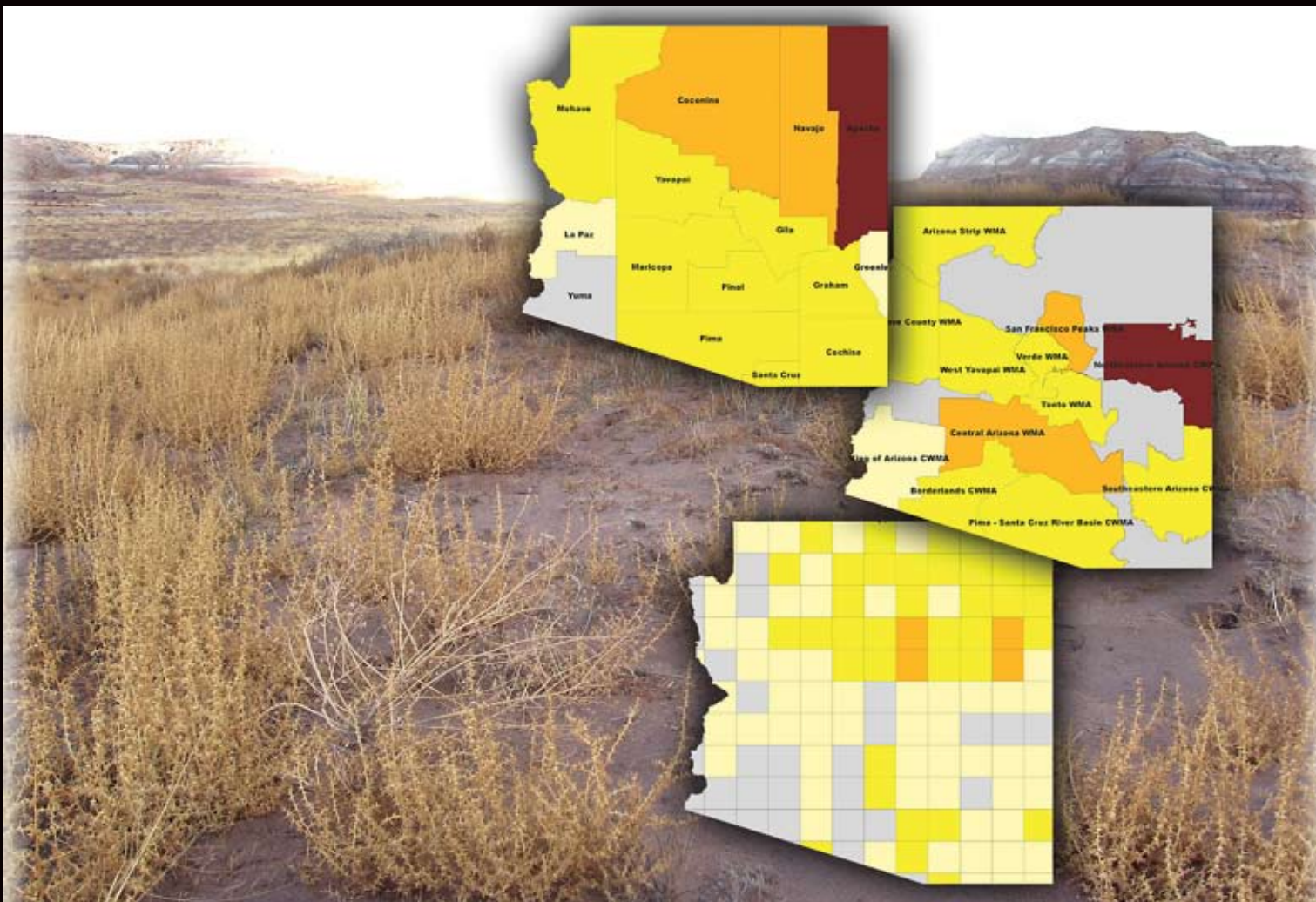




In Cooperation with the University of Arizona, Cooperative Extension and School of Natural Resources

Southwest Exotic Mapping Program 2007: Occurrence Summary and Maps of Select Invasive, Non-native Plants in Arizona



Open-File Report 2007-1277
September 2007

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Southwest Exotic Mapping Program 2007: Occurrence Summary and Maps of Select Invasive, Non-native Plants in Arizona

By Kathryn A. Thomas and Patricia Guertin

Open-File Report 2007-1277

October 2007

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Cover: Design by Patricia Guertin, Southwest Biological Science Center. *Salsola tragus* skeletons on sand dune at Petrified Forest National Park, Arizona.

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Introduction

An important aspect of management of invasive, non-native plants (invasive plants) is information on the type, location, and magnitude of infestations. Regional development of this information requires an integrated program of data collection, management, and delivery. The Southwest Exotic Plant Mapping Program (SWEMP), coordinated through the U.S. Geological Survey's Southwest Biological Science Center, annually compiles occurrence records for infestations of invasive plants. Operating since 1998, the SWEMP team has accepted occurrence records contributed voluntarily by federal, tribal, state, and private collaborators and has compiled these contributions accumulatively with previous versions of SWEMP. The SWEMP 2007 regional database update, SWEMP07, contains 62,000 records for 221 plant species with records dating as far back as 1911 and up to December, 2006. Records include invasive plants in Arizona, eastern California, Colorado, New Mexico, and Utah. SWEMP07 is available through the Southwest Exotic Plant Information Clearinghouse (<http://sbsc.wr.usgs.gov/research/projects/swepic/swepic.asp>, click SWEMP).

Not all invasive plants are non-native and not all non-native plants are even invasive. The Arizona Invasive Species Advisory Council (2006) defined an invasive species as “a species that is (1) non-native to the ecosystem under consideration and, (2) whose introduction causes or is likely to cause economic or environmental harm, or harm to human health”. SWEMP uses the U.S. Department of Agriculture PLANTS database (<http://plants.usda.gov/>) to determine if a plant is native or not to Arizona. As SWEMP does not independently assess the current or potential impact of invasive plants, we include most non-native plant records contributed. We have not included agricultural crops that are non-native, for example apples, oranges, etc.

In this open-file-report, we use the SWEMP07 update to summarize the occurrence of invasive plants in Arizona and present distribution maps for a select invasive plants in Arizona. We use the word occurrence purposefully instead of the word distribution. The SWEMP07 database only provides an estimate of the actual distribution of invasive plants in Arizona. The information provided is a first approximation of the state-wide extent of invasive plant distribution.

Invasive plants in Arizona

SWEMP07 as a data source

SWEMP07 was compiled from contributed occurrence records added to the SWEMP06 regional database. Not all contributed data is automatically added to the SWEMP database. In order for a species to be included, it must be listed as non-native in the Southwest by the PLANTS database. It must be submitted with proper geographic coordinates. All infestations of an invasive species found within one-hundred meters of an infestation of the same species in the same year are considered a single infestation. When this occurs the records are combined in the database as a single infestation. Taxonomic accuracy of the invasive plant record is the responsibility of the submitter. SWEMP07 records the submitter for each record and updates the infestation record if the taxonomy of the invasive plant needs correction.

We emphasize that SWEMP07 does not represent a complete or systematic survey of invasive plants in Arizona and the Southwest. Submitted data may represent area surveys for a single species or for all non-native species. The surveys may have been restricted to certain features, such as along roadsides or in a disturbed area, such as a utility corridor. Areas that were surveyed

for which invasive species were absent are not incorporated into SWEMP07. In addition, SWEMP is an accumulative database, so presence in SWEMP07 indicates that the invasive species has been found at least once at the location, but not necessarily recently. The invasive plant may have been adequately managed and may no longer be present at the location. While submitters are asked to also indicate the size of the infestation, infestation size is still inconsistently reported. Also, as contributions are voluntary, the number of infestations does not necessarily indicate more of a problem in one area than other. Rather, a higher number of reported occurrences may indicate more dedicated collection effort in that area.

Summary of Arizona invasive plants in SWEMP07

The infestation records for Arizona were subset from the SWEMP07 regional database. This subset contained 38,801 records for at least 149 species. Several species were grouped where differentiation between the species is difficult: *Salsola collina* and *S. tragus*; *Schismus arabicus* and *S. barbatus*; and *Tamarix chinensis*, *parviflora*, and *ramosissima*. Several genera included counts of invasive plants identified only to the genus level; these were removed from the summaries presented below (238 records total).

Pennisetum ciliare (buffelgrass) had the most records; this invasive plant has been aggressively tackled by the Pima-Santa Cruz River Basin weed management area and other concerned agencies and public in southern Arizona. *Salsola collina and tragus*, Russian thistle, has the second most records. The high number of records for Russian thistle in part reflects many occurrence records contributed from an intensive survey conducted at Petrified Forest National Park. The top 20 invasive plant species or species groups constitute nearly 80% of all the SWEMP records for Arizona (Table 1). Sixty-seven species occur with 10 or fewer records; fifteen of these with only one observances.

While all major lifeforms are represented in the records, most invasive plant records are either forbs or grasses (Table 2). There are slightly more records of invasive plants with perennial and biennial lifeforms (18,980 perennial and 3,544 biennial records) than annual (16,039 records). A summary of the species and species groups in the Arizona subset of the SWEMP2007 database is provided in Appendix I.

Table 1. Top twenty invasive plant species in Arizona as identified by number of occurrence records in the SWEMP07 database.

Scientific Name	Common Name	Number of Records	% of all records
<i>Pennisetum ciliare</i>	buffelgrass	6287	16.3%
<i>Salsola (collina, tragus)</i>	Russian thistle	3149	8.2%
<i>Tamarix (chinensis/parviflora/ramosissima)</i>	tamarisk	3027	7.8%
<i>Bromus tectorum</i>	cheatgrass	2013	5.2%
<i>Verbascum thapsus</i>	common mullein	1510	3.9%
<i>Linaria dalmatica</i>	dalmatian toadflax	1502	3.9%
<i>Erodium cicutarium</i>	redstem stork's bill	1439	3.7%
<i>Brassica tournefortii</i>	Asian mustard	1261	3.3%
<i>Cirsium vulgare</i>	bull thistle	1195	3.1%
<i>Alhagi maurorum</i>	camelthorn	1181	3.1%
<i>Bromus rubens</i>	red brome	1152	3.0%
<i>Pennisetum setaceum</i>	crimson fountaingrass	999	2.6%
<i>Eragrostis lehmanniana</i>	Lehmann lovegrass	980	2.5%
<i>Convolvulus arvensis</i>	field bindweed	922	2.4%
<i>Schismus (arabicus/barbatus)</i>	Mediterranean grass	919	2.4%
<i>Melilotus officinalis</i>	yellow sweetclover	869	2.3%
<i>Cynodon dactylon</i>	Bermudagrass	673	1.7%
<i>Marrubium vulgare</i>	horehound	594	1.5%
<i>Acroptilon repens</i>	hardheads	589	1.5%
<i>Onopordum acanthium</i>	Scotch cottonthistle	478	1.2%
			79.7%

Table 2. Life form distribution of invasive plants in Arizona as identified by number of occurrence records in the SWEMP07 database.

Number of Records	Lifeform
16,678	Forb/herb
15,808	Graminoid
1,838	Shrub/subshrub
3,545	Tree/ Shrub
932	Vine

Occurrence maps

We selected 62 invasive plants from the Arizona subset of the SWEMP2007 database that had moderate to high ratings as assigned by the Arizona Wildlands Invasive Plant Working Group, CAL-IPC, or NatureServe (Table 3) to present as maps (see Appendix II). Other species not included in the maps may also have severe to substantial impacts ecological impacts and species currently not rated as having moderate to high impact might actually have high impact locally.

For each weed species three maps are presented, categorized by the number of observation records for that species. The maps are organized by 1) county, 2) weed management area, and 3) 30 minute topographic quads. These different views of infestation patterns are complementary.

Within Arizona, the last decade has seen the organization of weed management areas. Governmental, tribal, and private land managers and decision makers have partnered geographically to plan and act on their collective weed problems. The map of weed management areas, as known in the spring of 2007, was developed by the SWEMP team with information provided by each weed management area and shows the areas of concern for 13 weed management areas (Figure 1). The boundaries presented may be updated and revised by each weed management area at any time.

Table 3. Ranking systems for invasive plants.

Ranking System	Documentation	Categories	Summarized Meaning
Arizona legal	Prohibited, regulated, and restricted noxious weeds (Plant Services Division 2005)	Prohibited	..prohibited from entry into the state
		Regulated	..if found in the state may be controlled or quarantined to prevent further infestation or contamination
		Restricted	..if found within the state shall be quarantined to prevent further infestation or contamination
AZ-WIPG	Invasive Non-native Plants that Threaten Wildlands in Arizona (AZ-WIPG 2005)	High	..species have severe ecological impacts
		Medium	..species have substantial and apparent ecological impacts
		Low	..species have minor yet detectable ecological impacts
		Alert	..additional designation for some species in either the high or medium category, but whose current ecological amplitude and distribution are limited
		Red flag	..additional designation ..to identify and document a critical piece of information not evident in the overall ranking
Cal-IPC	California Invasive Plant Inventory (Cal-IPC 2006)	High	..species have severe ecological impacts
		Moderate	..species have substantial and apparent – but generally not severe – ecological impacts
		Limited	..species are invasive but their ecological impacts are minor ...or not enough information
NatureServe	An Invasive Species Assessment Protocol (Morse et al 2004)	High	..species represents a severe threat to native species and ecological communities
		Medium	..species represents moderate threat to native species and ecological communities

COOPERATIVE WEED MANAGEMENT BOUNDARIES

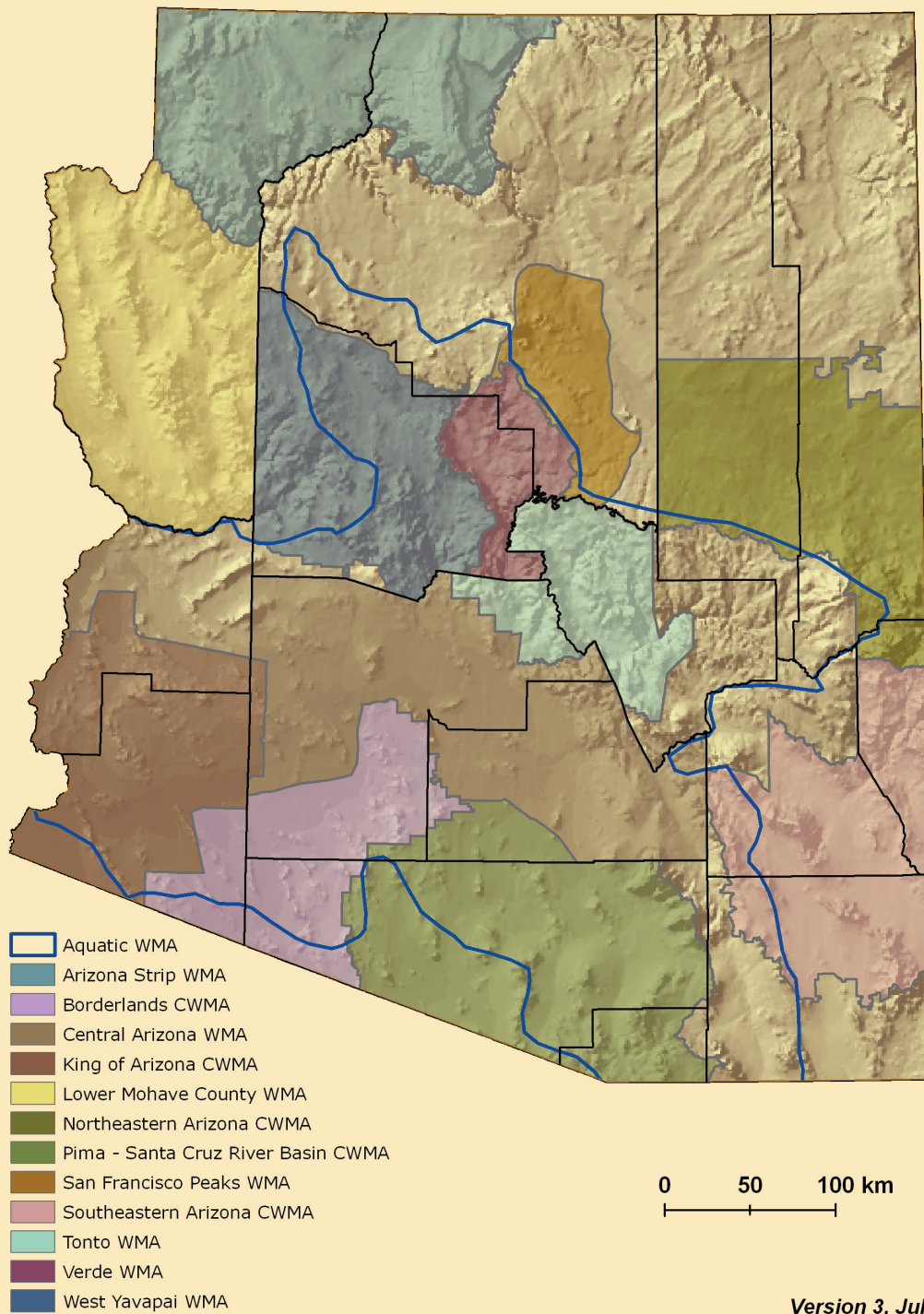


Figure 1. Cooperative weed management areas.

Use and limitations of this information

The SWEMP occurrence records provide information that can help with invasive plant management, scientific studies on invasive plants, and as input toward development of more comprehensive development of invasive plant distribution collection.

- The invasive species listed give an overview of invasive plants that have been found in Arizona.
- The identity of the invasive plants listed is the responsibility of the record provider. Some species may be misidentified at some locations. Field verification of the invasive plants identity is encouraged if management actions or policy decisions require high data accuracy.
- The lack of an occurrence record of an invasive plant in a weed management area, county or 30' topo quad does not mean the invasive plant is not present. The invasive species listed indicate those invasive plants that have been documented. Surveys are limited in size and may include only those invasive plants the observer noticed. Invasive plants with small infestation sizes and new invasive plants that are not commonly known are often not documented.
- The maps do not indicate the actual intensity of infestation; they indicate the level of field survey effort and contribution to SWEMP07.
- The impact ratings provided for the mapped invasive species are based on what is know about those plants impacts on a state or national level. The plant may behave differently at a local site. Not all invasive plants that occur on the SWEMP07 listing have been assessed for impact at the state or national level.
- The SWEMP07 database contains historic records. Historical records are included in the summary and maps.
- Several mapped invasive plants have few occurrence records yet have been rated to have high impact. These invasive plants are candidates for vigorous early detection and rapid response in order to contain infestation within the state.

For more information

- Arizona Wildlands Invasive Plants: <http://sbsc.wr.usgs.gov/research/projects/swepic/SWVMA/sbscmain.asp>
- Arizona Invasive Species Advisory Council: <http://www.governor.state.az.us/ais/>
- California Invasive Plant Council (Cal-IPC): <http://www.cal-ipc.org/>
- Encycloweedia: http://www.cdfa.ca.gov/phpps/ipc/encycloweedia/encycloweedia_hp.htm
- The National Institute of Invasive Species Science: <http://www.niiss.org>
- NatureServe Explorer: <http://www.natureserve.org/explorer/>
- NBII Invasive Species: <http://invasivespecies.nbii.gov/>
- Southwest Exotic Plant Information Clearinghouse: <http://sbsc.wr.usgs.gov/research/projects/swepic/swepic.asp>
- USDA PLANTS Database: <http://plants.usda.gov>
- USDA PLANTS Invasive and Noxious Weeds: <http://plants.usda.gov/java/noxiousDriver>

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Appendix I Invasive plants in Arizona as identified in the SWEMP07 database

Scientific Name	Common Name	Number of Records	Lifeform	Duration
<i>Acroptilon repens</i> *	hardheads	589	F	P
<i>Aegilops cylindrica</i>	jointed goatgrass	3	G	A
<i>Agropyron desertorum</i>	desert wheatgrass	43	G	P
<i>Ailanthus altissima</i> *	tree of heaven	29	T	P
<i>Alhagi maurorum</i> *	camelthorn	1181	S	P
<i>Amaranthus blitoides</i>	mat amaranth	2	F	A
<i>Apium graveolens</i>	wild celery	1	F	P
<i>Arctium minus</i>	lesser burdock	6	F	B
<i>Arundo donax</i> *	giant reed	12	G	P
<i>Asphodelus fistulosus</i> *	onionweed	6	F	P
<i>Avena fatua</i> *	wild oat	379	G	A
<i>Azolla pinnata</i>	pinnate mosquitofern	2	F	A
<i>Bassia scoparia</i>	burningbush	324	F	A
<i>Brassica nigra</i>	black mustard	1	F	A
<i>Brassica tournefortii</i> *	Asian mustard	1261	F	A
<i>Bromus arvensis</i>	field brome	30	G	A
<i>Bromus berteroi</i>	Chilean chess	9	G	A
<i>Bromus catharticus</i>	rescuegrass	30	G	A, P
<i>Bromus diandrus</i> *	ripgut brome	146	G	A, P
<i>Bromus inermis</i> *	smooth brome	113	G	P
<i>Bromus racemosus</i>	bald brome	1	G	A
<i>Bromus rubens</i> *	red brome	1152	G	A
<i>Bromus tectorum</i> *	cheatgrass	2013	G	A
<i>Caesalpinia gilliesii</i>	bird-of-paradise shrub	1	T	P
<i>Capsella bursa-pastoris</i>	shepherd's purse	3	F	A
<i>Cardaria draba</i> *	whitetop	9	F	P
<i>Carduus acanthoides</i>	spiny plumeless thistle	6	F	B
<i>Carduus nutans</i> *	nodding plumeless thistle	187	F	B, P
<i>Centaurea diffusa</i> *	diffuse knapweed	318	F	A, P
<i>Centaurea melitensis</i> *	Maltese star-thistle	303	F	A, B
<i>Centaurea solstitialis</i> *	yellow star-thistle	94	F	A
<i>Centaurea stoebe ssp. micranthos</i> *	spotted knapweed	76	F	B, P
<i>Centaurea virgata ssp. squarrosa</i> *	squarrose knapweed	3	F	P
<i>Ceratocephala testiculata</i>	curvseed butterwort	7	F	A
<i>Chenopodium album</i>	lambquarters	1	F	A
<i>Chenopodium murale</i>	nettleleaf goosefoot	23	F	A
<i>Chondrilla juncea</i> *	rush skeletonweed	47	F	P
<i>Chorispota tenella</i>	crossflower	12	F	A
<i>Cichorium intybus</i>	chicory	13	F	B, P
<i>Cirsium arvense</i> *	Canada thistle	6	F	P
<i>Cirsium vulgare</i> *	bull thistle	1195	F	B
<i>Conium maculatum</i> *	poison hemlock	10	F	B
<i>Convolvulus arvensis</i> *	field bindweed	922	V	P
<i>Cortaderia selloana</i> *	Uruguayan pampas grass	8	G	P

Scientific Name	Common Name	Number of Records	Lifeform	Duration
<i>Cynodon dactylon</i> *	Bermudagrass	673	G	P
<i>Cynoglossum officinale</i> *	gypsyflower	21	F	B
<i>Cyperus esculentus</i>	yellow nutsedge	31	G	P
<i>Dactylis glomerata</i>	orchardgrass	90	G	P
<i>Dactyloctenium radulans</i>	buttongrass	7	G	A
<i>Descurainia sophia</i>	herb sophia	295	F	A, B
<i>Dimorphotheca sinuata</i>	glandular Cape marigold	10	F	A
<i>Dipsacus fullonum</i> *	Fuller's teasel	2	F	B
<i>Echinochloa colona</i>	jungle rice	17	G	A
<i>Echinochloa crus-galli</i>	barnyardgrass	10	G	A
<i>Eichhornia crassipes</i> *	floating water hyacinth	8	F	P
<i>Elaeagnus angustifolia</i> *	Russian olive	400	T	P
<i>Elymus repens</i> *	quackgrass	22	G	P
<i>Eragrostis ciliaris</i>	stinkgrass	272	G	A
<i>Eragrostis curvula</i>	weeping lovegrass	295	G	P
<i>Eragrostis echinocloidea</i>	African lovegrass	6	G	P
<i>Eragrostis lehmanniana</i> *	Lehmann lovegrass	980	G	P
<i>Erodium cicutarium</i>	redstem stork's bill	1439	F	A, B
<i>Eruca vesicaria</i>	rocketsalad	40	F	A
<i>Erysimum repandum</i>	spreading wallflower	2	F	A
<i>Euphorbia esula</i> *	leafy spurge	17	F	P
<i>Euryops multifidus</i> *	hawk's eye	7	S	P
<i>Halogeton glomeratus</i> *	saltlover	280	F	A
<i>Hordeum murinum</i> *	mouse barley	239	G	A
<i>Hordeum vulgare</i>	common barley	16	G	A
<i>Hydrilla verticillata</i> *	hydrilla	9	F	P
<i>Ipomoea hederacea</i>	ivyleaf morningglory	7	V	A
<i>Ipomoea purpurea</i>	tall morningglory	2	V	A
<i>Ipomoea tricolor</i>	multicolored morningglory	1	V	A
<i>Lactuca serriola</i>	prickly lettuce	307	F	A, B
<i>Lepidium latifolium</i> *	broadleaved pepperweed	45	F	P
<i>Lepidium perfoliatum</i>	clasping pepperweed	1	F	A, B
<i>Leucanthemum vulgare</i> *	oxeye daisy	3	F	P
<i>Linaria dalmatica</i> *	dalmatian toadflax	1502	F	P
<i>Lolium perenne</i> *	perennial ryegrass	2	G	A, P
<i>Malcolmia africana</i>	African mustard	5	F	A
<i>Malva neglecta</i>	common mallow	9	F	A, B, P
<i>Malva parviflora</i>	cheeseweed mallow	77	F	A, B, P
<i>Marrubium vulgare</i>	horehound	594	S	P
<i>Medicago lupulina</i>	black medick	60	F	A, P
<i>Medicago minima</i>	little burclover	2	F	A
<i>Medicago polymorpha</i>	California burclover	2	F	A, P
<i>Medicago sativa</i>	alfalfa	26	F	A, P
<i>Melilotus indicus</i>	annual yellow sweetclover	55	F	A
<i>Melilotus officinalis</i> *	yellow sweetclover	869	F	A, B, P
<i>Melinis repens</i>	rose Natal grass	139	G	A, P
<i>Mesembryanthemum crystallinum</i> *	common iceplant	3	F	A, P
<i>Mesembryanthemum nodiflorum</i> *	slenderleaf iceplant	1	F	A, P
<i>Morus alba</i>	white mulberry	1	T	P

Scientific Name	Common Name	Number of Records	Lifeform	Duration
<i>Myriophyllum aquaticum</i> *	parrotfeather	1	F	P
<i>Nerium oleander</i>	oleander	3	T	P
<i>Nicotiana glauca</i>	tree tobacco	16	T	P
<i>Onopordum acanthium</i> *	Scotch cottonthistle	478	F	B
<i>Packera glabella</i>	butterweed	1	F	A
<i>Panicum antidotale</i>	blue panicum	7	G	P
<i>Paspalum dilatatum</i>	dallisgrass	2	G	P
<i>Pennisetum ciliare</i> *	buffelgrass	6287	G	P
<i>Pennisetum setaceum</i> *	crimson fountaingrass	999	G	P
<i>Phalaris caroliniana</i>	Carolina canarygrass	1	G	A
<i>Phalaris minor</i>	littleseed canarygrass	26	G	A
<i>Phleum pretense</i> *	timothy	24	G	P
<i>Phoenix dactylifera</i>	date palm	3	T	P
<i>Plantago lanceolata</i>	narrowleaf plantain	1	F	A, B, P
<i>Plantago macrocarpa</i>	seashore plantain	1	F	P
<i>Poa annua</i>	annual bluegrass	2	G	A
<i>Poa bulbosa</i>	bulbous bluegrass	5	G	P
<i>Poa compressa</i>	Canada bluegrass	12	G	P
<i>Poa pratensis</i>	Kentucky bluegrass	274	G	P
<i>Polygonum aviculare</i>	prostrate knotweed	39	F	A, P
<i>Polypogon monspeliensis</i>	annual rabbitsfoot grass	129	G	A
<i>Polypogon viridis</i>	beardless rabbitsfoot grass	8	G	P
<i>Potentilla recta</i> *	sulphur cinquefoil	3	F	P
<i>Rhus lancea</i> *	African sumac	5	T	P
<i>Rubus armeniacus</i> *	Himalayan blackberry	55	S	P
<i>Rumex acetosa</i>	garden sorrel	8	F	P
<i>Rumex crispus</i>	curly dock	35	F	P
<i>Saccharum ravennae</i> *	ravennagrass	159	G	P
<i>Salsola (collina/tragus)</i> *	Russian thistle	3149	F	A
<i>Salvia aethiopsis</i>	Mediterranean sage	32	F	B
<i>Salvinia molesta</i> *	giant salvinia	321	F	A, P
<i>Schedonorus phoenix</i>	tall fescue	2	G	P
<i>Schismus (arabicus/barbatus)</i> *	Mediterranean grass	919	G	A
<i>Setaria pumila</i> ssp. <i>pumila</i>	yellow foxtail	7	G	A
<i>Setaria viridis</i>	green bristlegrass	5	G	A
<i>Silene vulgaris</i>	bladder campion	6	F	P
<i>Silybum marianum</i>	milk thistle	4	F	A, B
<i>Sinapis arvensis</i>	wild mustard	5	F	A
<i>Sisymbrium altissimum</i>	tall tumbledustard	147	F	A, B
<i>Sisymbrium irio</i>	London rocket	401	F	A
<i>Solanum nigrum</i>	black nightshade	1	S	A, P
<i>Sonchus arvensis</i>	marsh sowthistle	4	F	P
<i>Sonchus asper</i> *	spiny sowthistle	34	F	A
<i>Sonchus oleraceus</i> *	common sowthistle	62	F	A
<i>Sorghum halepense</i> *	Johnsongrass	185	G	P
<i>Taeniatherum caput-medusae</i> *	medusahead	4	G	A
<i>Tamarix aphylla</i>	Athel tamarisk	20	T	P
<i>Tamarix (chinensis/parviflora/ramosissima)</i> *	tamarisk	3027	T	P
<i>Taraxacum officinale</i>	common dandelion	114	F	P

Scientific Name	Common Name	Number of Records	Lifeform	Duration
<i>Tragopogon dubius</i>	yellow salsify	194	F	A, B
<i>Tribulus terrestris</i>	puncturevine	278	F	A
<i>Trifolium repens</i>	white clover	22	F	P
<i>Ulmus pumila</i>*	Siberian elm	40	T	P
<i>Verbascum blattaria</i>	moth mullein	4	F	B
<i>Verbascum thapsus</i>*	common mullein	1510	F	B
<i>Verbascum virgatum</i>	wand mullein	4	F	B

¹ Invasive plants in bold and with a * following the name are represented on a map in the Appendix.

² Common names are from the PLANTS online database or from the Weeds of the West (Whitson et al 1992).

³ F=Forb/herb, G=Graminoid, S=Shrub/subshrub, T=Tree/tall shrub, V=Vine

⁴ P=perennial, B=biennial, A=annual

Appendix II Maps of select invasive plants in Arizona

Acroptilon repens

Synonym: *Centaurea repens*

Common Name: Russian knapweed, hardheads

USDA Plant Code: ACRE3

Family: Asteraceae






Arizona legal listing: Prohibited, Regulated

AZ-WIPWG category: High

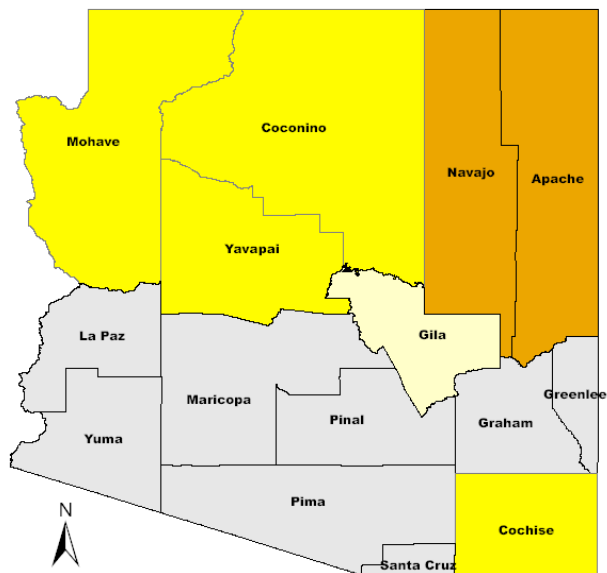
Cal-IPC category: Moderate

NatureServe ranking: High

Map legend :

-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records

Acroptilon repens

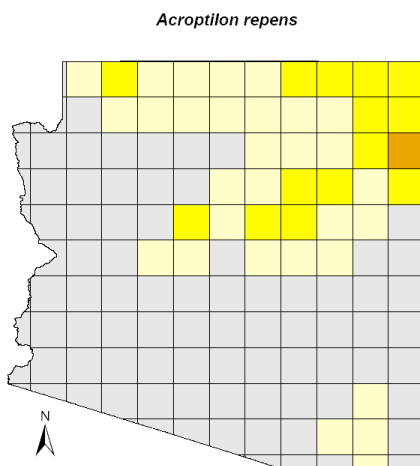


SWEMP occurrence records by County

Acroptilon repens



SWEMP occurrence records by 30' Topographic Quadrangles



SWEMP occurrence records by 30' Topographic Quadrangles

Ailanthus altissima

Synonym: none
Common Name: tree of heaven
USDA Plant Code: AIAL
Family: Simaroubaceae

Arizona legal listing: none

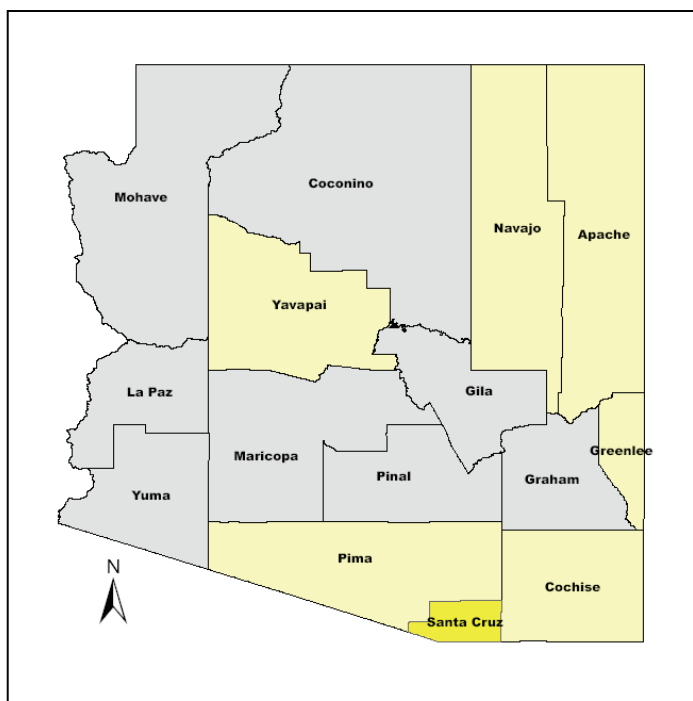
AZ-WIPWG category: Medium

Cal-IPC category: Moderate

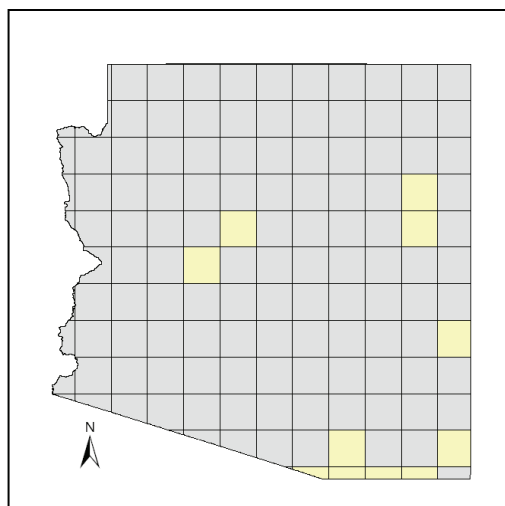
NatureServe ranking: Medium

Map legend:

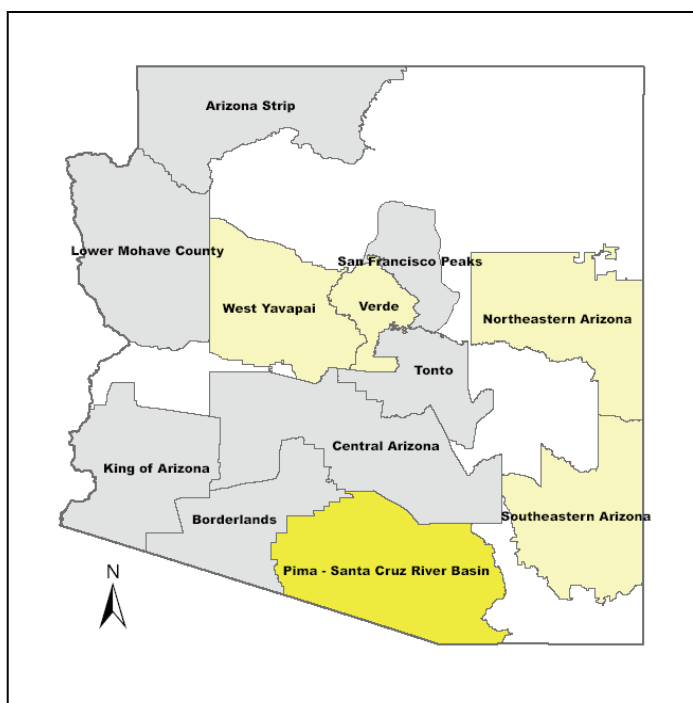
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Alhagi maurorum

Synonym: *Alhagi pseudalhagi*,
Alhagi camelorum

Common Name: camelthorn

USDA Plant Code: ALMA12

Family: Fabaceae

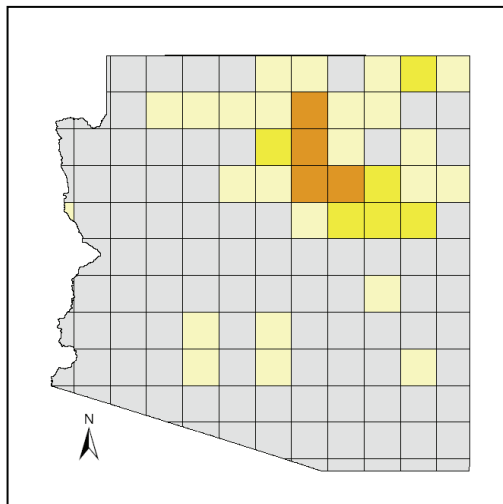
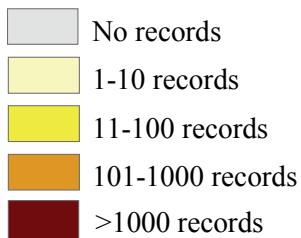
Arizona legal listing: Prohibited,
Restricted

AZ-WIPWG category: Medium

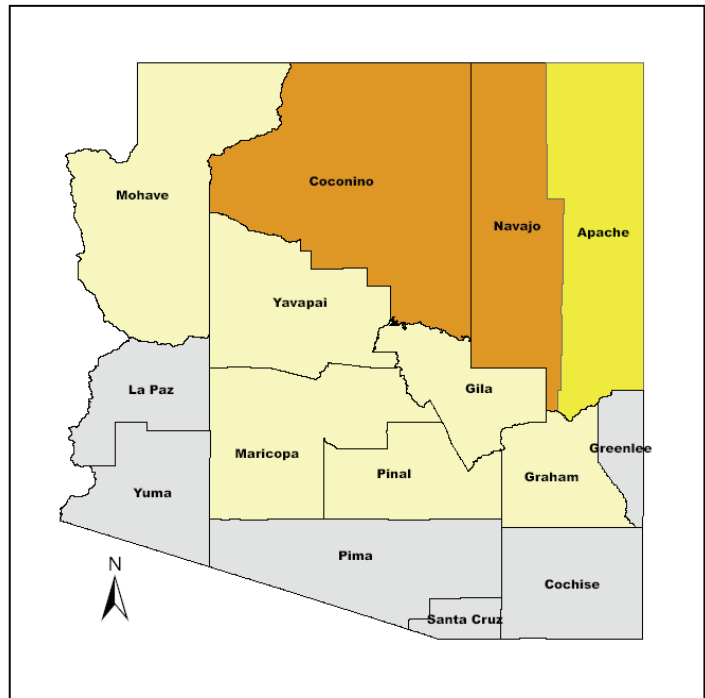
Cal-IPC category: Moderate

NatureServe ranking: Medium

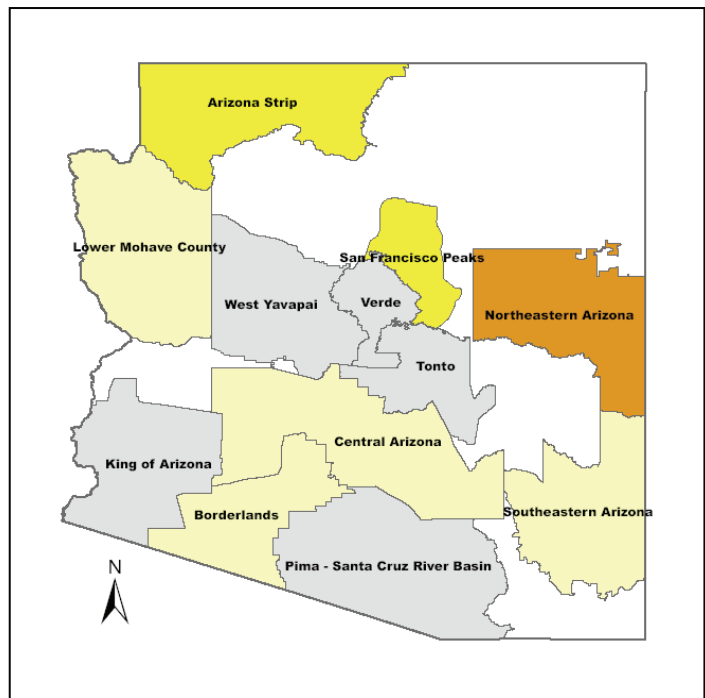
Map legend:



SWEMP occurrence records by
7.5" Topographic Quadrangles



SWEMP occurrence records by County



SWEMP occurrence records by
Weed Management Area

Arundo donax

Synonym: none
Common Name: giant reed
USDA Plant Code: ARDO4
Family: Poaceae

Arizona legal listing: none

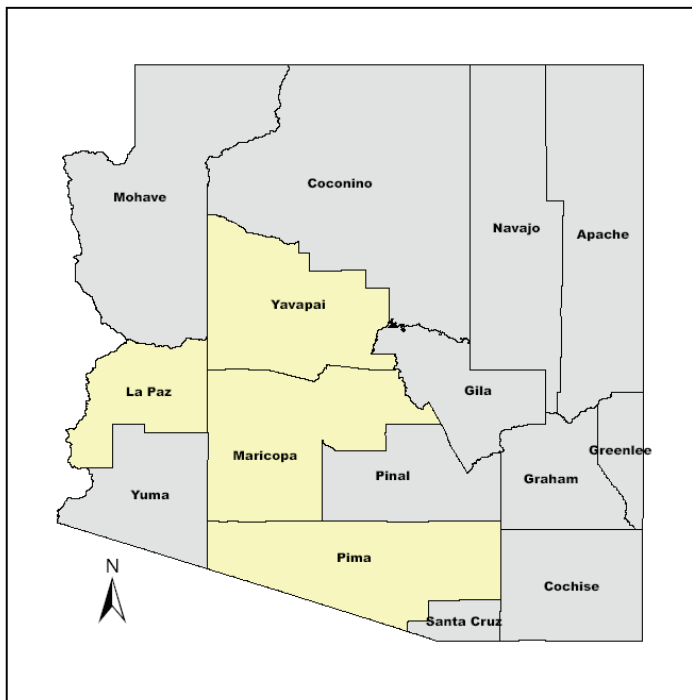
AZ-WIPWG category: High

Cal-IPC category: High

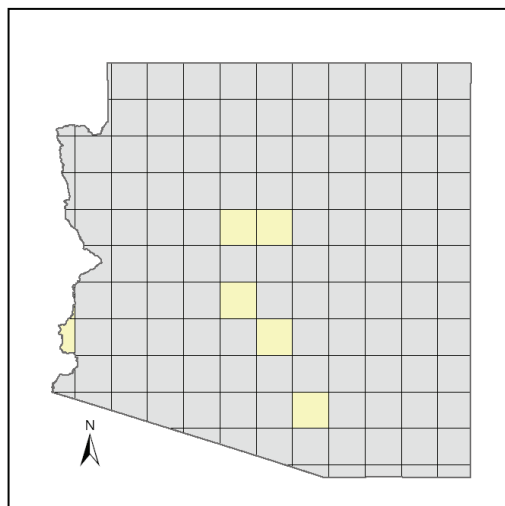
NatureServe ranking: High

Map legend:

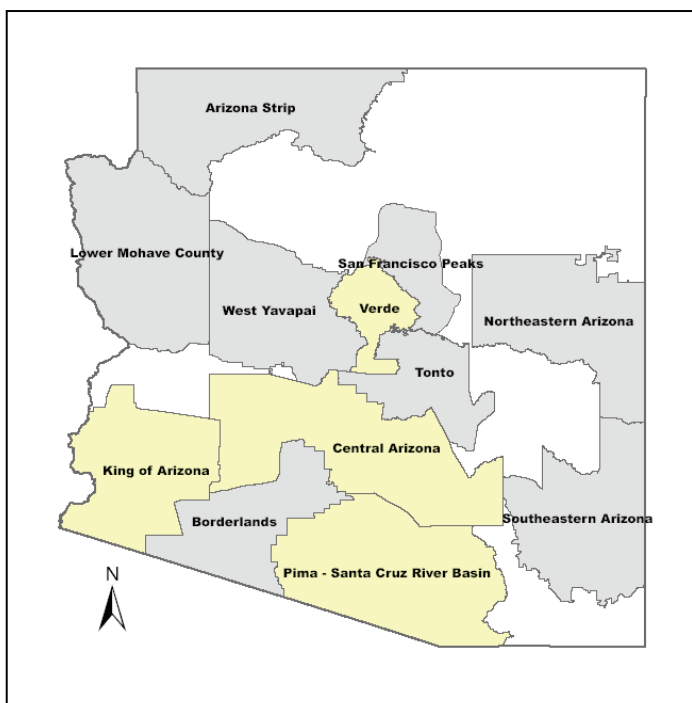
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Asphodelus fistulosus

Synonym: none
Common Name: onionweed, asphodelus
USDA Plant Code: ASF12
Family: Liliaceae






Arizona legal listing: none

AZ-WIPWG category: Low

Cal-IPC category: Moderate - Alert

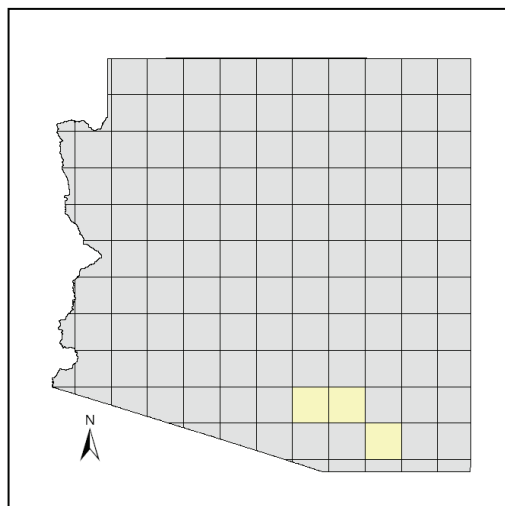
NatureServe ranking: not assessed at present

Map legend:

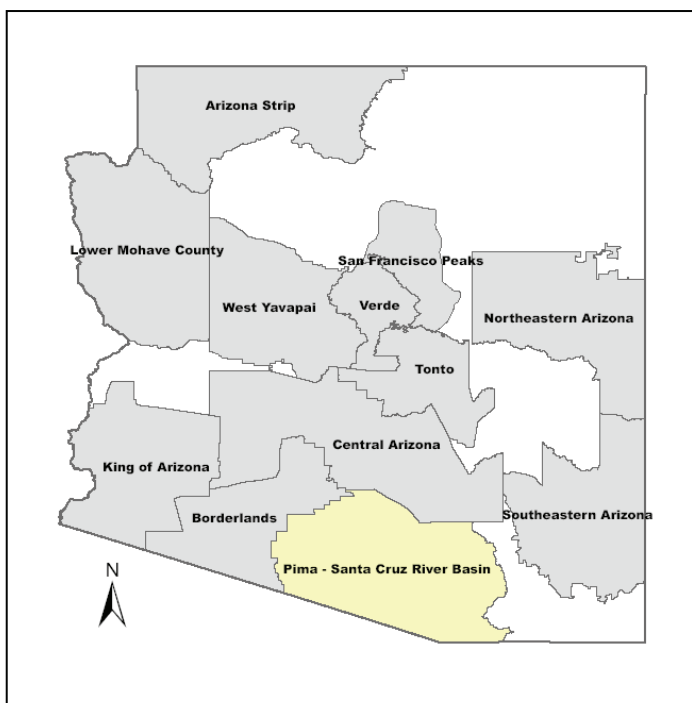
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Avena fatua

Synonym: none
Common Name: wild oat
USDA Plant Code: AVFA
Family: Poaceae






Arizona legal listing: none

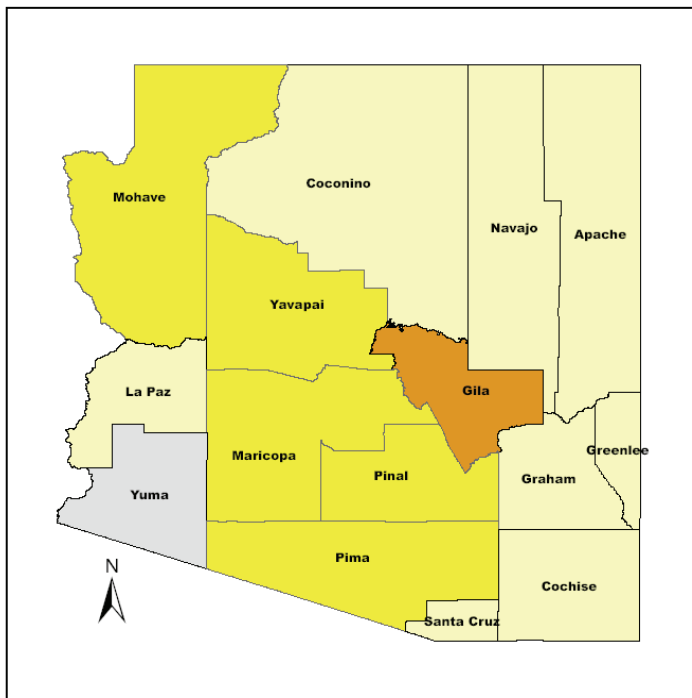
AZ-WIPWG category: Medium

Cal-IPC category: Moderate

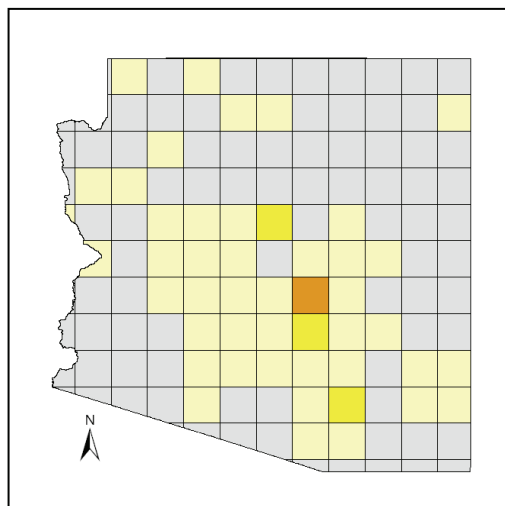
NatureServe ranking: Unknown

Map legend:

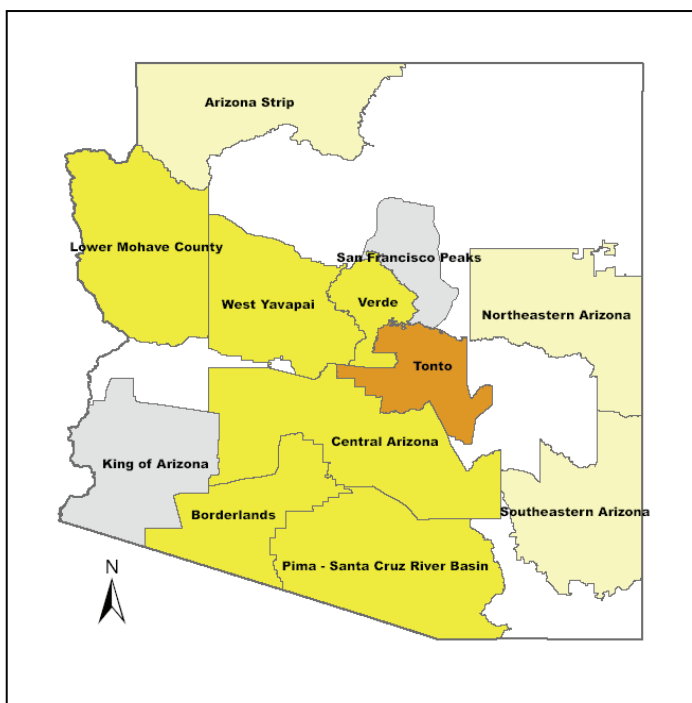
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Brassica tournefortii

Synonym: none
Common Name: African mustard,
 Asian mustard
USDA Plant Code: BRTO
Family: Brassicaceae






Arizona legal listing: none

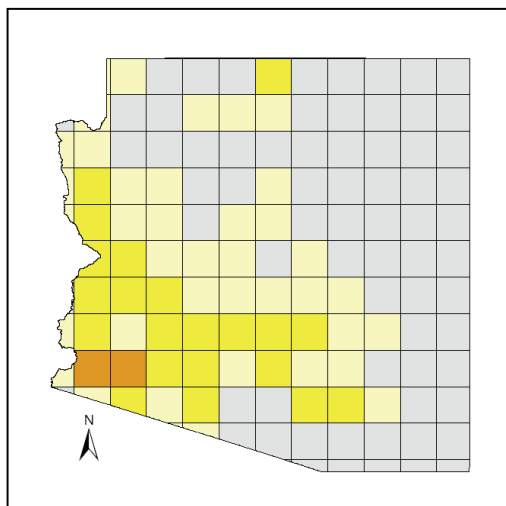
AZ-WIPWG category: Medium,
 Red flag

Cal-IPC category: High

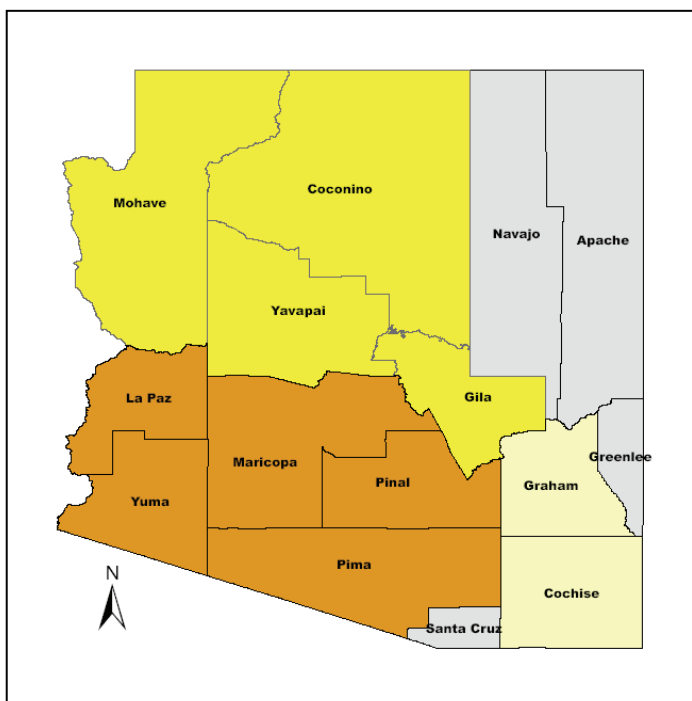
NatureServe ranking: Unknown

Map legend:

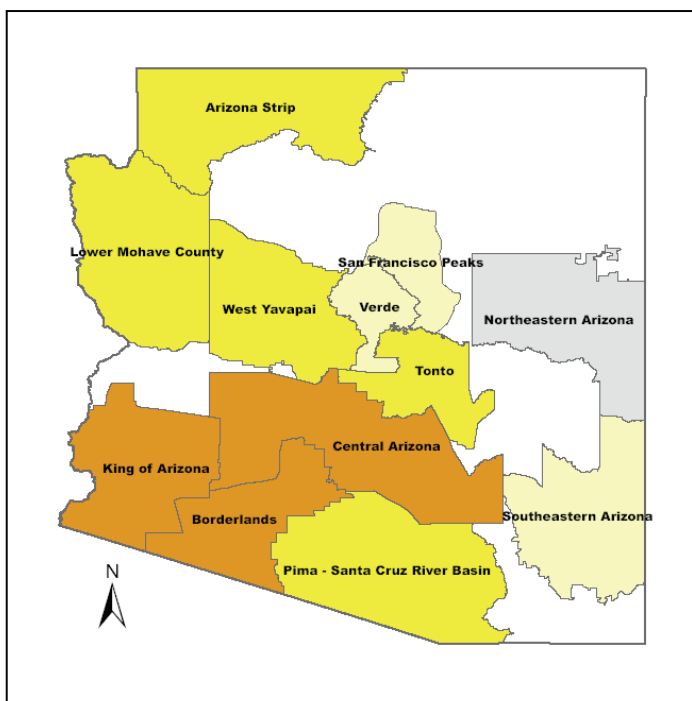
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by
 7.5" Topographic Quadrangles



SWEMP occurrence records by County



SWEMP occurrence records by
 Weed Management Area

Bromus diandrus

Synonym: *Bromus rigidus* var. *gussonei*

Common Name: ripgut brome

USDA Plant Code: BRDI3

Family: Poaceae

Arizona legal listing: none

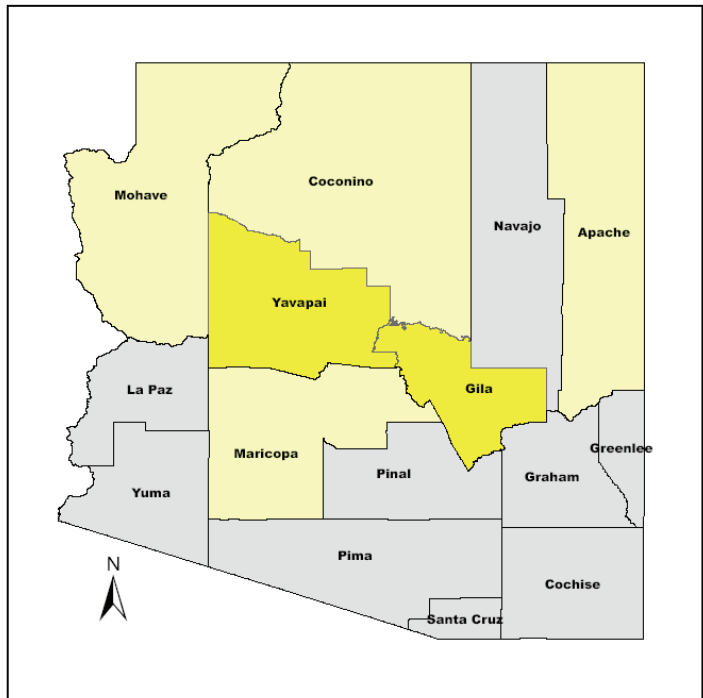
AZ-WIPWG category: Medium - Alert

Cal-IPC category: Moderate

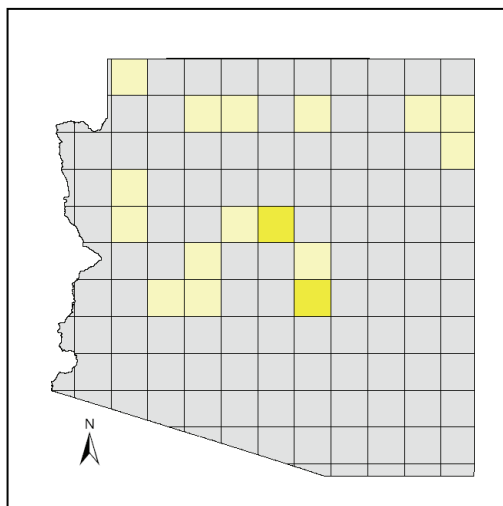
NatureServe ranking: not assessed at present

Map legend:

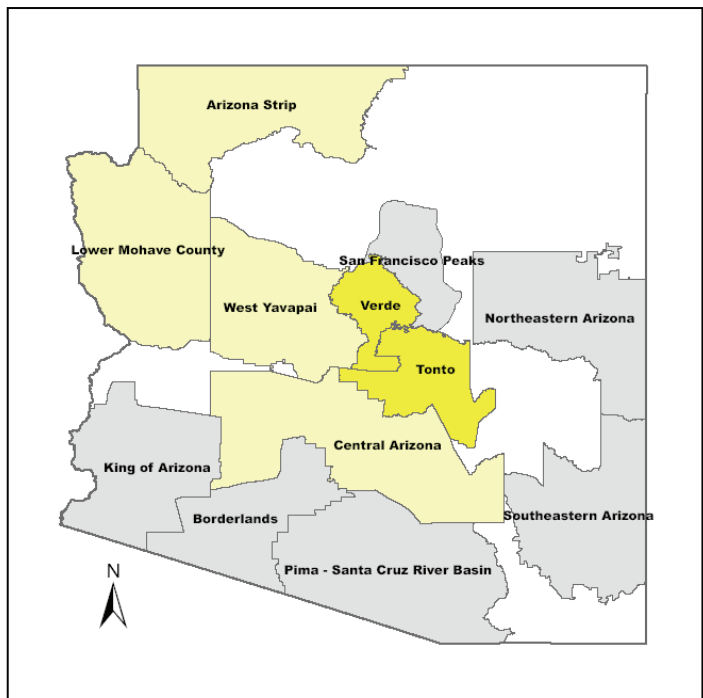
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Bromus inermis

Synonym: none
Common Name: smooth brome
USDA Plant Code: BRIN2
Family: Poaceae

Arizona legal listing: none

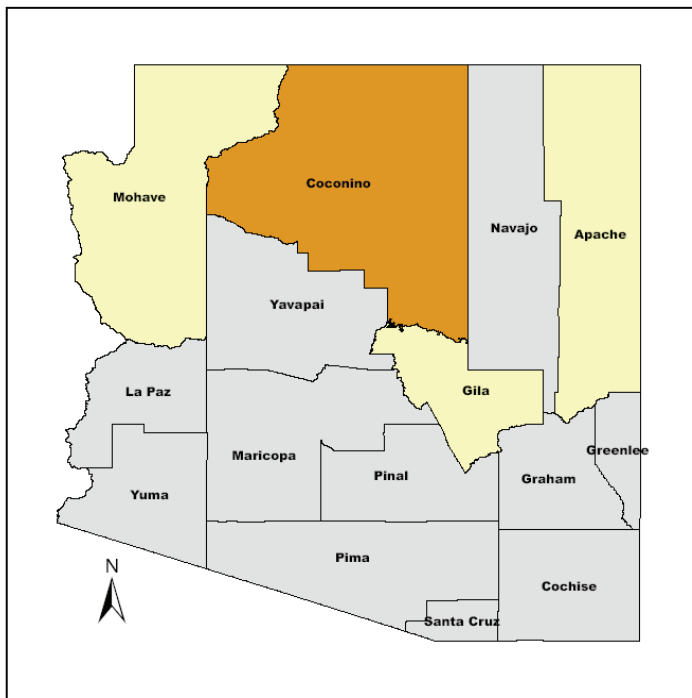
AZ-WIPWG category: Medium, Red Flag

Cal-IPC category: not assessed at present

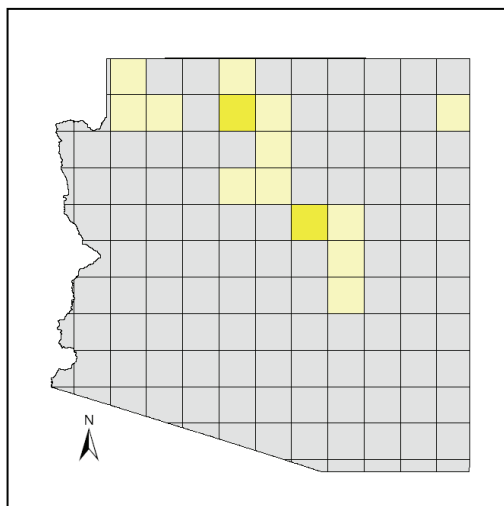
NatureServe ranking: Medium

Map legend:

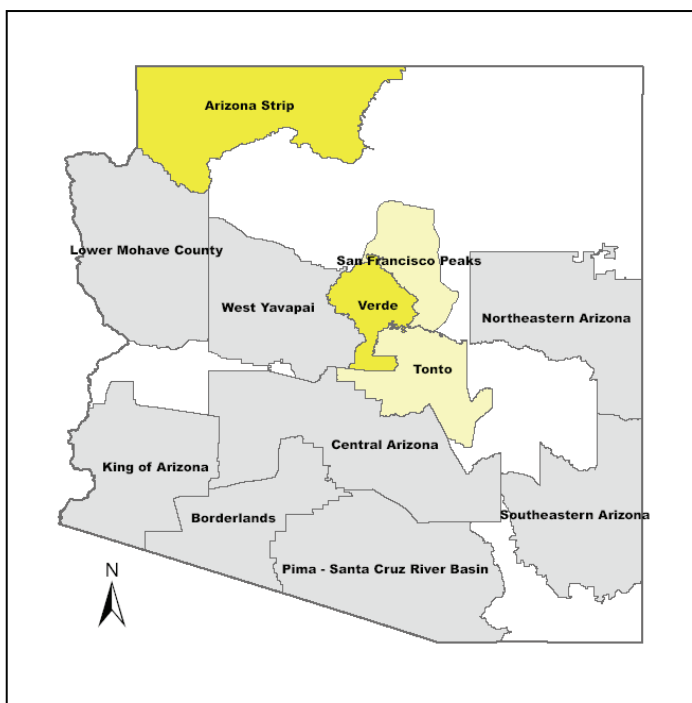
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Bromus rubens

Synonym: *Bromus madritensis* ssp. *rubens*

Common Name: red brome

USDA Plant Code: BRRU2

Family: Poaceae






Arizona legal listing: none

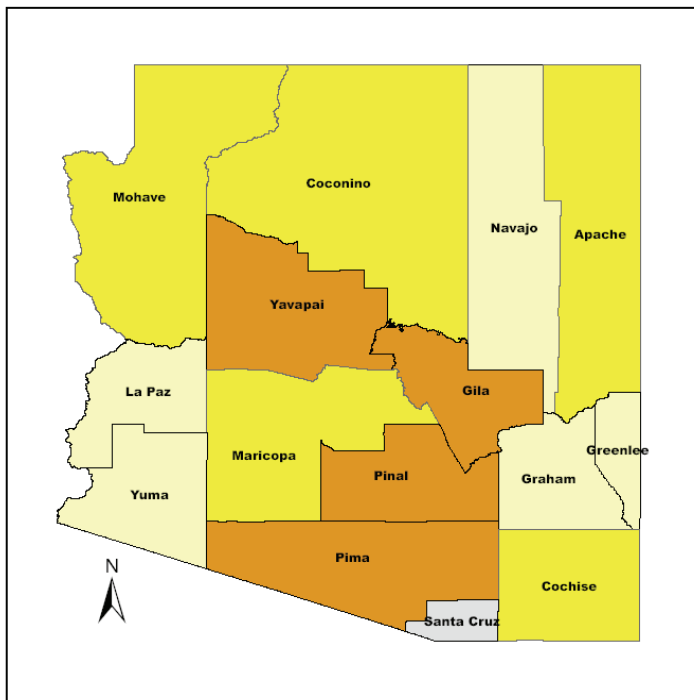
AZ-WIPWG category: High

Cal-IPC category: High

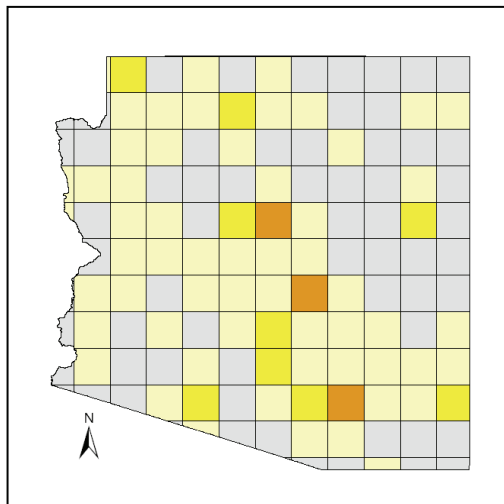
NatureServe ranking: not assessed at present

Map legend:

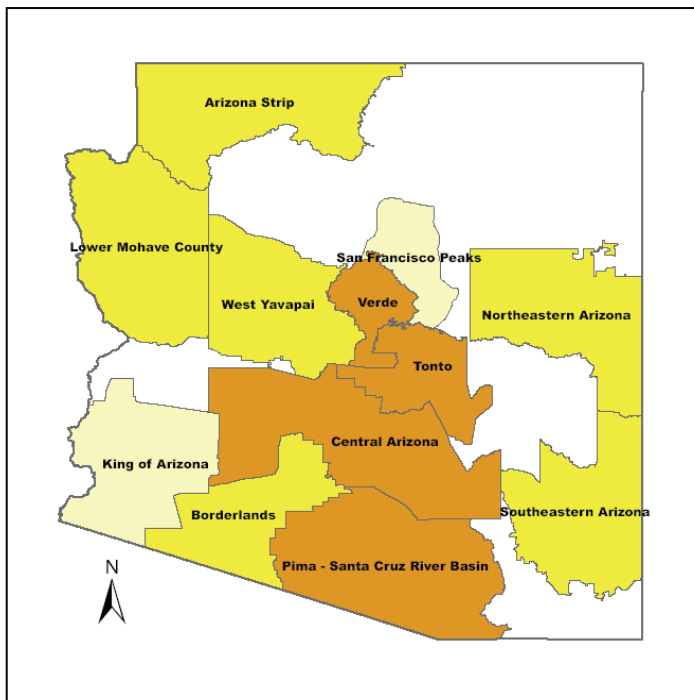
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Bromus tectorum

Synonym: none
Common Name: downy brome, cheatgrass
USDA Plant Code: BRTE
Family: Poaceae






Arizona legal listing: none

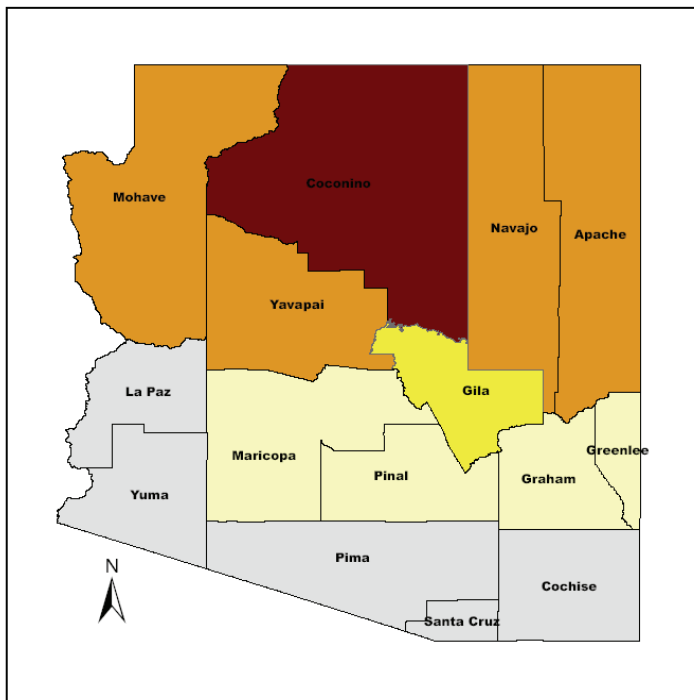
AZ-WIPWG category: High

Cal-IPC category: High

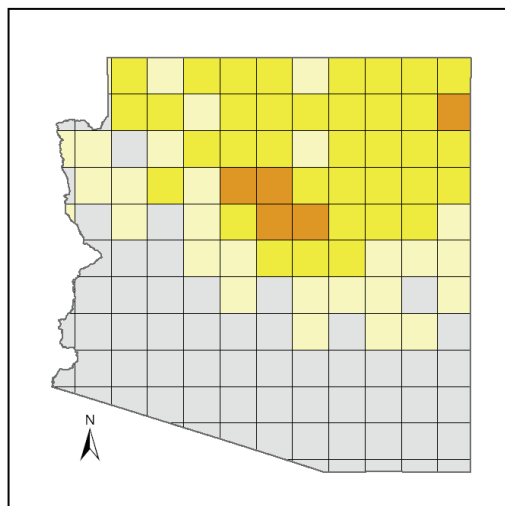
NatureServe ranking: High

Map legend:

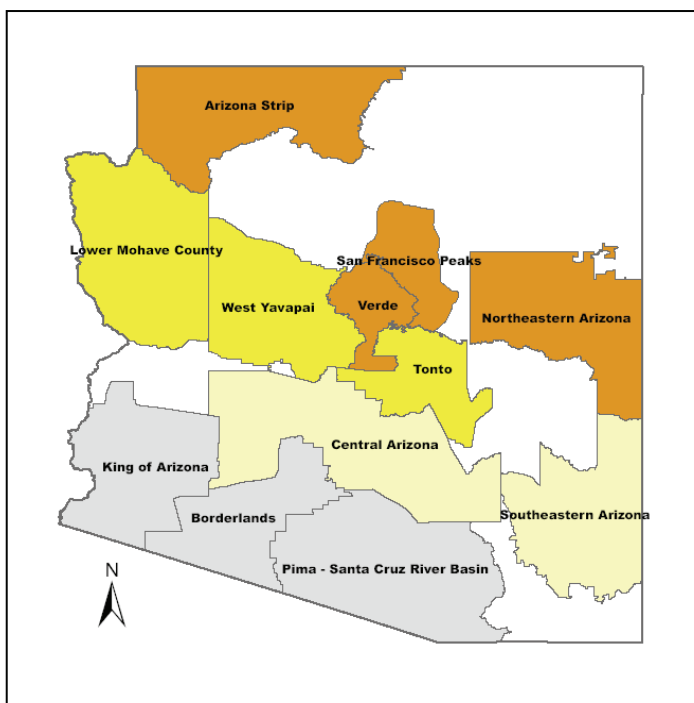
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Cardaria draba

Synonym: none
Common Name: whitetop
USDA Plant Code: CADR
Family: Brassicaceae

Arizona legal listing: Prohibited, Restricted

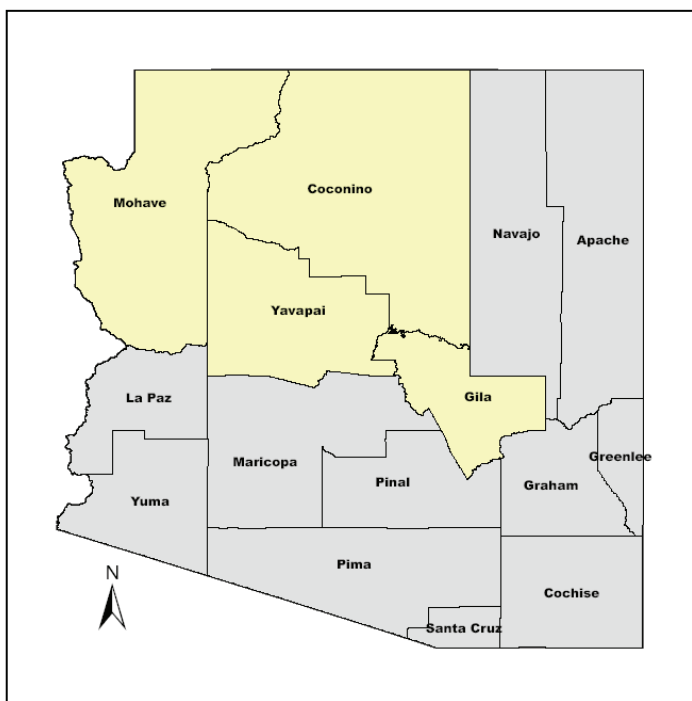
AZ-WIPWG category: Medium - Alert

Cal-IPC category: Moderate

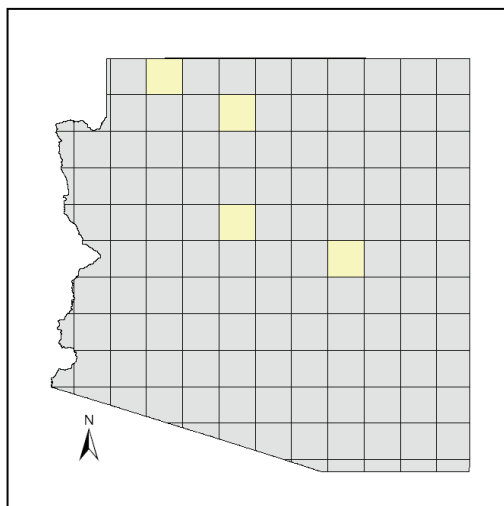
NatureServe ranking: not assessed at present

Map legend:

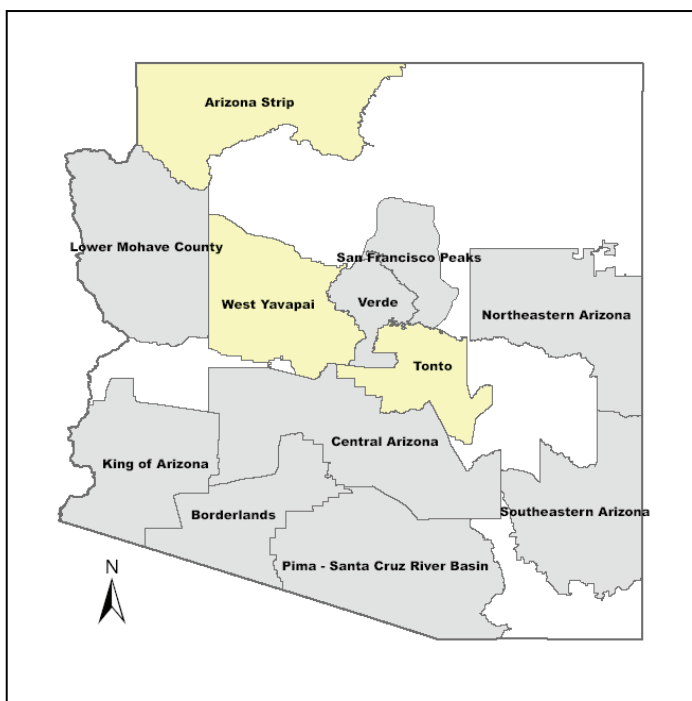
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Carduus nutans

Synonym: none
Common Name: nodding
 plumeless thistle, musk thistle
USDA Plant Code: CANU4
Family: Asteraceae

Arizona legal listing: none

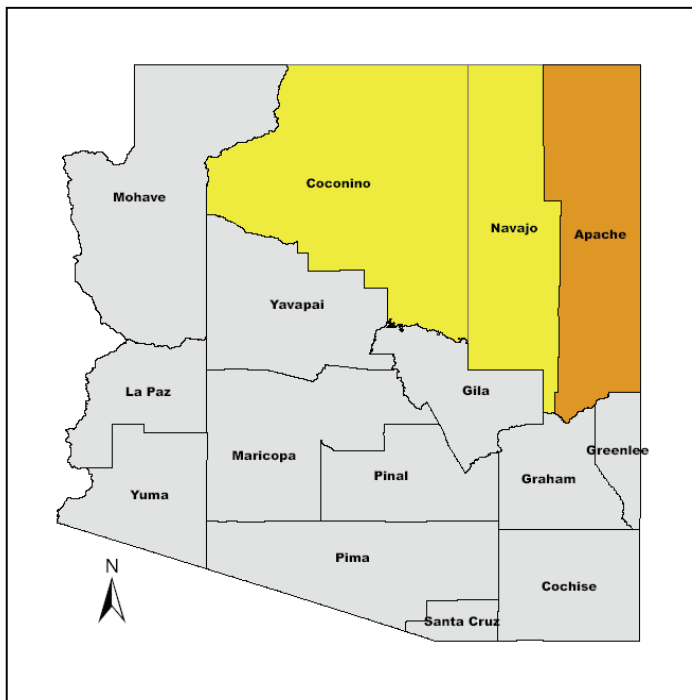
AZ-WIPWG category: Medium

Cal-IPC category: Moderate

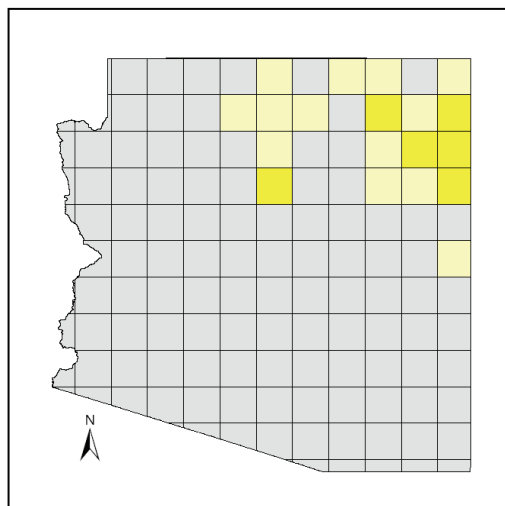
NatureServe ranking: Unknown

Map legend:

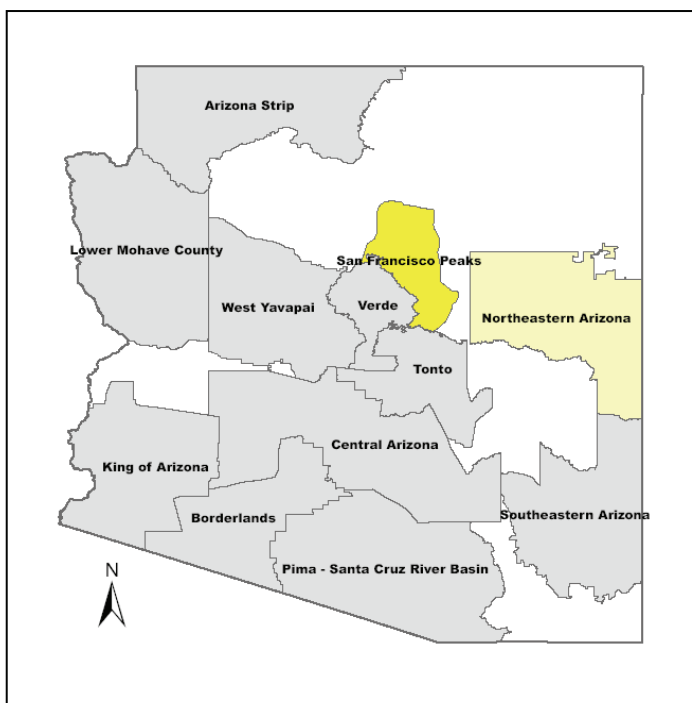
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Centaurea diffusa

Synonym: none
Common Name: white knapweed, diffuse knapweed
USDA Plant Code: CEDI3
Family: Asteraceae






Arizona legal listing: Prohibited, Restricted

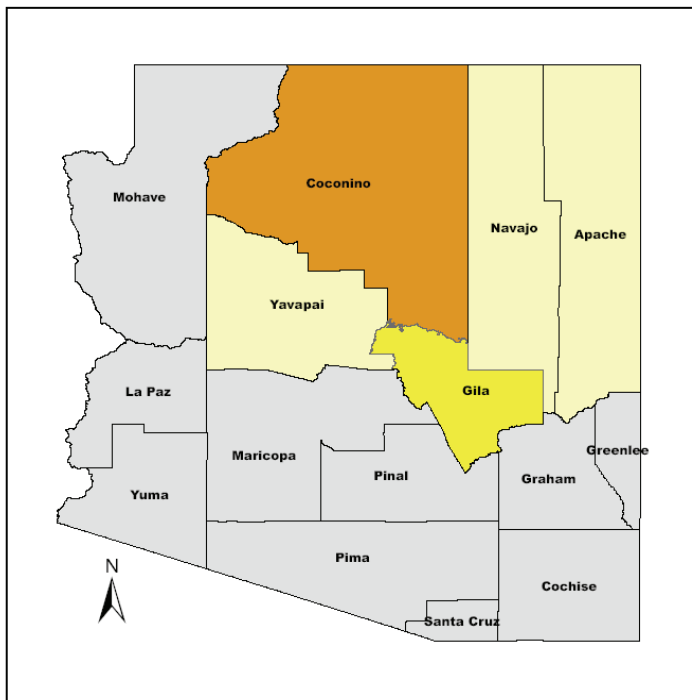
AZ-WIPWG category: Medium

Cal-IPC category: Moderate

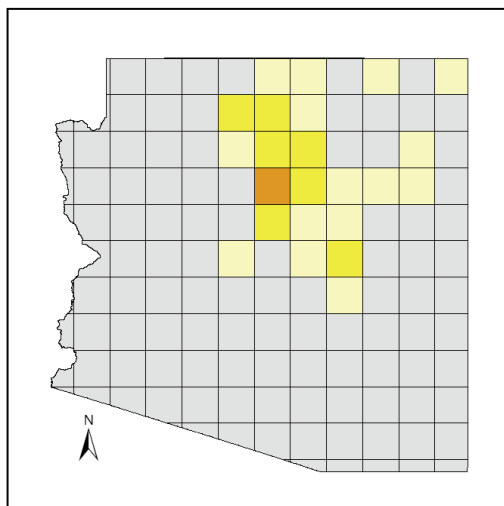
NatureServe ranking: High

Map legend:

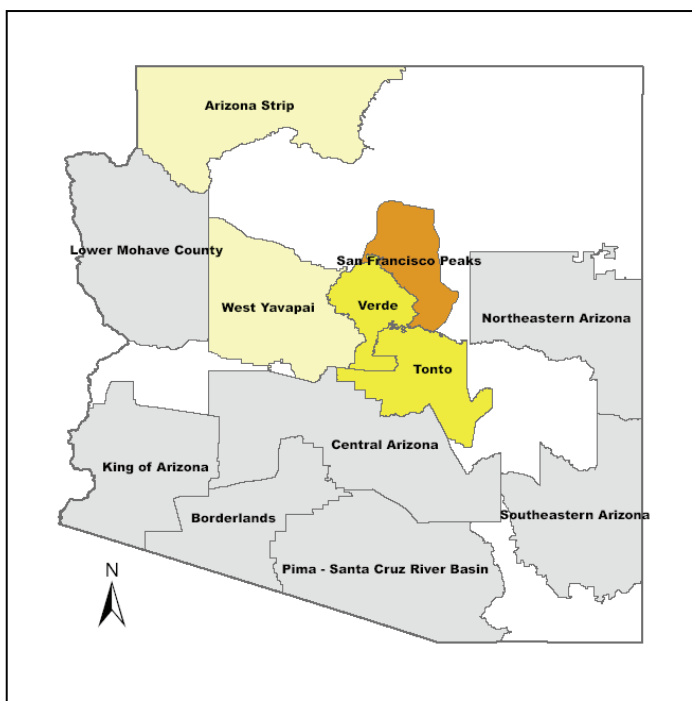
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Centaurea melitensis

Synonym: none
Common Name: Maltese starthistle, Malta starthistle
USDA Plant Code: CEME2
Family: Asteraceae

Arizona legal listing: none

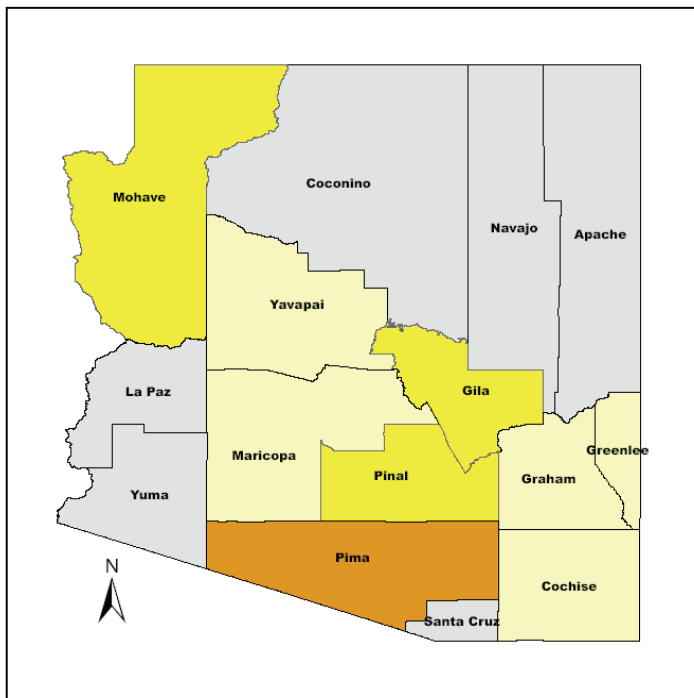
AZ-WIPWG category: Medium

Cal-IPC category: Moderate

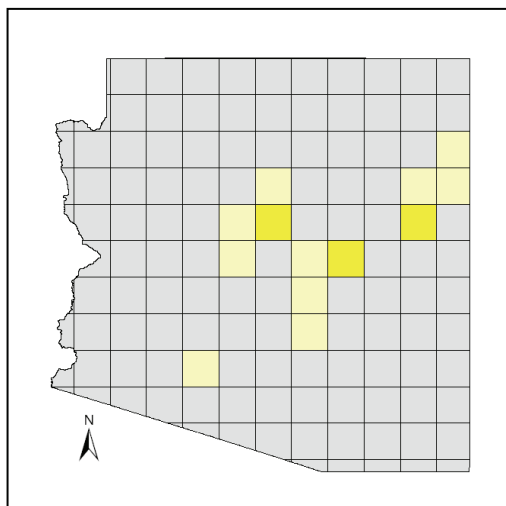
NatureServe ranking: Medium

Map legend:

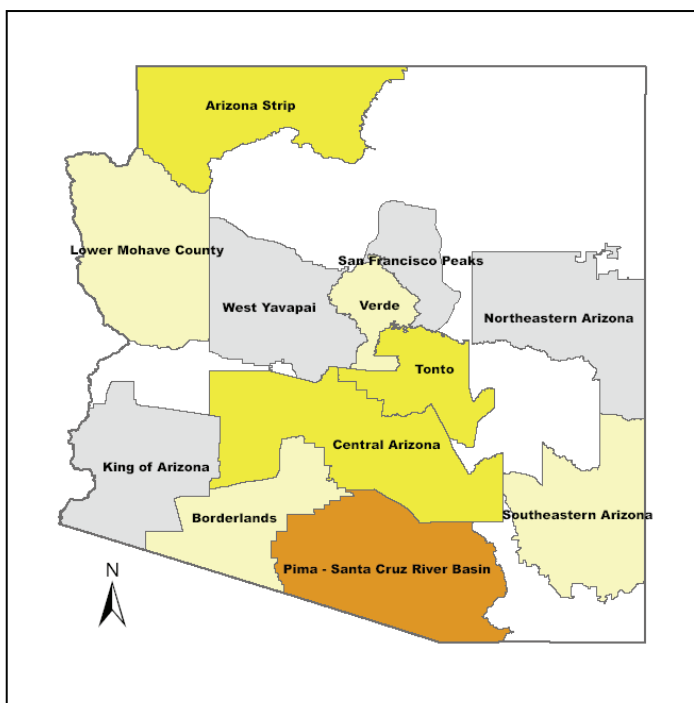
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Centaurea solstitialis

Synonym: none
Common Name: yellow starthistle
USDA Plant Code: CESO3
Family: Asteraceae






Arizona legal listing: Prohibited, Restricted

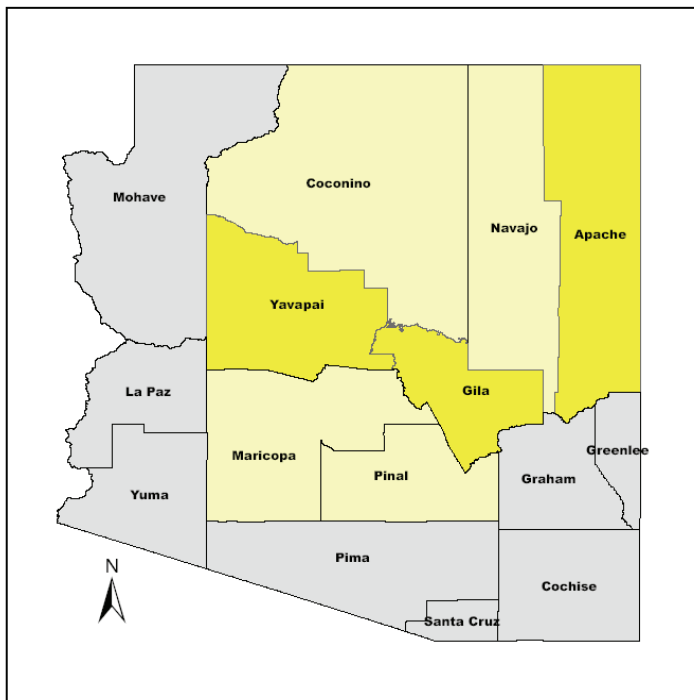
AZ-WIPWG category: High

Cal-IPC category: High

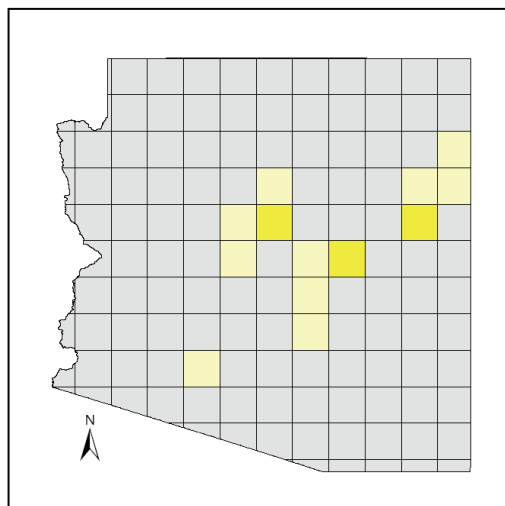
NatureServe ranking: High

Map legend:

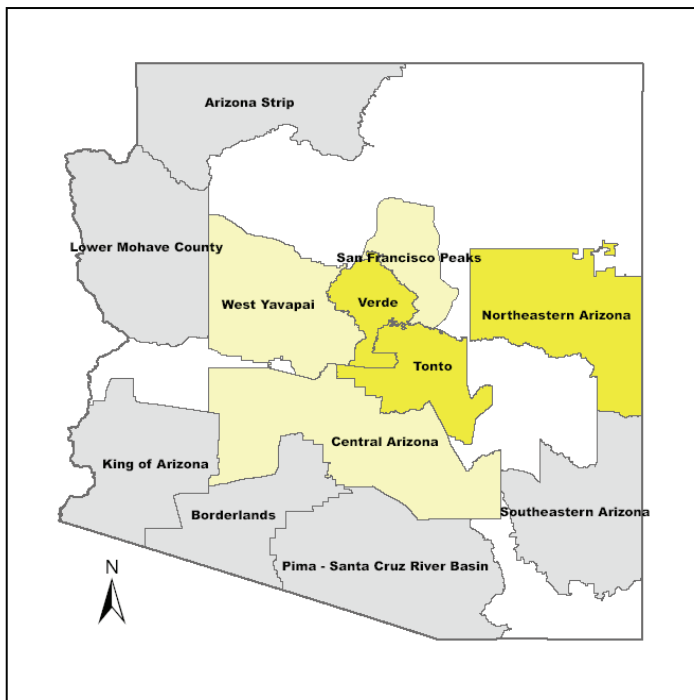
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Centaurea stoebe ssp. *micranthos*

Synonym: *Centaurea biebersteinii*,
Centaurea maculosa

Common Name: spotted knapweed

USDA Plant Code: CESTM

Family: Asteraceae






Arizona legal listing: none

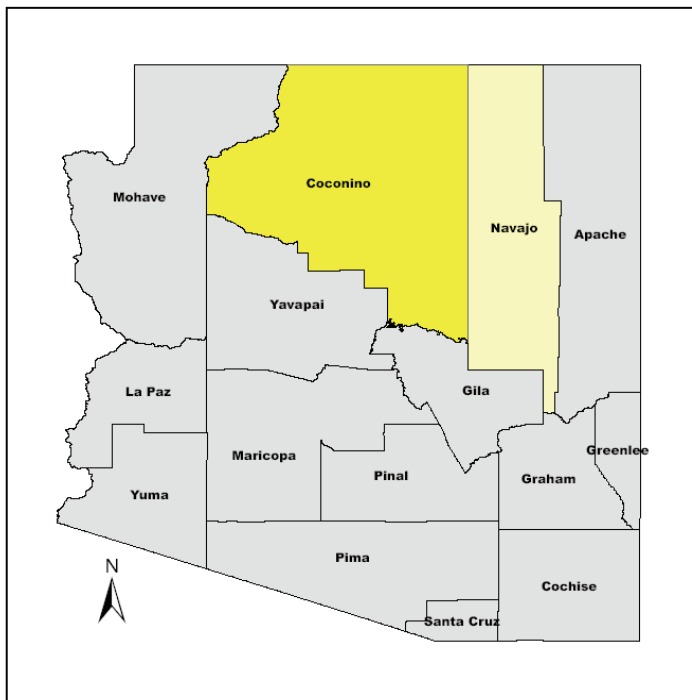
AZ-WIPWG category: Medium,
Red Flag

Cal-IPC category: not assessed at
present

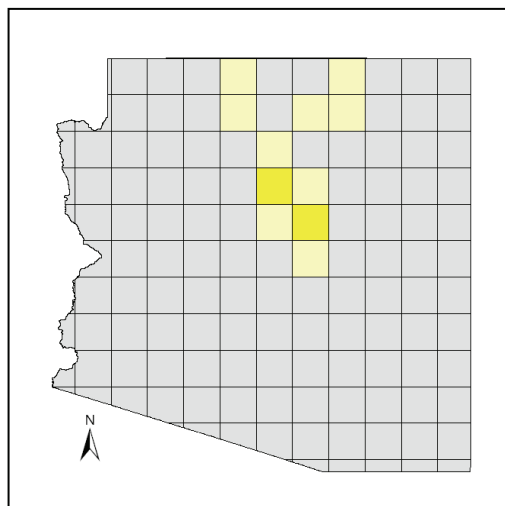
NatureServe ranking: High

Map legend:

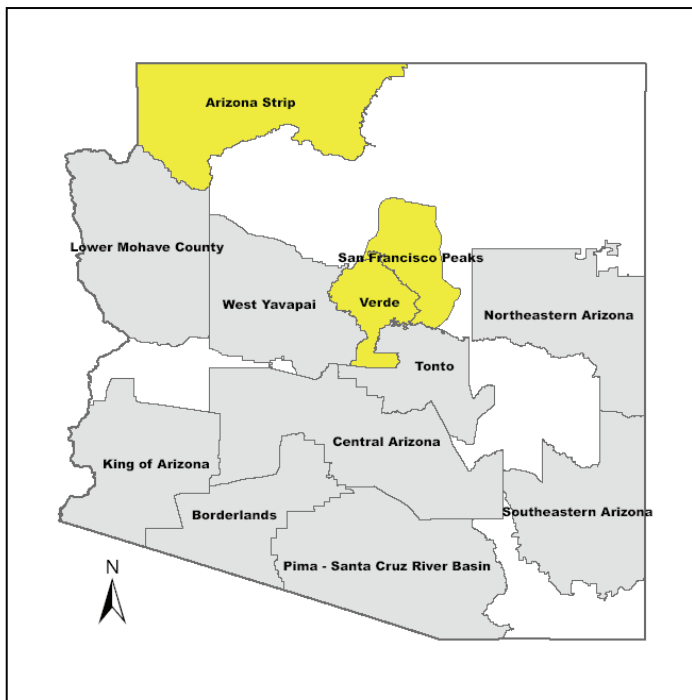
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by
7.5" Topographic Quadrangles



SWEMP occurrence records by
Weed Management Area

Centaurea virgata ssp. *squarrosa*

Synonym: *Centaurea triumfettii*,
Centaurea virgata, *Centaurea squarrosa*

Common Name: squarrose
knapweed

USDA Plant Code: CEVIS2

Family: Asteraceae

Arizona legal listing: Prohibited

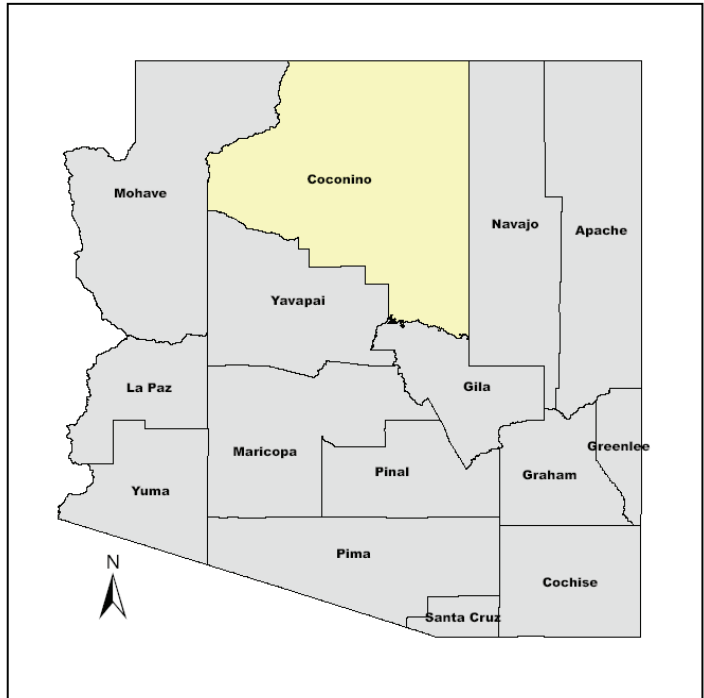
AZ-WIPWG category: not
assessed at present

Cal-IPC category: Moderate

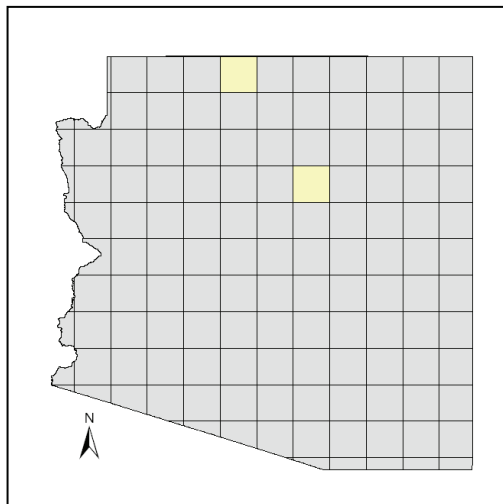
NatureServe ranking: Unknown

Map legend:

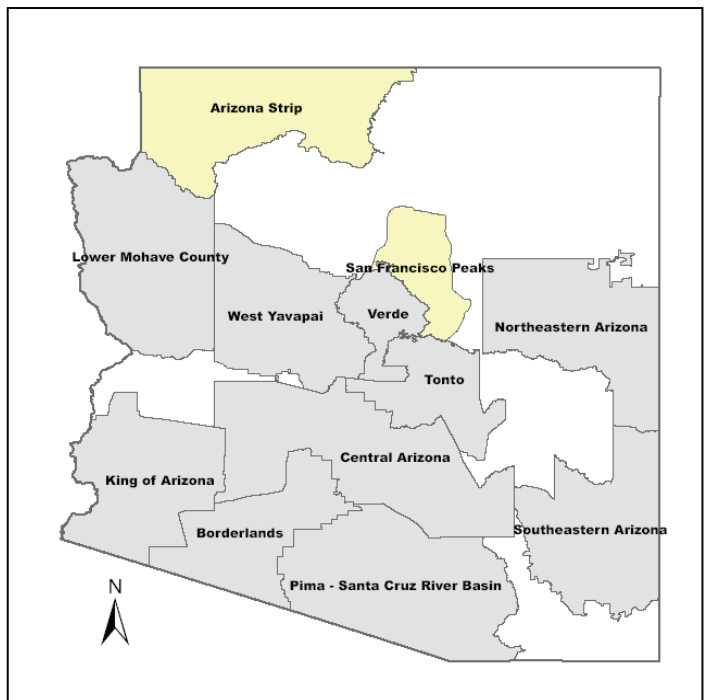
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by
7.5" Topographic Quadrangles



SWEMP occurrence records by
Weed Management Area

Chondrilla juncea

Synonym: none

Common Name: hogbite, rush skeletonweed

USDA Plant Code: CHJU

Family: Asteraceae






Arizona legal listing: Prohibited

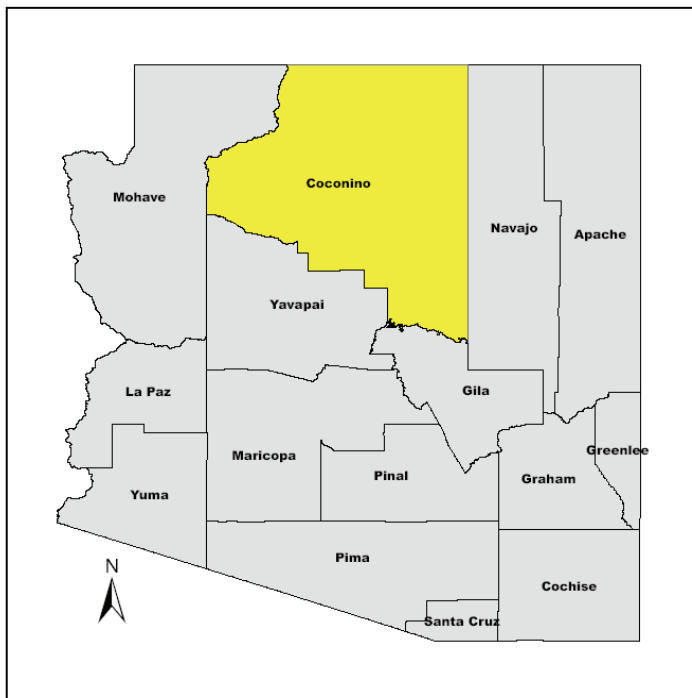
AZ-WIPWG category: Medium - Alert

Cal-IPC category: Moderate

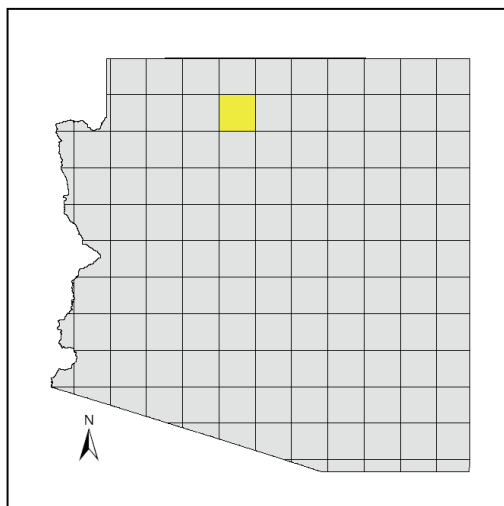
NatureServe ranking: Unknown

Map legend:

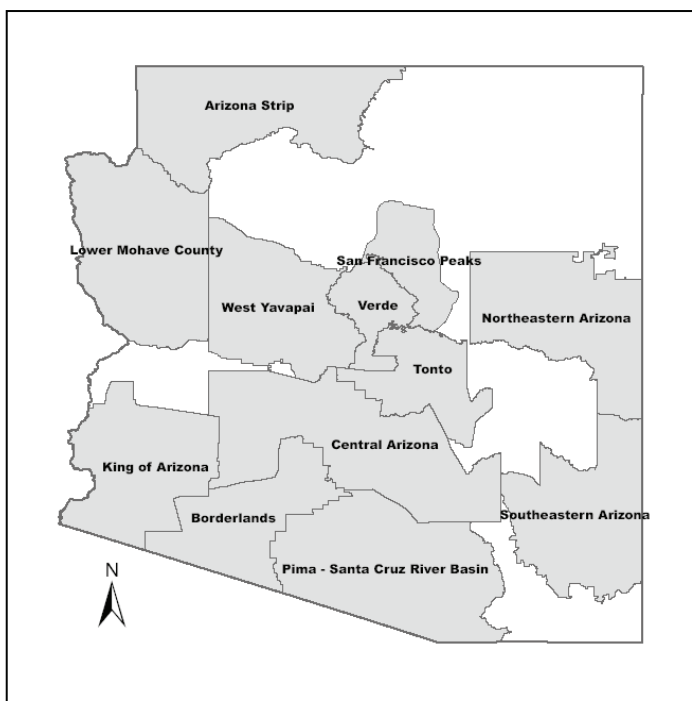
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Cirsium arvense

Synonym: none
Common Name: Canada thistle
USDA Plant Code: CIAR4
Family: Asteraceae

Arizona legal listing: Prohibited

AZ-WIPWG category: Medium, Red Flag

Cal-IPC category: Moderate

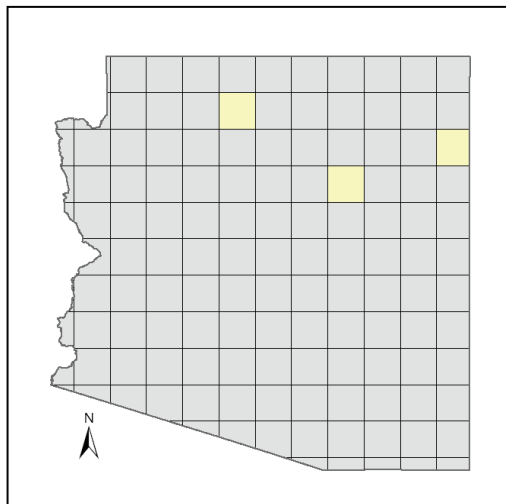
NatureServe ranking: High

Map legend:

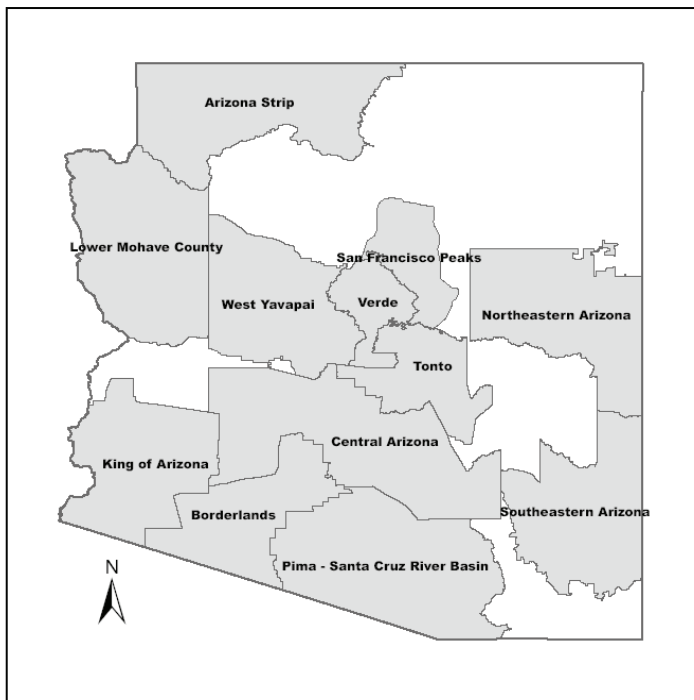
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Cirsium vulgare

Synonym: none
Common Name: bull thistle
USDA Plant Code: CIVU
Family: Asteraceae






Arizona legal listing: none

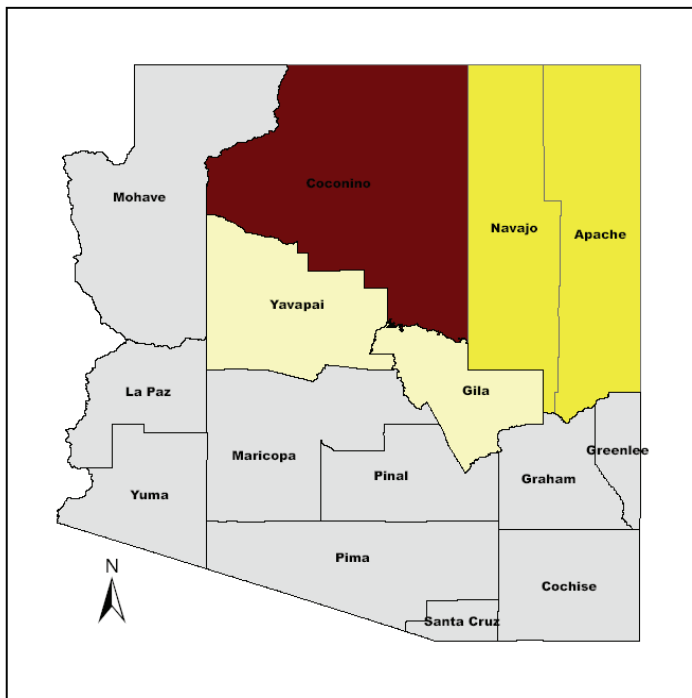
AZ-WIPWG category: Low

Cal-IPC category: Moderate

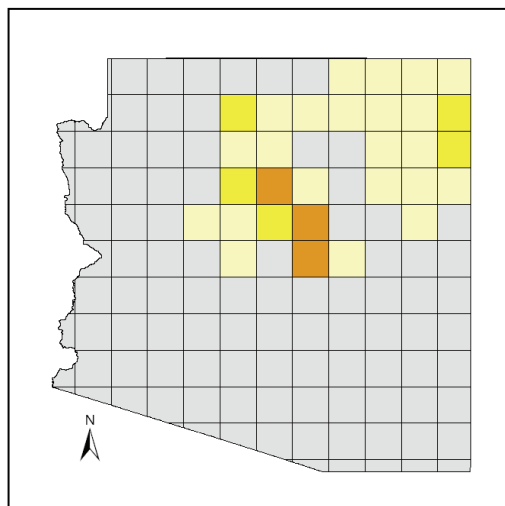
NatureServe ranking: Medium

Map legend:

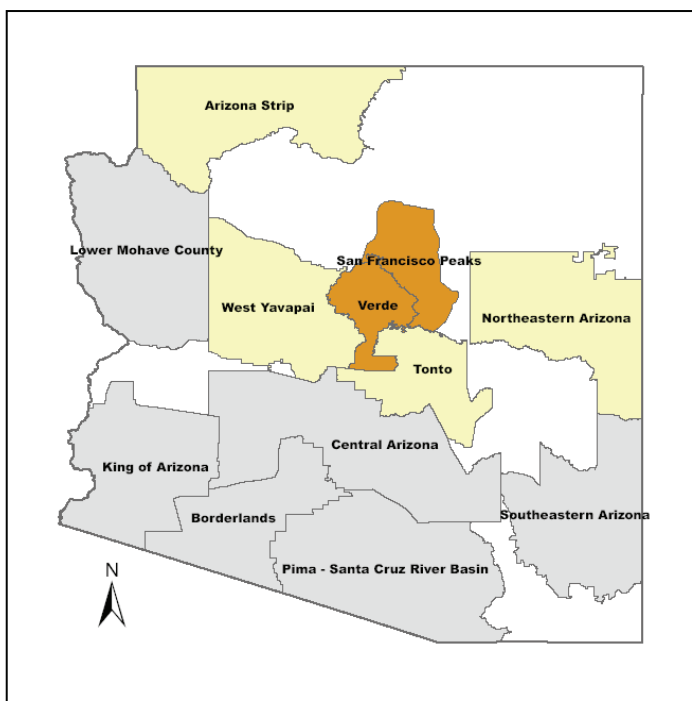
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Conium maculatum

Synonym: none
Common Name: poison hemlock
USDA Plant Code: COMA2
Family: Apiaceae

Arizona legal listing: none

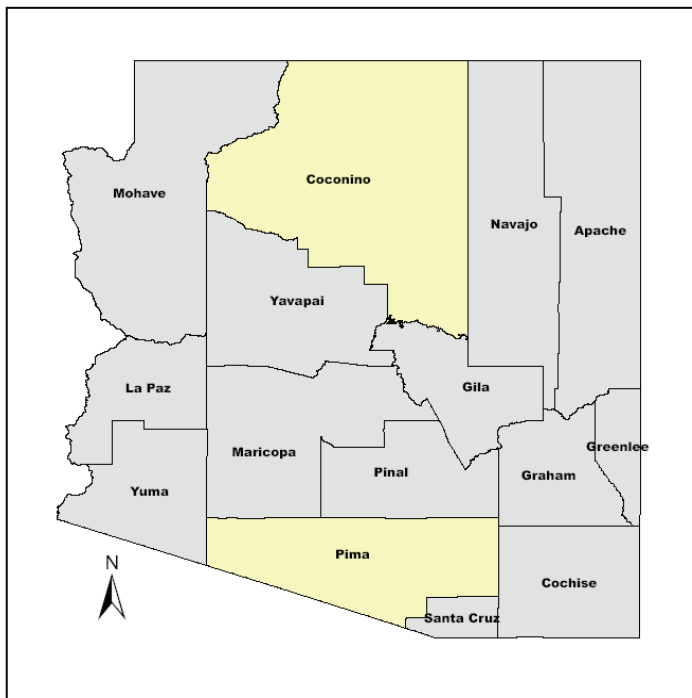
AZ-WIPWG category: Medium - Alert

Cal-IPC category: Moderate

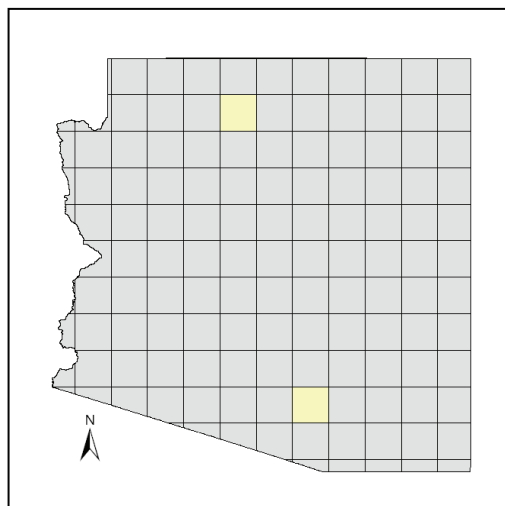
NatureServe ranking: Medium

Map legend:

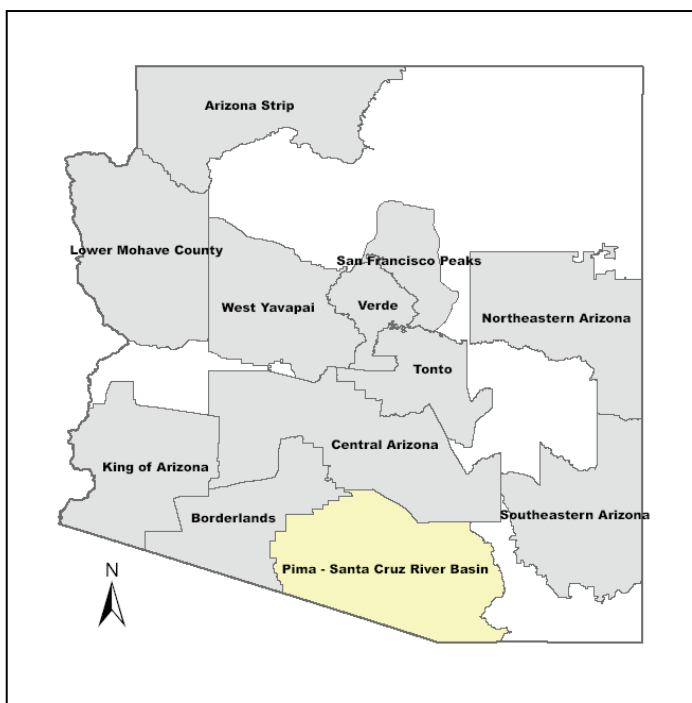
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Convolvulus arvensis

Synonym: none
Common Name: field bindweed
USDA Plant Code: COAR4
Family: Convolvulaceae






Arizona legal listing: Prohibited, Regulated

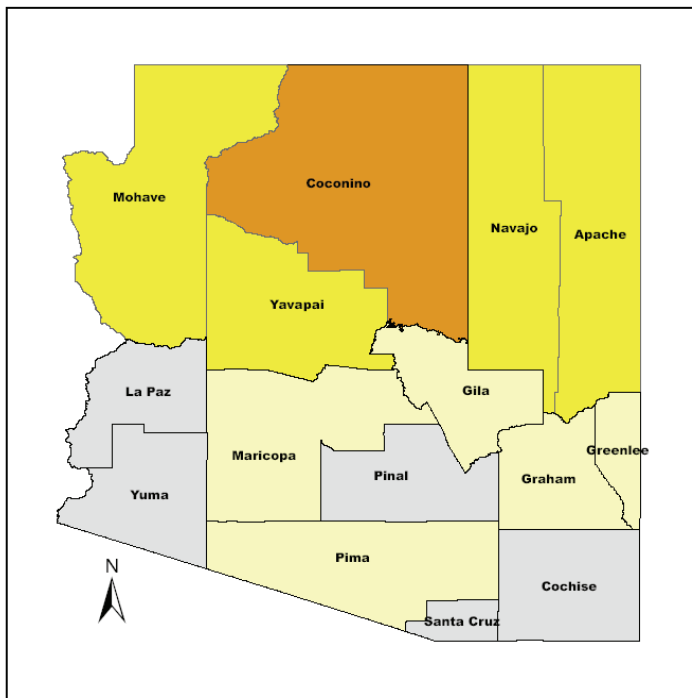
AZ-WIPWG category: Medium

Cal-IPC category: Evaluated, Not Listed

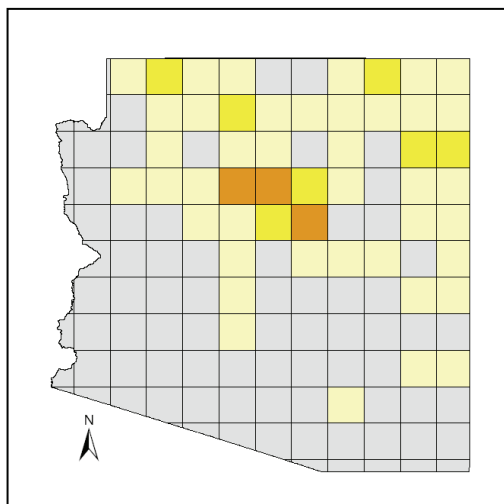
NatureServe ranking: Medium

Map legend:

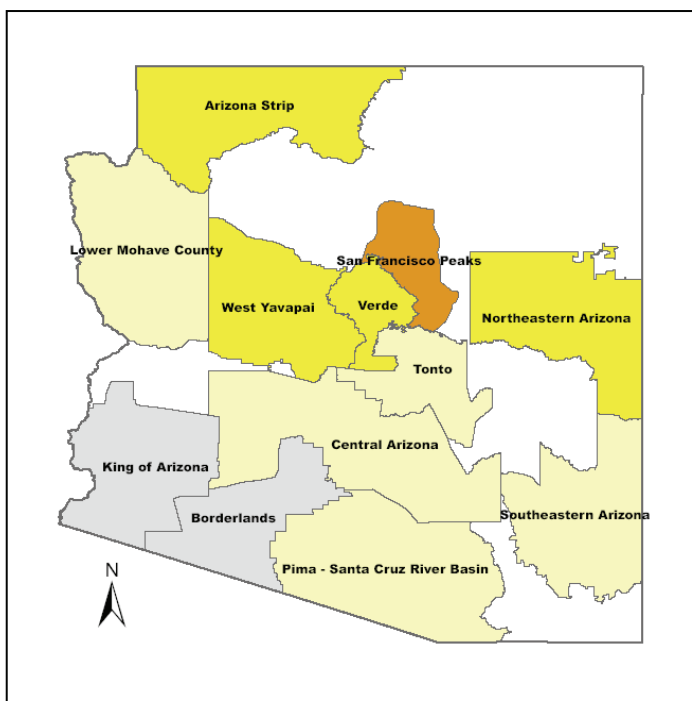
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Cortaderia selloana

Synonym: none
Common Name: Uruguayan pampas grass, Selloa pampas grass
USDA Plant Code: COSE4
Family: Poaceae

Arizona legal listing: none

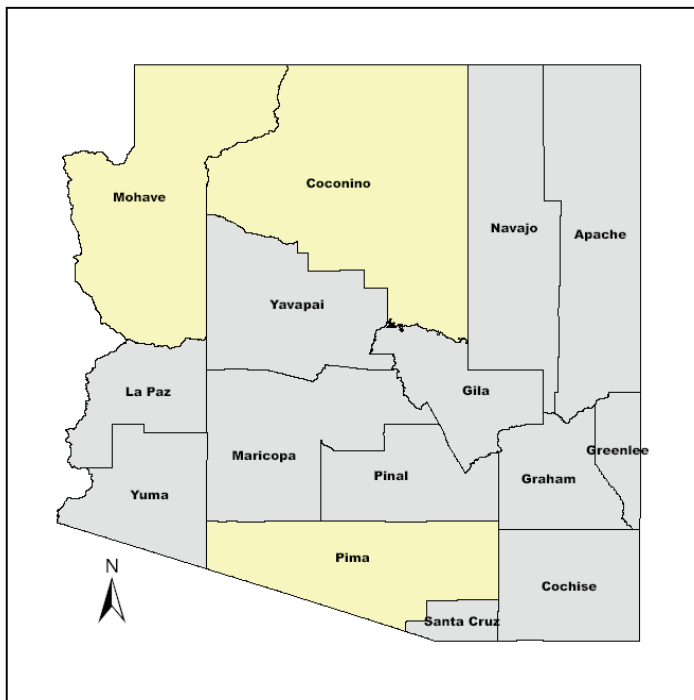
AZ-WIPWG category: Medium, Red Flag

Cal-IPC category: High

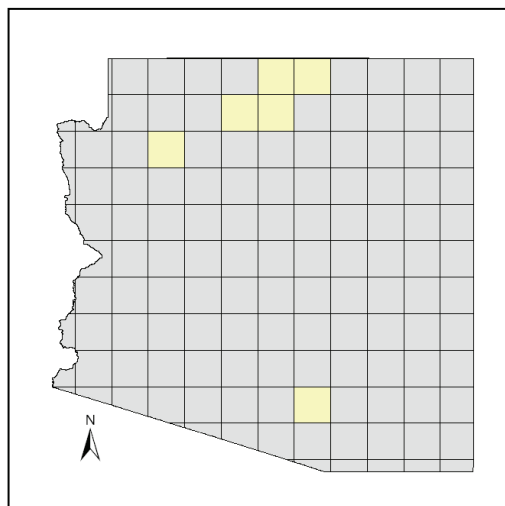
NatureServe ranking: Medium

Map legend:

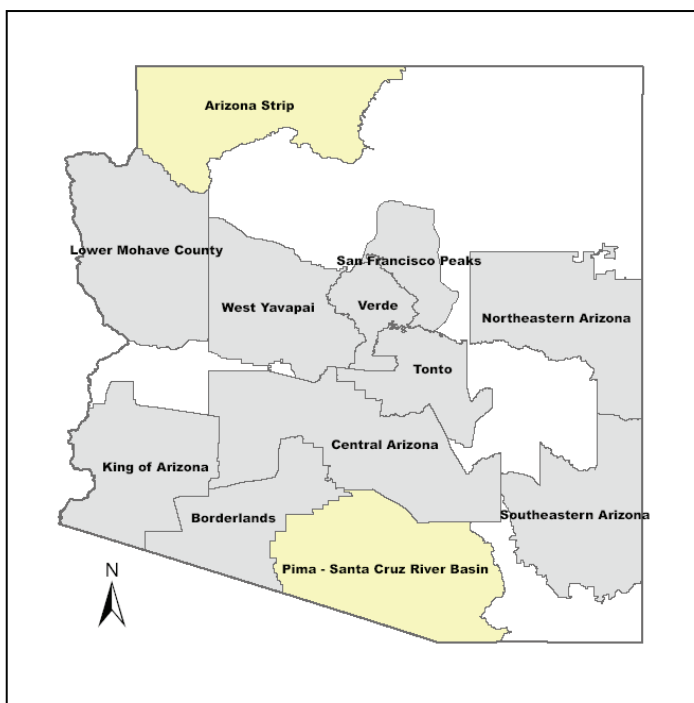
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Cynodon dactylon

Synonym: none
Common Name: Bermudagrass
USDA Plant Code: CYDA
Family: Poaceae






Arizona legal listing: none

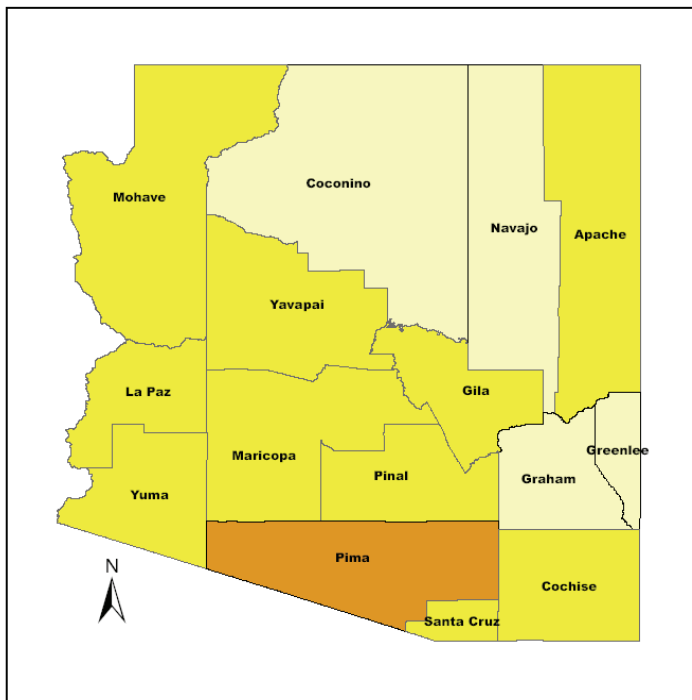
AZ-WIPWG category: Medium

Cal-IPC category: Moderate

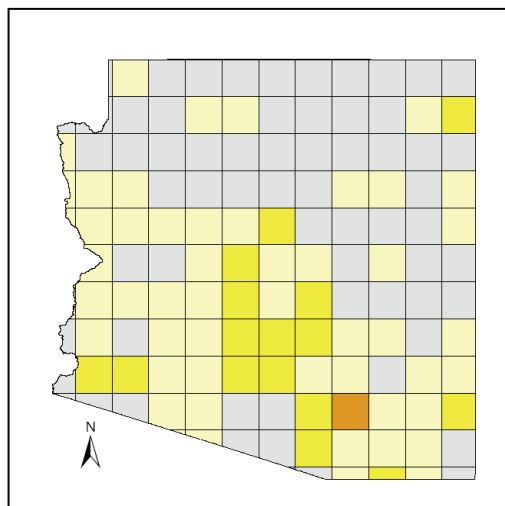
NatureServe ranking: Medium

Map legend:

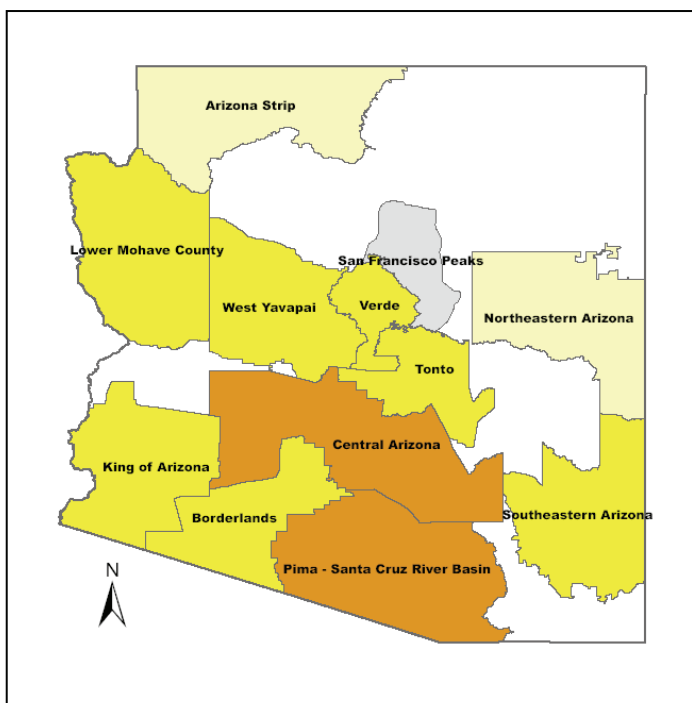
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Cynoglossum officinale

Synonym: none
Common Name: gypsyflower, houndstongue
USDA Plant Code: CYOF
Family: Boraginaceae

Arizona legal listing: none

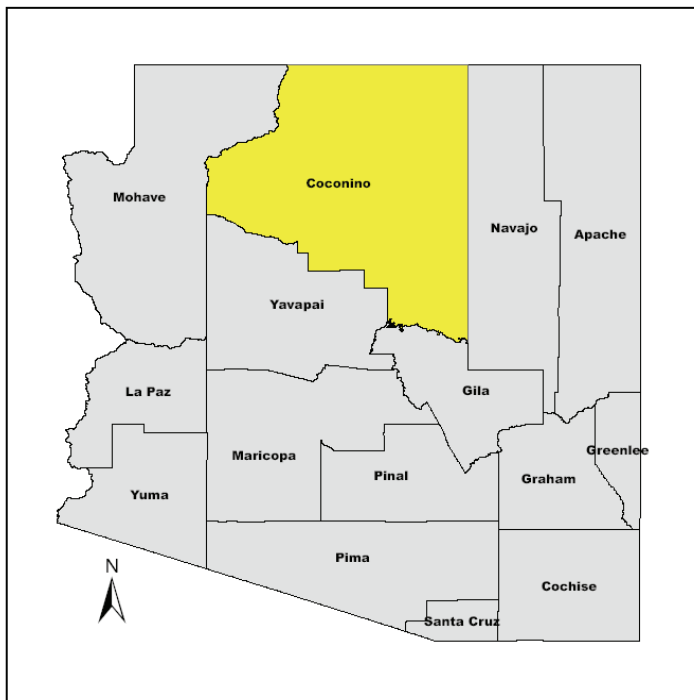
AZ-WIPWG category: Low

Cal-IPC category: Moderate

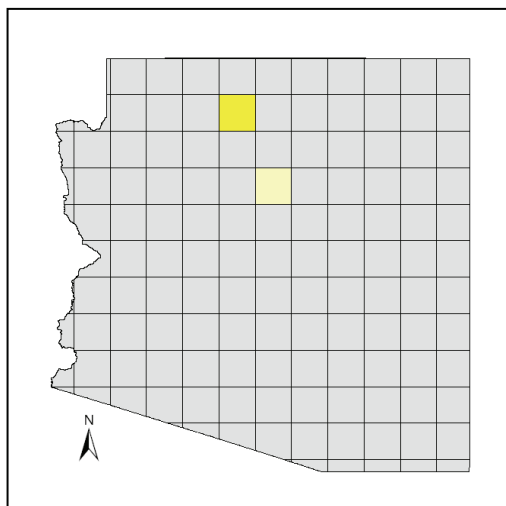
NatureServe ranking: Medium

Map legend:

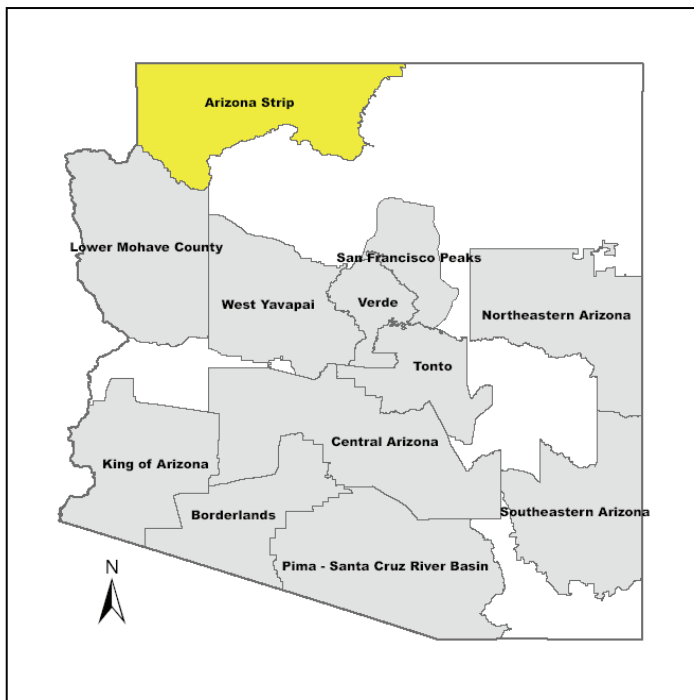
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Dipsacus fullonum

Synonym: none
Common Name: Fuller's teasel
USDA Plant Code: DIFU2
Family: Dipsaceae

Arizona legal listing: none

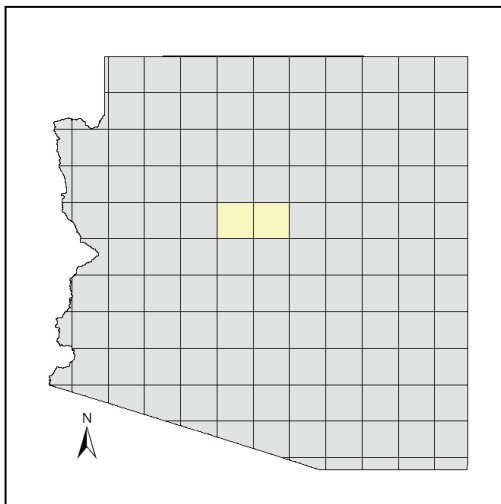
AZ-WIPWG category: not assessed at present

Cal-IPC category: Moderate

NatureServe ranking: Medium

Map legend:

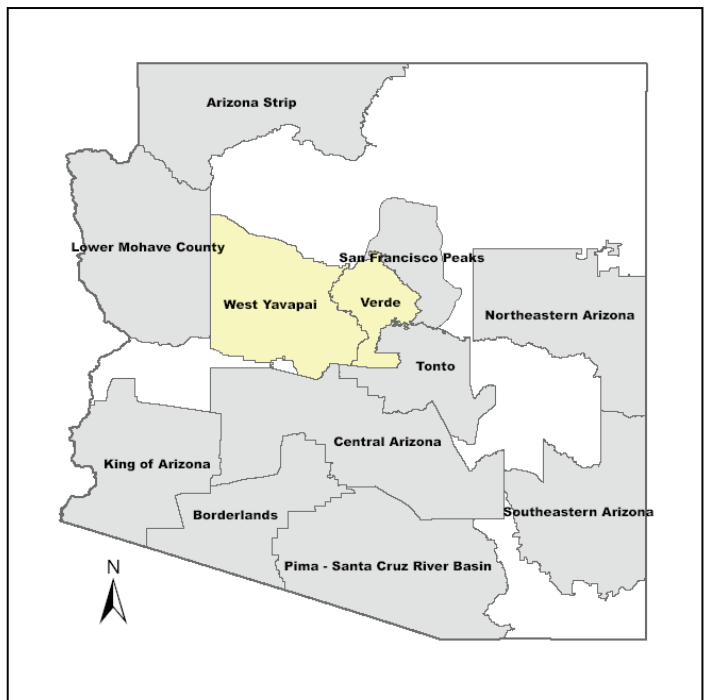
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by County



SWEMP occurrence records by Weed Management Area

Eichhornia crassipes

Synonym: none
Common Name: common water hyacinth
USDA Plant Code: EICR
Family: Pontederiaceae






Arizona legal listing: Prohibited, Regulated, Restricted

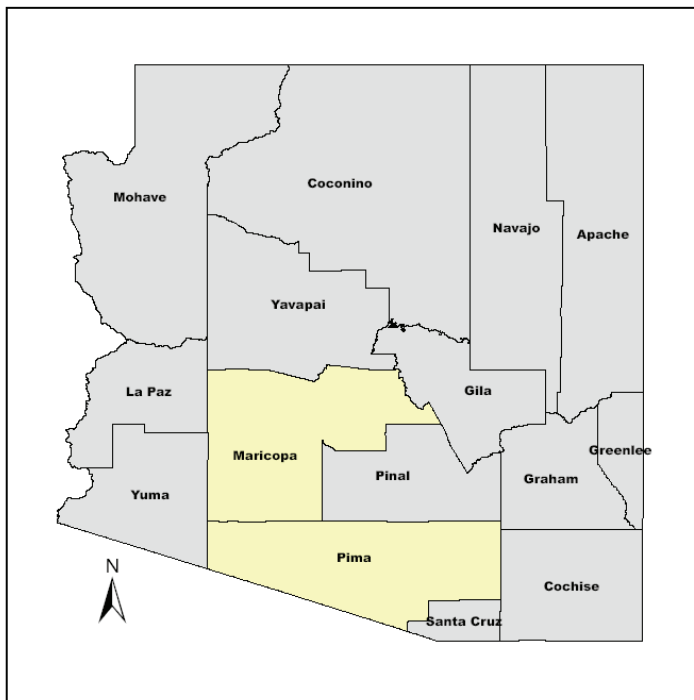
AZ-WIPWG category: High - Alert, Red Flag

Cal-IPC category: High - Alert

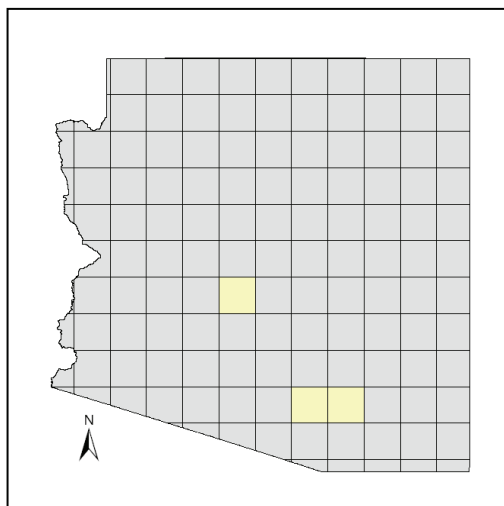
NatureServe ranking: High

Map legend:

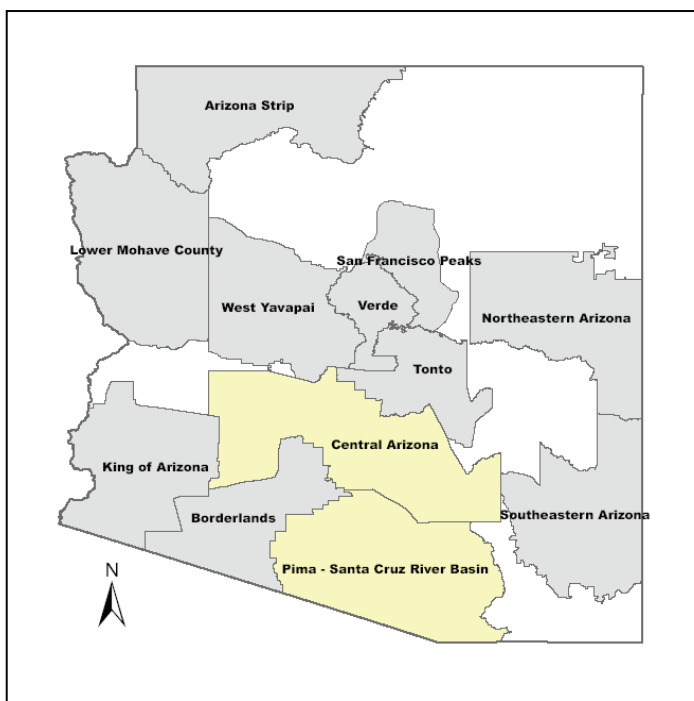
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Elaeagnus angustifolia

Synonym: none
Common Name: Russian olive
USDA Plant Code: ELAN
Family: *Elaeagnaceae*






Arizona legal listing: none

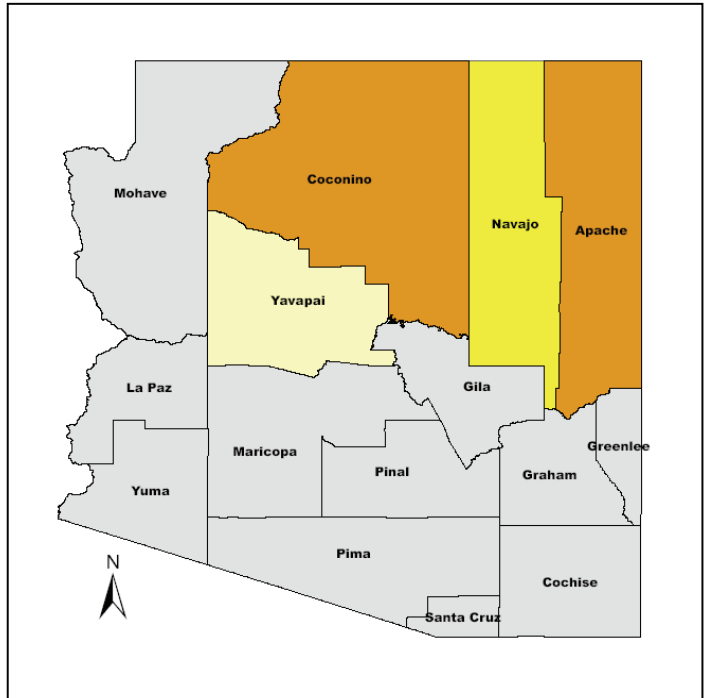
AZ-WIPWG category: High

Cal-IPC category: Moderate

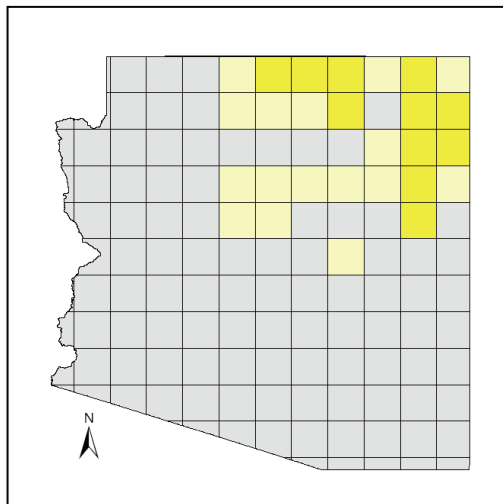
NatureServe ranking: High

Map legend:

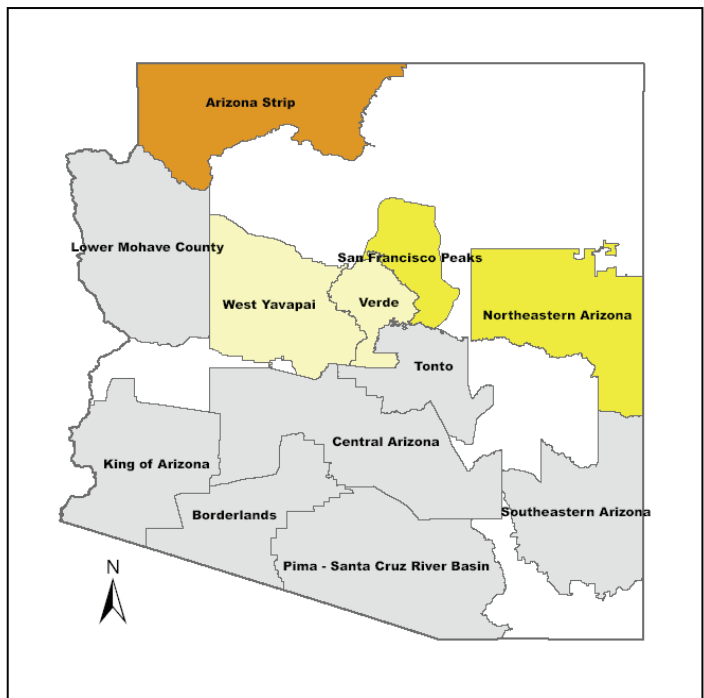
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Elymus repens

Synonym: *Agropyron repens*,
Elytrigia repens

Common Name: quackgrass

USDA Plant Code: ELRE4

Family: Poaceae

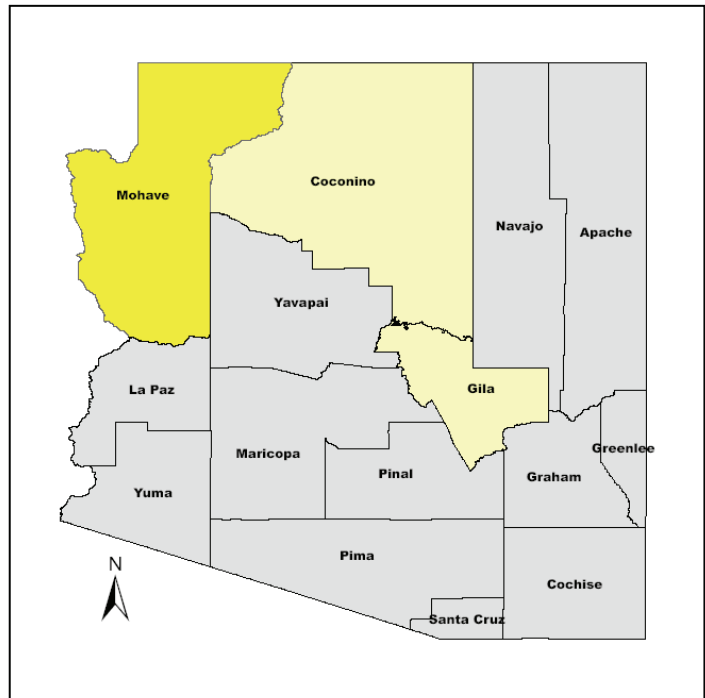
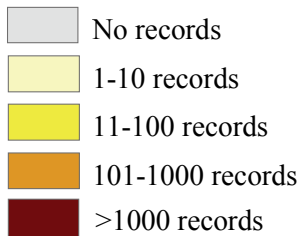
Arizona legal listing: none

AZ-WIPWG category: Low

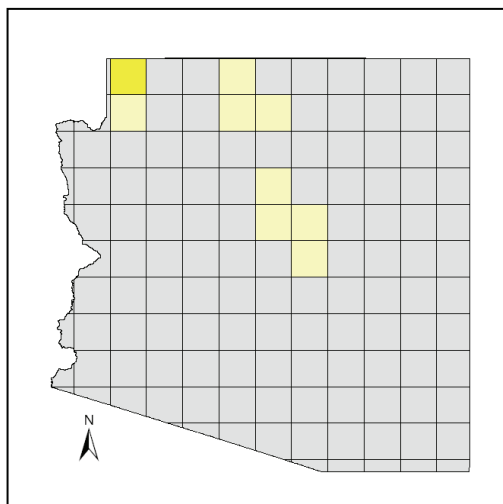
Cal-IPC category: not assessed at present

NatureServe ranking: High

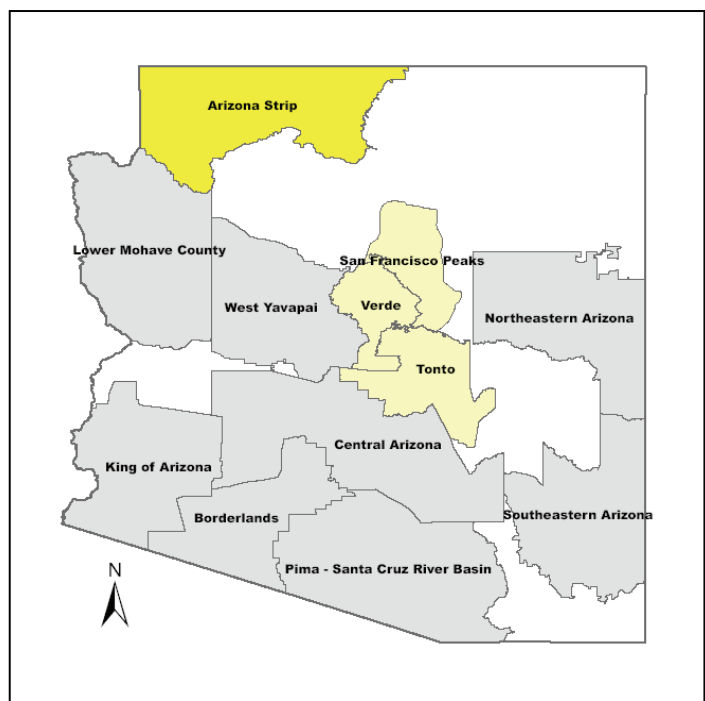
Map legend:



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Eragrostis lehmanniana

Synonym: none
Common Name: Lehmann lovegrass
USDA Plant Code: ERLE
Family: Poaceae






Arizona legal listing: none

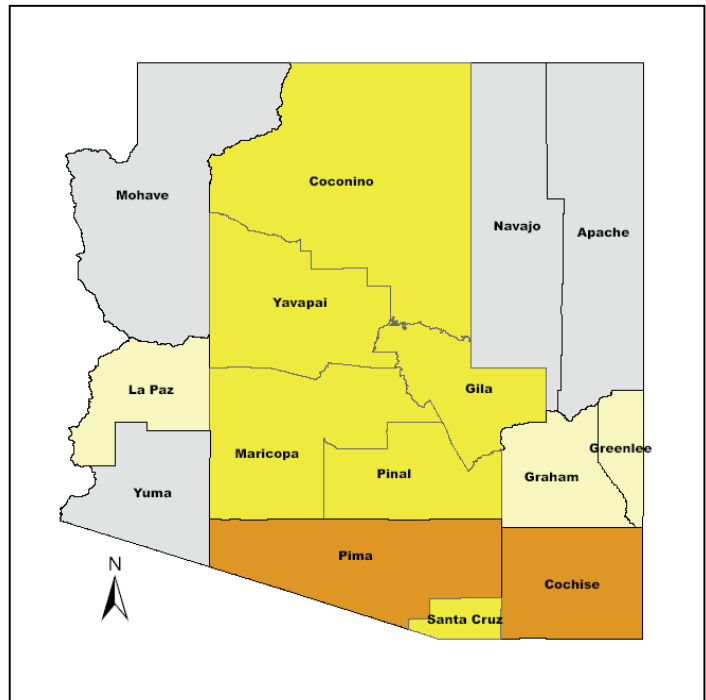
AZ-WIPWG category: High

Cal-IPC category: not assessed at present

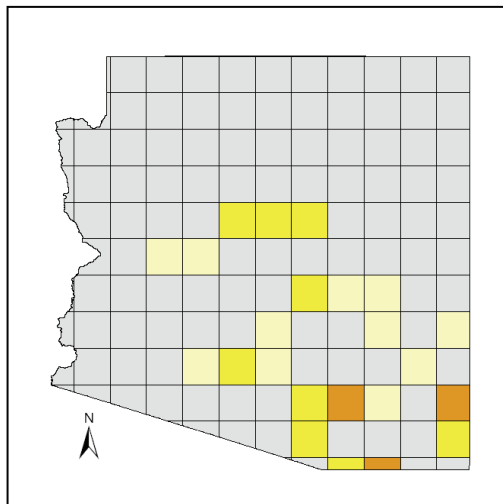
NatureServe ranking: High

Map legend:

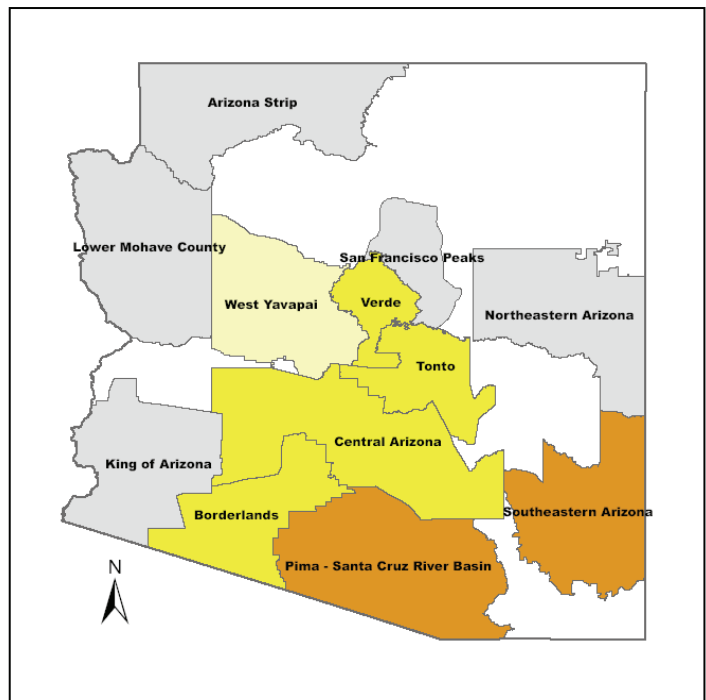
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Euphorbia esula

Synonym: none
Common Name: leafy spurge
USDA Plant Code: EUES
Family: Euphorbiaceae






Arizona legal listing: Prohibited

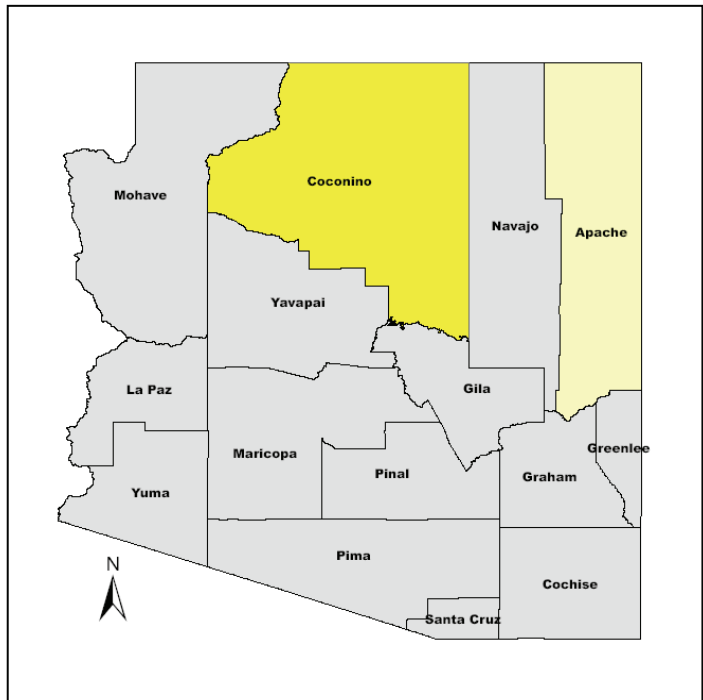
AZ-WIPWG category: High - Alert

Cal-IPC category: High - Alert

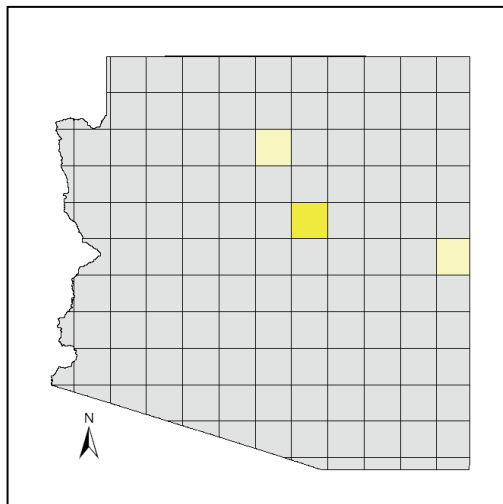
NatureServe ranking: High

Map legend:

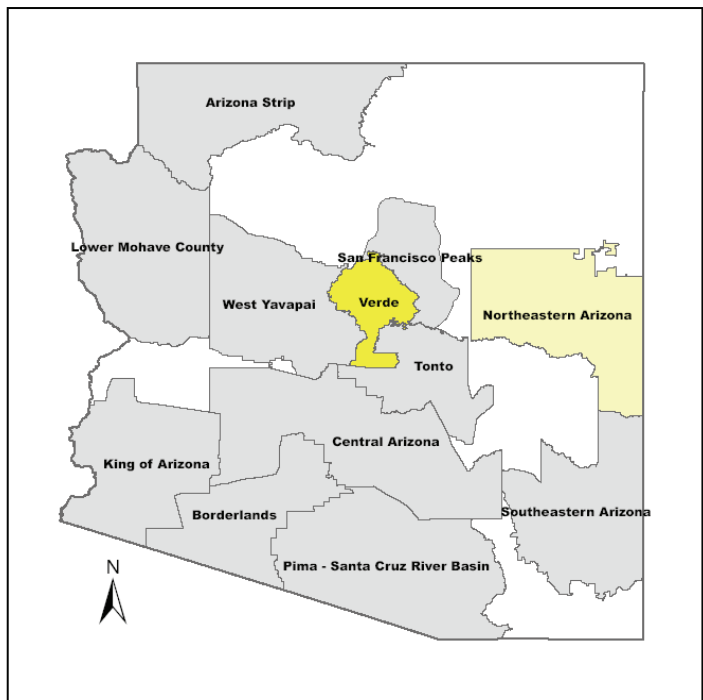
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Euryops multifidus

Synonym: *Euryops subcarnosus*
ssp. vulgaris
Common Name: sweet resinbush
USDA Plant Code: EUMU
Family: Asteraceae

Arizona legal listing: Restricted

AZ-WIPWG category: High, Red Flag

Cal-IPC category: not assessed at present

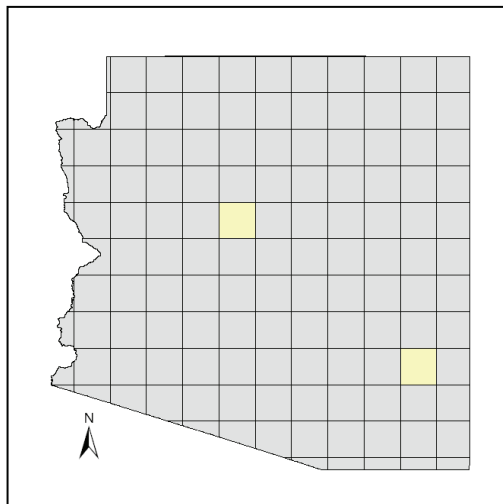
NatureServe ranking: Medium

Map legend:

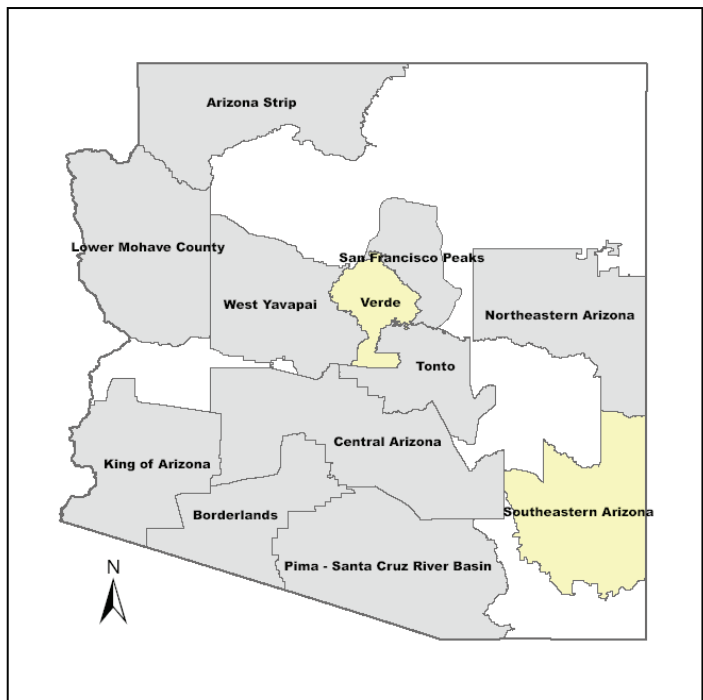
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Halogeton glomeratus

Synonym: none
Common Name: saltlover,
 halogeton
USDA Plant Code: HAGL
Family: Chenopodiaceae






Arizona legal listing: Prohibited,
 Restricted

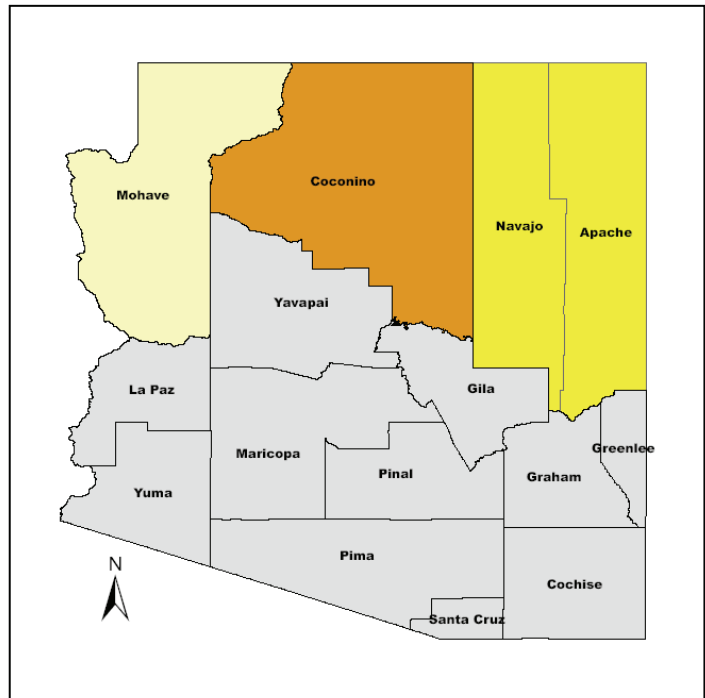
AZ-WIPWG category: not
 assessed at present

Cal-IPC category: Moderate

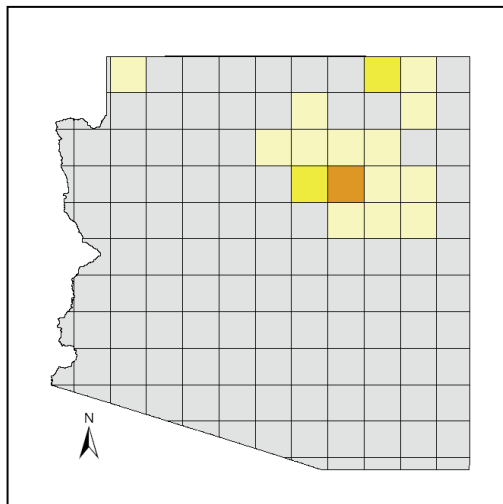
NatureServe ranking: High

Map legend:

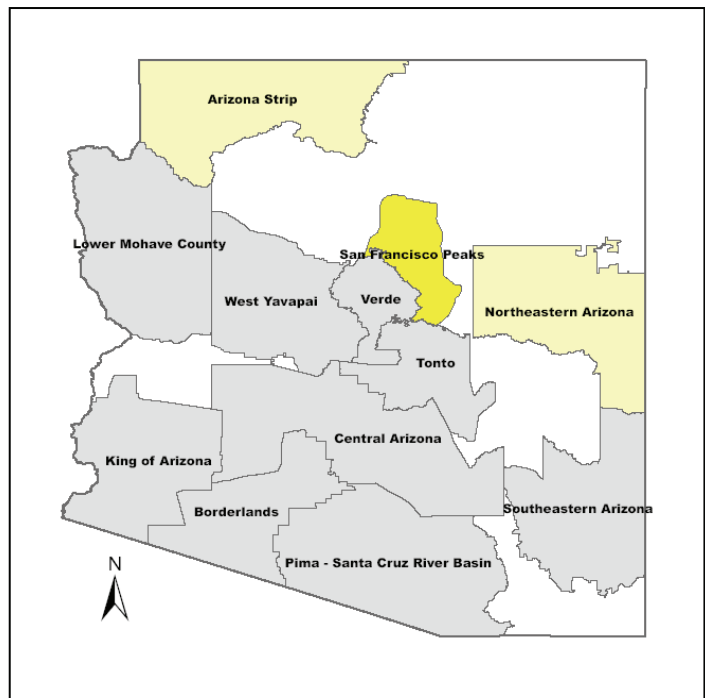
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by
 7.5" Topographic Quadrangles



SWEMP occurrence records by
 Weed Management Area

Hordeum murinum

Synonym: none
Common Name: mouse barley
USDA Plant Code: HOMU
Family: Poaceae






Arizona legal listing: none

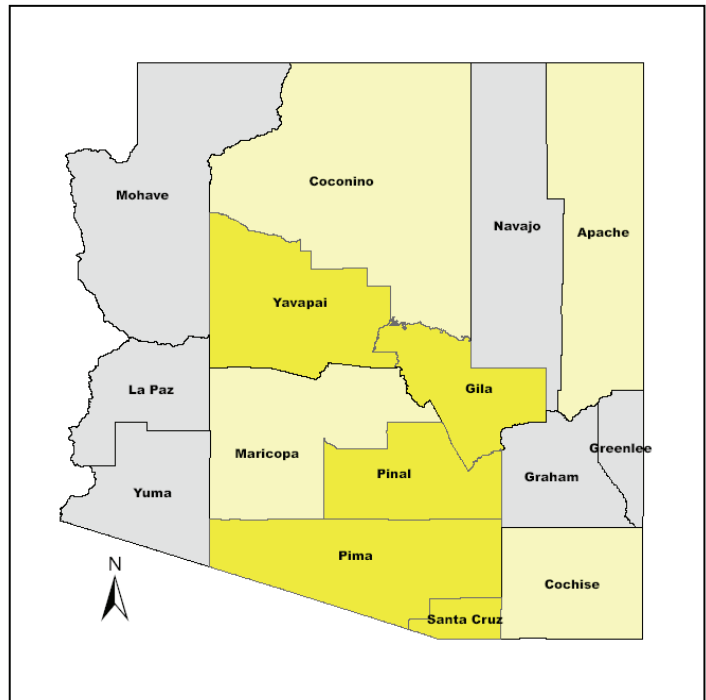
AZ-WIPWG category: Medium, Red Flag

Cal-IPC category: Moderate

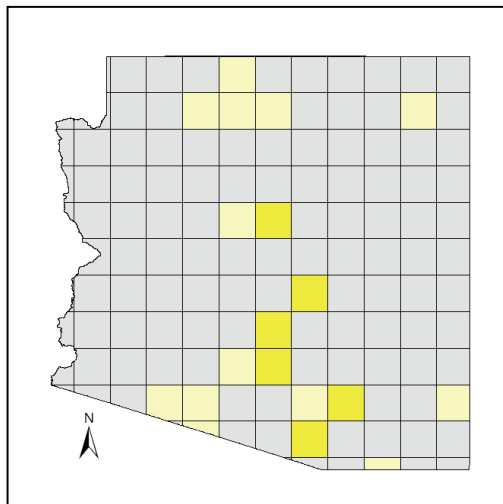
NatureServe ranking: Unknown

Map legend:

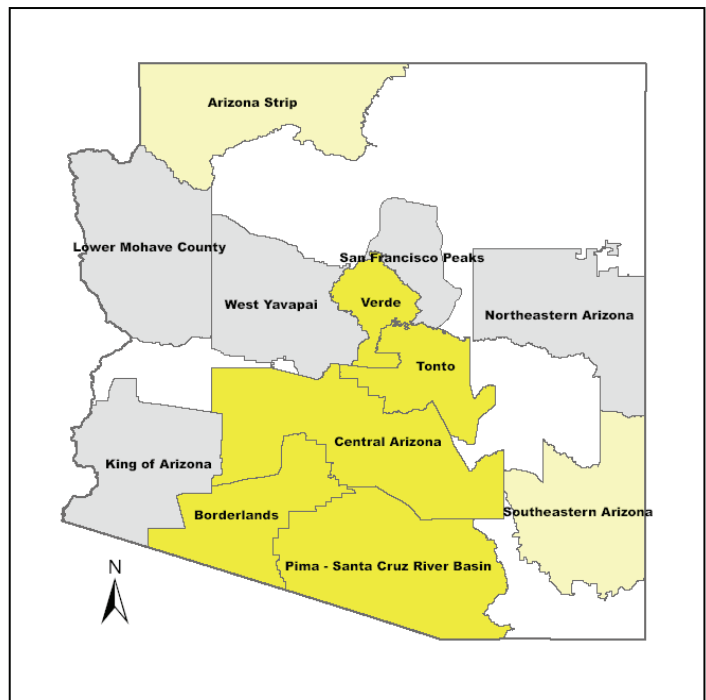
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Hydrilla verticillata

Synonym: none
Common Name: hydrilla
USDA Plant Code: HYVE3
Family: Hydrocharitaceae

Arizona legal listing: Prohibited

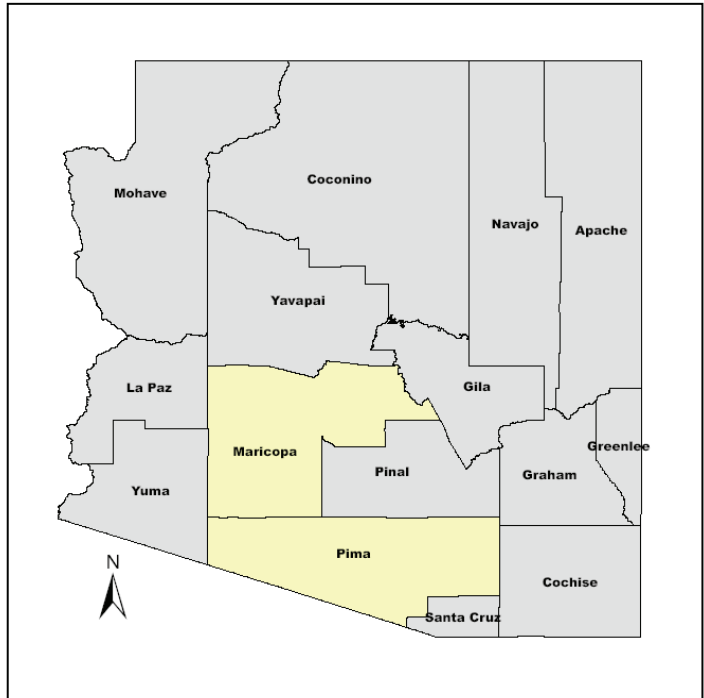
AZ-WIPWG category: Evaluated,
 Not Listed, Red Flag

Cal-IPC category: High - Alert

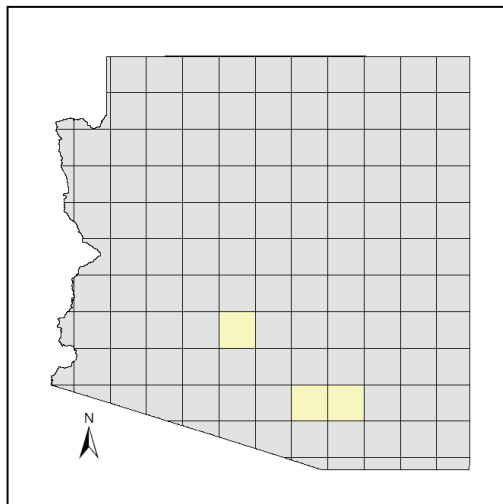
NatureServe ranking: High

Map legend:

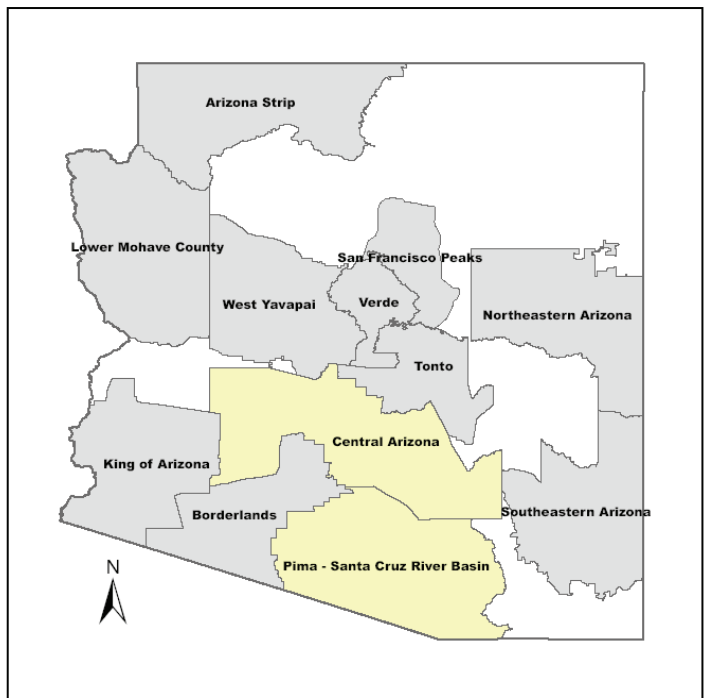
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by
 7.5" Topographic Quadrangles



SWEMP occurrence records by
 Weed Management Area

Lepidium latifolium

Synonym: none
Common Name: broad leaved
 pepperweed
USDA Plant Code: LELA2
Family: Brassicaceae






Arizona legal listing: none

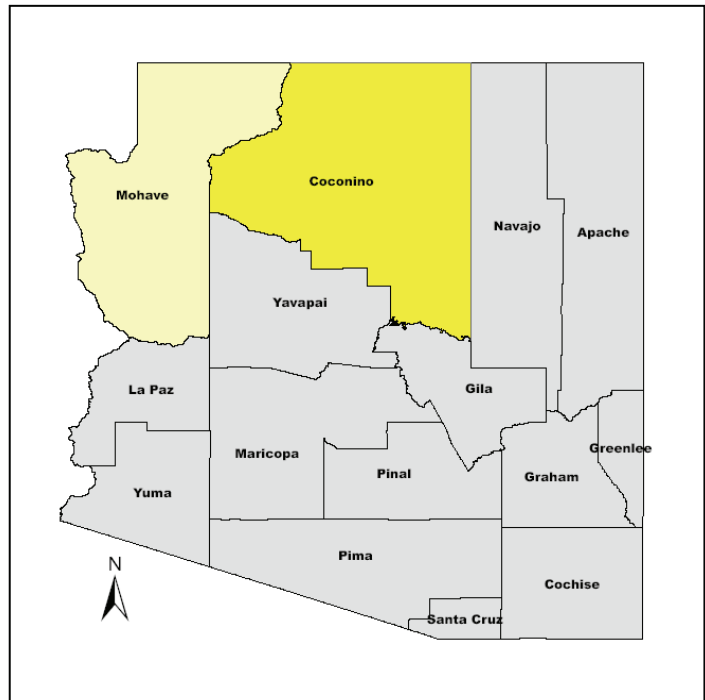
AZ-WIPWG category: High -
 Alert, Red Flag

Cal-IPC category: High

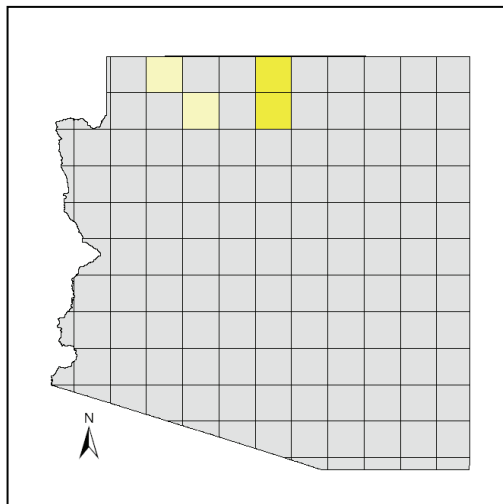
NatureServe ranking: High

Map legend:

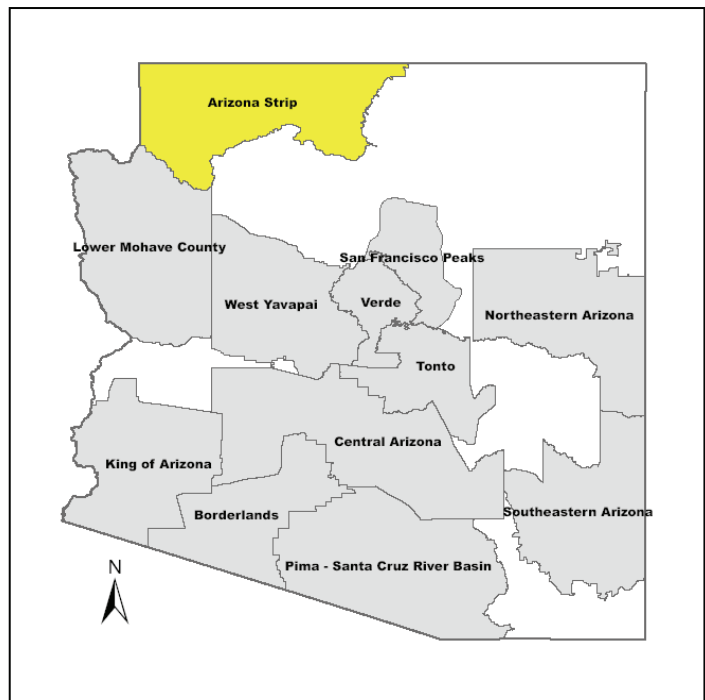
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by
 7.5" Topographic Quadrangles



SWEMP occurrence records by
 Weed Management Area

Leucanthemum vulgare

Synonym: none
Common Name: oxeye daisy
USDA Plant Code: LEVU
Family: Asteraceae

Arizona legal listing: none

AZ-WIPWG category: Low

Cal-IPC category: Moderate

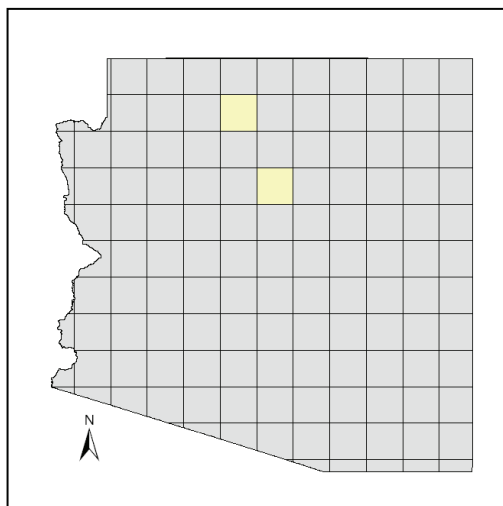
NatureServe ranking: Medium

Map legend:

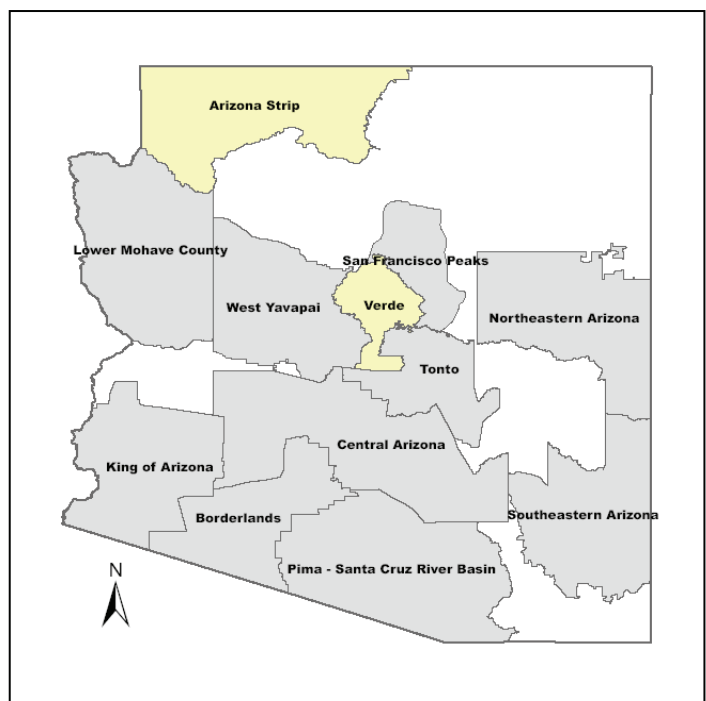
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5'' Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Linaria dalmatica

Synonym: *Linaria genistifolia* ssp. *dalmatica*

Common Name: Dalmatian toadflax

USDA Plant Code: LIDA

Family: Scrophulariaceae






Arizona legal listing: Prohibited, Restricted

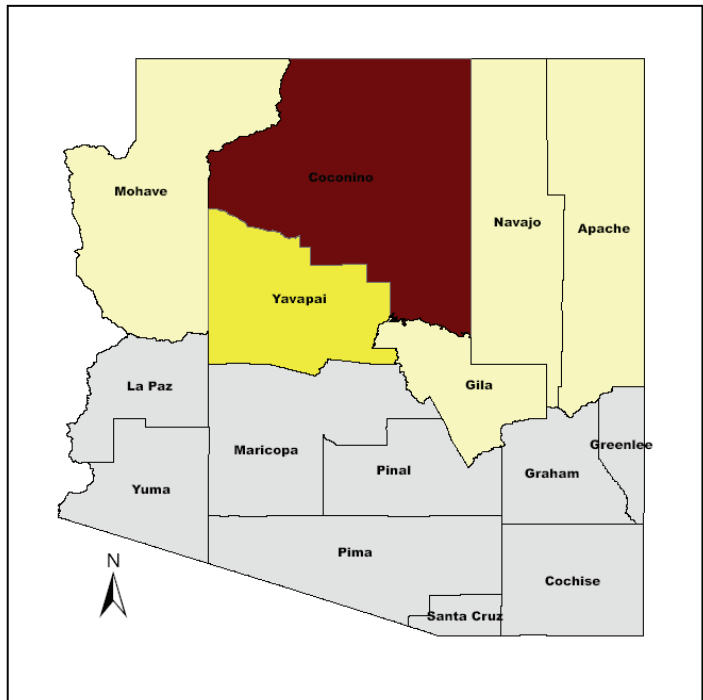
AZ-WIPWG category: Medium, Red Flag

Cal-IPC category: not assessed at present

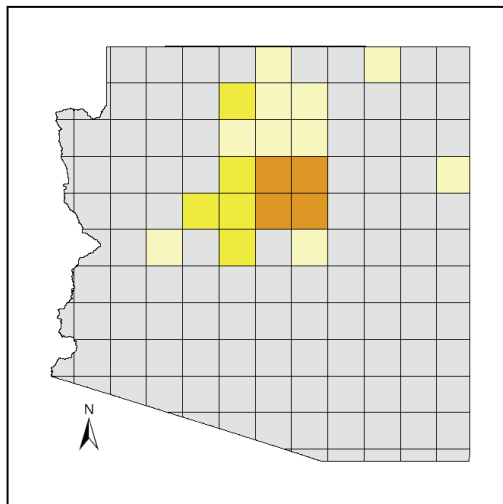
NatureServe ranking: not assessed at present

Map legend:

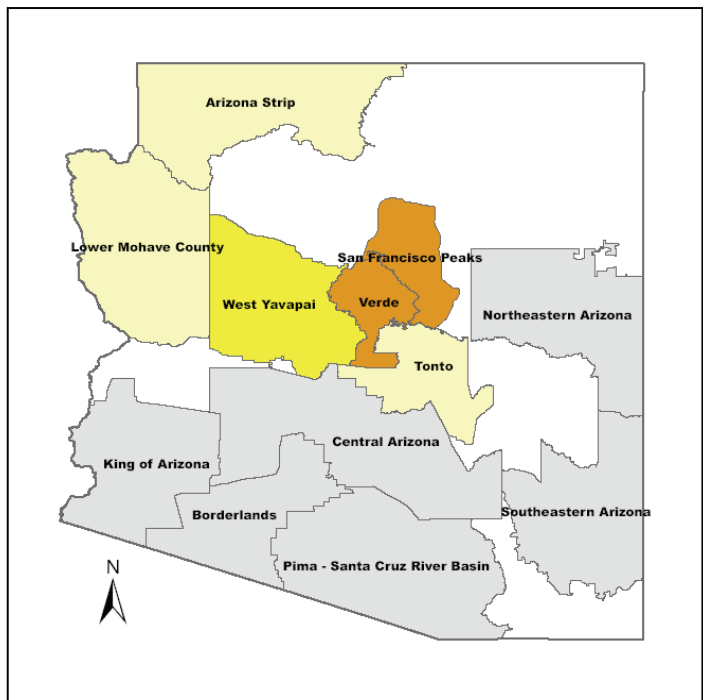
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Lolium perenne

Synonym: none
Common Name: perennial ryegrass
USDA Plant Code: LOPE
Family: Poaceae

Arizona legal listing: none

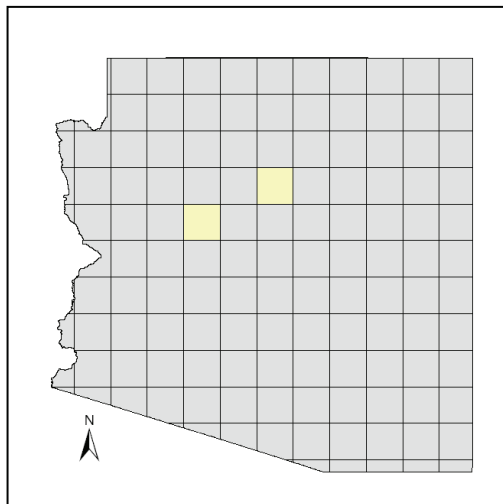
AZ-WIPWG category: Medium

Cal-IPC category: not assessed at present

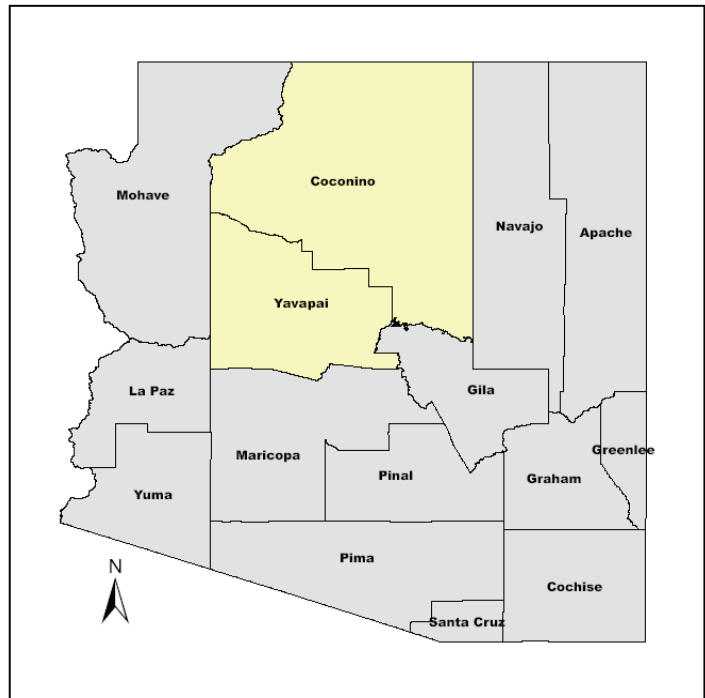
NatureServe ranking: Medium

Map legend:

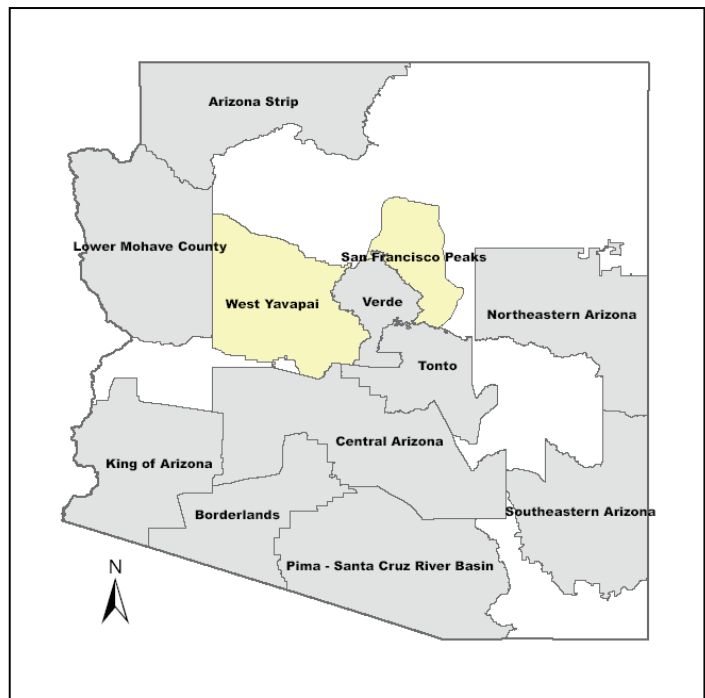
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by County



SWEMP occurrence records by Weed Management Area

Melilotus officinalis

Synonym: *Melilotus alba*, *Melilotus albus*

Common Name: yellow sweetclover

USDA Plant Code: MEOF

Family: Fabaceae

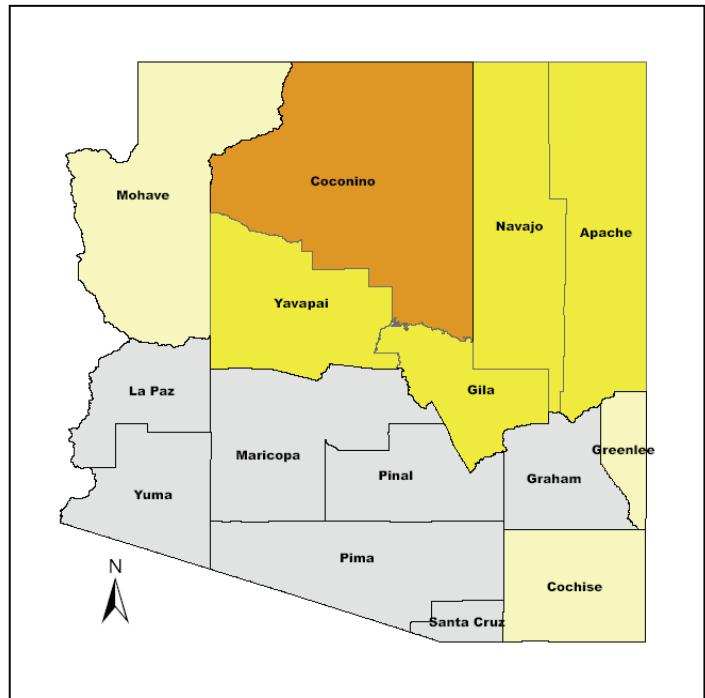
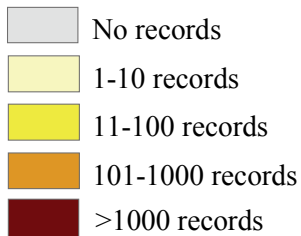
Arizona legal listing: none

AZ-WIPWG category: Medium, Red Flag

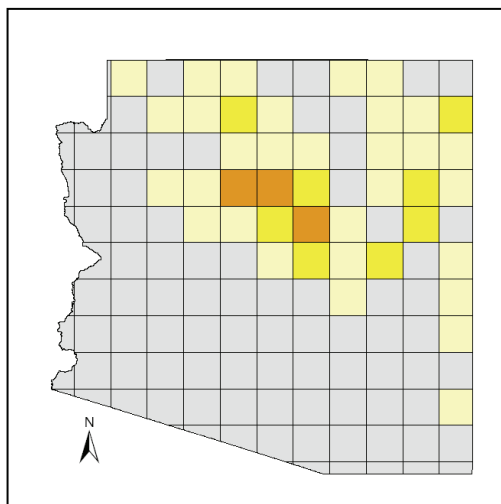
Cal-IPC category: Evaluated, Not Listed

NatureServe ranking: Medium

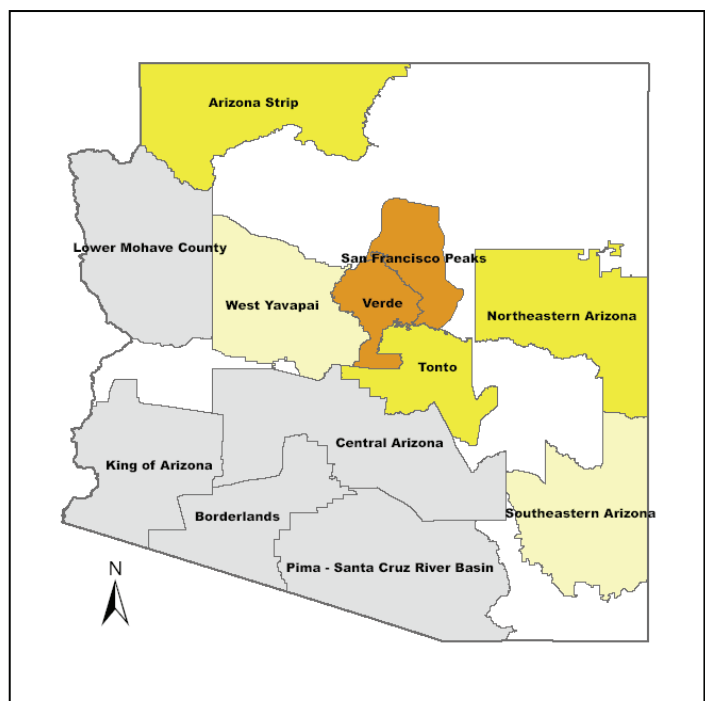
Map legend:



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Mesembryanthemum crystallinum

Synonym: none
Common Name: common iceplant
USDA Plant Code: MECR3
Family: Aizoaceae

Arizona legal listing: none

AZ-WIPWG category: Low

Cal-IPC category: Moderate - Alert

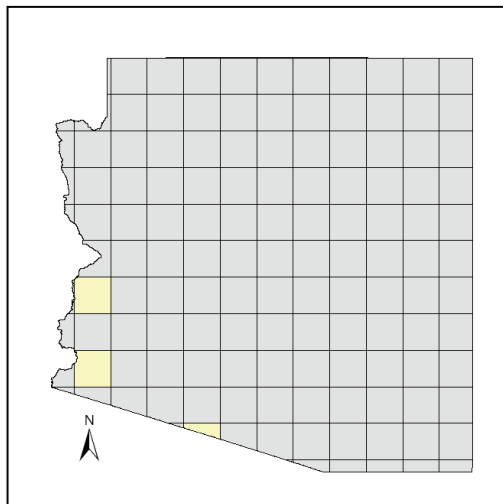
NatureServe ranking: not assessed at present

Map legend:

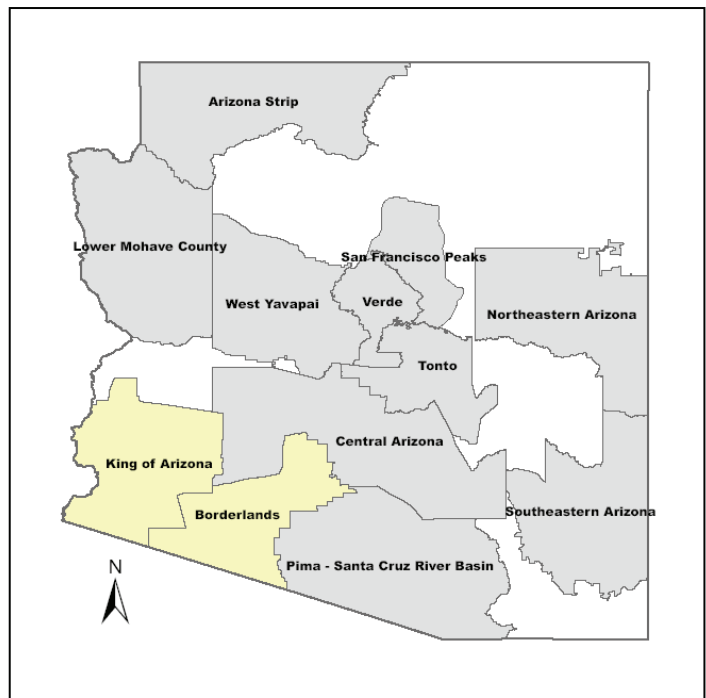
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Mesembryanthemum nodiflorum

Synonym: none
Common Name: slenderleaf
iceplant
USDA Plant Code: MENO2
Family: Aizoaceae






Arizona legal listing: none

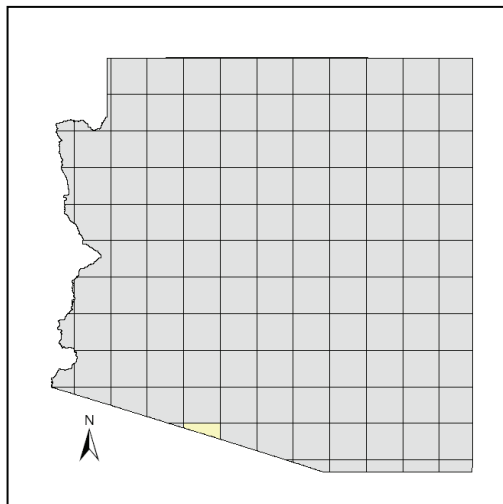
AZ-WIPWG category: Medium -
Alert

Cal-IPC category: not assessed at
present

NatureServe ranking: Unknown

Map legend:

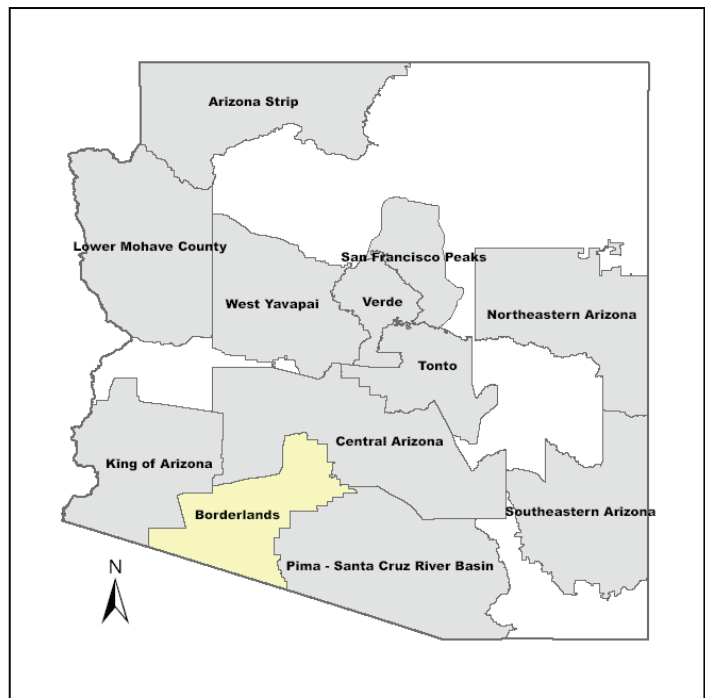
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by
7.5" Topographic Quadrangles



SWEMP occurrence records by County



SWEMP occurrence records by
Weed Management Area

Myriophyllum aquaticum

Synonym: none
Common Name: parrot feather
 watermilfoil
USDA Plant Code: MYAQ2
Family: Haloragaceae






Arizona legal listing: none

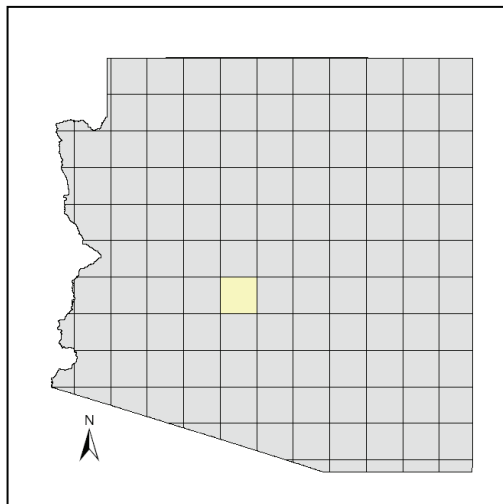
AZ-WIPWG category: High - Alert

Cal-IPC category: High - Alert

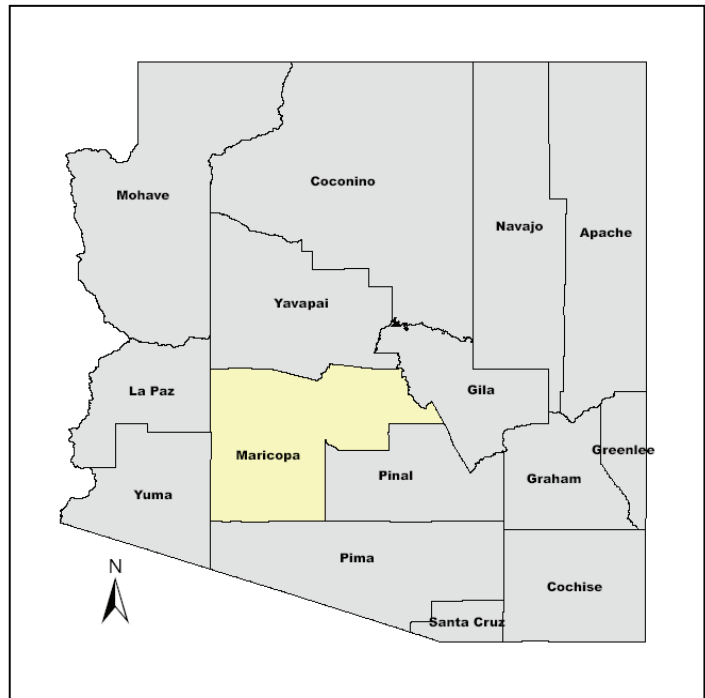
NatureServe ranking: High

Map legend:

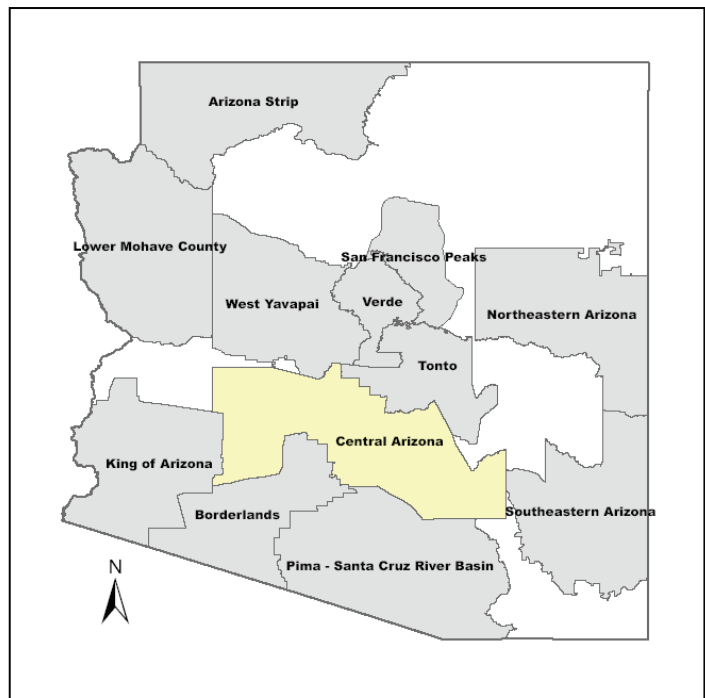
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by County



SWEMP occurrence records by Weed Management Area

Onopordum acanthium

Synonym: none

Common Name: Scotch
cottonthistle, Scotch thistle

USDA Plant Code: ONAC

Family: Asteraceae

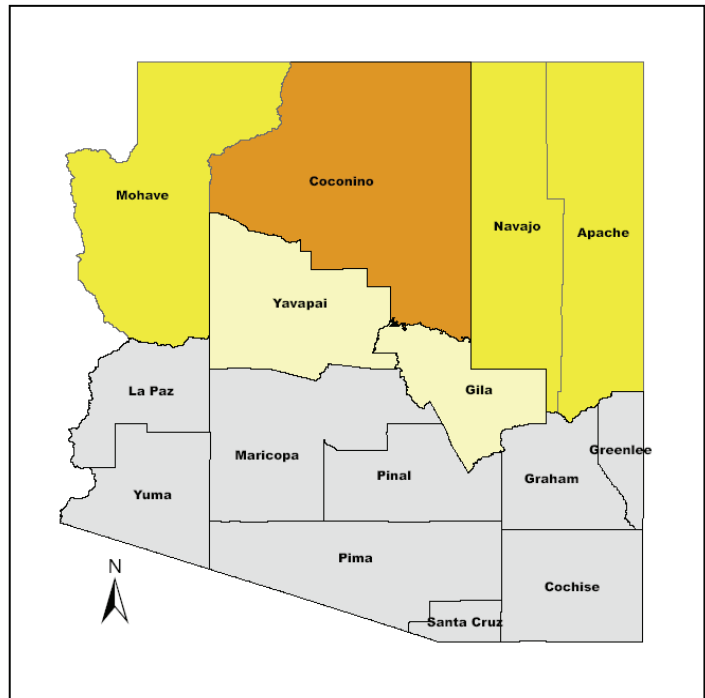
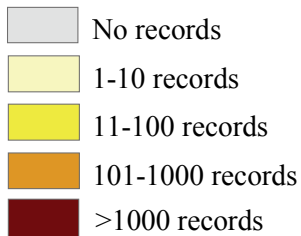
Arizona legal listing: Prohibited,
Restricted

AZ-WIPWG category: Low

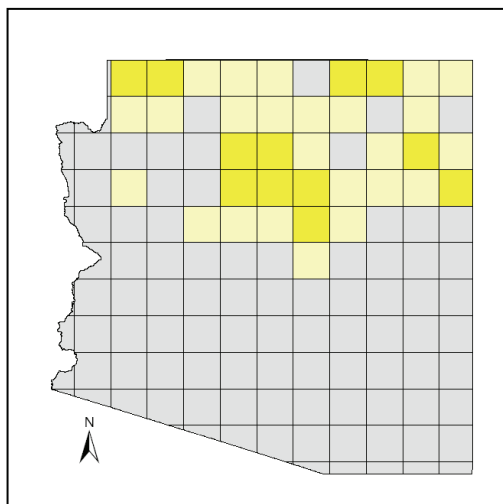
Cal-IPC category: High

NatureServe ranking: not assessed
at present

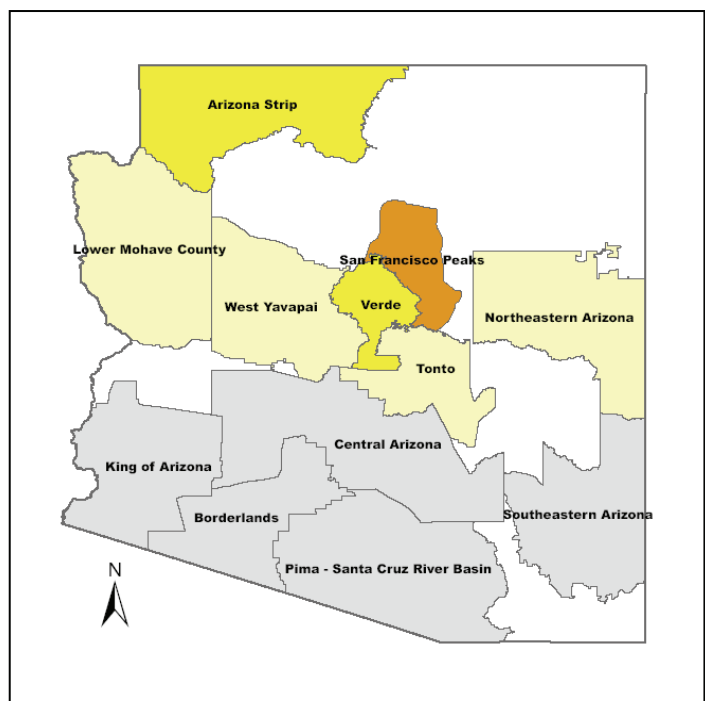
Map legend:



SWEMP occurrence records by County



SWEMP occurrence records by
7.5" Topographic Quadrangles



SWEMP occurrence records by
Weed Management Area

Pennisetum ciliare

Synonym: *Cenchrus ciliaris*
Common Name: buffelgrass
USDA Plant Code: PECE
Family: Poaceae

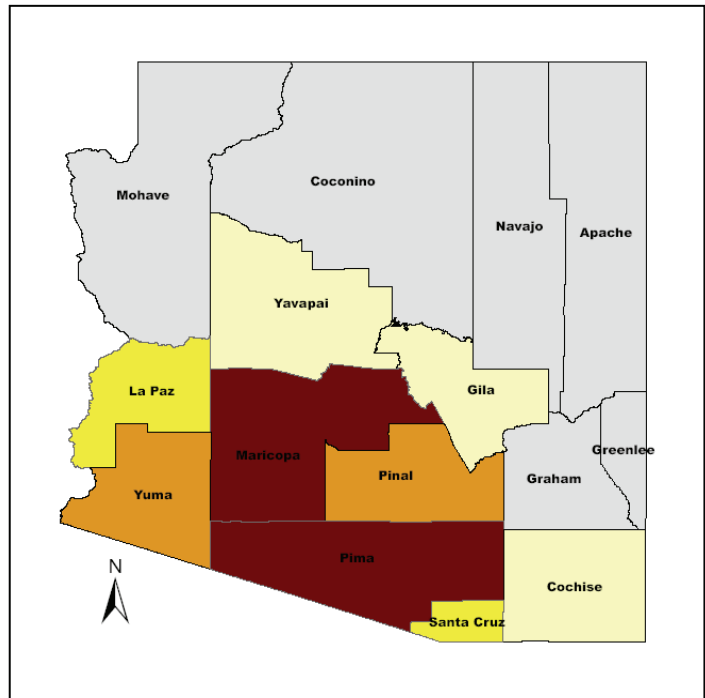
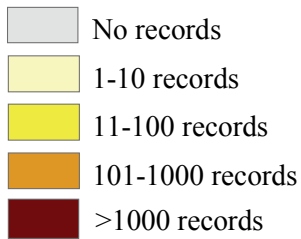
Arizona legal listing: Prohibited, Regulated

AZ-WIPWG category: High, Red Flag

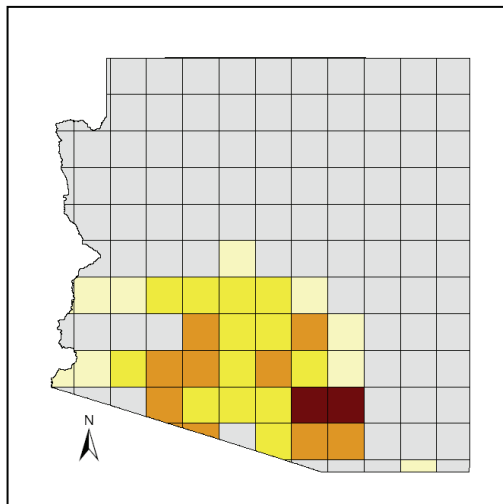
Cal-IPC category: not assessed at present

NatureServe ranking: High

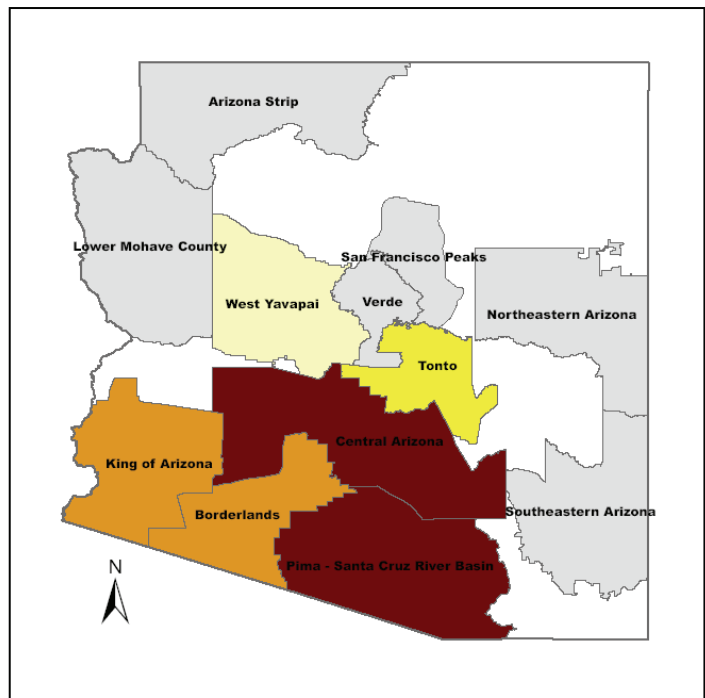
Map legend:



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Pennisetum setaceum

Synonym: none
Common Name: crimson
 fountaingrass, fountaingrass
USDA Plant Code: PESE3
Family: Poaceae

Arizona legal listing: none

AZ-WIPWG category: High, Red
 Flag

Cal-IPC category: Moderate

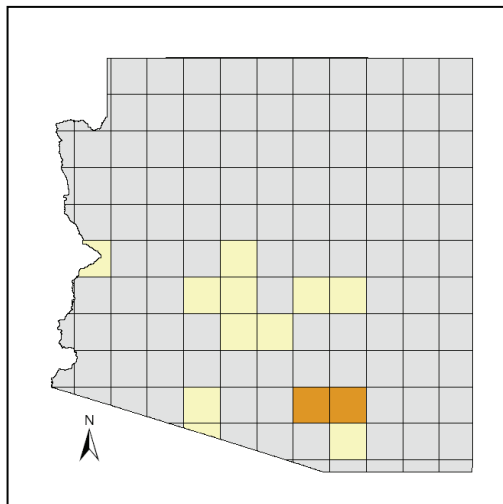
NatureServe ranking: High

Map legend:

- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by
 7.5" Topographic Quadrangles



SWEMP occurrence records by
 Weed Management Area

Phleum pratense

Synonym: none
Common Name: timothy
USDA Plant Code: PHPR3
Family: Poaceae

Arizona legal listing: none

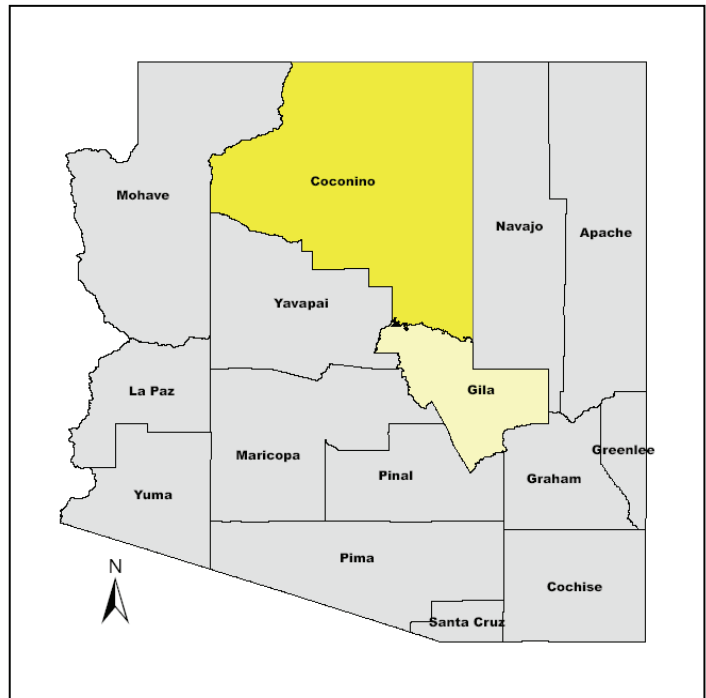
AZ-WIPWG category: not assessed at present

Cal-IPC category: not assessed at present

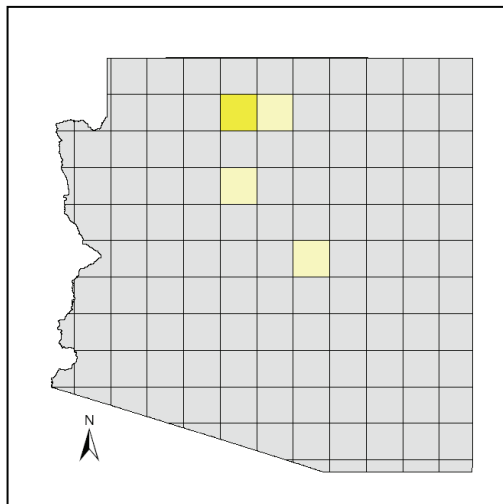
NatureServe ranking: Medium

Map legend:

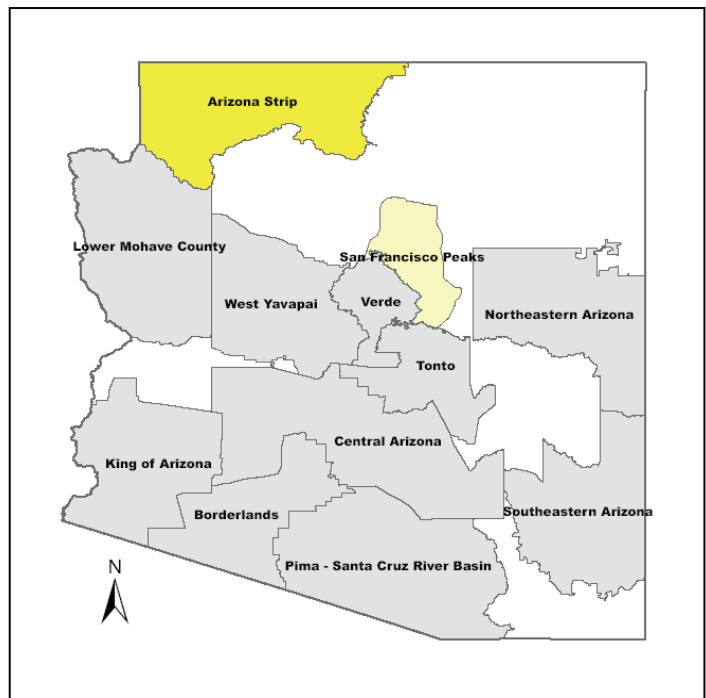
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Potentilla recta

Synonym: none
Common Name: sulfur cinquefoil
USDA Plant Code: PORE5
Family: Rosaceae






Arizona legal listing: none

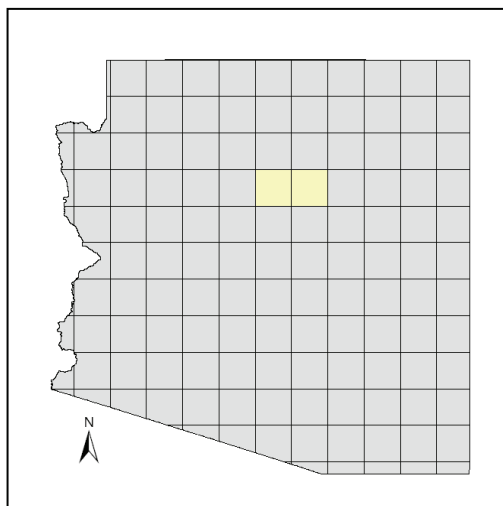
AZ-WIPWG category: not assessed at present

Cal-IPC category: not assessed at present

NatureServe ranking: High

Map legend:

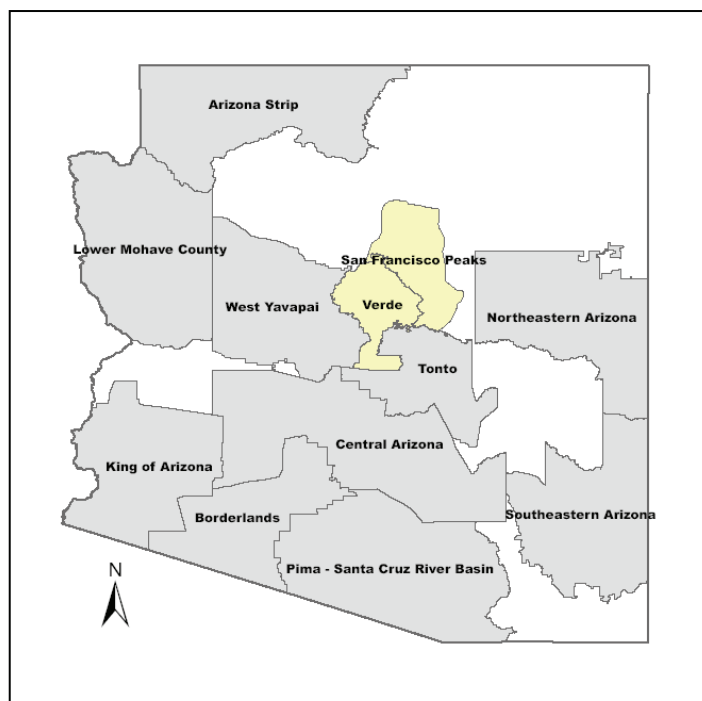
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by County



SWEMP occurrence records by Weed Management Area

Rhus lancea

Synonym: none
Common Name: African sumac
USDA Plant Code: RHLA11
Family: Anacardiaceae

Arizona legal listing: none

AZ-WIPWG category: Medium - Alert

Cal-IPC category: not assessed at present

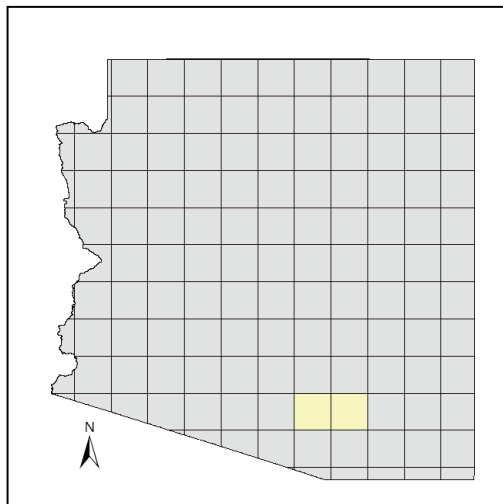
NatureServe ranking: not assessed at present

Map legend:

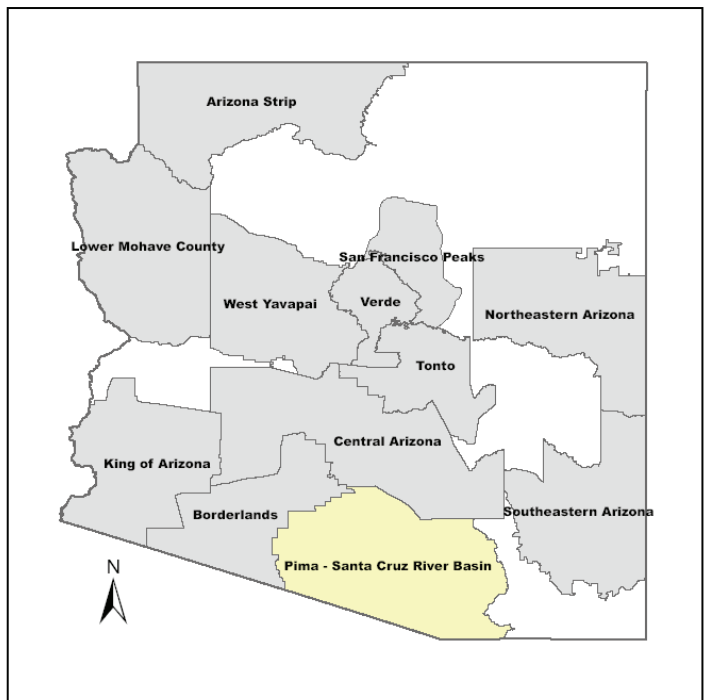
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Rubus armeniacus

Synonym: *Rubus procerus*, *Rubus discolor*

Common Name: Himalayan blackberry

USDA Plant Code: RUAR9

Family: Rosaceae

Arizona legal listing: none

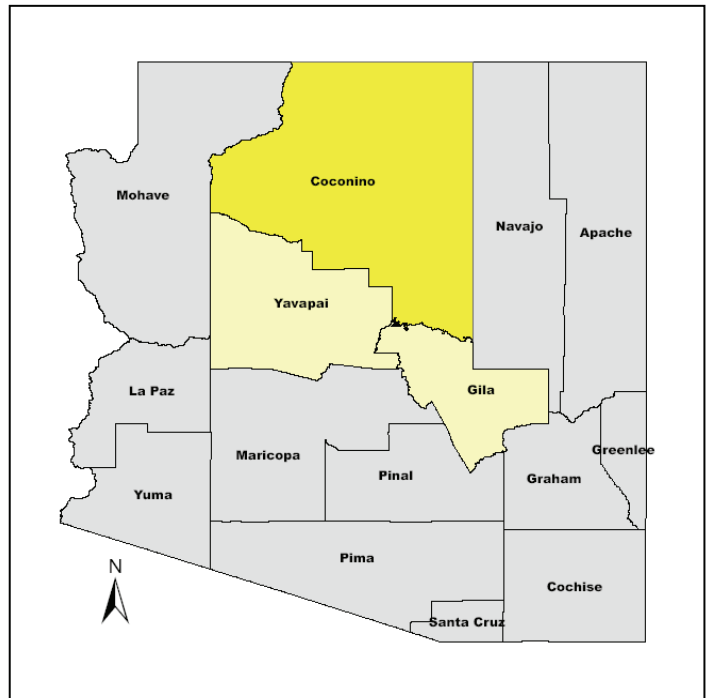
AZ-WIPWG category: Medium - Alert

Cal-IPC category: High

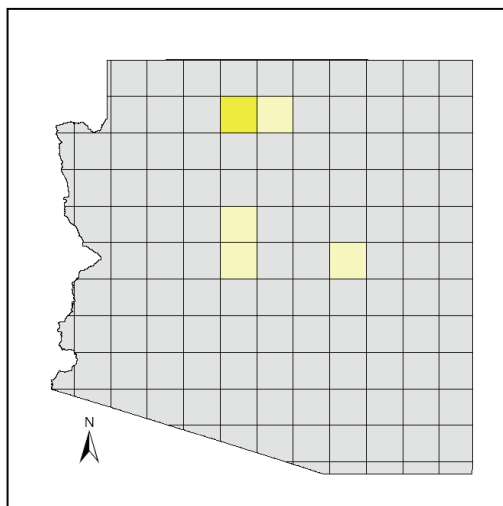
NatureServe ranking: Unknown

Map legend:

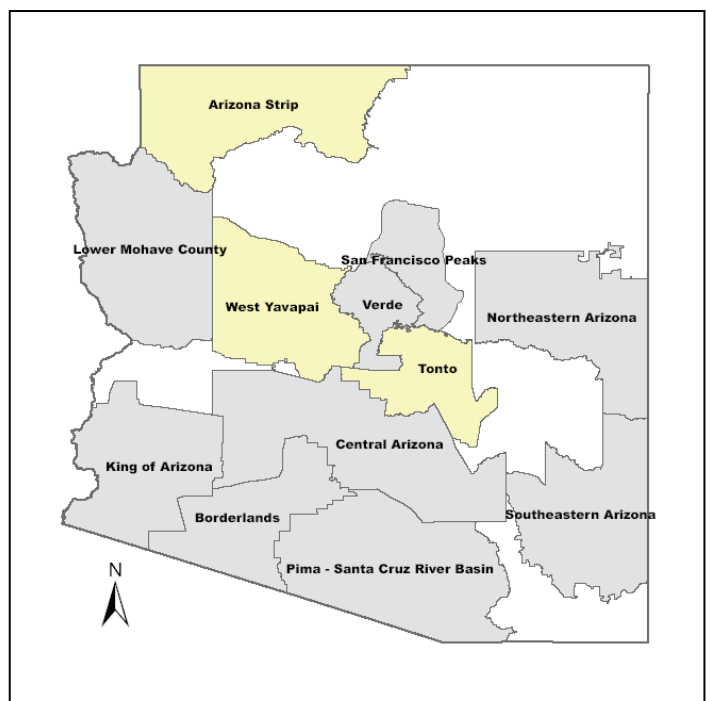
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Saccharum ravennae

Synonym: *Erianthus ravennae*
Common Name: ravengrass
USDA Plant Code: SARA3
Family: Poaceae

Arizona legal listing: none

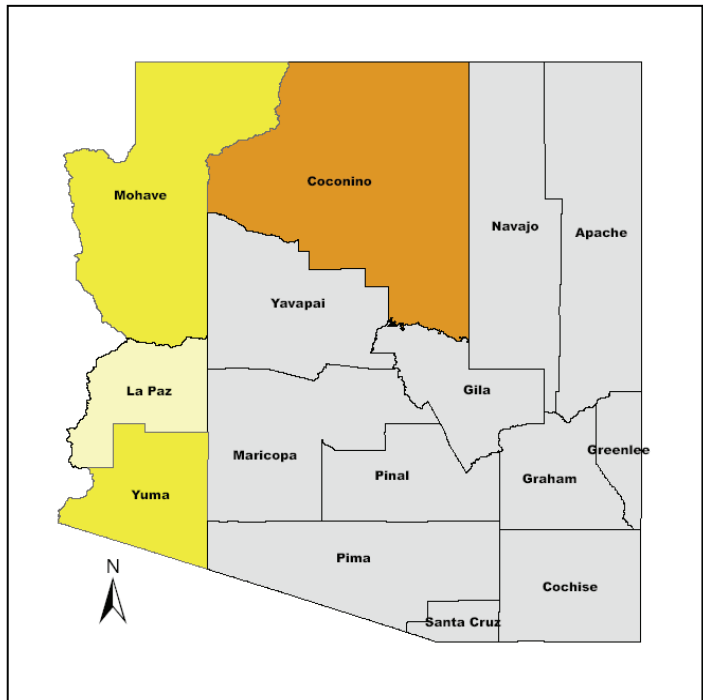
AZ-WIPWG category: Medium - Alert

Cal-IPC category: not assessed at present

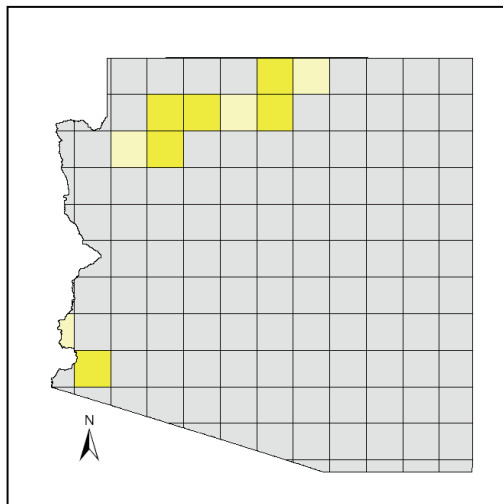
NatureServe ranking: not assessed at present

Map legend:

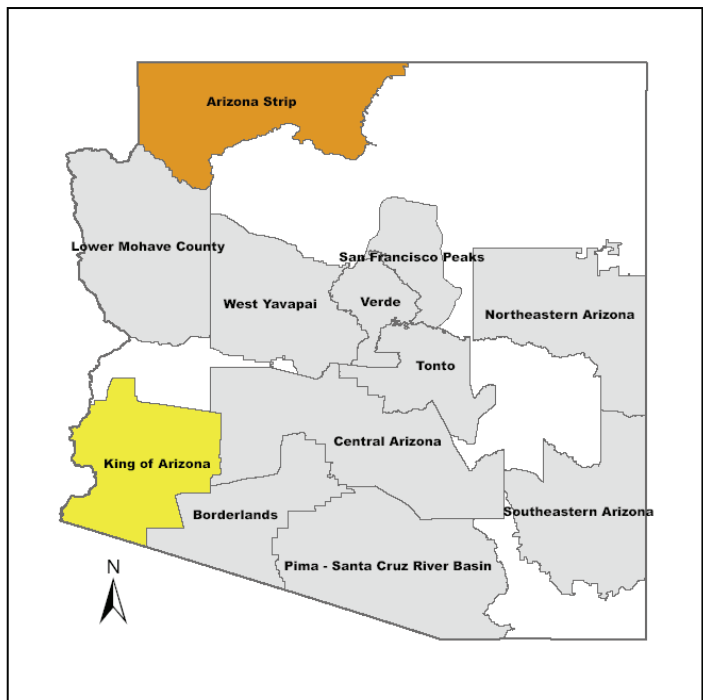
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Salsola spp.

Species covered: *Salsola collina*,
Salsola tragus

Common Name: Russian thistle

USDA Plant Code: SALSO

Family: Chenopodiaceae

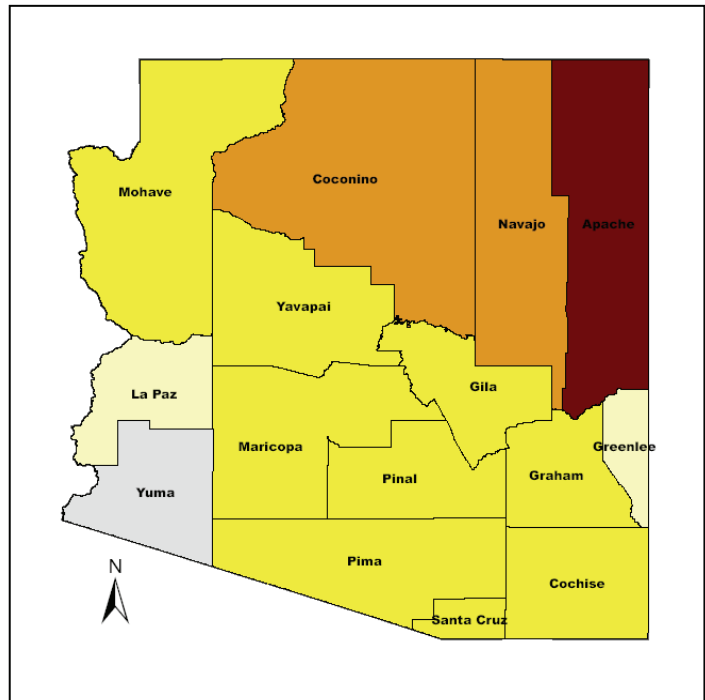
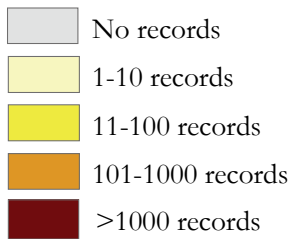
Arizona legal listing: none

AZ-WIPWG category: Medium
(for *Salsola collina*, *Salsola tragus*)

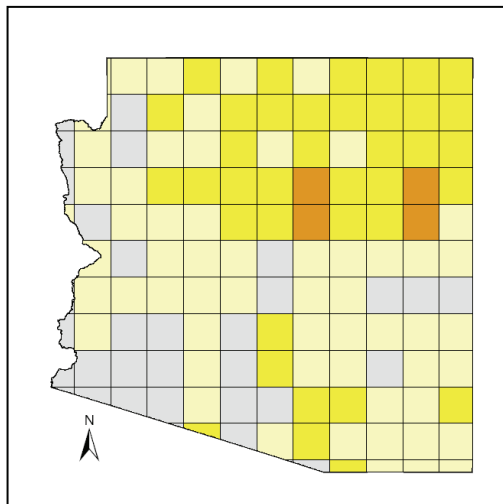
Cal-IPC category: Limited (for
Salsola tragus)

NatureServe ranking: not assessed
at present

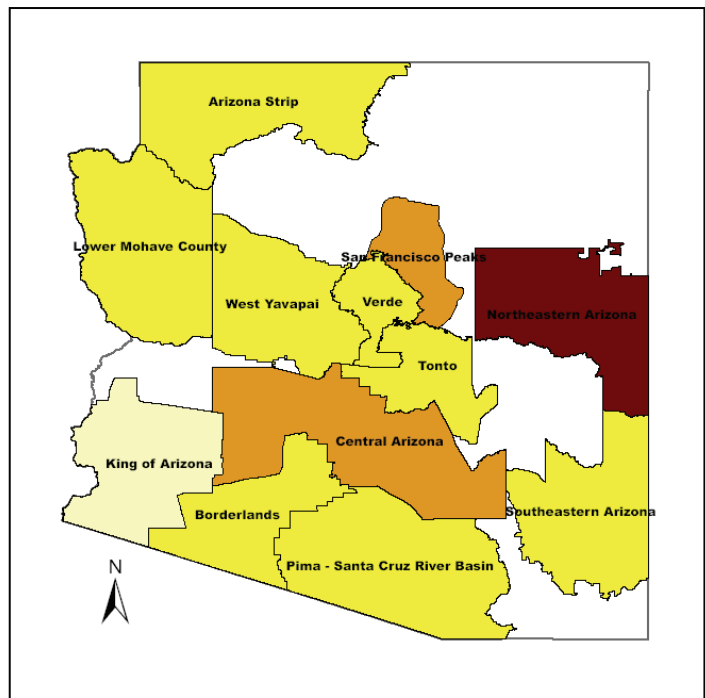
Map legend:



SWEMP occurrence records by County



SWEMP occurrence records by
7.5" Topographic Quadrangles



SWEMP occurrence records by
Weed Management Area

Salvinia molesta

Synonym: none

Common Name: Kariba-weed, giant salvinia

USDA Plant Code: SAMO5

Family: Salviniaceae

Arizona legal listing: Prohibited, Regulated

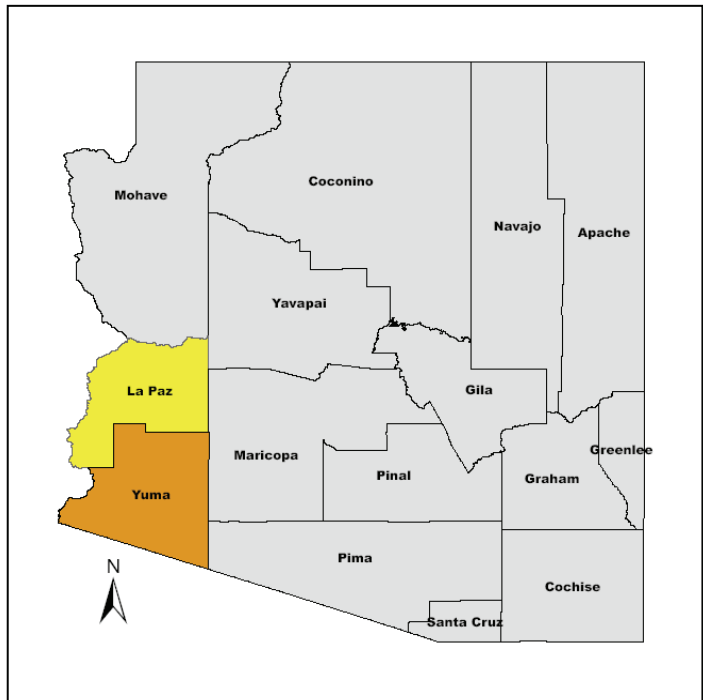
AZ-WIPWG category: High - Alert

Cal-IPC category: High - Alert

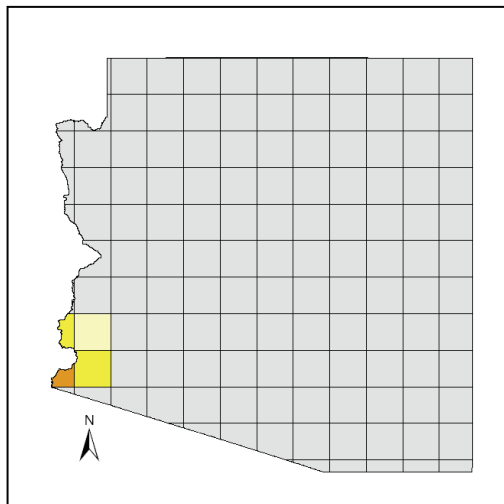
NatureServe ranking: Medium

Map legend:

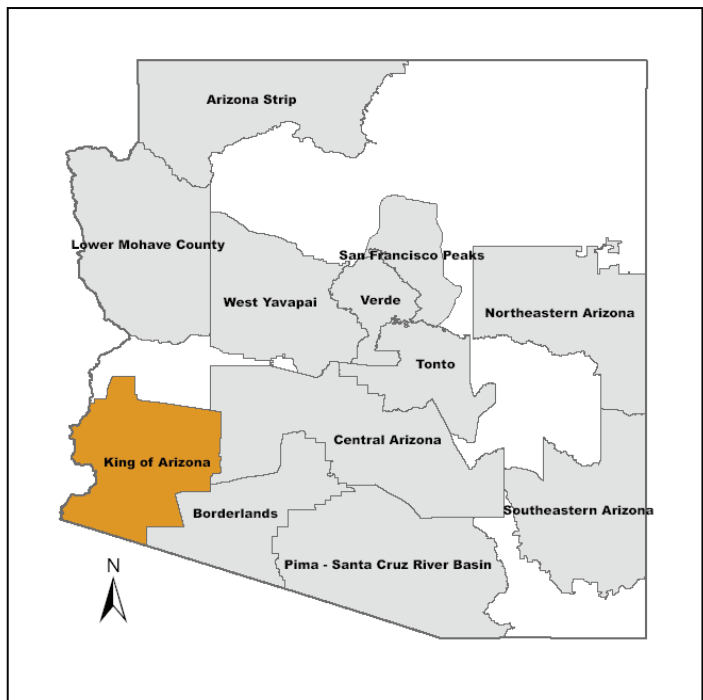
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Schismus spp.

Species covered: *Schismus arabicus*, *Schismus barbatus*
 Common Name: Mediterranean grass
 USDA Plant Code: SCHIS
 Family: Poaceae






Arizona legal listing: none

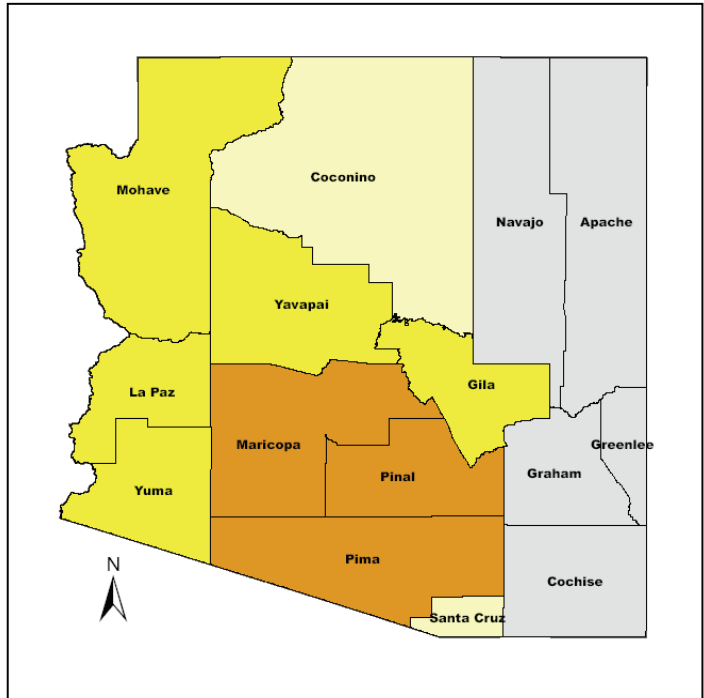
AZ-WIPWG category: Medium

Cal-IPC category: Limited

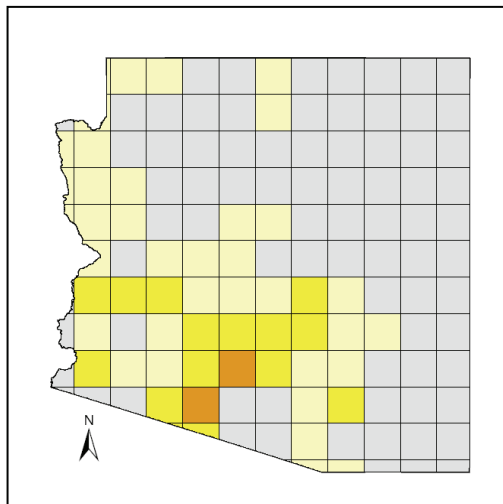
NatureServe ranking: High

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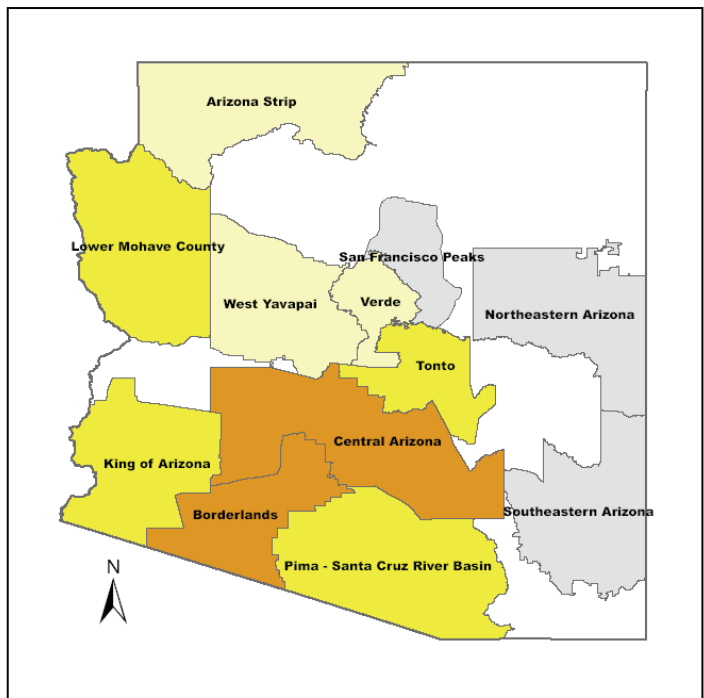
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Sonchus asper

Synonym: none
Common Name: spiny sowthistle
USDA Plant Code: SOAS
Family: Asteraceae

Arizona legal listing: none

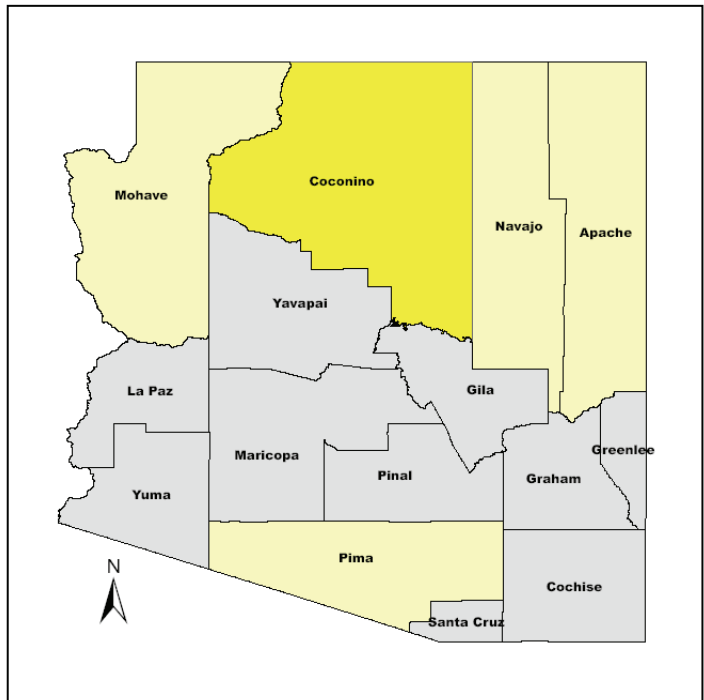
AZ-WIPWG category: Medium

Cal-IPC category: Evaluated, Not listed

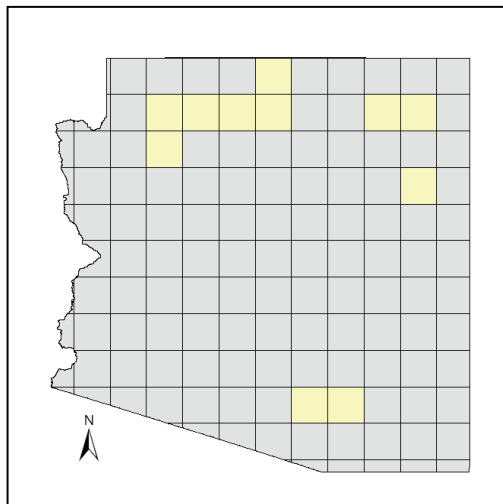
NatureServe ranking: not assessed at present

Map legend:

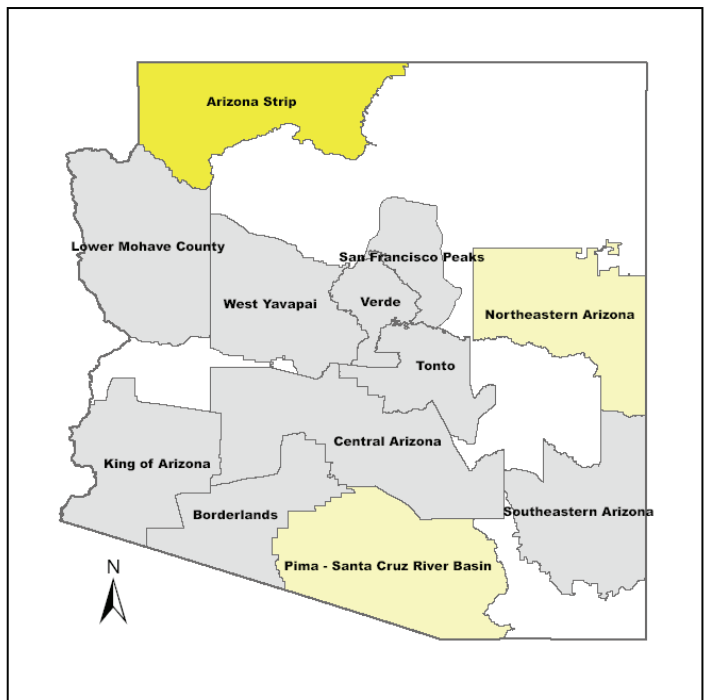
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Sonchus oleraceus

Synonym: none
Common Name: common
 sowthistle, annual sowthistle
USDA Plant Code: SOOL
Family: Asteraceae

Arizona legal listing: none

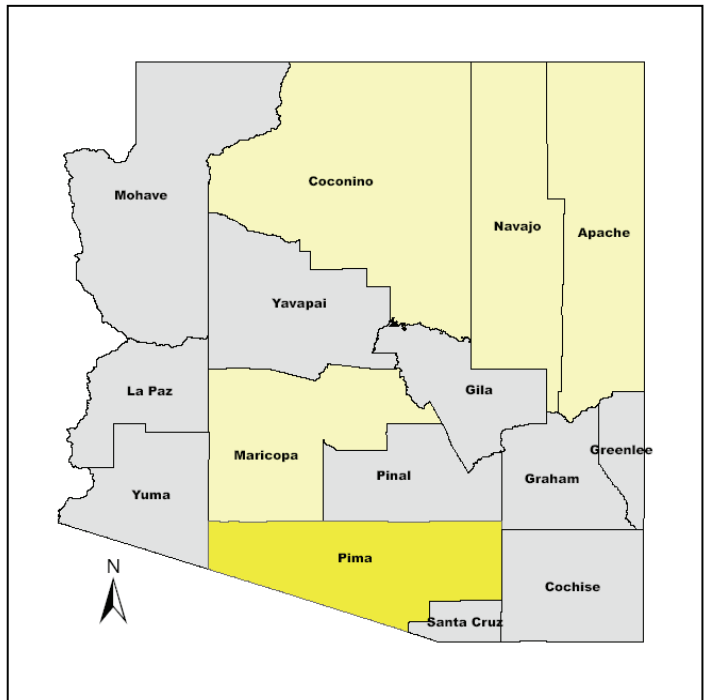
AZ-WIPWG category: Medium

Cal-IPC category: not assessed at present

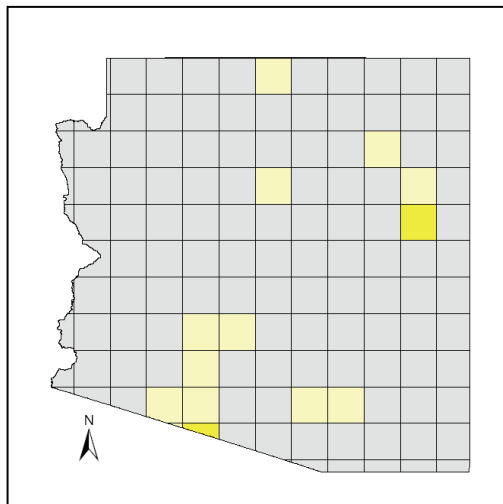
NatureServe ranking: not assessed at present

Map legend:

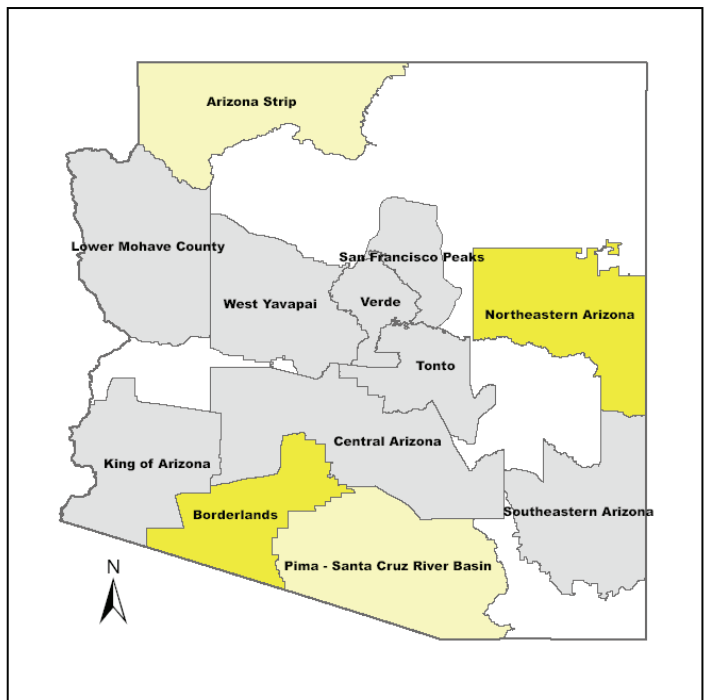
- No records
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- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Sorghum halepense

Synonym: none
Common Name: Johnsongrass
USDA Plant Code: SOHA
Family: Poaceae






Arizona legal listing: none

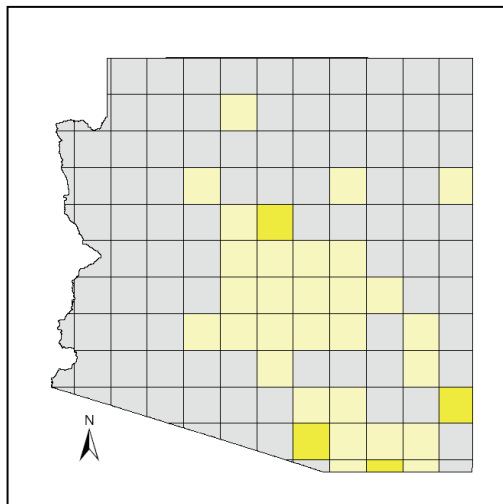
AZ-WIPWG category: Medium

Cal-IPC category: not assessed at present

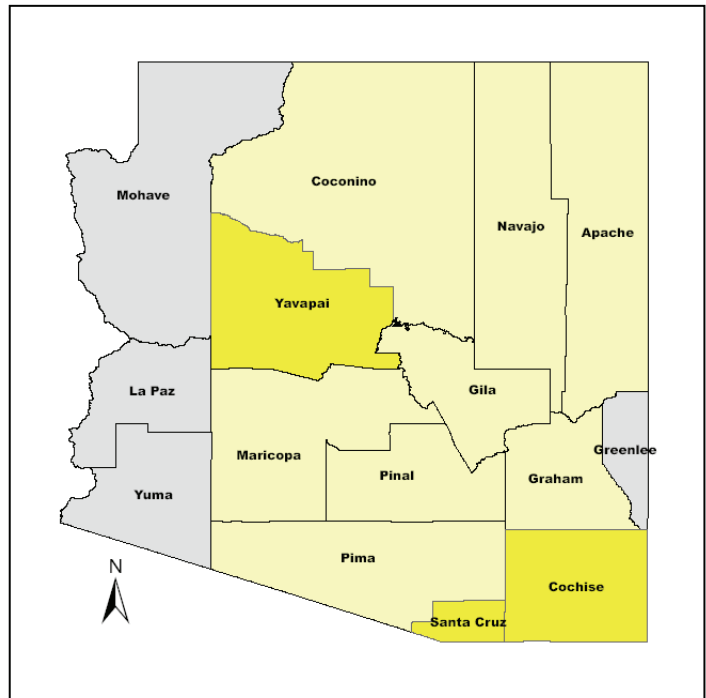
NatureServe ranking: High

Map legend:

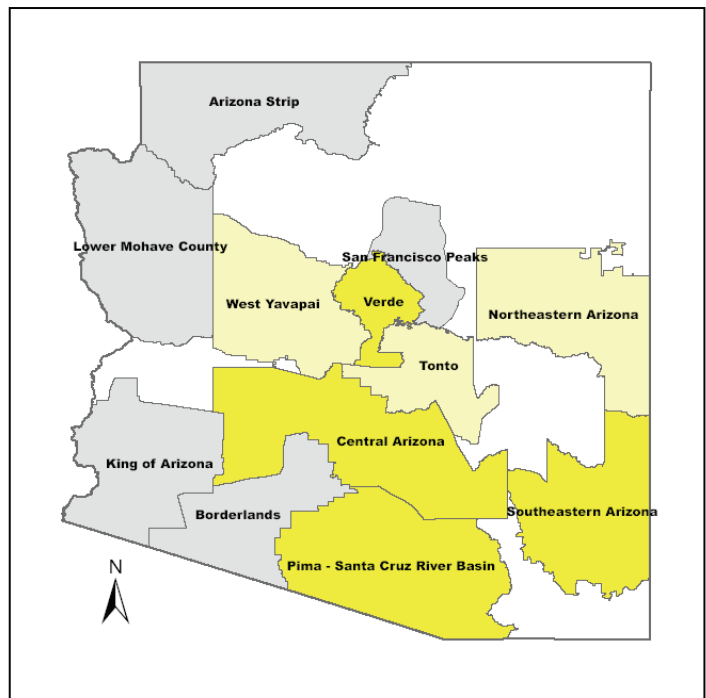
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by County



SWEMP occurrence records by Weed Management Area

Taeniatherum caput-medusae

Synonym: *Elymus caput-medusae*
Common Name: medusahead
USDA Plant Code: TACA8
Family: Poaceae

Arizona legal listing: none

AZ-WIPWG category: not assessed at present

Cal-IPC category: High

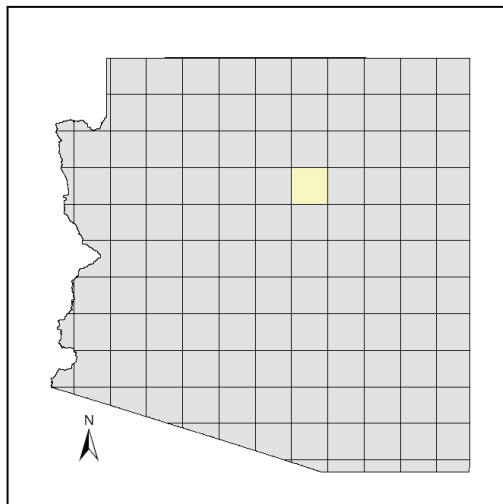
NatureServe ranking: High

Map legend:

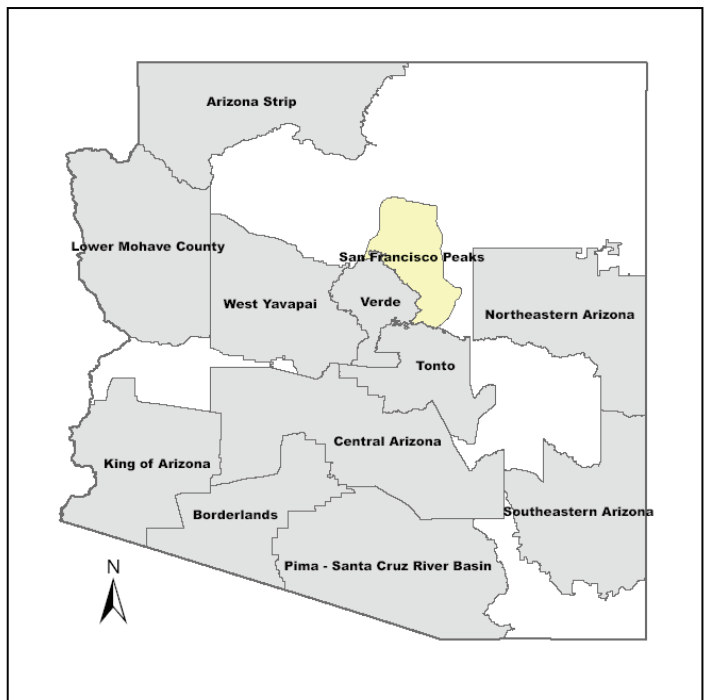
- No records
- 1-10 records
- 11-100 records
- 101-1000 records
- >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles








SWEMP occurrence records by Weed Management Area

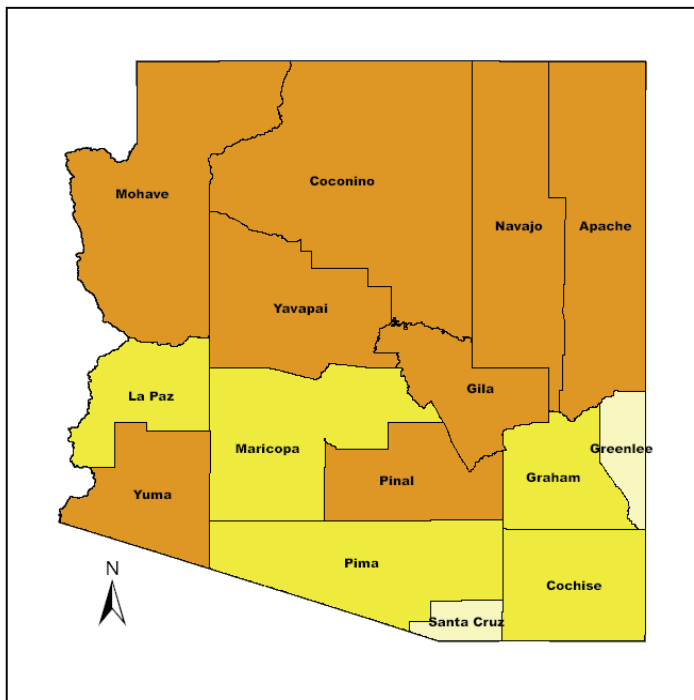
Tamarix spp.

Species covered: *Tamarix chinensis*, *Tamarix parviflora*, *Tamarix ramosissima*
Common Name: saltcedar
USDA Plant Code: TAMAR2
Family: Tamaricaceae

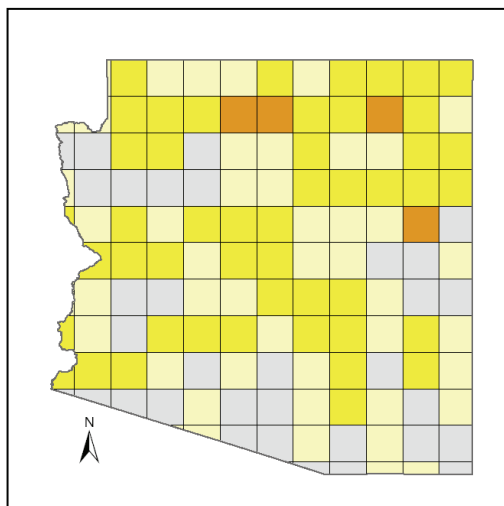
Arizona legal listing: none
AZ-WIPWG category: High, Red Flag (for *Tamarix chinensis*, *Tamarix parviflora*, *Tamarix ramosissima*)
Cal-IPC category: High (for *Tamarix parviflora*, *Tamarix ramosissima*)
NatureServe ranking: High (for *Tamarix ramosissima*)

Map legend:

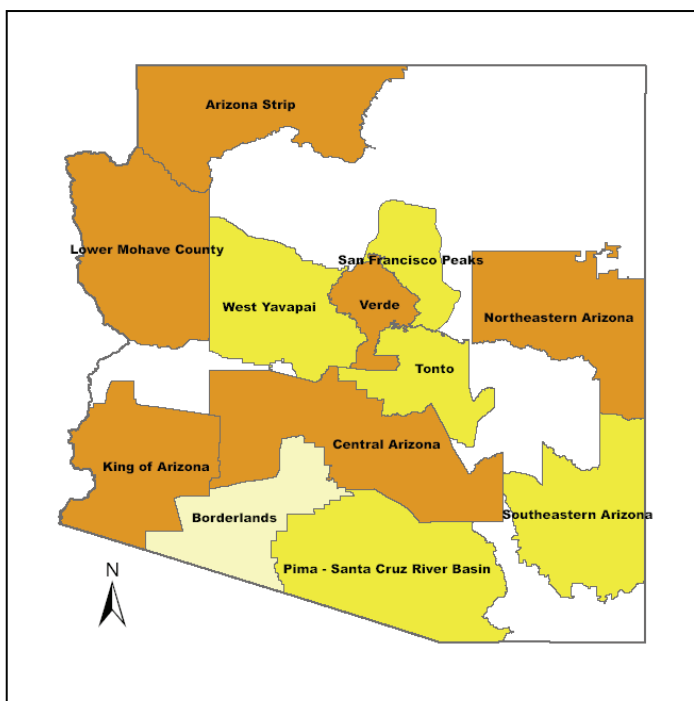
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by 7.5" Topographic Quadrangles



SWEMP occurrence records by Weed Management Area

Ulmus pumila

Synonym: none
Common Name: Siberian elm
USDA Plant Code: ULPU
Family: Ulmaceae

Arizona legal listing: none

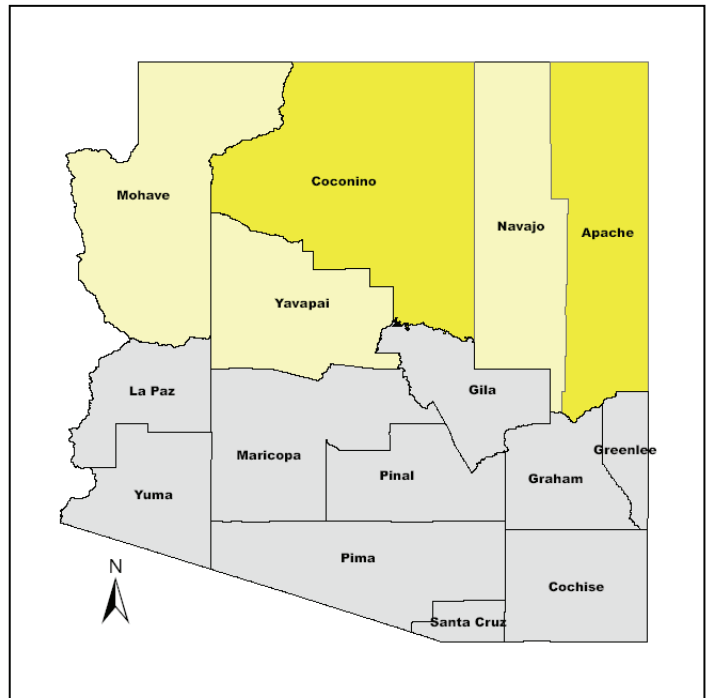
AZ-WIPWG category: Medium

Cal-IPC category: Evaluated, Not Listed

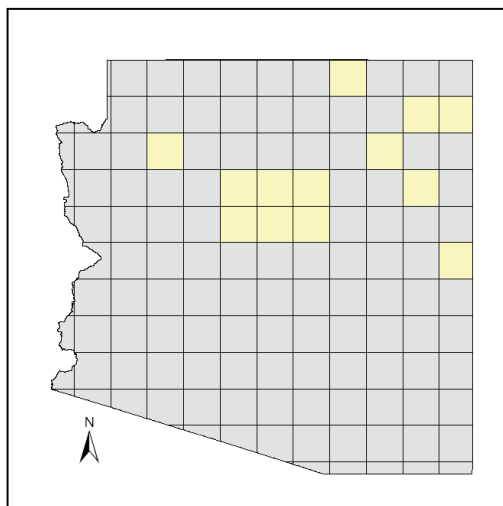
NatureServe ranking: Medium

Map legend:

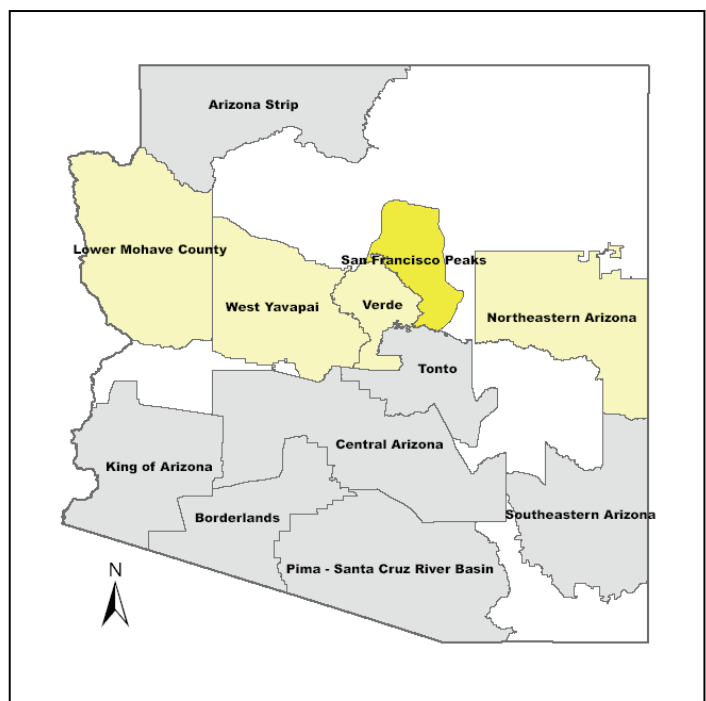
- No records
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- >1000 records



SWEMP occurrence records by County



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SWEMP occurrence records by Weed Management Area

Verbascum thapsus

Synonym: none
Common Name: common mullein
USDA Plant Code: VETH
Family: Scrophulariaceae






Arizona legal listing: none

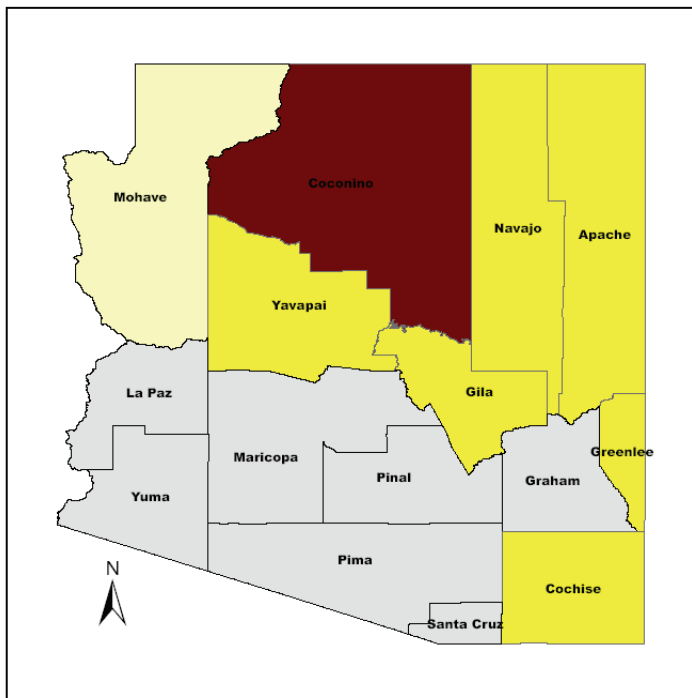
AZ-WIPWG category: Evaluated,
 Not Listed

Cal-IPC category: Limited

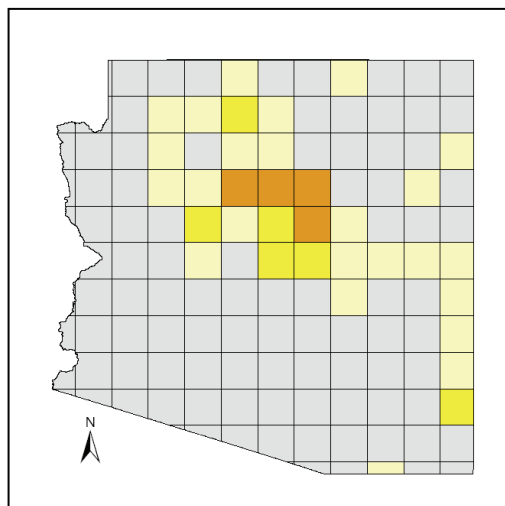
NatureServe ranking: Medium

Map legend:

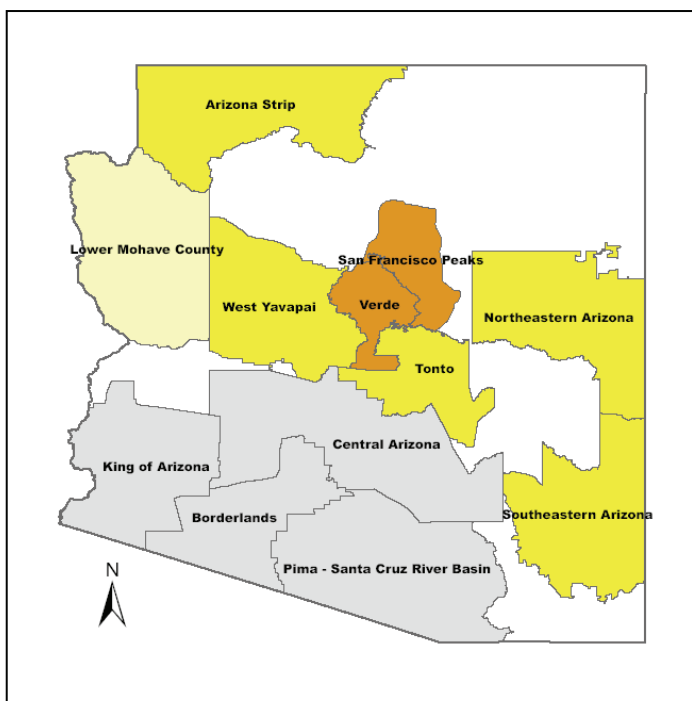
-  No records
-  1-10 records
-  11-100 records
-  101-1000 records
-  >1000 records



SWEMP occurrence records by County



SWEMP occurrence records by
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SWEMP occurrence records by
 Weed Management Area

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U.S. Geological Survey
Southwest Biological Science Center
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Flagstaff, AZ 86001