

**The list of completed WRAs that is presented on the next worksheet (or below if you are viewing the PDF version), only includes species that have been evaluated with PPQ's current weed risk assessment process. Below is a description of the column headings and the data that are summarized by that column.**

**Species and Authority** - This column identifies the species current scientific name and the author of the name.

**Common Name** - Although each species may have many common names, we present the one we felt to be the most widely used English common name.

**Family** - This is the accepted family name of the taxon.

**E/S Score** - Establish/Spread potential risk score from the WRA model. This risk score ranges from about -25 to potentially more than +25. The higher the value, the greater the taxon's ability to escape, naturalize, and spread.

**Imp Score** - Impact potential risk score from the WRA model. This score ranges from 1 (no documented evidence of impact) to 5.1 (maximum possible impact under the WRA model).

**Risk Result** - This is the main result from the WRA logistic regression model: HR (High Risk), EF (Evaluate Further), or LR (Low Risk).

**Secondary Screening** - If the species was classified as Evaluate Further by the main model, it undergoes a secondary screening process that focuses on a few factors that were very predictive of risk potential in our study. Following secondary evaluation, species may be classified as HR (High Risk) or LR (Low Risk), or they may remain in the EF (Evaluate Further) category. If the taxon did not undergo secondary screening, N/A (Not Applicable) is entered into this column.

**P(Major-Invader)** - Probability of being a major-invader. This value is one of the products from the logistic regression model. The sum of this value and the other two probabilities is always 100%

**P(Minor-Invader)** - Probability of being a minor-invader. This value is one of the products from the logistic regression model. The sum of this value and the other two probabilities is always 100%

**P(Non-Invader)** - Probability of being a non-invader. This value is one of the products from the logistic regression model. The sum of this value and the other two probabilities is always 100%

**Date Last Modified** - For a variety of reasons, WRAs are sometimes revised. This column gives the last data of a revision.

**Orig FY** - Original Fiscal Year. This column lists the fiscal year (October - September) when the original WRA was completed.

**Ver.** - WRA version number. Each time a WRA is revised, it receives a new version number.

**Uncertainty Analysis** - Mousing over a cell will display a jpeg image of the results of the uncertainty analysis. Starting in 2019, the uncertainty results were graphed with the risk score plot that shows the risk score for the taxon being analyzed (black square) along with the risk scores of the 204 species used to develop and test the PPQ WRA. This graph is not available in the PDF version of the summary.

**Geopotential Map** - Mousing over a cell will display a jpeg image of the results of the geographic potential analysis. Starting in 2019, the geographic potential map also includes information about the current known naturalized distribution of the taxon in the United States and Canada. This image is not available in the PDF version of the summary.

Species and Authority	Common Name	Family	E/S Score	Imp Score	Risk Result	Secondary Screening	P(Major-Invader)	P(Minor-Invader)	P(Non-Invader)	Orig FY	Ver.	Uncertainty Analysis	Geographic Potential
<i>Acalypha australis</i> L.	Asian copperleaf	Euphorbiaceae	8	2.1	EF	EF	27.2%	65.3%	7.5%	2012	2	Unc	Map
<i>Acanthospermum hispidum</i> DC.	Bristly starbur	Asteraceae	18	3.1	HR	N/A	87.8%	11.8%	0.4%	2015	1	Unc	Map
<i>Achyranthes japonica</i> (Miq.) Nakai	Japanese chaff flower	Amaranthaceae	17	2.3	HR	N/A	77.8%	21.3%	0.9%	2012	3	Unc	Map
<i>Adonis aestivalis</i> L.	Summer pheasant's-eye	Ranunculaceae	16	2.9	HR	N/A	79.9%	19.3%	0.8%	2019	1	Unc	Map
<i>Adonis microcarpa</i> DC.	Pheasant's-eye	Ranunculaceae	10	2.4	HR	N/A	41.7%	54.2%	4.1%	2016	1	Unc	Map
<i>Aegilops geniculata</i> Roth	Ovate goatgrass	Poaceae	31	4.1	HR	N/A	99.6%	0.3%	0.0%	2017	1	Unc	Map
<i>Aegilops neglecta</i> Req. ex Bertol.	Three-awn goatgrass	Poaceae	31	4.1	HR	N/A	99.6%	0.3%	0.0%	2017	1	Unc	Map
<i>Aegilops triuncialis</i> L.	Barb goatgrass	Poaceae	31	4.1	HR	N/A	99.6%	0.3%	0.0%	2017	1	Unc	Map
<i>Ageratum conyzoides</i> L.	Billygoat plant	Asteraceae	21	3.6	HR	N/A	95.2%	4.7%	0.2%	2019	1	Unc	Map
<i>Agrostis stolonifera</i> L.	Creeping bentgrass	Poaceae	23	3.7	HR	N/A	97.1%	2.8%	0.1%	2011	3	Unc	Map
<i>Agrostis stolonifera</i> L (GE herbicide resistant)	Creeping bentgrass	Poaceae	24	3.7	HR	N/A	97.7%	2.2%	0.1%	2011	3	Unc	Map
<i>Alectra vogelii</i> Benth.	Yellow witchweed	Orobanchaceae	16	2.5	HR	N/A	75.8%	23.3%	1.0%	2019	1	Unc	Map
<i>Alternanthera reineckii</i>	Temple plant	Amaranthaceae	4	1.2	EF	EF	7.8%	65.9%	26.3%	2016	1	Unc	Map
<i>Athaea armeniaca</i> Ten.	Marshmallow	Malvaceae	1	1.0	LR	N/A	3.6%	51.4%	45.0%	2012	2	Unc	Map
<i>Amaranthus palmeri</i> S. Watson	Palmer's amaranth	Amaranthaceae	28	2.8	HR	N/A	98.4%	1.5%	0.0%	2019	2	Unc	Map
<i>Anubias barteri</i> Schott	(none)	Araceae	-9	1.0	LR	N/A	0.3%	10.0%	89.6%	2013	1	Unc	Map
<i>Apera spica-venti</i> (L.) P. Beauv.	Common windgrass	Poaceae	22	2.5	HR	N/A	92.8%	7.0%	0.2%	2016	1	Unc	Map
<i>Araujia sericifera</i> Brot.	Cruel plant	Apocynaceae	16	3.8	HR	N/A	87.2%	12.3%	0.4%	2012	1	Unc	Map
<i>Ardisia crenata</i> Sims	Coralberry ardisia	Myrsinaceae	12	2.8	HR	N/A	59.3%	38.6%	2.0%	2012	2	Unc	Map
<i>Arundo donax</i> L.	Giant reed	Poaceae	13	3.3	HR	N/A	71.4%	27.4%	1.2%	2012	1	Unc	Map
<i>Asphodelus fistulosus</i> L.	Onion weed	Asphodelaceae	15	3.7	HR	N/A	83.6%	15.8%	0.6%	2019	1	Unc	Map
<i>Austroderia richardii</i> (Endl.) N. P. Barker & H. P. Linder	New Zealand pampas grass	Poaceae	9	3.0	HR	N/A	44.8%	51.6%	3.6%	2014	1	Unc	Map
<i>Bacopa australis</i> V.C. Souza	(none)	Scrophulariaceae	5	1.0	EF	EF	8.7%	67.2%	24.2%	2013	1	Unc	Map
<i>Bifora radians</i> M. Bieb	Wild bishop	Apiaceae	14	2.2	HR	HR	61.9%	36.2%	1.8%	2016	1	Unc	Map
<i>Bothriocline laxa</i> N. E. Br.	Kapanthi	Asteraceae	3	2.1	EF	EF	10.3%	68.8%	20.8%	2015	1	Unc	Map
<i>Brassica carinata</i> A. Braun	Ethiopian mustard	Brassicaceae	5	1.2	EF	EF	9.7%	68.3%	22.0%	2015	1	Unc	Map
<i>Bulbostylis hispidula</i> (Vahl) R. W. Haines	Beard of the lion	Cyperaceae	3	2.3	EF	EF	11.5%	69.6%	18.9%	2015	1	Unc	Map
<i>Bunias erucago</i> L.	Southern warty cabbage	Brassicaceae	6	1.2	EF	EF	11.9%	69.8%	18.3%	2017	1	Unc	Map
<i>Calendula arvensis</i> L.	Field marigold	Asteraceae	17	2.3	HR	HR	77.8%	21.3%	0.9%	2016	1	Unc	Map
<i>Cardiospermum grandiflorum</i> Sw.	Balloon vine	Sapindaceae	17	2.5	HR	N/A	79.8%	19.4%	0.8%	2013	1	Unc	Map
<i>Carex breviculmis</i> R. Br.	Short-stem sedge	Cyperaceae	5	1.5	EF	EF	11.4%	69.5%	19.1%	2012	1	Unc	Map
<i>Carex pendula</i> Huds.	Pendulous sedge	Cyperaceae	9	2.3	EF	EF	34.7%	59.9%	5.4%	2013	1	Unc	Map
<i>Cestrum laevigatum</i> Schlttdl.	Inkberry	Solanaceae	10	3.4	HR	N/A	56.6%	41.1%	2.3%	2013	1	Unc	Map
<i>Chondrilla juncea</i> L.	Rush skeletonweed	Asteraceae	20	3.3	HR	N/A	92.8%	6.9%	0.2%	2016	1	Unc	Map
<i>Chrysanthemoides monilifera</i> (L.) Norl.	Boneseed; Bitou bush	Asteraceae	16	2.6	HR	N/A	76.8%	22.3%	0.9%	2013	2	Unc	Map
<i>Chrysopogon aciculatus</i> (Retz.) Trin.	Golden false beardgrass	Poaceae	19	3.0	HR	N/A	89.5%	10.1%	0.4%	2013	1	Unc	Map
<i>Coleostephus myconis</i> (L.) Cass. -	Mediterranean marigold	Asteraceae	21	2.8	HR	HR	92.4%	7.4%	0.2%	2017	2	Unc	Map
<i>Colophospermum mopane</i> (Kirk ex Benth.) Kirk ex J. Léonard	Mopane	Fabaceae	-5	2.4	LR	N/A	2.0%	38.8%	59.1%	2013	1	Unc	Map

<i>Cordia curassavica</i> (Jacq.) Roem. & Schult.	Black sage	Boraginaceae	11	2.9	HR	N/A	55.0%	42.6%	2.4%	2013	1	Unc	Map
<i>Cortaderia jubata</i> (Lemoine ex Carrière) Stapf.	Jubata grass	Poaceae	17	4.1	HR	N/A	91.2%	8.5%	0.3%	2014	1	Unc	Map
<i>Cortaderia selloana</i> (Schult. & Schult. f.) Asch. & Graebn.	Pampas grass	Poaceae	15	4.3	HR	N/A	87.9%	11.6%	0.4%	2014	1	Unc	Map
<i>Corydalis incisa</i> (Thunb.) Pers.	Incised fumewort	Papaveraceae	18	3.1	HR	HR	87.8%	11.8%	0.4%	2017	1	Unc	Map
<i>Crassula helmsii</i> (Kirk) Cockayne	Swamp stonecrop	Crassulaceae	21	3.9	HR	N/A	95.9%	3.9%	0.1%	2013	1	Unc	Map
<i>Cryptocoryne beckettii</i> Thwaites ex Trimen.	Beckett's water trumpet	Araceae	11	1.9	HR	N/A	40.1%	55.5%	4.3%	2016	1	Unc	Map
<i>Delairea odorata</i> Lem	Cape ivy	Asteraceae	14	3.4	HR	N/A	77.0%	22.1%	0.9%	2013	1	Unc	Map
<i>Diplotaxis viminea</i> (L.) DC.	Vineyard wall rocket	Brassicaceae	1	1.3	EF	EF	4.2%	55.2%	40.6%	2016	1	Unc	Map
<i>Dittrichia graveolens</i> (L.) Greuter	Stinkwort	Asteraceae	20	3.2	HR	N/A	92.4%	7.3%	0.2%	2013	1	Unc	Map
<i>Dolichandra unguis-cati</i> (L.) L. G. Lohmann	Cat's-claw	Bignoniaceae	14	3.4	HR	N/A	77.0%	22.1%	0.9%	2013	2	Unc	Map
<i>Echinochloa pyramidalis</i> (Lam.) Hitch. & Chase	Antelope grass	Poaceae	13	3.5	HR	N/A	73.8%	25.2%	1.1%	2012	1	Unc	Map
<i>Echinodorus uruguayensis</i> Arechav.	Uruguay sword plant	Alismataceae	1	1.0	LR	N/A	3.6%	51.4%	45.0%	2013	1	Unc	Map
<i>Echium plantagineum</i> L.	Paterson's Curse	Boraginaceae	24	2.8	HR	N/A	96.1%	3.8%	0.1%	2017	1	Unc	Map
<i>Euphorbia fulcata</i> L.	Sickle spurge	Euphorbiaceae	9	1.3	EF	HR	22.6%	68.0%	9.4%	2017	1	Unc	Map
<i>Falcaria vulgaris</i> Bernh.	Sickleweed	Apiaceae	14	3.6	HR	N/A	79.1%	20.1%	0.8%	2012	1	Unc	Map
<i>Ficaria verna</i> Huds.	Fig buttercup	Ranunculaceae	17	2.8	HR	N/A	82.6%	16.8%	0.6%	2015	1	Unc	Map
<i>Fumaria schleicheri</i> Soy.-Will	Fumitory	Papaveraceae	13	1.5	HR	N/A	45.8%	50.8%	3.5%	2016	1	Unc	Map
<i>Geranium lucidum</i> L.	Shining cranesbill	Geraniaceae	17	2.5	HR	N/A	79.8%	19.4%	0.8%	2013	1	Unc	Map
<i>Gladiolus undulatus</i> L.	Wavy gladiolus	Iridaceae	11	2.0	HR	N/A	41.6%	54.3%	4.1%	2012	1	Unc	Map
<i>Glycine max</i> (L.) Merr.	Soybeans	Fabaceae	2	1.6	EF	EF	6.3%	62.7%	31.1%	2014	1	Unc	Map
<i>Glycine max</i> (L.) Merr. (GE herbicide resistant)	Soybeans (GE herbicide resistant)	Fabaceae	3	2.4	EF	EF	12.1%	69.9%	18.0%	2014	1	Unc	Map
<i>Gymnocoronis spilanthoides</i> (D. Don ex Hook. & Arn.) DC.	Senegal tea plant	Asteraceae	16	3.4	HR	N/A	84.3%	15.1%	0.6%	2012	2	Unc	Map
<i>Hakea gibbosa</i> (Sm.) Cav.	Rock hakea	Proteaceae	7	3.3	EF	HR	37.8%	57.5%	4.7%	2013	1	Unc	Map
<i>Hakea salicifolia</i> (Vent.) B. L. Burt.	Finger hakea	Proteaceae	5	2.1	EF	HR	15.5%	70.3%	14.1%	2013	1	Unc	Map
<i>Hakea sericea</i> Schrad. & J. C. Wendl.	Bushy needlewood	Proteaceae	9	3.8	HR	N/A	56.8%	41.0%	2.3%	2012	2	Unc	Map
<i>Hedychium gardnerianum</i> Sheppard ex Ker Gawl	Kahili ginger lily	Zingiberaceae	15	3.7	HR	N/A	83.6%	15.8%	0.6%	2012	1	Unc	Map
<i>Heliotropium europaeum</i> L.	European heliotrope	Boraginaceae	19	2.7	HR	N/A	87.7%	11.9%	0.4%	2014	1	Unc	Map
<i>Hirschfeldia incana</i> (L.) Lagr.-Foss.	Shortpod mustard	Brassicaceae	20	3.7	HR	N/A	94.3%	5.5%	0.2%	2017	1	Unc	Map
<i>Hydrocharis morsus-ranae</i> L.	European frogbit	Hydrocharitaceae	14	3.2	HR	N/A	74.8%	24.2%	1.0%	2017	1	Unc	Map
<i>Hygrophila corymbosa</i> (Blume) Lindau	Temple plant	Acanthaceae	13	1.2	HR	N/A	41.3%	54.5%	4.1%	2015	1	Unc	Map
<i>Hygrophila difformis</i> (L. f.) Blume	Water wisteria	Acanthaceae	16	1.6	HR	N/A	64.5%	33.9%	1.6%	2015	1	Unc	Map
<i>Hygrophila pinnatifida</i> (Dalzell) Sreem	Fern hygrophila	Acanthaceae	9	1.2	EF	EF	21.5%	68.5%	9.9%	2015	1	Unc	Map
<i>Hygrophila polysperma</i> (Roxb.) T. Anderson	Miramar weed	Acanthaceae	21	3.6	HR	N/A	95.2%	4.7%	0.2%	2015	1	Unc	Map
<i>Impatiens parviflora</i> DC.	Smallflower touch-me-not; small balsam	Balsaminaceae	20	2.5	HR	N/A	88.9%	10.7%	0.4%	2013	1	Unc	Map
<i>Imperata cylindrica</i> (L.) P. Beauv.	Cogongrass	Poaceae	19	4.7	HR	N/A	96.0%	3.9%	0.1%	2019	1	Unc	Map
<i>Ipomoea biflora</i> (L.) Pers.	Bell vine	Convolvulaceae	3	2.1	EF	EF	10.3%	68.8%	20.8%	2015	1	Unc	Map

<i>Iris pseudacorus</i> L.	Yellow flag iris	Iridaceae	13	4.2	HR	N/A	81.1%	18.2%	0.7%	2013	1	Unc	Map
<i>Jatropha curcas</i> L.	Physic nut	Euphorbiaceae	7	3.0	EF	EF	33.6%	60.7%	5.6%	2015	1	Unc	Map
<i>Knautia integrifolia</i> (Honck. ex L.) Bertol.	Whole-leaved scabious	Caprifoliaceae	11	1.6	EF	HR	35.9%	59.0%	5.1%	2016	1	Unc	Map
<i>Leptochilus pteropus</i> (Blume) Fraser-Jenk.	Java fern	Polypodiaceae	1	1.0	LR	N/A	3.6%	51.4%	45.0%	2013	1	Unc	Map
<i>Ligustrum sinense</i> Lour.	Chinese privet	Oleaceae	14	3.3	HR	N/A	75.9%	23.1%	0.9%	2012	1	Unc	Map
<i>Lilaeopsis brasiliensis</i> (Glaziov) Affolter	Brazilian micro sword	Apiaceae	13	1.2	HR	N/A	41.3%	54.5%	4.1%	2017	1	Unc	Map
<i>Lilaeopsis mauritiana</i> G. Petersen & Affolter	Mauritius micro sword	Apiaceae	0	1.0	LR	N/A	2.8%	46.3%	50.9%	2017	1	Unc	Map
<i>Limnobiium laevigatum</i> (Humb. & Bonpl. ex Willd.) Heine	South American spongeplant	Hydrocharitaceae	18	3.4	HR	N/A	89.6%	10.1%	0.4%	2011	4	Unc	Map
<i>Luziola subintegra</i> Swallen.	Tropical American watergrass	Poaceae	14	3.7	HR	N/A	80.1%	19.2%	0.7%	2011	2	Unc	Map
<i>Mercurialis annua</i> L.	Annual mercury	Euphorbiaceae	23	3.2	HR	N/A	96.1%	3.8%	0.1%	2016	1	Unc	Map
<i>Mikania micrantha</i> Kunth.	Mile-a-minute	Asteraceae	20	4.3	HR	N/A	95.9%	3.9%	0.1%	2011	2	Unc	Map
<i>Mimosa pudica</i> L.	Sensitive plant	Fabaceae	17	2.9	HR	N/A	83.4%	16.0%	0.6%	2014	1	Unc	Map
<i>Myagrum perfoliatum</i> L.	Bird's-eye cress	Brassicaceae	20	2.5	HR	N/A	88.9%	10.7%	0.4%	2017	1	Unc	Map
<i>Myriophyllum mattogrossensis</i> Hoehne	None	Haloragaceae	6	1.2	EF	EF	11.9%	69.8%	18.3%	2017	1	Unc	Map
<i>Nassella neesiana</i> (Trin. & Rupr.) Barkworth	Chilean needlegrass	Poaceae	23	4.3	HR	N/A	98.0%	2.0%	0.1%	2013	1	Unc	Map
<i>Neptunia oleracea</i> Lour.	Water mimosa	Fabaceae	14	3.1	HR	N/A	73.7%	25.3%	1.1%	2012	1	Unc	Map
<i>Nymphoides cristata</i> (Roxb.) Kuntze	Crested floating heart	Menyanthaceae	12	3.3	HR	N/A	66.3%	32.2%	1.5%	2012	1	Unc	Map
<i>Nymphoides indica</i> (L.) Kuntze	Water snowflake	Menyanthaceae	14	2.3	HR	N/A	63.4%	34.9%	1.7%	2012	1	Unc	Map
<i>Nymphoides peltata</i> (S. G. Gmel.) Kuntze	Yellow floating heart	Menyanthaceae	18	4.1	HR	N/A	92.9%	6.9%	0.2%	2012	1	Unc	Map
<i>Onopordum acaulon</i> L.	Stemless thistle	Asteraceae	21	2.4	HR	N/A	90.5%	9.2%	0.3%	2020	1	Unc	Map
<i>Optismenus hirtellus</i> (L.) P. Beauv. subsp. undulatifolius (Ard.) U. Scholz	Wavyleaf basketgrass	Poaceae	15	3.3	HR	N/A	80.0%	19.3%	0.8%	2011	3	Unc	Map
<i>Oxalis hispidula</i> Zucc.	Bristly wood sorrel	Oxalidaceae	-2	1.1	LR	N/A	1.9%	37.1%	61.0%	2016	1	Unc	Map
<i>Persicaria chinensis</i> (L.) H. Gross	Chinese knotweed	Polygonaceae	19	3.3	HR	N/A	91.1%	8.6%	0.3%	2013	2	Unc	Map
<i>Persicaria nepalensis</i> (Meisn.) H. Gross	Nepal knotweed	Polygonaceae	17	3.8	HR	N/A	89.6%	10.0%	0.3%	2015	1	Unc	Map
<i>Phalaris brachystachys</i> Link	Short-spike canary grass	Poaceae	10	2.3	HR	N/A	40.3%	55.4%	4.3%	2016	1	Unc	Map
<i>Phalaris paradoxa</i> L.	Awned canary grass	Poaceae	18	2.8	HR	N/A	85.7%	13.8%	0.5%	2016	1	Unc	Map
<i>Phelipanche aegyptiaca</i> (Pers.) Pomel	Egyptian broomrape	Orobanchaceae	16	2.6	HR	N/A	76.8%	22.3%	0.9%	2019	1	Unc	Map
<i>Phelipanche ramosa</i> (L.) Pomel	Branched broomrape	Orobanchaceae	22	3.1	HR	N/A	94.9%	5.0%	0.2%	2019	1	Unc	Map
<i>Philydrum lanuginosum</i> Banks ex Gaertn.	Woolly frogs mouth	Philydraceae	13	1.8	HR	N/A	50.3%	46.8%	2.9%	2016	1	Unc	Map
<i>Phyllanthus fluitans</i> Benth. ex Müll. Arg.	Red root floater	Phyllanthaceae	13	2.4	HR	N/A	59.2%	38.8%	2.0%	2011	2	Unc	Map
<i>Phyllanthus maderaspatensis</i> L.	Canoe weed	Phyllanthaceae	4	1.6	EF	EF	9.7%	68.3%	21.9%	2012	1	Unc	Map
<i>Phyllostachys aurea</i> Carr. ex A. & C. Rivière	Golden bamboo	Poaceae	8	3.2	HR	N/A	42.0%	54.0%	4.0%	2012	1	Unc	Map
<i>Phyllostachys aureosulcata</i> McClure	Yellow groove bamboo	Poaceae	5	2.6	EF	HR	19.9%	69.2%	10.8%	2012	1	Unc	Map
<i>Pilea hyalina</i> Fenzl	(none)	Urticaceae	8	1.1	EF	EF	17.0%	70.1%	12.9%	2012	1	Unc	Map
<i>Pistacia chinensis</i> Bunge	Chinese pistache	Anacardiaceae	1	1.7	EF	HR	5.3%	59.7%	34.9%	2013	1	Unc	Map
<i>Pogostemon erectus</i> (Dalzell) Kuntze	None	Lamiaceae	5	1.0	EF	EF	8.7%	67.2%	24.2%	2017	1	Unc	Map
<i>Pogostemon helferi</i> (Hook. f.) Press	Downoi	Lamiaceae	5	1.0	EF	EF	8.7%	67.2%	24.2%	2017	1	Unc	Map

