

Memorandum

Date:	June 4, 2014
To:	Bob Tincher, San Bernardino Valley Municipal Water District
From:	Lucas Bare, Mikael Romich, Scott Fleury, ICF International
Subject:	Updated Covered Species Recommendations for the Upper Santa Ana River Watershed HCP

In the Phase 1 Report for the Upper Santa Ana River Habitat Conservation Plan (Upper SAR HCP or Plan), the HCP Team developed a list of species recommended for coverage under the Upper SAR HCP. However, there were several species that required further review to determine the need for inclusion as a covered species. The decision on inclusion of these species was postponed to allow time for further information gathering, consultation with species experts, evaluation and discussion on their probability of future listing and/or the potential for impact by covered activities. These species included: Santa Barbara morning-glory¹, mesa horkelia, greenest tiger beetle, southern mountain yellow-legged frog, western spadefoot, Coast Range newt, western pond turtle, yellow-breasted chat, western mastiff bat, San Diego black-tailed jackrabbit, and Los Angeles pocket mouse (Table 1). In addition, glossy snake and south coast garter snake were re-reviewed as new information became available.

Methods followed for this continued evaluation are the same as those presented in the Phase 1 Report, namely that species were evaluated for coverage based on occurrence data, listing status, potential impact from proposed covered activities, availability of sufficient data on the species' life history and distribution.

Next Steps

Once the covered species list is finalized, development of the Upper SAR HCP chapter that describes Plan species will proceed. Information in the Plan species chapter will include detailed species profiles, predictive models of habitat distribution in the Plan Area (if applicable and data are sufficient), potential impacts, and a detailed analysis of the species' conservation needs.

¹ In the Phase 1 Report, this species was identified as Santa Barbara morning-glory (*Calystegia sepium* ssp. *binghamiae*). However, as documented by Provance and Sanders (2013), this species may be a new species that occurs within the Plan Area—lucky morning-glory (*Calystegia felix*).

Table 1. Review of Species Recommended for Further Review

Common Name	Scientific Name	Status		Criteria for Covered Species				Proposed Coverage Type Decision	Notes/Rationale
		Federal	State	Occurrence	Status	Impact	Data		
Santa Barbara morning-glory ¹	<i>Calystegia sepium</i> ssp. <i>binghamiae</i>	None	None	Y	H	L	L	Not covered	Likely a new species occurring in urban landscaping near Chino. Believed to have occurred in ciénega-wetland complexes in southern California's alluvial basins and to have sprung from historical seed bank in newly irrigated areas around Chino (Provance and Sanders 2013). Based on documented occurrences and the extent of the Chino artesian belt (Mendenhall 1907), where the species would be most likely to occur (Provance and Sanders 2013), this species is unlikely to be impacted by covered activities.
Mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	None	None	Y	H	L	L	Not covered	Very limited distribution. Only one known population on the Etiwanda Fan just east of intersection of Dry Creek Boulevard and Etiwanda Avenue. Unlikely to be affected by covered activities and project avoidance likely.
Greenest tiger beetle	<i>Cicindela tranquebarica viridissima</i>	None	None	Y	M	H	L	Covered	Occurs within Plan Area along the Santa Ana River in and near the City of Riverside. The only other known occurrence is near Bautista Creek in Hemet. Not a well-documented species. State threat level is S1 (critically imperiled – at very high risk of extinction or elimination). Potential for listing in the near future is unlikely; however likelihood of impacts from covered activities is high. Recommended as a covered species and continue gather more information on its current distribution, population trends, and potential impacts of covered activities.
Southern mountain yellow-legged frog	<i>Rana muscosa</i>	Endangered	Endangered	Y	Listed	L	M	Not covered	Designated critical habitat occurs within upper City Creek where it overlaps with National Forest Service lands. City Creek is the only currently known location near the Plan Area. However, this elevation is above where covered activities will occur. This species' current range does not occur within the proposed covered activity area. Therefore, it is not proposed as a covered species.

Table 1 (continued). Species Recommended for Further Review

Common Name	Scientific Name	Status		Criteria for Covered Species				Proposed Coverage Type Decision	Notes/Rationale
		Federal	State	Occurrence	Status	Impact	Data		
Western spadefoot	<i>Spea hammondi</i>	None	Sensitive	Y	M	H	M	Covered	Stebbins (2012) describes the species as extinct throughout much of lowland southern California, and no CNDDDB records occur within San Bernardino County. However, the San Bernardino County Museum has trapping array records of spadefoot toad from near the following locations: San Sevaine Creek, Cajon Wash upstream of the Lytle Creek confluence and upstream and downstream of Interstate 15, Devil's Canyon, City Creek downstream of Highland Street, Plunge Creek downstream of Greenspot Road, Mill Creek upstream of the confluence with the Santa Ana River, and the Santa Ana River from Orange Street upstream to near the 7 Oaks borrow pit. This species is ranked as vulnerable by the state. Although the risk of this species being listed is difficult to judge, it has been included as a covered species on several other southern California HCPs. Because direct project impacts to this species are expected, it is recommended as a covered species.
Coast Range newt	<i>Taricha torosa</i>	None	Sensitive	Y	L	L	L	Not covered	In the CNDDDB, there are no records of this species in San Bernardino County, although there are other records from the Etiwanda Fan (Braden 2013). Additionally, this species is ranked as apparently secure (uncommon but not rare) at the state level. Finally, this species' current range does not occur within the proposed covered activity area. Therefore, it is not proposed as a covered species.
Western pond turtle	<i>Emys marmorata</i>	None	Sensitive	N	M	L	L	Covered	The species is a California Species of Special Concern, has a vulnerable (S3) conservation status in California, and is currently under U.S. Fish and Wildlife Service review. The species is covered by the Western Riverside MSHCP and monitoring for the species has documented occurrences in the Santa Ana River diversion in the Prado Wetlands and at the oxbow pools along the Santa Ana River in Norco (Western Riverside County MSHCP 2012, 2010). The Western Riverside County

Table 1 (continued). Species Recommended for Further Review

Common Name	Scientific Name	Status		Criteria for Covered Species				Proposed Coverage Type Decision	Notes/Rationale
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									MSHCP also identifies core habitat for this species along the Santa Ana River. This species is recommended as covered.
California glossy snake	<i>Arizona elegans occidentalis</i>	None	None	Y	M	H	M	Covered	San Bernardino County Museum has trapping array records of California glossy snake from near the following locations: Lytle Creek and Interstate 15, Cajon Wash upstream of the Lytle Creek confluence and upstream of Interstate 15, Plunge Creek downstream of Greenspot Road, Mill Creek upstream of the confluence with the Santa Ana River, and the Santa Ana River from Alabama Street upstream to near the 7 Oaks borrow pit. Experts on the species (Gerald Braden, Robert Fisher, and Brian Hinds) have advised that this species is critically imperiled and has a high potential for future proposed listing. Therefore, this species is recommended for coverage.
South coast garter snake	<i>Thamnophis sirtalis</i> ssp.	None	None	Y	M	M	L	Covered	Range is Coastal Plain from Ventura County to San Diego County, from sea level to about 850 meters above sea level. Little is known about the life history of this taxon (Jennings and Hayes 1994). Historical occurrence data is sparse. There are no San Bernardino County Museum records for San Bernardino County, or CNDDDB records for Riverside and San Bernardino Counties. Jennings and Hayes (1994) show one extinct museum record from Prado Basin. However, the HERP database has two records from Prado Basin in 2007 and 2011 (HERP 2014), and U.S. Geological Survey has recent occurrence records from the Santa Ana River upstream of Interstate 15. Experts on the species (Gerald Braden, Robert Fisher, and Brian Hinds) have advised that this species is critically imperiled and may have a high potential for future proposed listing. Therefore, this species is recommended for coverage.

Table 1 (continued). Species Recommended for Further Review

Common Name	Scientific Name	Status		Criteria for Covered Species				Proposed Coverage Type Decision	Notes/Rationale
		Federal	State	Occurrence	Status	Impact	Data		
Yellow-breasted chat	<i>Icteria virens</i>	None	Sensitive	Y	M	H	H	Covered	Currently occurs in riparian habitat within the Santa Ana River and associated tributaries. Within the state it is ranked as vulnerable or at a moderate risk of extinction or elimination. Within the Plan Area this species may be in decline and is at some risk of being listed. Therefore, it is recommended as a species for coverage. It also shares some habitat preferences with least Bell's vireo and southwestern willow flycatcher and would fall under the umbrella of covered riparian bird species.
Western mastiff bat	<i>Eumops perotis californicus</i>	None	None	Y	L	L	L	Not covered	The covered activities are expected to have limited to no removal of suitable roost features for bats species. In addition, it is expected that any roosts that are identified would be avoided during the maternity and winter seasons. No data is available for prevalence and population trends in the Plan Area. This species is not recommended as a covered species.
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	None	Sensitive	Y	M	H	L	Covered	This species has a state sensitivity ranking of "vulnerable", but population levels are not well documented not well documented in the Plan Area. It is not an aquatic-dependent or fluvial-dependent species, but direct impacts are expected from several covered activities. This species has a large home range and is sensitive to habitat fragmentation. No data is available for population trends in the Plan Area, and there is also no information that suggests this species has a high likelihood of listing. The black-tailed jackrabbit has been included as a covered species on several other southern California HCPs. Because direct project impacts to this species are expected, it is recommended as a covered species.

Table 1 (continued). Species Recommended for Further Review

Common Name	Scientific Name	Status		Criteria for Covered Species				Proposed Coverage Type Decision	Notes/Rationale
		Federal	State	Occurrence	Status	Impact	Data		
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	None	Sensitive	Y	M	H	L	Covered	Occurs in alluvial fan habitat and sandy terraces (including sparse grasslands) of the Santa Ana River, Mill Creek, Plunge Creek, City Creek, Lytle Creek, Cajon Wash, and Cable Creek. In California it is ranked between critically imperiled and imperiled (very high to high risk of extinction). Within the Plan Area, this species may be in decline and is at some risk of being listed. Therefore, it is recommended as a species for coverage. It also shares some habitat preferences with San Bernardino kangaroo rat and would fall under the umbrella of this listed species.

¹ In the Phase 1 Report, this species was identified as Santa Barbara morning-glory (*Calystegia sepium ssp. binghamiae*). However, as documented by Provance and Sanders (2013), this species may be a new species that occurs within the Plan Area—lucky morning-glory (*Calystegia felix*).

Table 2. Revised List of Species Proposed for Coverage

Common Name	Scientific Name	Status	
		Federal	State
<i>Priority HCP Species</i>			
slender-horned spineflower	<i>Dodecahema leptoceras</i>	Endangered	Endangered
Santa Ana River woolly-star	<i>Eriastrum densifolium ssp. sanctorum</i>	Endangered	Endangered
Santa Ana sucker	<i>Catostomus santaanae</i>	Threatened	SSC
arroyo chub	<i>Gila orcuttii</i>	None	SSC
Santa Ana speckled dace	<i>Rhinichthys osculus ssp. 3</i>	None	SSC
southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Endangered	Endangered
least Bell's vireo	<i>Vireo bellii pusillus</i>	Endangered	Endangered
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	Endangered	SSC
<i>Other Aquatic and Riparian Species</i>			
arroyo toad	<i>Anaxyrus californicus</i>	Endangered	SSC
western pond turtle	<i>Emys marmorata</i>	None	SSC
western spadefoot	<i>Spea hammondi</i>	None	SSC
South coast garter snake	<i>Thamnophis sirtalis ssp.</i>	None	SSC
tricolored blackbird	<i>Agelaius tricolor</i>	None	SSC
western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Candidate	Endangered
yellow-breasted chat	<i>Icteria virens</i>	None	SSC
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	None	SSC
<i>Other Upland Species</i>			
Delhi Sands flower-loving fly	<i>Rhaphiomidas terminatus abdominalis</i>	Endangered	None
greenest tiger beetle	<i>Cicindela tranquebarica viridissima</i>	None	None
California glossy snake	<i>Arizona elegans occidentalis</i>	None	None
burrowing owl	<i>Athene cunicularia</i>	None	SSC
cactus wren	<i>Campylorhynchus brunneicapillus anthonyi</i>	None	None
coastal California gnatcatcher	<i>Polioptila californica californica</i>	Threatened	SSC
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	None	SSC
SSC = California Department of Fish and Wildlife Species of Special Concern			

References

- [HERP] North American Herpetological Education and Research Project. 2014. Database search. Available at: <http://www.naherp.com/>
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- Mendenhall, W.C. 1907. U.S. Geological Survey map showing the artesian areas and hydrographic contours in the valley of Southern California. Water Supply Paper No. 219. Plate 3. US Geological Survey, Washington: Department of the Interior. 1:250,000. Made available by the Department of Geography, University of Alabama: <http://alabamamaps.ua.edu/index.html>
- Provance, M.C. and A.C. Sanders. 2013. Lucky morning glory, *Calystegia felix* (Convolvulaceae): a new species from Southern California, with notes on the historical ecology of the Chino cienega belt. *PhytoKeys* 32: 1-26.
- Stebbins, Robert C., and S.M. McGinnis. 2012. Field Guide to Amphibians and Reptiles of California: Revised Edition (California Natural History Guides) University of California Press.
- Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). 2012. Western Pond Turtle (*Clemmys marmorata pallida*) Survey Report 2011. Biological Monitoring Program. April 2, 2012.
- _. 2010. Western Pond Turtle (*Clemmys marmorata pallida*) Survey Report 2009. Biological Monitoring Program. April 23, 2010.