

California Department of Fish and Game

Natural Diversity Database

For information about these species or natural communities, or other species or natural communities, or for staff contacts, please see the NDDB website at <http://www.dfg.ca.gov/whdab/cnddb.htm>

IMPORTANT NOTICE:

This list of species was produced from data presently included in the California Natural Diversity Database (CNDDDB). The CNDDDB is a positive sighting data base, and our data sets can not be considered to be complete for every species in every county. Therefore, this list must not be considered to be a comprehensive list of all special status species in the county.

Special Status Plants, Animals and Natural Communities of BUTTE COUNTY

Scientific Name	Common Name	STATUS*: *(see footnotes)			
		Federal	California	CDFG	CNPS
Vascular Plants					
<i>Agrostis hendersonii</i>	HENDERSON'S BENT GRASS	Species of concern	None		3
<i>Allium jepsonii</i>	JEPSON'S ONION	Species of concern	None		1B
<i>Astragalus tener var ferrisiae</i>	FERRIS'S MILK-VETCH	Species of concern	None		1B
<i>Atriplex cordulata</i>	HEARTSCALE	Species of concern	None		1B
<i>Atriplex depressa</i>	BRITTLESCALE	None	None		1B
<i>Atriplex minuscule</i>	LESSER SALTSCALE	None	None		1B
<i>Balsamorhiza macrolepis var macrolepis</i>	BIG-SCALE BALSAMROOT	None	None		1B
<i>Botrychium crenulatum</i>	SCALLOPED MOONWORT	Species of concern	None		1B
<i>Botrychium montanum</i>	WESTERN GOBLIN	None	None		2
<i>Carex limosa</i>	SHORE SEDGE	None	None		2
<i>Carex vulpinoidea</i>	FOX SEDGE	None	None		2
<i>Chamaesyce hooveri</i>	HOOVER'S SPURGE	Threatened	None		1B
<i>Clarkia gracilis ssp albicaulis</i>	WHITE-STEMMED CLARKIA	None	None		1B
<i>Clarkia mosquinii ssp mosquinii</i>	MOSQUIN'S CLARKIA	Species of concern	None		1B
<i>Clarkia mosquinii ssp xerophila</i>	ENTERPRISE CLARKIA	Species of concern	None		1B
<i>Delphinium recurvatum</i>	RECURVED LARKSPUR	Species of concern	None		1B
<i>Eleocharis quadrangulata</i>	FOUR-ANGLED SPIKERUSH	None	None		2
<i>Fritillaria eastwoodiae</i>	BUTTE COUNTY FRITILLARY	Species of concern	None		1B
<i>Fritillaria pluriflora</i>	ADOBE-LILY	Species of concern	None		1B
<i>Hibiscus lasiocarpus</i>	ROSE-MALLOW	None	None		2
<i>Juncus leiospermus var ahartii</i>	AHART'S DWARF RUSH	Species of concern	None		1B
<i>Juncus leiospermus var leiospermus</i>	RED BLUFF DWARF RUSH	None	None		1B
<i>Lewisia cantelovii</i>	CANTELOW'S LEWISIA	None	None		1B
<i>Limnanthes floccosa ssp californica</i>	BUTTE COUNTY MEADOWFOAM	Endangered	Endangered		1B
<i>Limnanthes floccosa ssp floccosa</i>	WOOLLY MEADOWFOAM	None	None		2
<i>Monardella douglasii ssp venosa</i>	VEINY MONARDELLA	Species of concern	None		1B
<i>Orcuttia pilosa</i>	HAIRY ORCUTT GRASS	Endangered	Endangered		1B
<i>Paronychia ahartii</i>	AHART'S PARONYCHIA	Species of concern	None		1B
<i>Penstemon personatus</i>	CLOSED-THROATED BEARDTONGUE	Species of concern	None		1B
<i>Rhynchospora californica</i>	CALIFORNIA BEAKED-RUSH	Species of concern	None		1B
<i>Rupertia hallii</i>	HALL'S RUPERTIA	None	None		1B
<i>Sagittaria sanfordii</i>	SANFORD'S ARROWHEAD	Species of concern	None		1B
<i>Sanicula tracyi</i>	TRACY'S SANICLE	Species of concern	None		1B
<i>Scirpus subterminalis</i>	WATER BULRUSH	None	None		2
<i>Sedum albomarginatum</i>	FEATHER RIVER STONECROP	None	None		1B
<i>Senecio eurycephalus var lewisrosei</i>	CUT-LEAVED RAGWORT	None	None		1B
<i>Sidalcea robusta</i>	BUTTE COUNTY CHECKERBLOOM	Species of concern	None		1B
<i>Stellaria longifolia</i>	LONG-LEAVED STARWORT	None	None		2
<i>Stellaria obtusa</i>	OBTUSE STARWORT	None	None		2
<i>Trifolium jokerstii</i>	BUTTE COUNTY GOLDEN CLOVER	None	None		
<i>Tuctoria greenei</i>	GREENE'S TUCTORIA	Endangered	Rare		1B

**Special Status Plants, Animals and Natural Communities of
BUTTE COUNTY**

<u>Scientific Name</u>	<u>Common Name</u>	<u>STATUS*</u> : <small>*(see footnotes)</small>			
		<u>Federal</u>	<u>California</u>	<u>CDFG</u>	<u>CNPS</u>
<u>Vascular Plants</u>					
<i>Viola tomentosa</i>	WOOLLY VIOLET	None	None		1B
<u>Crustaceans</u>					
<i>Branchinecta conservatio</i>	CONSERVANCY FAIRY SHRIMP	Endangered	None		
<i>Branchinecta lynchi</i>	VERNAL POOL FAIRY SHRIMP	Threatened	None		
<i>Lepidurus packardii</i>	VERNAL POOL TADPOLE SHRIMP	Endangered	None		
<i>Linderiella occidentalis</i>	CALIFORNIA LINDERIELLA	None	None		
<u>Beetles</u>					
<i>Desmocerus californicus dimorphus</i>	VALLEY ELDERBERRY LONGHORN BEETLE	Threatened	None		
<u>Fish</u>					
<i>Oncorhynchus tshawytscha spring-run</i>	SPRING-RUN CHINOOK SALMON	Candidate	Candidate		
<u>Amphibians</u>					
<i>Ambystoma californiense</i>	CALIFORNIA TIGER SALAMANDER	Candidate	None		SC
<i>Rana aurora draytonii</i>	CALIFORNIA RED-LEGGED FROG	Threatened	None		SC
<u>Reptiles</u>					
<i>Clemmys marmorata marmorata</i>	NORTHWESTERN POND TURTLE	Species of concern	None		SC
<i>Thamnophis gigas</i>	GIANT GARTER SNAKE	Threatened	Threatened		
<u>Birds</u>					
<i>Accipiter gentilis (nesting)</i>	NORTHERN GOSHAWK	Species of concern	None		SC
<i>Agelaius tricolor (nesting colony)</i>	TRICOLORED BLACKBIRD	Species of concern	None		SC
<i>Ardea alba</i>	GREAT EGRET	None	None		
<i>Ardea herodias (rookery)</i>	GREAT BLUE HERON	None	None		
<i>Athene cunicularia (burrow sites)</i>	BURROWING OWL	Species of concern	None		SC
<i>Buteo swainsoni (nesting)</i>	SWAINSON'S HAWK	None	Threatened		
<i>Circus cyaneus (nesting)</i>	NORTHERN HARRIER	None	None		SC
<i>Coccyzus americanus occidentalis (nesting)</i>	WESTERN YELLOW-BILLED CUCKOO	None	Endangered		
<i>Cypseloides niger (nesting)</i>	BLACK SWIFT	None	None		SC
<i>Haliaeetus leucocephalus (nesting & wintering)</i>	BALD EAGLE	Threatened	Endangered		
<i>Laterallus jamaicensis coturniculus</i>	CALIFORNIA BLACK RAIL	Species of concern	Threatened		
<i>Pandion haliaetus (nesting)</i>	OSPREY	None	None		SC
<i>Riparia riparia (nesting)</i>	BANK SWALLOW	None	Threatened		
<u>Mammals</u>					
<i>Martes pennanti pacifica</i>	PACIFIC FISHER	Species of concern	None		SC
<u>Natural Communities</u>					
<i>Coastal and valley freshwater marsh</i>	N.A.	None	None		
<i>Great valley cottonwood riparian forest</i>	N.A.	None	None		
<i>Great valley mixed riparian forest</i>	N.A.	None	None		
<i>Great valley valley oak riparian forest</i>	N.A.	None	None		
<i>Great valley willow scrub</i>	N.A.	None	None		
<i>Northern basalt flow vernal pool</i>	N.A.	None	None		
<i>Northern hardpan vernal pool</i>	N.A.	None	None		
<i>Northern volcanic mud flow vernal pool</i>	N.A.	None	None		

California Native Species Field Survey Form

Mail to:
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 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 8 - 6 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: Hibiscus lasiocarpus Cav. (Malvaceae)

Common Name: rose-mallow

Species Found? _____
yes no If not, why?
 Total No. Individuals 150 Subsequent Visit? yes no
Is this an existing NDDB occurrence? 123 no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
Chico, CA 95973
Email Address: kstuart2@pachell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 60.00 40.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: _____ # adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Upper Bidwell Park. Hillside secp ~ 130yds north from entrance of Diversion Dam Parking Area.

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 440 ft
 T 22N R 2E NE 1/4 of NE 1/4 of Section 9 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)
 Source: GPS (GPS, map & type, etc.) Point Accuracy: < 1 Meters
 UTM Coordinates Lat/Long: 39 46' 46.88493"N 121 45' 02.81767"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Hillside Seep Wetland: Quercus lobata, Rhamnus rubra, Rosa californica, Mentha pulegium, Toxicodendron diversilobum, Artemesia douglasiana, Vitis californica, Verbena litoralis, Rumex crispus
 Tuscan soils, Slope ~ 4%, Southern Aspect

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park.

Visible disturbances / possible threats: None

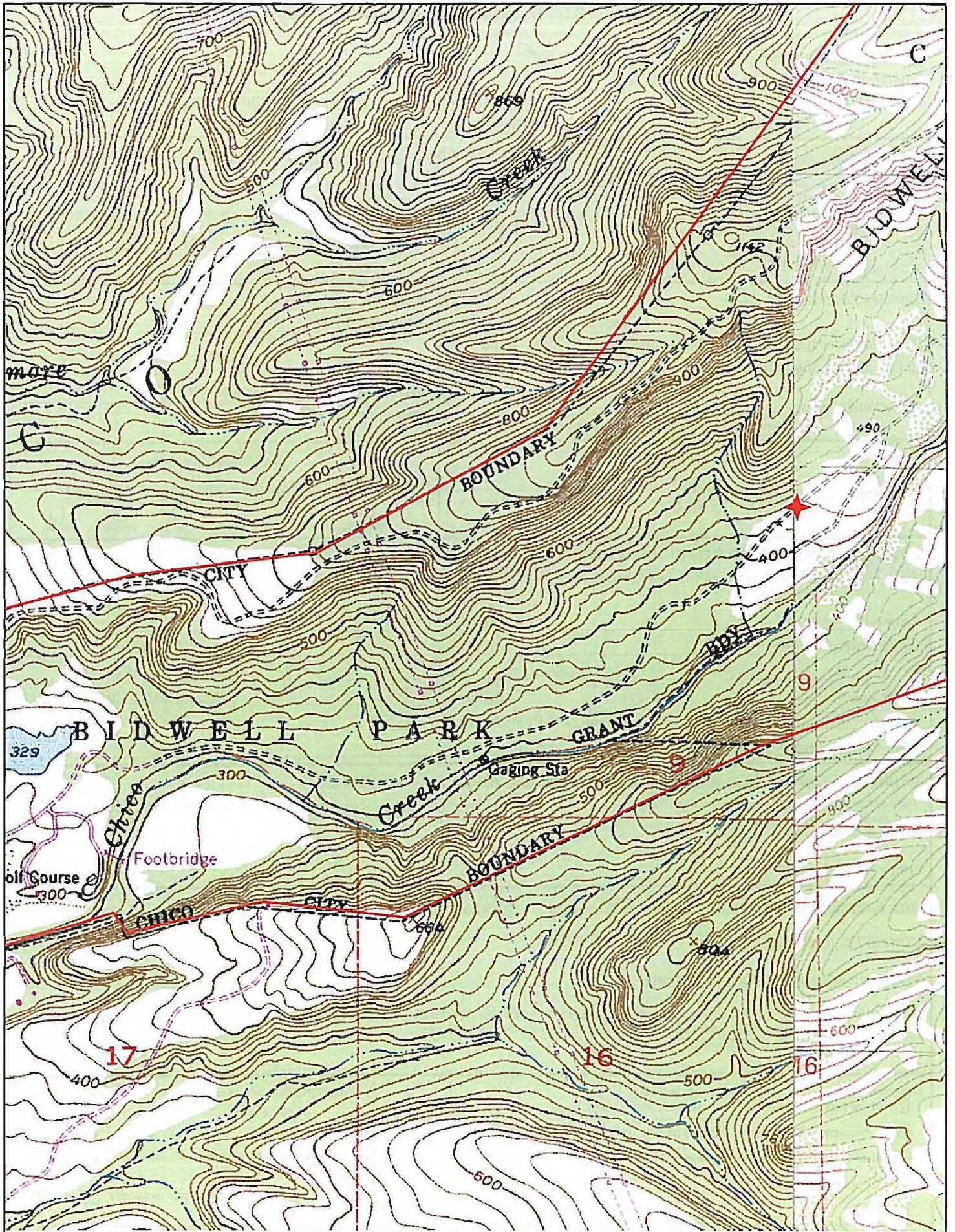
Comments: Oswald's location description needs to be updated since the roads that are referenced no longer exist.
Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference) Jepson Manual, Butte County Flora
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: www.CalFlora.org
- By another person (name): _____
- Other: _____

Photographs: (check one or more) Slide Print
 Plant / animal
 Habitat
 Diagnostic feature

May we obtain duplicates at our expense? yes no



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 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 6 - 13 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Lilium humboldtii* Roezl & Leichtlin ssp. *humboldtii* (Liliaceae)

Common Name: Humboldt's lily

Species Found?
yes no If not, why?
 Total No. Individuals 1 Subsequent Visit? yes no
Is this an existing NDDB occurrence? no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
 Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 100.00 0.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown

breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Upper Bidwell Park. One plant found adjacent to foot trail approximately 560 ft up slope (west) from Brown's Hole parking area.

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 850 ft
 T 23N R 2E NE 1/4 of NW 1/4 of Section 3 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)
 Source: GPS-Trimble GeoIII (GPS, map & type, etc.) Point Accuracy: 1 Meters
 UTM Coordinates Lat/Long: 39 47' 54.92053"N 121 44' 10.45868"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Live oak woodland / chaparral ecotone: *Quercus wislizenii*, *Toxicodendron diversilobum*, *Umbellularia californica*, *Rhus trilobata*
 Tuscan soils, Slope ~ 6%, Southeastern Aspect

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park, found just below foot trail.

Visible disturbances / possible threats: No visible disturbances.

Comments: Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

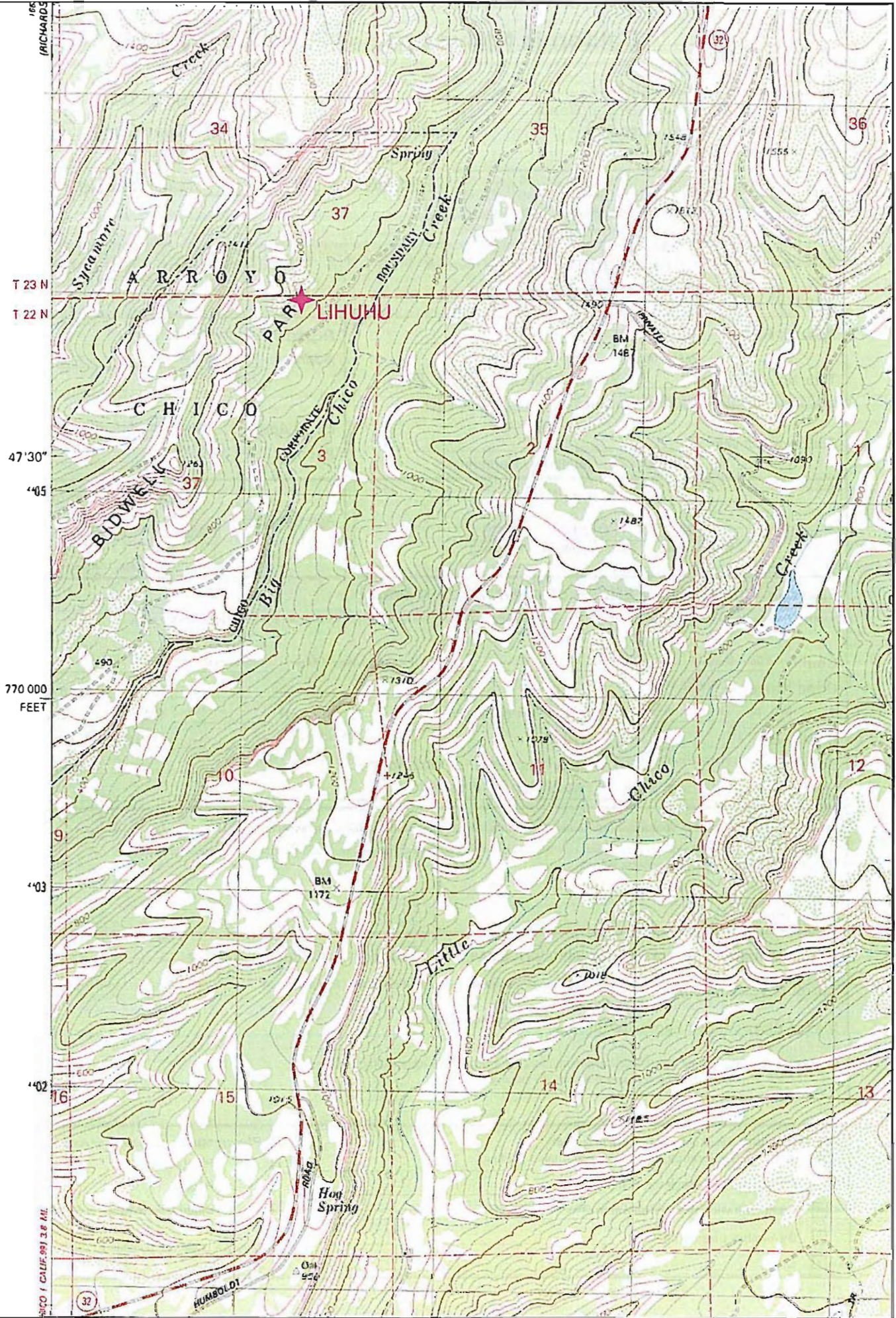
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Butte Co. Flora
- Compared with specimen housed at: _____
- Compared with photo / drawing in: www.CalFlora.org
- By another person (name): _____
- Other: _____

Photographs: (check one or more) Slide Print

Plant / animal
 Habitat
 Diagnostic feature

May we obtain duplicates at our expense? yes no



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 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 18 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Mimulus glaucescens* E. Greene (Scrophulariaceae)

Common Name: shield-bracted monkeyflower

Species Found?
yes no If not, why?
 Total No. Individuals 650 Subsequent Visit? yes no
 Is this an existing NDDDB occurrence? no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
 Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: # adults # juveniles # unknown

breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Four separate occurrences. Two in ephemeral stream channel N-NE of Horseshoe Lake (Upper Bidwell Park). Two at base of fanglomerate outcrop midslope below Monkey Face rock NE of Horseshoe Lake.

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 400 - 460 ft
 T 22N R 2E 1/4 of _____ 1/4 of Section NA T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NA D83, NAD 27, WG5 84, other)
 Source: GPS (GPS, map & type, etc.) Point Accuracy: < 1 Meters
 UTM Coordinates Lat/Long: 39 46' 29.70160"N 121 46' 39.28975"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Ephemeral stream within blue oak woodland: *Quercus douglasii*, *Rhamnus rubra*, *Ceanothus cuneatus*, *Toxicodendron diversilobum*, *Avena barbata*, Tuscan soils, Slope ~ 12%, Southern Aspect

Other rare species? Sidalcea robusta

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park.

Visible disturbances / possible threats: No visible disturbances.

Comments: Population seems stable and in no immediate threat from surrounding land use. This species is locally abundant. Occupies most of the ephemeral drainages and seeps in Upper Bidwell Park.

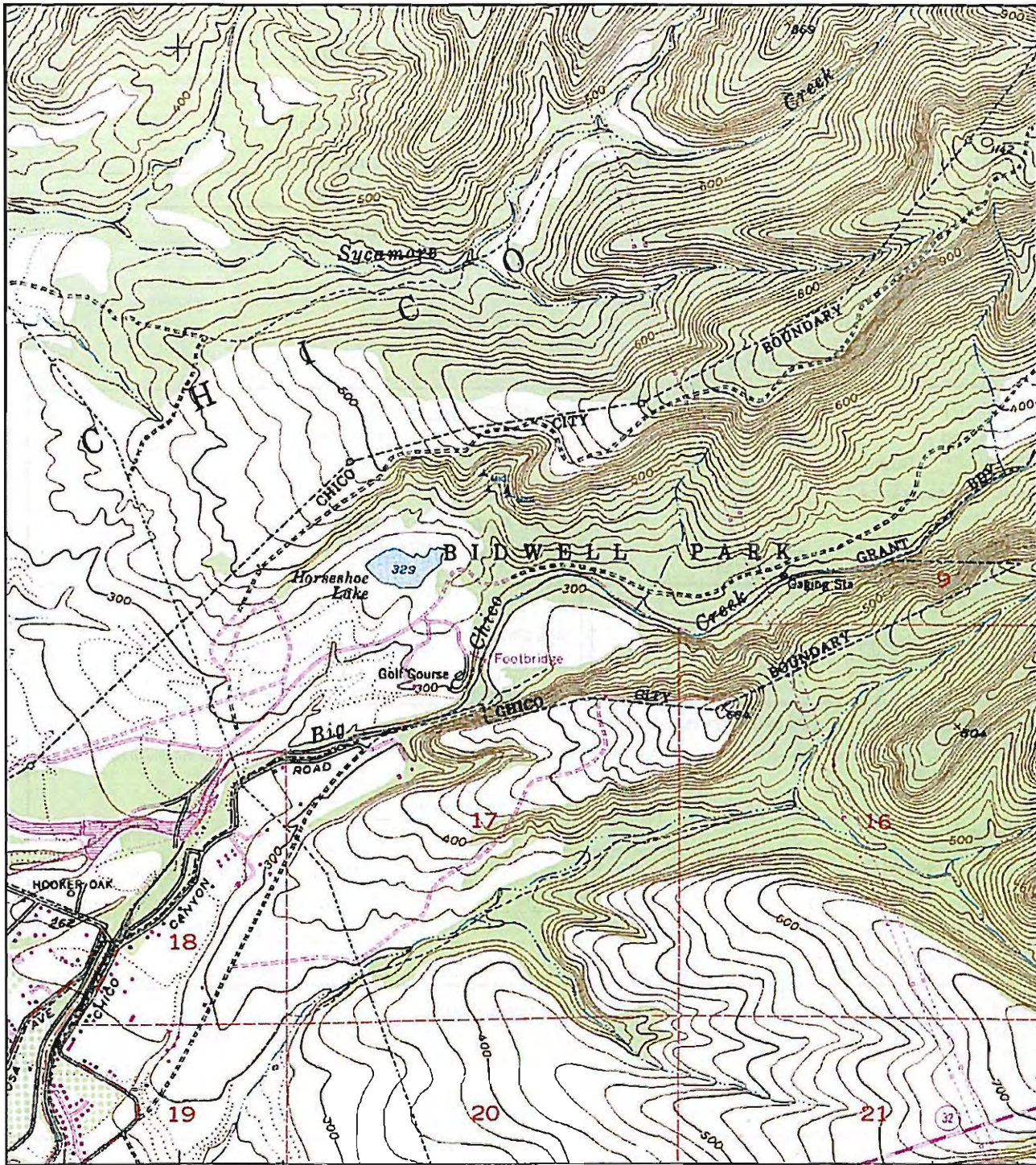
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Butte County Flora
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: www.CalFlora.org
- By another person (name): _____
- Other: _____

Photographs: (check one or more)

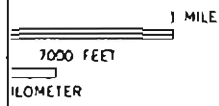
	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



47°30"
44°05'
44°04'
44°03'
44°02'00"N
39°45'
121°45'

1603 47°30" 1604 1605
INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1988
606200m.E
3.3 MI. TO CALIF. 99
CHICO (CITY HALL) 5 MI.



N. VIRGINIA 22092
REQUEST

Revisions shown in purple compiled in cooperation with California Department of Water Resources from aerial photographs taken 1969. This information not field checked
Purple tint indicates extension of urban areas

ROAD CLASSIFICATION

Heavy-duty	Light-duty
Medium-duty	Unimproved dirt
○ State Route	

RICHARDSON SPRINGS, CALIF.
SE/4 RICHARDSON SPRINGS 15' QUADRANGLE
39121-G7-TF-024

1951
PHOTOREVISED 1969
DMA 1663 IV SE-SERIES V895

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Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 16 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: Polygonum bidwelliae S. Watson (Polygonaceae)

Common Name: Bidwell's knotweed

Species Found? yes no If not, why?
 Total No. Individuals 150 Subsequent Visit? yes no
 Is this an existing NDDDB occurrence? yes no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
 Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Upper Bidwell Park. Foot trail extending S - SW from parking area "O"

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 600 ft
 T 23N R 2E SE 1/4 of SW 1/4 of Section 37 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)
 Source: GPS (GPS, map & type, etc.) Point Accuracy: <1 Meters
 UTM Coordinates Lat /Long: 39 47' 07.55764"N 121 44' 30.99866"W Position is taken from north end of polygon (55m x 4m).

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Annual grassland: Taeniatherum caput-medusae, Lupinus bicolor, Navarretia pubescens, Minuartia californica, Lolium multiflorum, Vulpia microstachys var. pauciflora, Brodiaea minor, Plantago crecta
 Tuscan soils, Slope ~ 6%, Southern Aspect

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park.

Visible disturbances / possible threats: Plants occupy "foot trail habitats" where competing vegetation is kept to a minimum. Hence the disturbance is the reason for the existence of this species at this location.

Comments: Population seems stable and in no immediate threat from surrounding land use. Photo's may be obtained at www.CalFlora.org

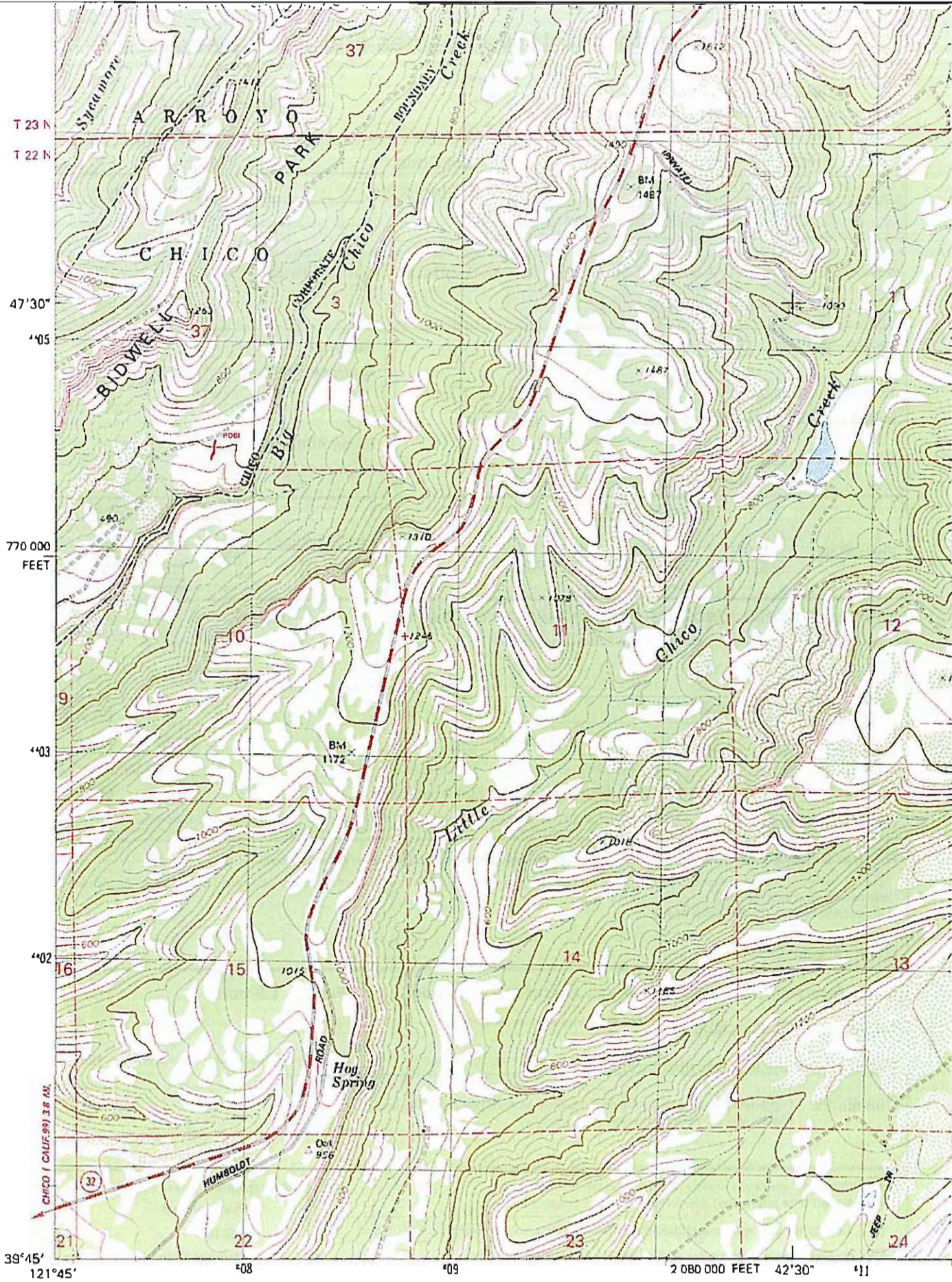
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Butte County Flora
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: www.CalFlora.org
- By another person (name): _____
- Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



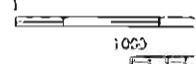
(CHICO)
1663 of NE

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial
photographs taken 1973. Field checked 1974

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Source Code _____ Quad Code _____
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Date of Field Work: 7 - 16 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: Polygonum bidwelliae S. Watson (Polygonaceae)

Common Name: Bidwell's knotweed

Species Found?
yes no If not, why?
 Total No. Individuals 200 Subsequent Visit? yes no
 Is this an existing NDDDB occurrence? no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
 Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: # adults # juveniles # unknown

breedhg wintering burrow site rookery nestling other

Location (please also attach or draw map on back)

Upper Bidwell Park. Main foot trail extending E from parking area "O".

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 630 ft
 T 23N R 2E SE 1/4 of SW 1/4 of Section 37 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)
 Source: GPS (GPS, map & type, etc.) Point Accuracy: < 1 Meters
 UTM Coordinates Lat / Long: 39 47' 08.65977"N 121 44' 29.67437"W Position is taken from northwest end of polygon (55m x 4m).

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Annual grassland: Taeniatherum caput-medusae, Lupinus bicolor, Navarretia pubescens, Minuartia californica, Lolium multiflorum, Vulpia microstachys var. pauciflora, Brodiaea minor, Plantago erecta
 Tuscan soils, Slope ~ 6%, Southern Aspect

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park.

Visible disturbances / possible threats: Plants occupy "foot trail habitats" where competing vegetation is kept to a minimum. Hence the disturbance is the reason for the existence of this species at this location.

Comments: Population seems stable and in no immediate threat from surrounding land use. Photo's may be obtained at www.CalFlora.org

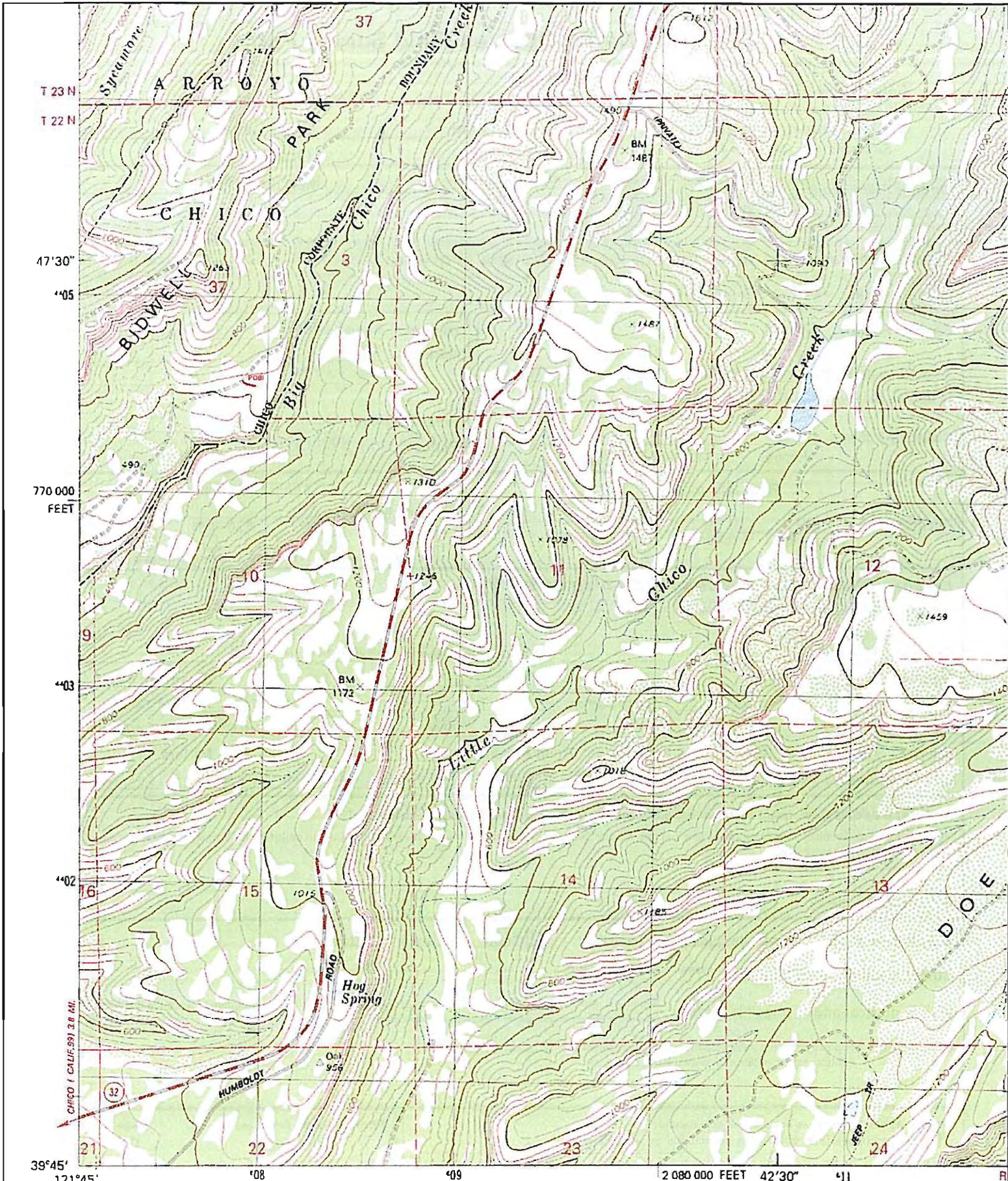
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- Other: _____

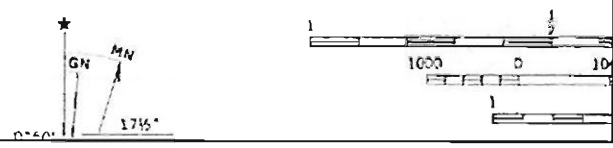
Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



(CHICO)
 1:62,500
 Mapped, edited, and published by the Geological Survey
 Control by USGS and NOS/NOAA
 Topography by photogrammetric methods from aerial
 photographs taken 1973. Field checked 1974
 Map edited 1980



California Native Species Field Survey Form

Mall to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 16 - 2002
month (mm) data (dd) year (yyyy)

Scientific Name: *Rhynchospora californica* Gale (Cyperaceae)

Common Name: California beaked-rush

Species Found? yes no If not, why? _____
 Total No. Individuals 1,000 Subsequent Visit? yes no
 Is this an existing NDDDB occurrence? 5 no unk.
Yes, Occ. #
 Collection? If yes: 27.00 Biological Sciences Herbarium at CSU, Chico
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)
 Upper Bidwell Park. Approximately, 475 ft SW of Upper Park Rd' and 635 ft E - NE (Az. 77deg) of Salmon Hole parking area.

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 730 ft
 T 22N R 2E NE 1/4 of NW 1/4 of Section 10 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD 27, WG584, other)
 Source: GPS-Trimble GeoIII (GPS, map & type, etc.) Point Accuracy: >1 Meters
 UTM Coordinates LAT/LONG: 39 47' 03.26066"N 121 44' 36.60729"W Position indicates northern end of polygon (55m x 4m).

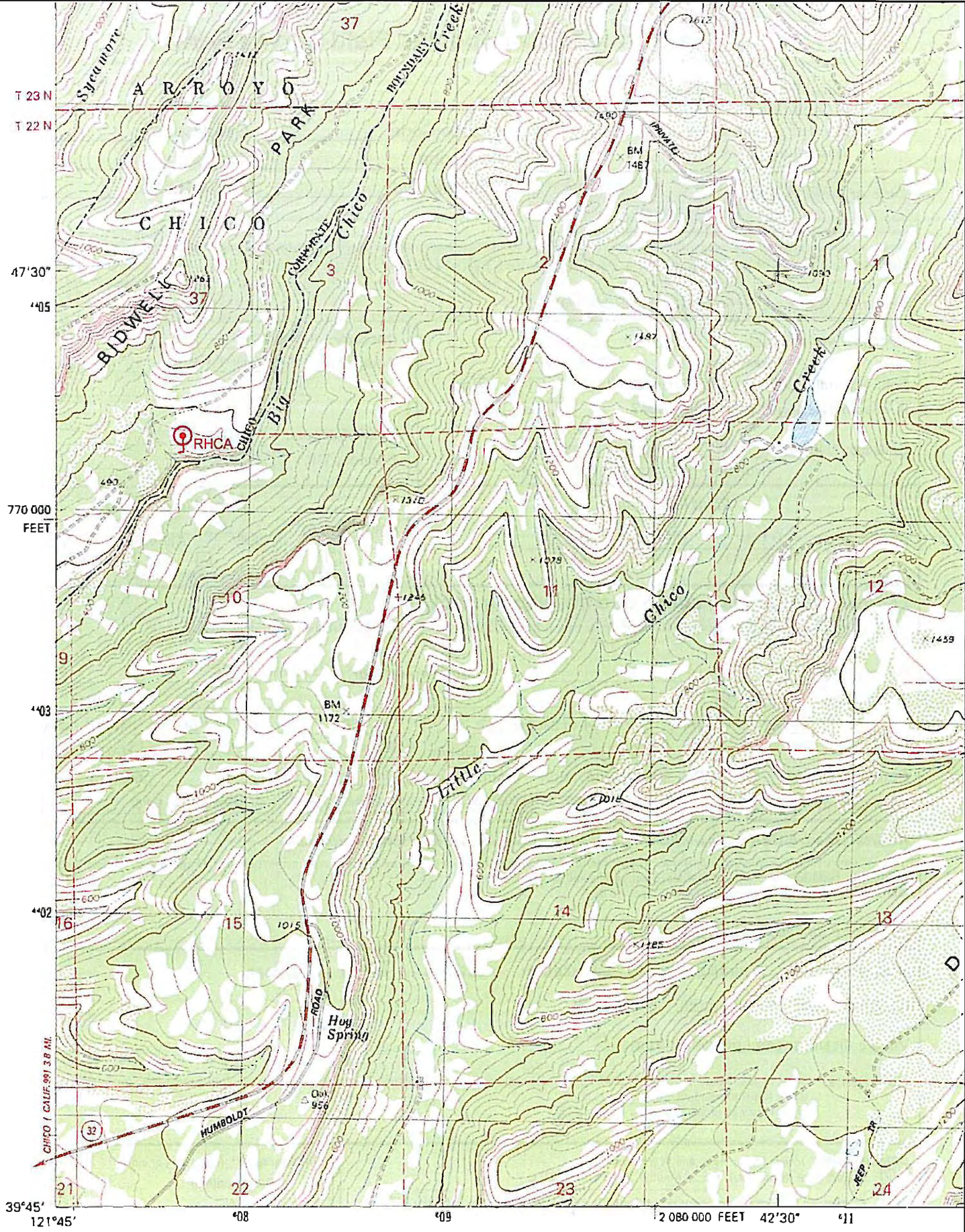
Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)
 Hillside seep within annual grassland habitat. Population inhabits a furrow between low rising Tuscan fanglomerate outcrops. Doms/Assoc: *Muhlenbergia rigens*, *Phragmites australis*, *Xanthium strumarium*, *Stachys pycnantha*, *Carex densa*
 Substrate: Tuscan soils Aspect: southern Slope: ~ 8 deg

Other rare species? Mimulus glaucescens

Site Information Overall site quality: Excellent Good Fair Poor
 Current / surrounding land use: Municipal park.
 Visible disturbances / possible threats: None
 Comments: Same population as Janeway 88' however I am delineating his two populations as separate occurrences. Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)
 Keyed (cite reference) Jepson Manual, Butte County Flora
 Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
 Compared with photo / drawing in: _____
 By another person (name): _____
 Other: _____

Photographs: (check one or more) Slide Print
 Plant / animal
 Habitat
 Diagnostic feature
 May we obtain duplicates at our expense? yes no



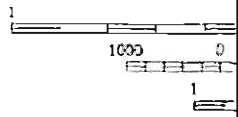
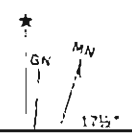
T 23 N
T 22 N
47°30'
405
770 000
FEET
9
403
402
39°45'
121°45'

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1973. Field checked 1974

Map edited 1980



(CHICO)
1:62,500 N.E.

California Native Species Field Survey Form

Mail to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 3 - 2002
month (mm) date (dd) year (YYYY)

Scientific Name: *Rhynchospora californica* Gale (Cyperaceae)

Common Name: California beaked-rush

Species Found?
yes no If not, why?
 Total No. Individuals 50 Subsequent Visit? yes no
Is this an existing NDDDB occurrence? no unk.
Yes, Occ. #
 Collection? If yes: 27.00 Biological Sciences Herbarium at CSU, Chico
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
 Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown

breedhg wintering burrow alta rookery nesting other

Location (please also attach or draw map on back)

Approximately 1,100' west of power lines and 1,000' north of lower trail (above Upper Park Rd.)

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Richardson Springs Elevation: 385 ft
 T 22N R 2E 1/4 of _____ 1/4 of Section NA T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NA D83, NAD 27, WG584, other)
 Source: GPS-Trimble GeoIII (GPS, map & type, etc.) Point Accuracy: >1 Meters
 UTM Coordinates LAT/LONG: 39 46' 26.17864"N 121 46' 07.22443"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Hillside seep/wetland within blue oak savannah. Doms/Assoc: *Salix lasirolepis*, *Muhlenbergia rigens*, *Hypericum anagalloides*, *Briza minor*, *Stachys pycnantha*, *Elcocharis* sp., *Lolium multiflorum*
 Substrate: Tuscan soils Aspect: southern Slope: ~ 6%

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Municipal park.

Visible disturbances / possible threats: None

Comments: Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

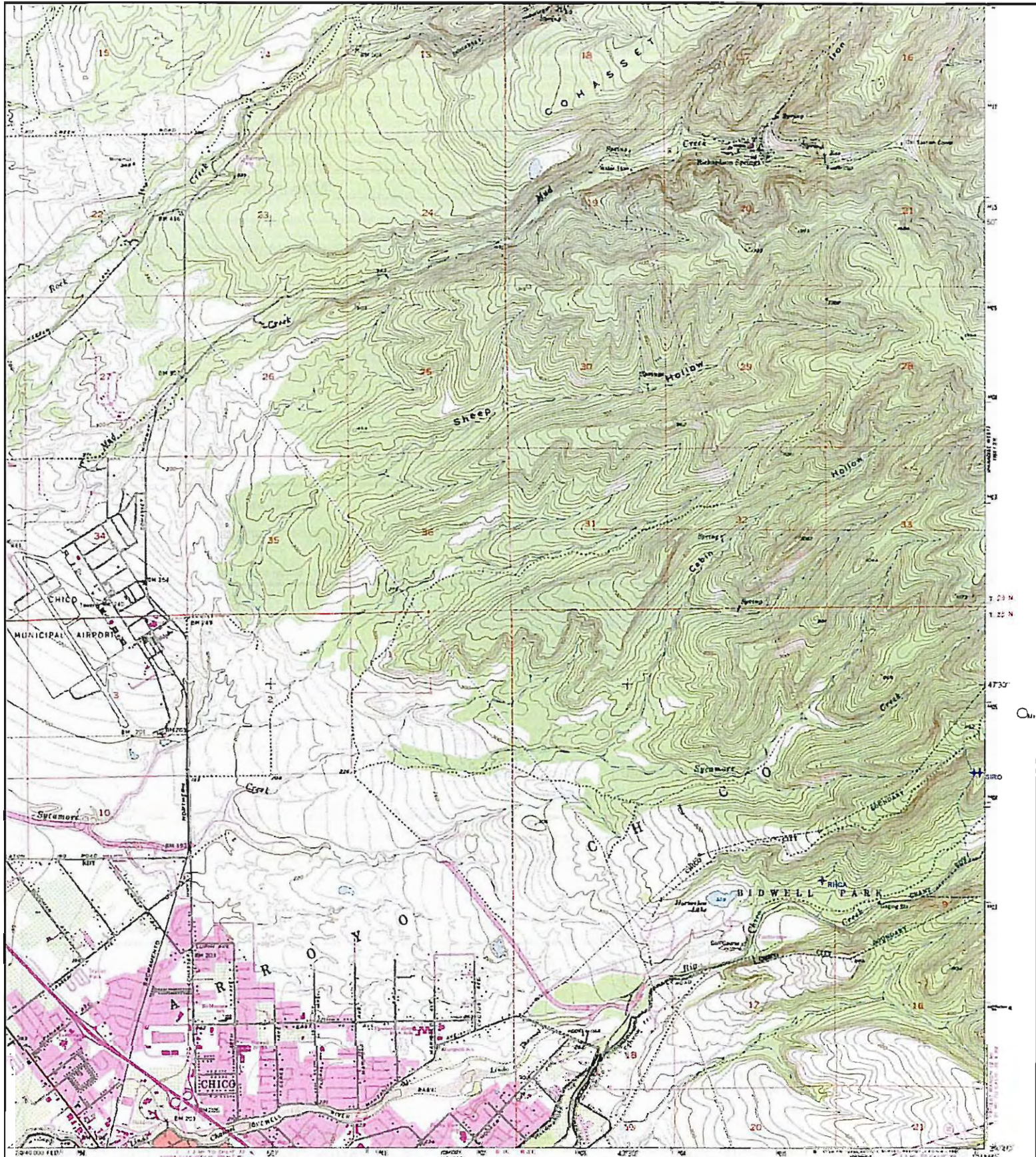
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Selected Rare Plants of Northern California
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



Compiled by the Geological Survey

Scale by multiples method

51 Aerial photographs taken 1941

North American datum

Contour interval 20 feet

1:50,000 Datum 1983

Vertical datum

Vertical datum

Vertical datum

Vertical datum

Vertical datum

Vertical datum

Vertical datum



SCALE 1:24,000

CONTOUR INTERVAL 20 FEET

SHADED LINES REPRESENT 100 FT. CONTOURS

NATIONAL GEODESIC SURVEY DATA

FOR SALE BY U.S. GEOLOGICAL SURVEY, GEOGRAPHIC BOARD OF PROFESSION

FOR SALE BY U.S. GEOLOGICAL SURVEY, GEOGRAPHIC BOARD OF PROFESSION

FOR SALE BY U.S. GEOLOGICAL SURVEY, GEOGRAPHIC BOARD OF PROFESSION

FOR SALE BY U.S. GEOLOGICAL SURVEY, GEOGRAPHIC BOARD OF PROFESSION

FOR SALE BY U.S. GEOLOGICAL SURVEY, GEOGRAPHIC BOARD OF PROFESSION

FOR SALE BY U.S. GEOLOGICAL SURVEY, GEOGRAPHIC BOARD OF PROFESSION

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FOR SALE BY U.S. GEOLOGICAL SURVEY, GEOGRAPHIC BOARD OF PROFESSION

FOR SALE BY U.S. GEOLOGICAL SURVEY, GEOGRAPHIC BOARD OF PROFESSION

RICHARDSON SPRINGS, CALIF.

BY U.S. GEOLOGICAL SURVEY

BY U.S. GEOLOGICAL SURVEY

BY U.S. GEOLOGICAL SURVEY

BY U.S. GEOLOGICAL SURVEY

BY U.S. GEOLOGICAL SURVEY

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California Native Species Field Survey Form

Mail to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 6 - 27 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Rhynchospora californica* Gale (Cyperaceae)

Common Name: California beaked-rush

Species Found? yes no _____
If not, why?

Total No. Individuals 11 Subsequent Visit? yes no

Is this an existing NDDB occurrence? yes no unk.
Yes, Occ. #

Collection? If yes: 28.00 Biological Sciences Herbarium at CSU, Chico
Number Museum / Herbarium

Reporter: Kristian Stuart

Address: 595 Kings Canyon Way
Chico, CA 95973

Email Address: kstuart2@pacbell.net

Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: # adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)
 Approximately 1,800' northeast of power lines and 1,200' northwest of Upper Park Rd.

County: Butte County Landowner / Mgr.: City of Chico

Quad Name: Richardson Springs Elevation: 480 ft

T 22N R 2E _____ 1/4 of _____ 1/4 of Section NA T _____ R _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD 27, WG584, other)

Source: GPS-Trimble GeoII (GPS, map & type, etc.) Point Accuracy: 1 Meters

UTM Coordinates LAT/LONG: 39 46' 37.08243"N 121 45' 35.86282"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)
 Hillside seep/wetland within blue oak savannah. Doms/Assoc: *Salix lasiolepis*, *Muhlenbergia rigens*, *Hypericum anagalloides*, *Briza minor*, *Stachys pycnantha*, *Eleocharis* sp., *Lolium multiflorum*
 Substrate: Tuscan soils Aspect: southern Slope: -6%

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Municipal park.

Visible disturbances / possible threats: None

Comments: Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)

Keyed (cite reference) Jepson Manual, Selected Rare Plants of Northern California

Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico

Compared with photo / drawing in: _____

By another person (name): _____

Other: _____

Photographs: (check one or more)

Plant / animal	<input type="checkbox"/>	Slide	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	Print	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>		<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 16 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Rhynchospora californica* Gale (Cyperaceae)

Common Name: California beaked-rush

Species Found? _____
yes no If not, why?

Total No. Individuals 60 Subsequent Visit? yes no

Is this an existing NDDB occurrence? 5 no unk.
Yes, Occ. #

Collection? If yes: 27.00 Biological Sciences Herbarium at CSU, Chico
Number Museum / Herbarium

Reporter: Kristiaan Stuart

Address: 595 Kings Canyon Way
Chico, CA 95973

Email Address: kstuan2@pacbell.net

Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown

breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Upper Bidwell Park. Approximately, 250 ft south of Upper Park Rd. and 1000 ft E - NE (Az. 67deg) of Salmon Hole parking area.

County: Butte County Landowner / Mgr.: City of Chico

Quad Name: Paradise West Elevation: 750 ft

T 22N R 2E SW 1/4 of SE 1/4 of Section 37 T _____ R _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD 27, WG584, other)

Source: GPS-Trimble GeoIII (GPS, map & type, etc.) Point Accuracy: >1 Meters

UTM Coordinates LAT/LONG: 39 47' 05.68707"N 121 44' 32.35900"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Hillside seep within annual grassland habitat. Small population within a small, isolated seep area. Doms/Assoc: *Muhlenbergia rigens*, *Phragmites australis*, *Stachys pycnantha*, *Carex densa*, *Polypogon monspeliensis*, *Briza minor*, *Cyperus niger*
 Substrate: Tuscan soils Aspect: southern Slope: ~ 6 deg

Other rare species? Mimulus glaucescens

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Municipal park.

Visible disturbances / possible threats: None

Comments: Same population as Janeway 88' however I am delineating his two populations as separate occurrences. Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

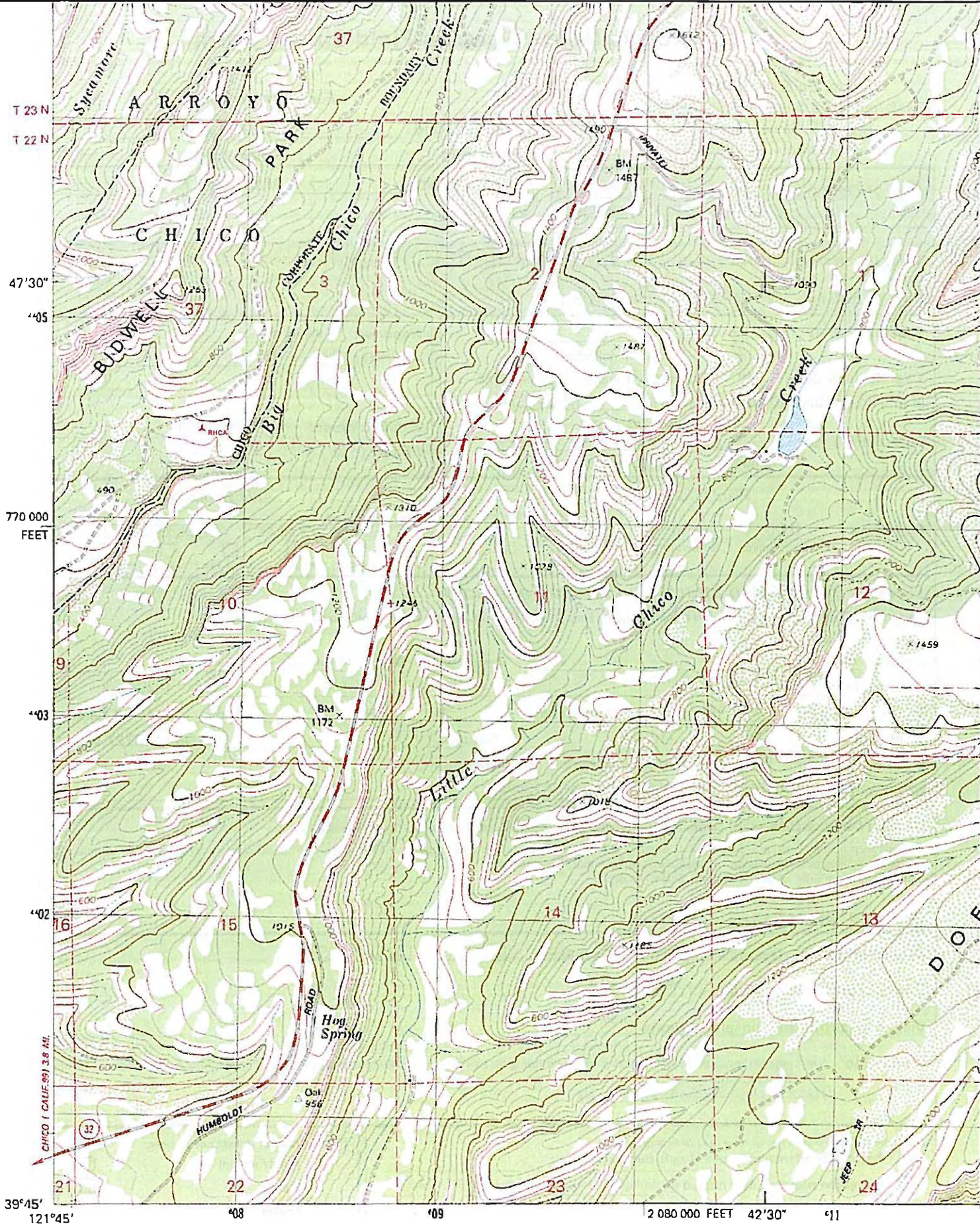
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Butte County Flora
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



(CHICO) 1663 MI NE
 Mapped, edited, and published by the Geological Survey
 Control by USGS and NOS/NOAA
 Topography by photogrammetric methods from aerial
 photographs taken 1973. Field checked 1974

California Native Species Field Survey Form

Mail to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 6 - 1 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: Sidalcea robusta E.M. Roush (Malvaceae)

Common Name: Butte County checkerbloom

Species Found? _____
yes no If not, why?
 Total No. Individuals 45 Subsequent Visit? yes no
Is this an existing NDDDB occurrence? no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 100.00 0.00 0.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: _____ # adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Found on northwest side slope of large knoll in and adjacent to ephemeral stream approximately 2,000 ft north of Bear Hole parking area.

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Richardson Springs Elevation: 600 ft
 T 22N R 2E 1/4 of _____ 1/4 of Section NA T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD 27, WG584, other)
 Source: GPS (GPS, map & type, etc.) Point Accuracy: >1 Meters
 UTM Coordinates Lat /Long: 39 46' 55.54857"N 121 45' 12.60926"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Population exists on west aspect of drainage slope. Individuals begin at streamside and follow slope uphill.
 Riparian mix within blue oak savannah. Exposed Tuscan fanglomerate and thin soils. Slope ~ 18%

Other rare species? Mimulus glaucescens within stream channel.

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in a municipal park.

Visible disturbances / possible threats: All flowering stems have been removed by grazing. No visible direct human disturbance.

Comments: Photo's may be obtained at www.CalFlora.org

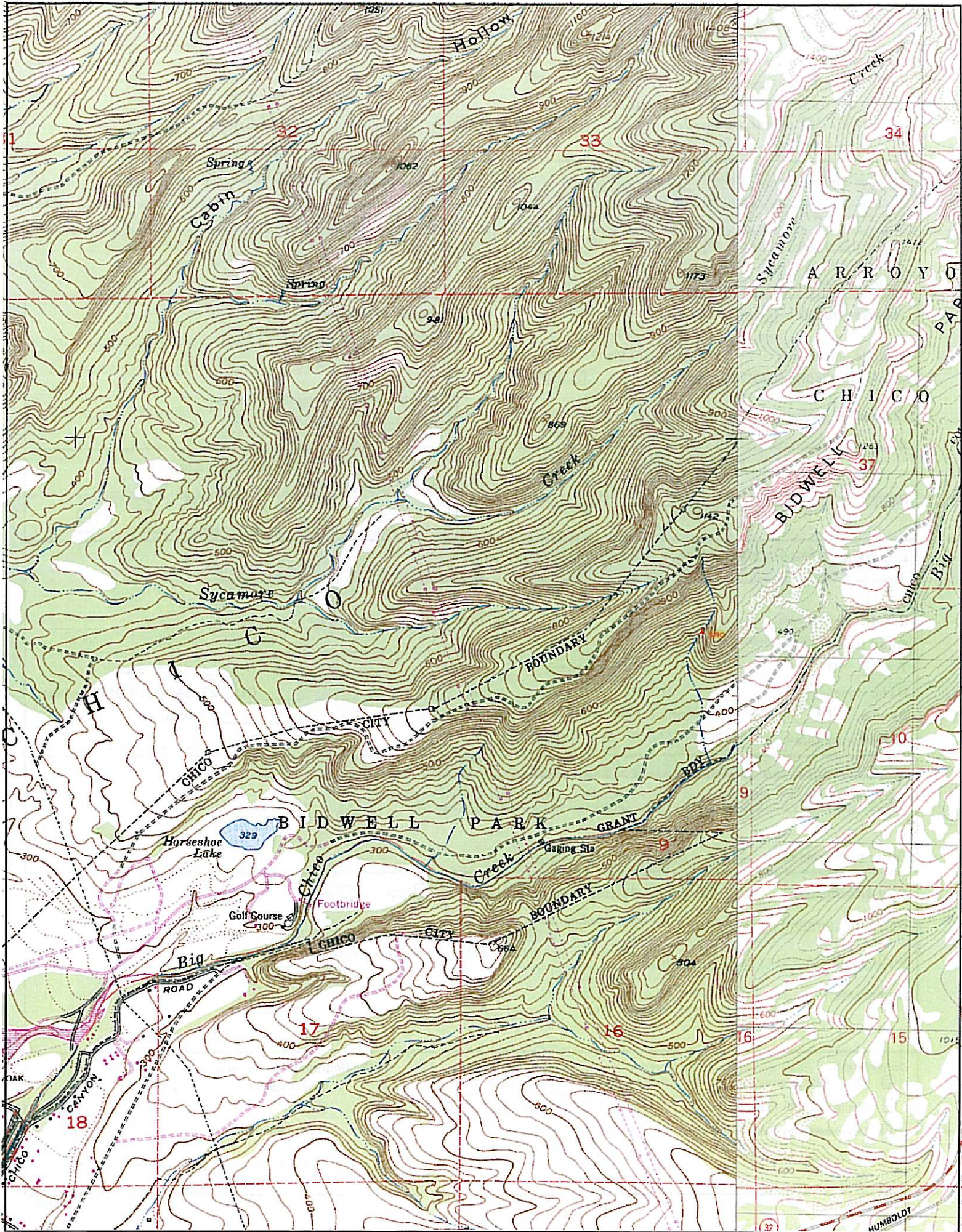
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Selected Rare Plants of Northern California
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: www.CalFlora.org
- By another person (name): _____
- Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



California Native Species Field Survey Form

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 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 6 - 1 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Sidalcea robusta* E.M. Roush (Malvaceae)

Common Name: Butte County checkerbloom

Species Found? _____
yes no If not, why?
 Total No. Individuals 11 Subsequent Visit? yes no
Is this an existing NDDDB occurrence? yes no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 5.00 95.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: _____
adults # juveniles # unknown

breedhg wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Found 5 ft from Live Oak Trail and 40 ft up slope from junction of Live Oak Trail with Middle Trail.

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Richardson Springs Elevation: 498 ft
 T 22N R 2E NA 1/4 of NA 1/4 of Section 9 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)
 Source: GPS (GPS, map & type, etc.) Point Accuracy: >1 Meters
 UTM Coordinates Lat / Long: 39 46' 48.91325"N 121 45' 05.61488"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Blue oak savannah: *Quercus douglasii*, *Rhamnus rubra*, *Toxicodendron diversilobum*, *Avena fatua*, *Achnatherum lemmonii*, *Melica californica*, *Brodiaea californica*, *Centaurea solstitialis*. Tuscan soils (thin). Southern Aspect. Slope ~ 16%

Other rare species? Mimulus glaucescens within stream channel.

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in a municipal park. Found 5 ft from Live Oak foot trail.

Visible disturbances / possible threats: Plants have been heavily grazed upon.

Comments: Plants often found growing within shrubs (i.e. Ceanothus, Rhamnus, Toxicodendron) or shade of oaks.
Photo's may be obtained at www.CalFlora.org

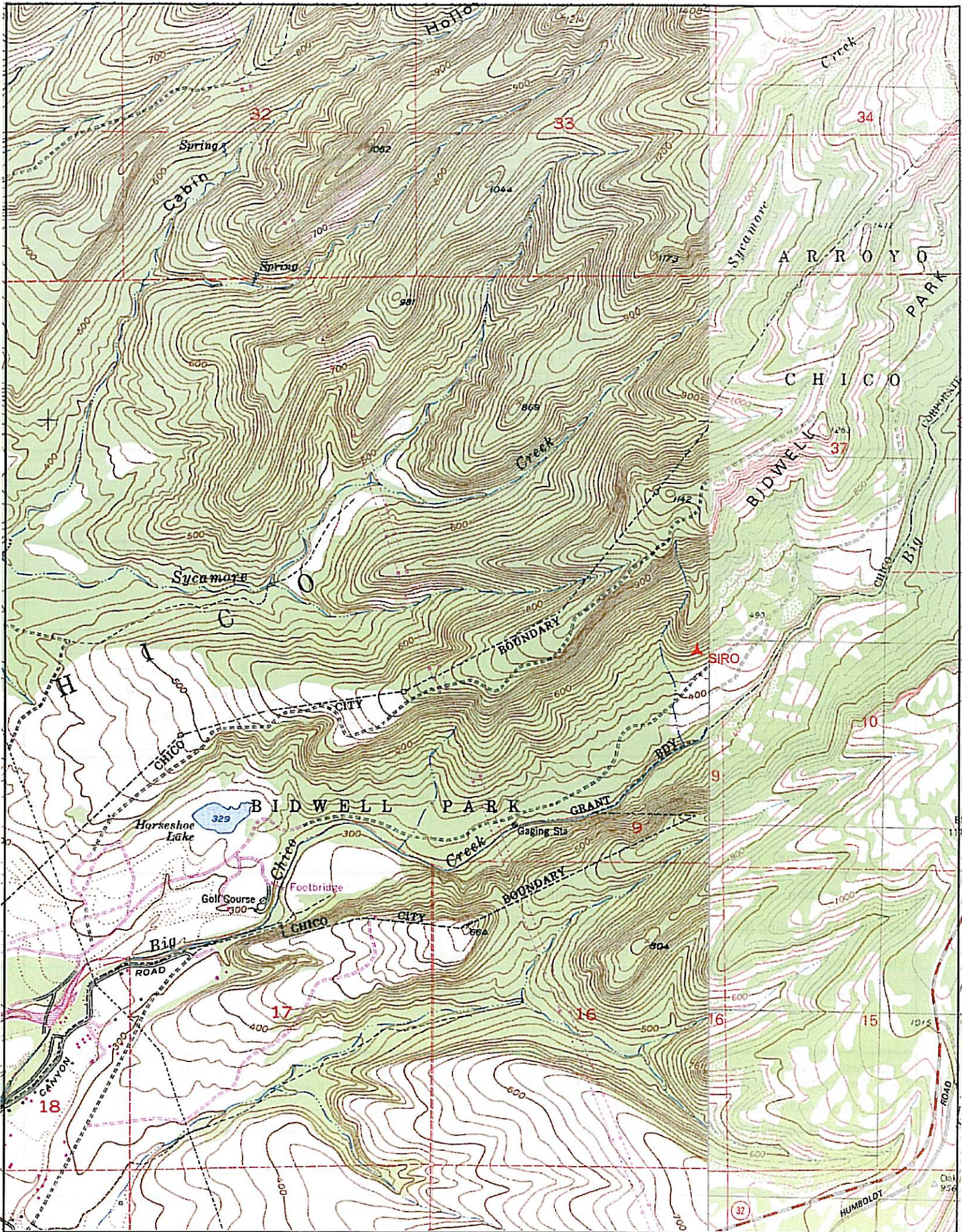
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Selected Rare Plants of Northern California
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: www.CalFlora.org
- By another person (name): _____
- Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



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Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 16 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Rhynchospora californica* Gale (Cyperaceae)

Common Name: California beaked-rush

Species Found? _____
yes no If not, why?

Total No. Individuals 60 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? 5 no unk.
Yes, Occ. #

Collection? If yes: 27.00 Biological Sciences Herbarium at CSU, Chico
Number Museum / Herbarium

Reporter: Kristiaan Stuart

Address: 595 Kings Canyon Way
Chico, CA 95973

Email Address: kstuart2@pacbell.net

Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: # adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Upper Bidwell Park. Approximately, 250 ft south of Upper Park Rd. and 1000 ft E - NE (Az. 67deg) of Salmon Hole parking area.

County: Butte County Landowner / Mgr.: City of Chico

Quad Name: Paradise West Elevation: 750 ft

T 22N R 2E SW 1/4 of SE 1/4 of Section 37 T _____ R _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)

Source: GPS-Trimble GeolIII (GPS, map & type, etc.) Point Accuracy: >1 Meters

UTM Coordinates LAT/LONG: 39 47' 05.68707"N 121 44' 32.35900"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Hillside seep within annual grassland habitat. Small population within a small, isolated seep area. Doms/Assoc: *Muhlenbergia rigens*, *Phragmites australis*, *Stachys pycnantha*, *Carex densa*, *Polypogon monspeliensis*, *Briza minor*, *Cyperus niger*
 Substrate: Tuscan soils Aspect: southern Slope: ~ 6 deg

Other rare species? Mimulus glaucescens

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Municipal park.

Visible disturbances / possible threats: None

Comments: Same population as Janeway 88' however I am delineating his two populations as separate occurrences. Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

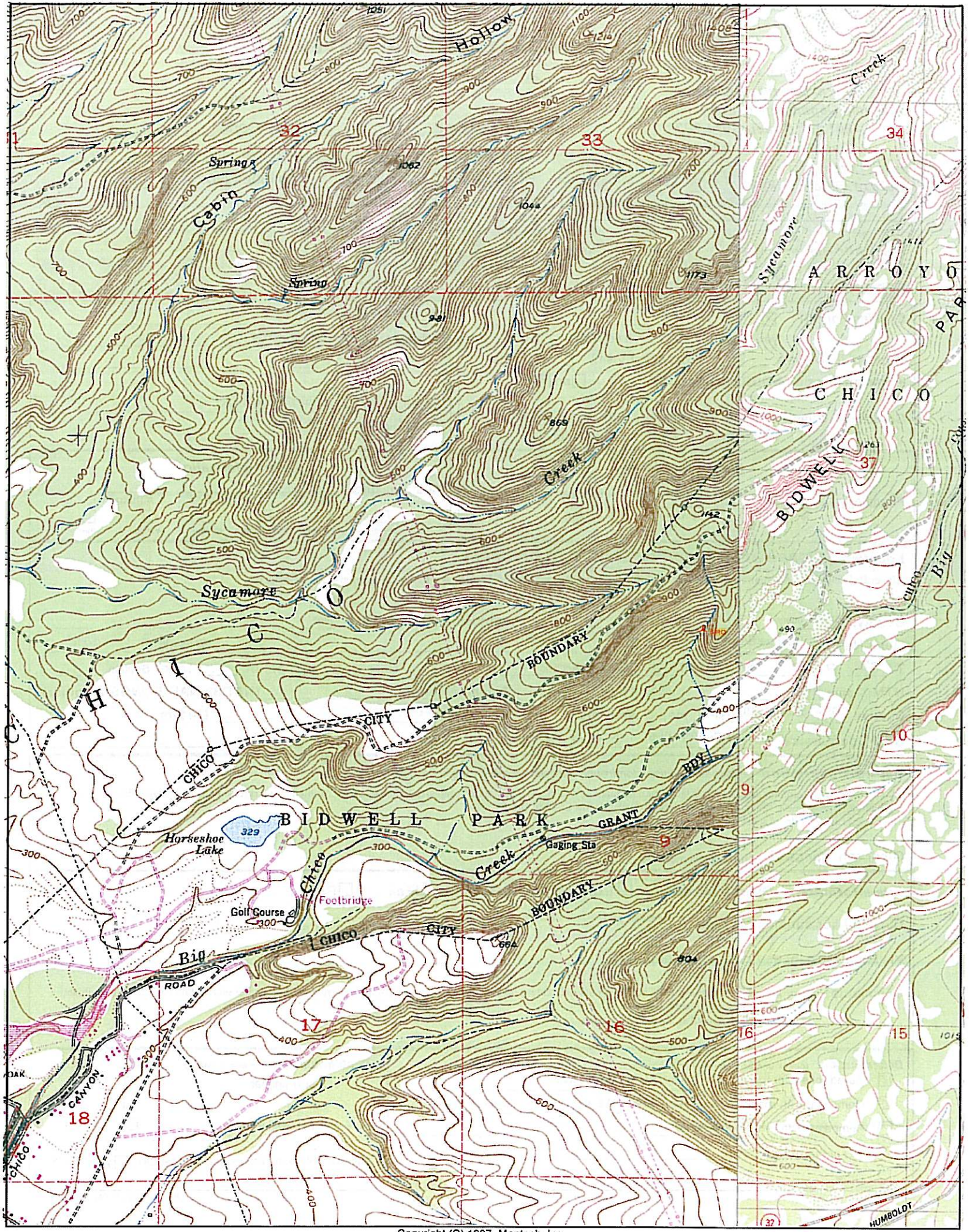
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Butte County Flora
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



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 California Department of Fish and Game
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 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 16 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: Rhynchospora californica Gale (Cyperaceae)

Common Name: California beaked-rush

Species Found? yes no If not, why?
 Total No. Individuals 1,000 Subsequent Visit? yes no
 Is this an existing NDDDB occurrence? 5 no unk.
 Yes, Occ. #
 Collection? If yes: 27.00 Biological Sciences Herbarium at CSU, Chico
 Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
 % vegetative % flowering % fruiting

Animal Information

Age Structure: # adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)
 Upper Bidwell Park. Approximately, 475 ft SW of Upper Park Rd' and 635 ft E - NE (Az. 77deg) of Salmon Hole parking area.

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 730 ft
 T 22N R 2E NE 1/4 of NW 1/4 of Section 10 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)
 Source: GPS-Trimble Geoll (GPS, map & type, etc.) Point Accuracy: >1 Meters
 UTM Coordinates LAT/LONG: 39 47' 03.26066"N 121 44' 36.60729"W Position indicates northern end of polygon (55m x 4m).

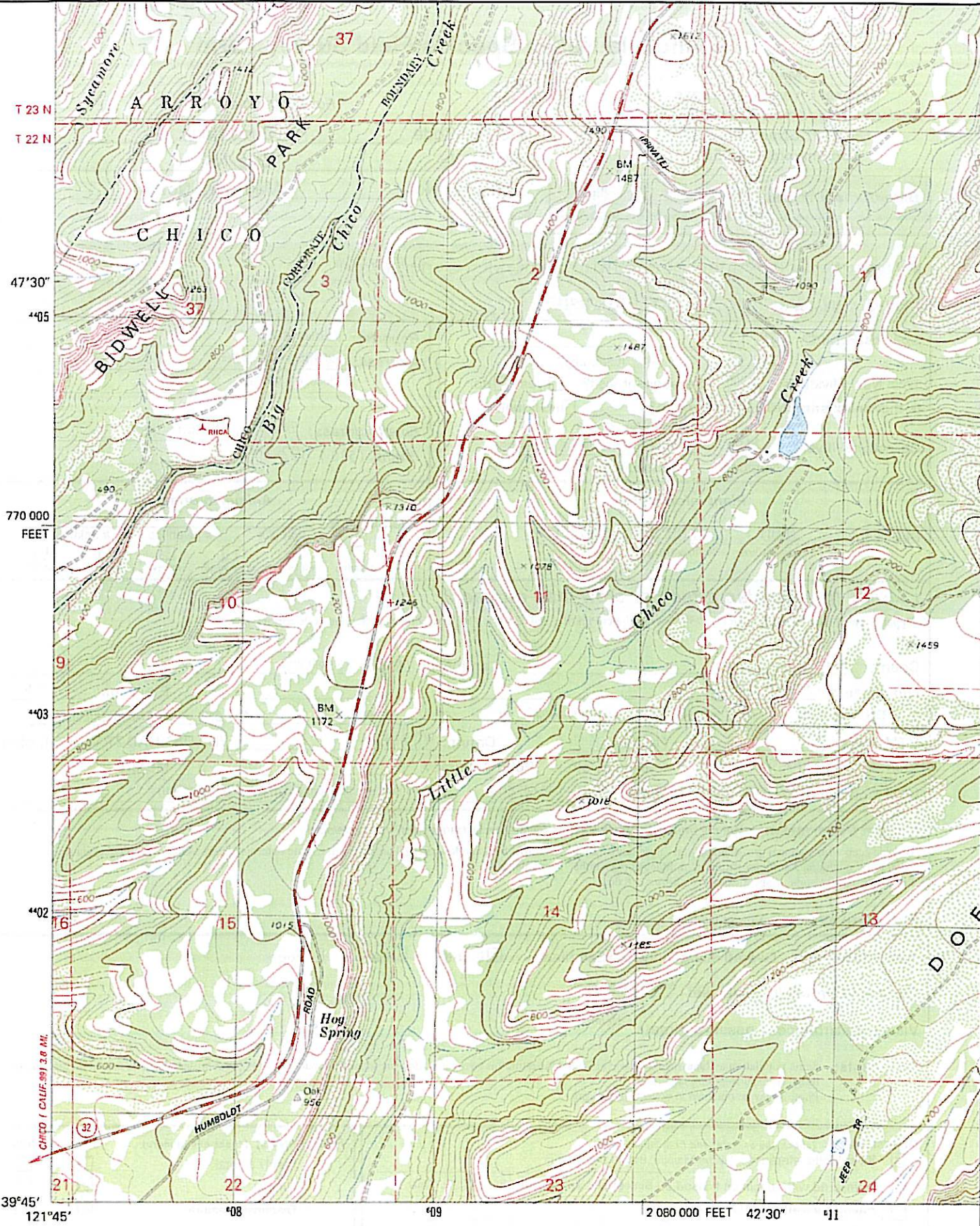
Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)
 Hillside seep within annual grassland habitat. Population inhabits a furrow between low rising Tuscan fanglomerate outcrops. Doms/Assoc: Muhlenbergia rigens, Phragmites australis, Xanthium strumarium, Stachys pycnantha, Carex densa
 Substrate: Tuscan soils Aspect: southern Slope: ~ 8 deg

Other rare species? Mimulus glaucescens

Site Information Overall site quality: Excellent Good Fair Poor
 Current / surrounding land use: Municipal park.
 Visible disturbances / possible threats: None
 Comments: Same population as Janeway 88' however I am delineating his two populations as separate occurrences. Population seems stable and in no immediate threat from surrounding land use. Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)
 Keyed (cite reference): Jepson Manual, Butte County Flora
 Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
 Compared with photo / drawing in: _____
 By another person (name): _____
 Other: _____

Photographs: (check one or more) Slide Print
 Plant / animal
 Habitat
 Diagnostic feature
 May we obtain duplicates at our expense? yes no

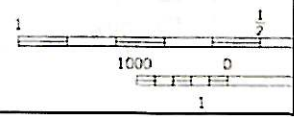
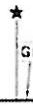


(CHICO)
1:62,500 NE

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial
photographs taken 1973. Field checked 1974



California Native Species Field Survey Form

Mail to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 3 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Rhynchospora californica* Gale (Cyperaceae)

Common Name: California beaked-rush

Species Found? _____
yes no If not, why?

Total No. Individuals 50 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? no unk.
Yes, Occ. #

Collection? If yes: 27.00 Biological Sciences Herbarium at CSU, Chico
Number Museum / Herbarium

Reporter: Kristiaan Stuart

Address: 595 Kings Canyon Way
Chico, CA 95973

Email Address: kstuart2@pacbell.net

Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown

breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)
 Approximately 1,100' west of power lines and 1,000' north of lower trail (above Upper Park Rd.)

County: Butte County Landowner / Mgr.: City of Chico

Quad Name: Richardson Springs Elevation: 385 ft

T 22N R 2E 1/4 of _____ 1/4 of Section NA T _____ R _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD 27, WG5 84, other)

Source: GPS-Trimble GeolIII (GPS, map & type, etc.) Point Accuracy: >1 Meters

UTM Coordinates LAT/LONG: 39 46' 26.17864"N 121 46' 07.22443"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)
 Hillside scep/wetland within blue oak savannah. Doms/Assoc: *Salix lasirolepis*, *Muhlenbergia rigens*, *Hypericum anagalloides*, *Briza minor*, *Stachys pycnantha*, *Eleocharis* sp., *Lolium multiflorum*
 Substrate: Tuscan soils Aspect: southern Slope: ~ 6%

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Municipal park.

Visible disturbances / possible threats: None

Comments: Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): Jepson Manual, Selected Rare Plants of Northern California

Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico

Compared with photo / drawing in: _____

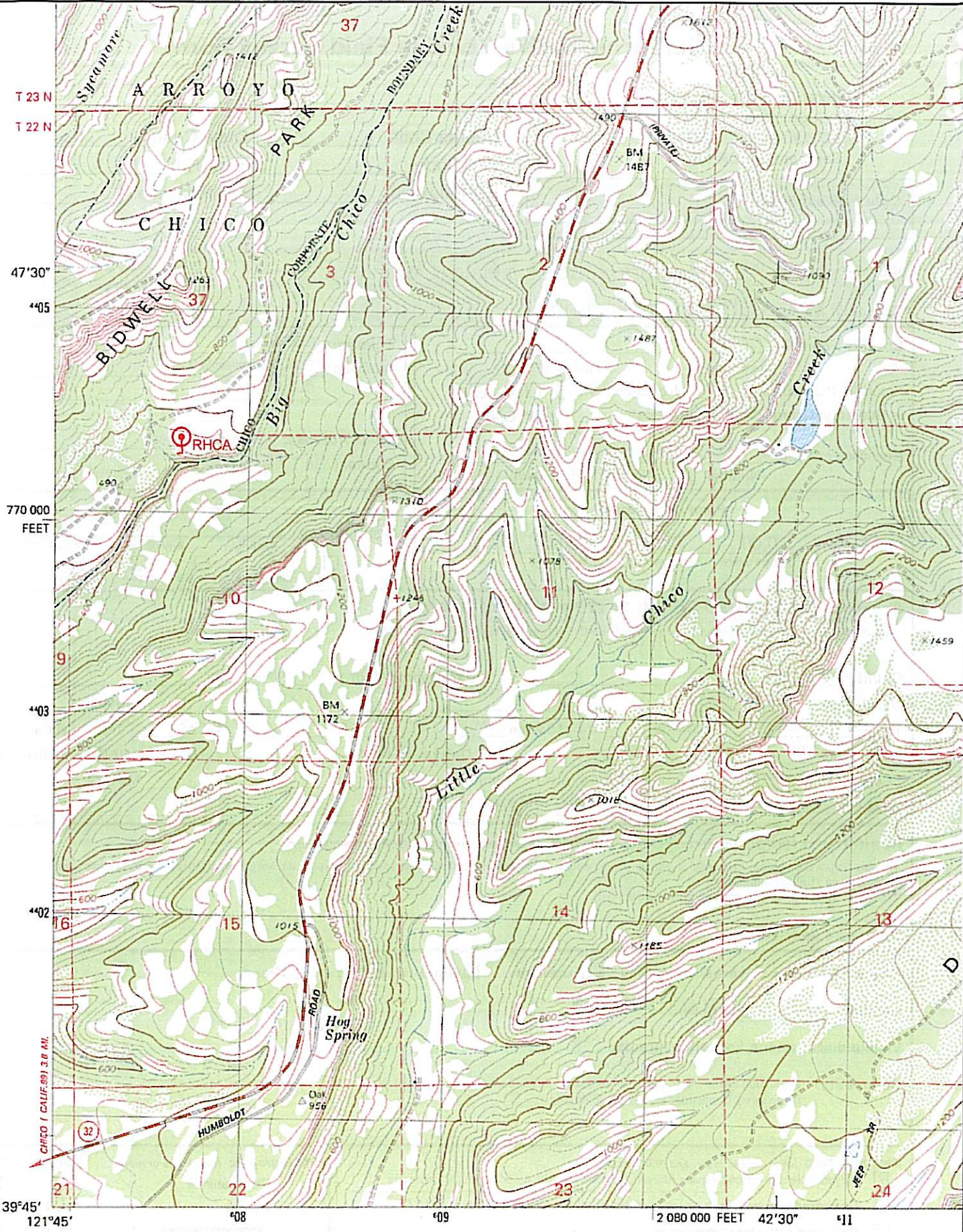
By another person (name): _____

Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



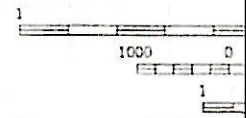
(CHICO)
1:62,500 N 1:62,500 NE

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1973. Field checked 1974

Map edited 1980



California Native Species Field Survey Form

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 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 6 - 27 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: Rhynchospora californica Gale (Cyperaceae)

Common Name: California beaked-rush

Species Found?
yes no If not, why?

Total No. Individuals 11 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? yes, Occ. # no unk.

Collection? If yes: 28.00 Biological Sciences Herbarium at CSU, Chico
Number Museum / Herbarium

Reporter: Kristiaan Stuart

Address: 595 Kings Canyon Way
Chico, CA 95973

Email Address: kstuart2@pacbell.net

Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown

breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)
 Approximately 1,800' northeast of power lines and 1,200' northwest of Upper Park Rd.

County: Butte County Landowner / Mgr.: City of Chico

Quad Name: Richardson Springs Elevation: 480 ft

T 22N R 2E 1/4 of _____ 1/4 of Section NA T _____ R _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)

Source: GPS-Trimble GeolIII (GPS, map & type, etc.) Point Accuracy: 1 Meters

UTM Coordinates LAT/LONG: 39 46' 37.08243"N 121 45' 35.86282"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)
 Hillside seep/wetland within blue oak savannah. Doms/Assoc: Salix lasiolepis, Muhlenbergia rigens, Hypericum anagalloides, Briza minor, Stachys pycnantha, Eleocharis sp., Lolium multiflorum
 Substrate: Tuscan soils Aspect: southern Slope: ~ 6%

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Municipal park.

Visible disturbances / possible threats: None

Comments: Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): Jepson Manual, Selected Rare Plants of Northern California

Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico

Compared with photo / drawing in: _____

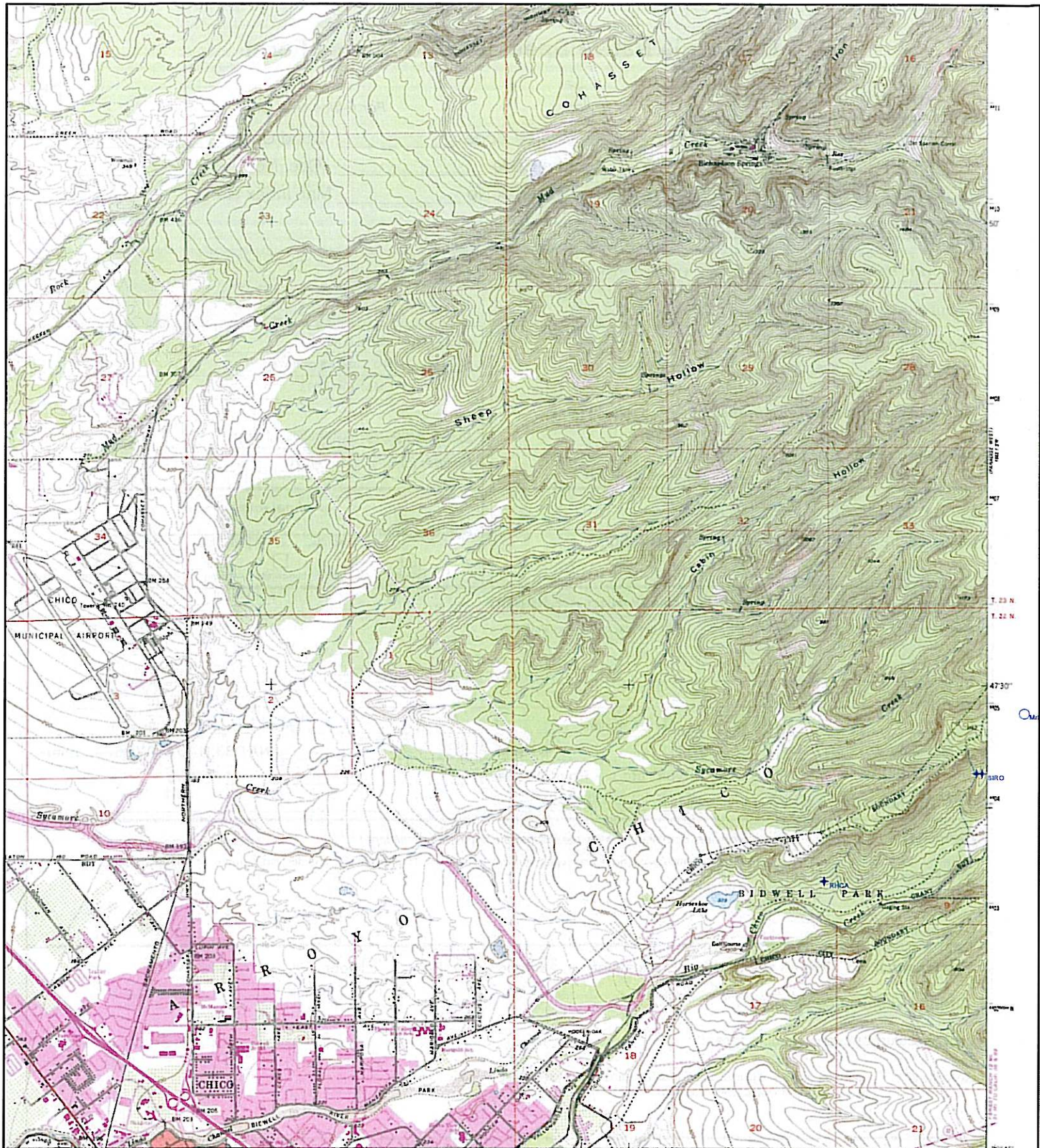
By another person (name): _____

Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



Produced by the Geological Survey
 by multiple methods
 Aerial photographs taken 1947
 North American datum
 UTM coordinate system, zone 2
 UTM Merzator grid ticks
 American Datum 1983
 stars north and
 red corner ticks
 Only landmark buildings are shown



ROAD CLASSIFICATION

Heavy duty	Light duty
Medium duty	Unimproved dirt
State Roads	

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Revisions shown in purple compiled in cooperation
 with California Department of Water Resources from
 aerial photographs taken 1969. This information
 not field checked
 Purple lines indicate extent of urban areas

RICHARDSON SPRINGS, CALIF.
 SE/4 RICHARDSON SPRINGS 19 QUADRANGLE
 33121-G7-1F-G24
 1951
 PHOTOGRAPHED 1949
 DMA 1463 IV GC-SLINES 1949

California Native Species Field Survey Form

Mail to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 16 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: Polygonum bidwelliae S. Watson (Polygonaceae)

Common Name: Bidwell's knotweed

Species Found?
yes no If not, why?
 Total No. Individuals 300 Subsequent Visit? yes no
 Is this an existing NDDDB occurrence? no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
 Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: # adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Upper Bidwell Park. Old road bed paralleling and below Upper Park Rd. extending 325 ft NE from parking area "O".

County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 640 ft
 T 23N R 2E SW 1/4 of SE 1/4 of Section 37 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG584, other)
 Source: GPS (GPS, map & type, etc.) Point Accuracy: < 1 Meters
 UTM Coordinates Lat/Long: 39 47' 08.65977"N 121 44' 29.67437"W Position is taken from southwest end of polygon (55m x 4m).

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Annual grassland with thin Tuscan soils: Taeniatherum caput-medusaea, Lupinus bicolor, Navarretia pubescens, Minuartia californica, Lolium multiflorum, Vulpia microstachys var. pauciflora, Brodiaea minor, Plantago erecta
 Tuscan soils, Slope ~ 6%, Southern Aspect

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park.

Visible disturbances / possible threats: Plants only occupy the thin Tuscan soils within the polygon that are void of Medusa Head.

Comments: Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

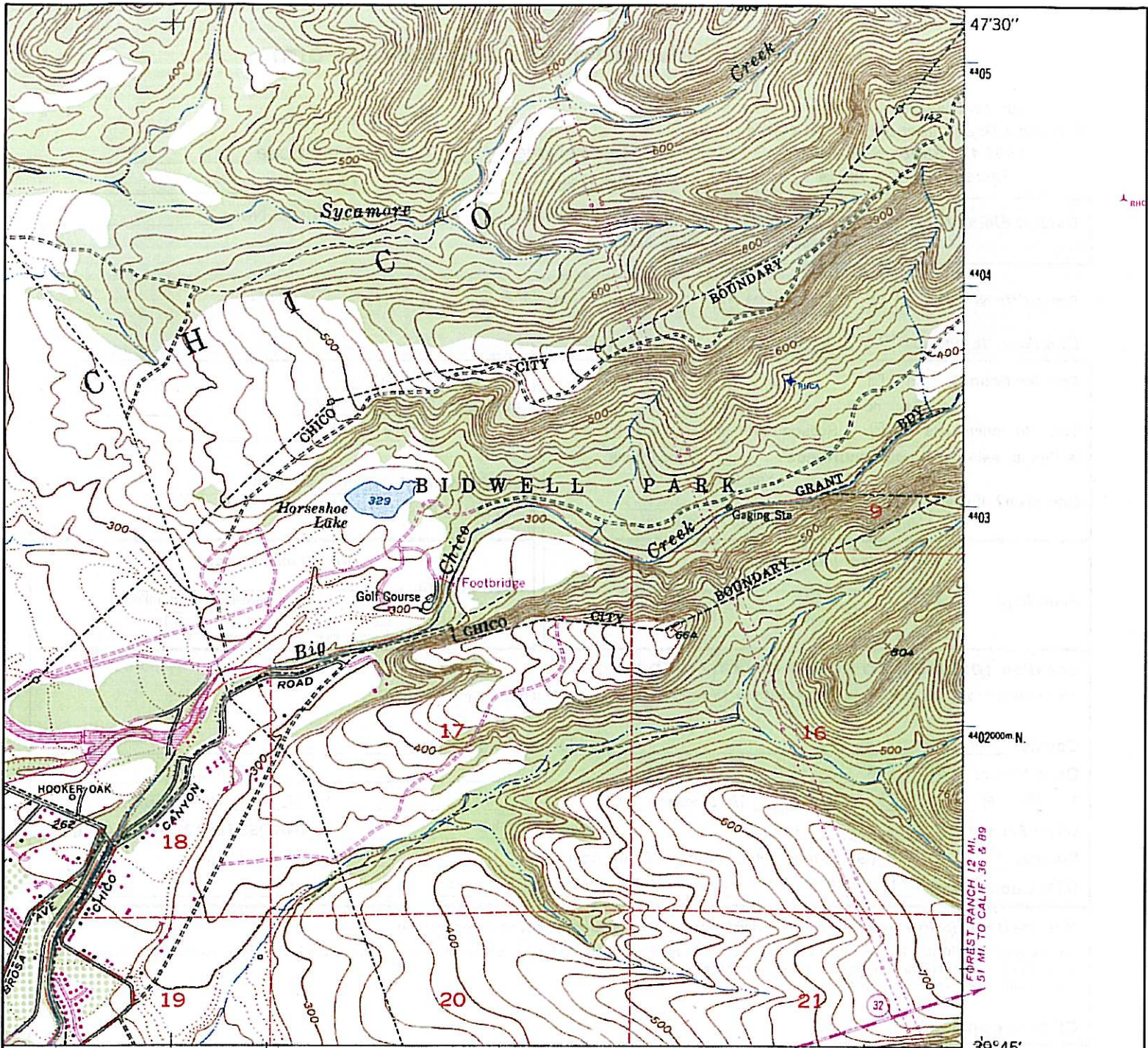
Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson Manual, Butte County Flora
- Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
- Compared with photo / drawing in: www.CalFlora.org
- By another person (name): _____
- Other: _____

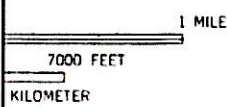
Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



603 47'30" 604 605 606 121°45' 39°45' 44°20'00" N 44°03' 44°04' 44°05' 47'30"



ON, VIRGINIA 22092
REQUEST

Revisions shown in purple compiled in cooperation with California Department of Water Resources from aerial photographs taken 1969. This information not field checked
Purple tint indicates extension of urban areas

ROAD CLASSIFICATION

Heavy-duty	—————	Light-duty	—————
Medium-duty	—————	Unimproved dirt	-----
		State Route	○

RICHARDSON SPRINGS, CALIF.
SE/4 RICHARDSON SPRINGS 15' QUADRANGLE
39121-G7-TF-024

1951
PHOTOREVISED 1969
DMA 1663 IV SE—SERIES V895

California Native Species Field Survey Form

Mail to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 16 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: Polygonum bidwelliae S. Watson (Polygonaceae)
Common Name: Bidwell's knotweed

Species Found? _____
yes no If not, why?

Total No. Individuals 200 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? yes no unk.
Yes, Occ. #

Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
 Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: # adults # juveniles # unknown
 breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)
 Upper Bidwell Park. Main foot trail extending E from parking area "O".

County: Butte County Landowner / Mgr.: City of Chico

Quad Name: Paradise West Elevation: 630 ft

T 23N R 2E SE 1/4 of SW 1/4 of Section 37 T _____ R _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 10 (10, 11) Datum: WGS 84 (NA D83, NAD 27, WG5 84, other)

Source: GPS (GPS, map & type, etc.) Point Accuracy: <1 Meters

UTM Coordinates Lat /Long: 39 47' 08.65977"N 121 44' 29.67437"W Position is taken from northwest end of polygon (55m x 4m).

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)
 Annual grassland: Taeniatherum caput-medusuca, Lupinus bicolor, Navarretia pubescens, Minuartia californica, Lolium multiflorum, Vulpia microstachys var. pauciflora, Brodiaea minor, Plantago erecta
 Tuscan soils, Slope ~ 6%, Southern Aspect

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park.

Visible disturbances / possible threats: Plants occupy "foot trail habitats" where competing vegetation is kept to a minimum. Hence the disturbance is the reason for the existance of this species at this location.

Comments: Population seems stable and in no immediate threat from surrounding land use. Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): Jepson Manual, Butte County Flora

Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico

Compared with photo / drawing in: www.CalFlora.org

By another person (name): _____

Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

California Native Species Field Survey Form

Mail to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 16 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Polygonum bidwelliae* S. Watson (Polygonaceae)

Common Name: Bidwell's knotweed

Species Found?
yes no If not, why?
 Total No. Individuals 150 Subsequent Visit? yes no
 Is this an existing NDDDB occurrence? no unk.
Yes, Occ. #
 Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart
Address: 595 Kings Canyon Way
Chico, CA 95973
Email Address: kstuart2@pacbell.net
Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown
 breeding wintering burrow site rookery nestling other

Location (please also attach or draw map on back)

Upper Bidwell Park. Foot trail extending S - SW from parking area "O"
 County: Butte County Landowner / Mgr.: City of Chico
 Quad Name: Paradise West Elevation: 600 ft
 T 23N R 2E SE 1/4 of SW 1/4 of Section 37 T _____ R _____ 1/4 of _____ 1/4 of Section _____
 UTM: Zone: 10 (10, 11) Datum: WGS 84 (NA D83, NAD 27, WG5 84, other)
 Source: GPS (GPS, map & type, etc.) Point Accuracy: <1 Meters
 UTM Coordinates Lat /Long: 39 47' 07.55764"N 121 44' 30.99866"W Position is taken from north end of polygon (55m x 4m).

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Annual grassland: *Tachnatherum caput-medusae*, *Lupinus bicolor*, *Navarretia pubescens*, *Minuartia californica*, *Lolium multiflorum*, *Vulpia microstachys* var. *pauciflora*, *Brodiaea minor*, *Plantago erecta*
 Tuscan soils, Slope ~ 6%, Southern Aspect

Other rare species?

Site Information Overall site quality: Excellent Good Fair Poor

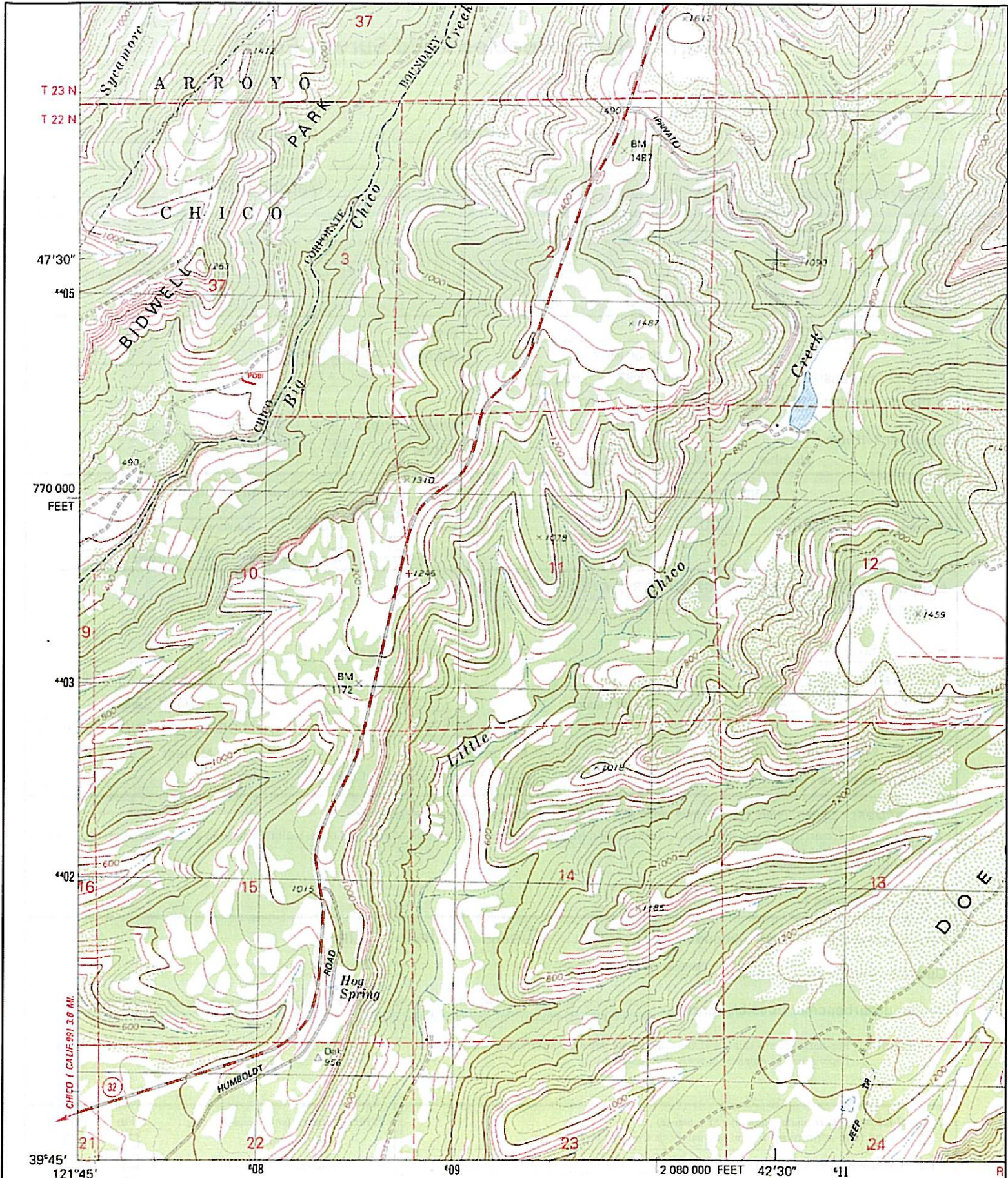
Current / surrounding land use: Plants are in municipal park.

Visible disturbances / possible threats: Plants occupy "foot trail habitats" where competing vegetation is kept to a minimum. Hence the disturbance is the reason for the existence of this species at this location.

Comments: Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)
 Keyed (cite reference): Jepson Manual, Butte County Flora
 Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico
 Compared with photo / drawing in: www.CalFlora.org
 By another person (name): _____
 Other: _____

Photographs: (check one or more) Slide Print
 Plant/ animal
 Habitat
 Diagnostic feature
 May we obtain duplicates at our expense? yes no



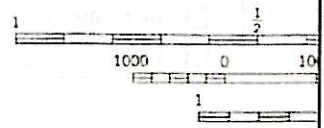
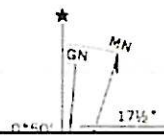
(CHICO)
1:63 31 NE

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1973. Field checked 1974

Map edited 1980



California Native Species Field Survey Form

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 California Department of Fish and Game
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 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 18 - 2002
month (mm) date (dd) year (yyyy)

Scientific Name: *Mimulus glaucescens* E. Greene (Scrophulariaceae)

Common Name: shield-bracted monkeyflower

Species Found? _____
yes no If not, why?

Total No. Individuals 650 Subsequent Visit? yes no

Is this an existing NDDB occurrence? no unk.
Yes, Occ. #

Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart

Address: 595 Kings Canyon Way
Chico, CA 95973

Email Address: kstuart2@pacbell.net

Phone: (530) 892-1696

Plant Information

Phenology: 0.00 0.00 100.00
% vegetative % flowering % fruiting

Animal Information

Age Structure:
adults # juveniles # unknown

breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

Four separate occurrences. Two in ephemeral stream channel N-NE of Horseshoe Lake (Upper Bidwell Park). Two at base of fanglomerate outcrop midslope below Monkey Face rock NE of Horseshoe Lake.

County: Butte County Landowner / Mgr.: City of Chico

Quad Name: Paradise West Elevation: 400 - 460 ft

T 22N R 2E 1/4 of _____ 1/4 of Section NA T _____ R _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 10 (10, 11) Datum: WGS 84 (NA D83, NAD 27, WG5 84, other)

Source: GPS (GPS, map & type, etc.) Point Accuracy: <1 Meters

UTM Coordinates Lat / Long: 39 46' 29.70160"N 121 46' 39.28975"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Ephemeral stream within blue oak woodland: *Quercus douglasii*, *Rhamnus rubra*, *Ceanothus cuneatus*, *Toxicodendron diversilobum*, *Avena barbata*, Tuscan soils, Slope ~ 12%, Southern Aspect

Other rare species? Sidalcea robusta

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park,

Visible disturbances / possible threats: No visible disturbances.

Comments: Population seems stable and in no immediate threat from surrounding land use. This species is locally abundant. Occupies most of the ephemeral drainages and seeps in Upper Bidwell Park.

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): Jepson Manual, Butte County Flora

Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico

Compared with photo / drawing in: www.CalFlora.org

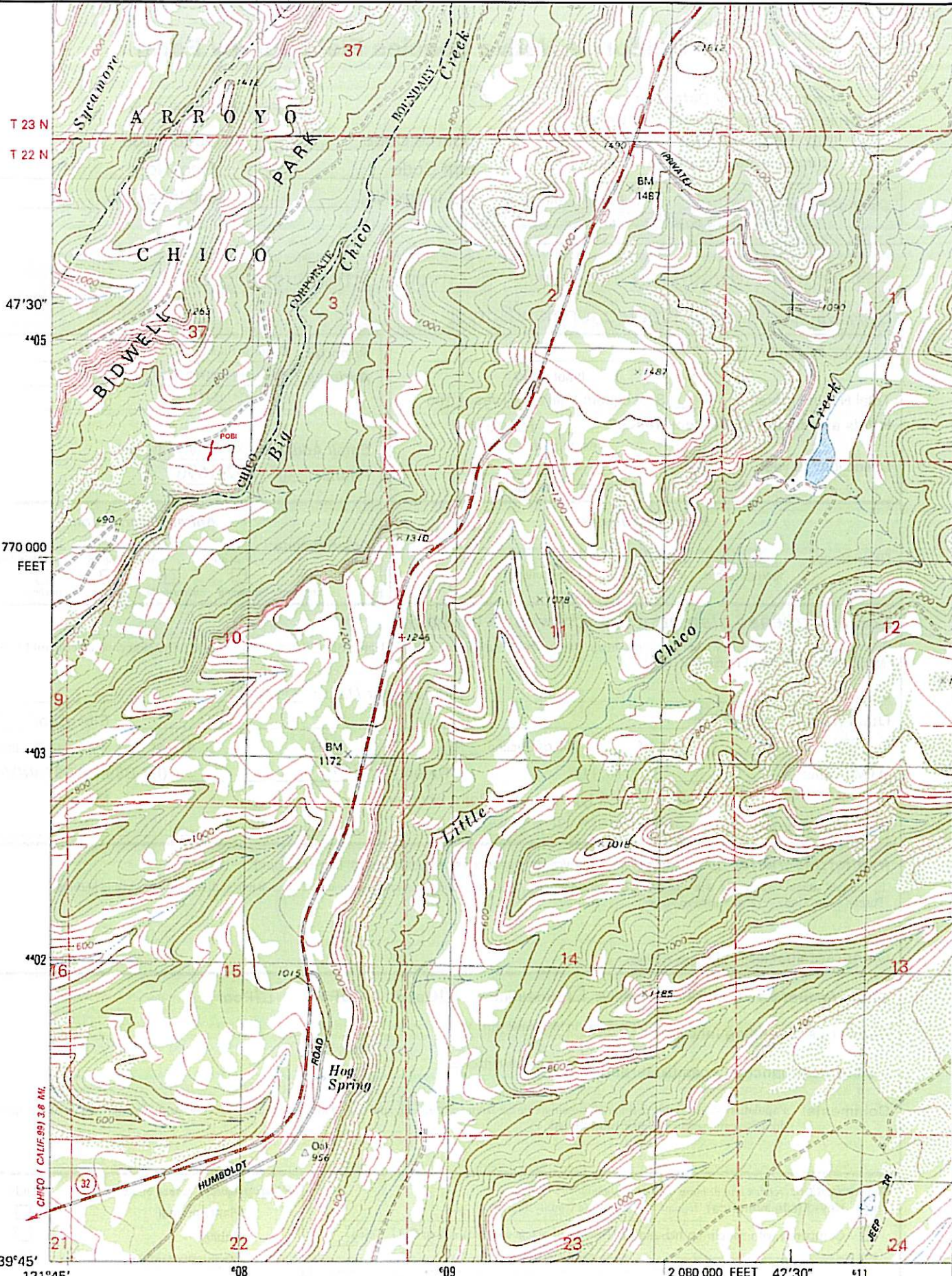
By another person (name): _____

Other: _____

Photographs: (check one or more)

	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

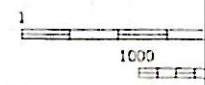
May we obtain duplicates at our expense? yes no



CHICO
1:62,500
1:62,500 NE

Mapped, edited, and published by the Geological Survey
 Control by USGS and NOS/NOAA
 Topography by photogrammetric methods from aerial
 photographs taken 1973. Field checked 1974.

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California Native Species Field Survey Form

Mail to:
 Natural Diversity Database
 California Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work: 7 - 18 - 2002
month (mm) date (da) year (yyyy)

Scientific Name: *Sidalcea robusta* E.M. Roush (Malvaceae)

Common Name: Butte County checkerbloom

Species Found? _____
yes no If not, why?

Total No. Individuals 87 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. #

Collection? If yes: _____
Number Museum / Herbarium

Reporter: Kristiaan Stuart

Address: 595 Kings Canyon Way
Chico, CA 95973

Email Address: kstuart2@pacbell.net

Phone: (530) 892-1696

Plant Information

Phenology: 60.00 0.00 40.00
% vegetative % flowering % fruiting

Animal Information

Age Structure: _____
adults # juveniles # unknown

breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)
 Thirteen separate occurrences found at the base of Tuscan fanglomerate outcrops, intermixed with various shrubs, and in open areas. Most found within side slope of ephemeral drainage.

County: Butte County Landowner / Mgr.: City of Chico

Quad Name: Richardson Springs Elevation: 440 ft

T 23N R 2E SE 1/4 of SW 1/4 of Section 37 T _____ R _____ 1/4 of _____ 1/4 of Section _____

UTM: Zone: 10 (10, 11) Datum: WGS 84 (NAD83, NAD27, WG5 84, other)

Source: GPS (GPS, map & type, etc.) Point Accuracy: >1 Meters

UTM Coordinates Lat /Long: 39 46' 32.20814"N 121 46' 38.52677"W

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)
 Blue oak woodland: *Quercus douglasii*, *Toxicodendron diversilobum*, *Ceanothus cuneatus*, *Heteromeles arbutifolia*, *Avena barbata*, *Brachypodium distachyon*, *Bromus hordeaceus*, *Cynosurus echinatus*,
 Tuscan soils & fanglomerate outcrops, Slope from 12 to 20 deg, Southeastern Aspect

Other rare species? Mimulus glaucescens

Site Information Overall site quality: Excellent Good Fair Poor

Current / surrounding land use: Plants are in municipal park.

Visible disturbances / possible threats: No visible disturbances.

Comments: Population seems stable and in no immediate threat from surrounding land use.
Photo's may be obtained at www.CalFlora.org

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): Jepson Manual, Selected Rare Plants of Northern California

Compared with specimen housed at: Biological Sciences Herbarium at CSU, Chico

Compared with photo / drawing in: www.CalFlora.org

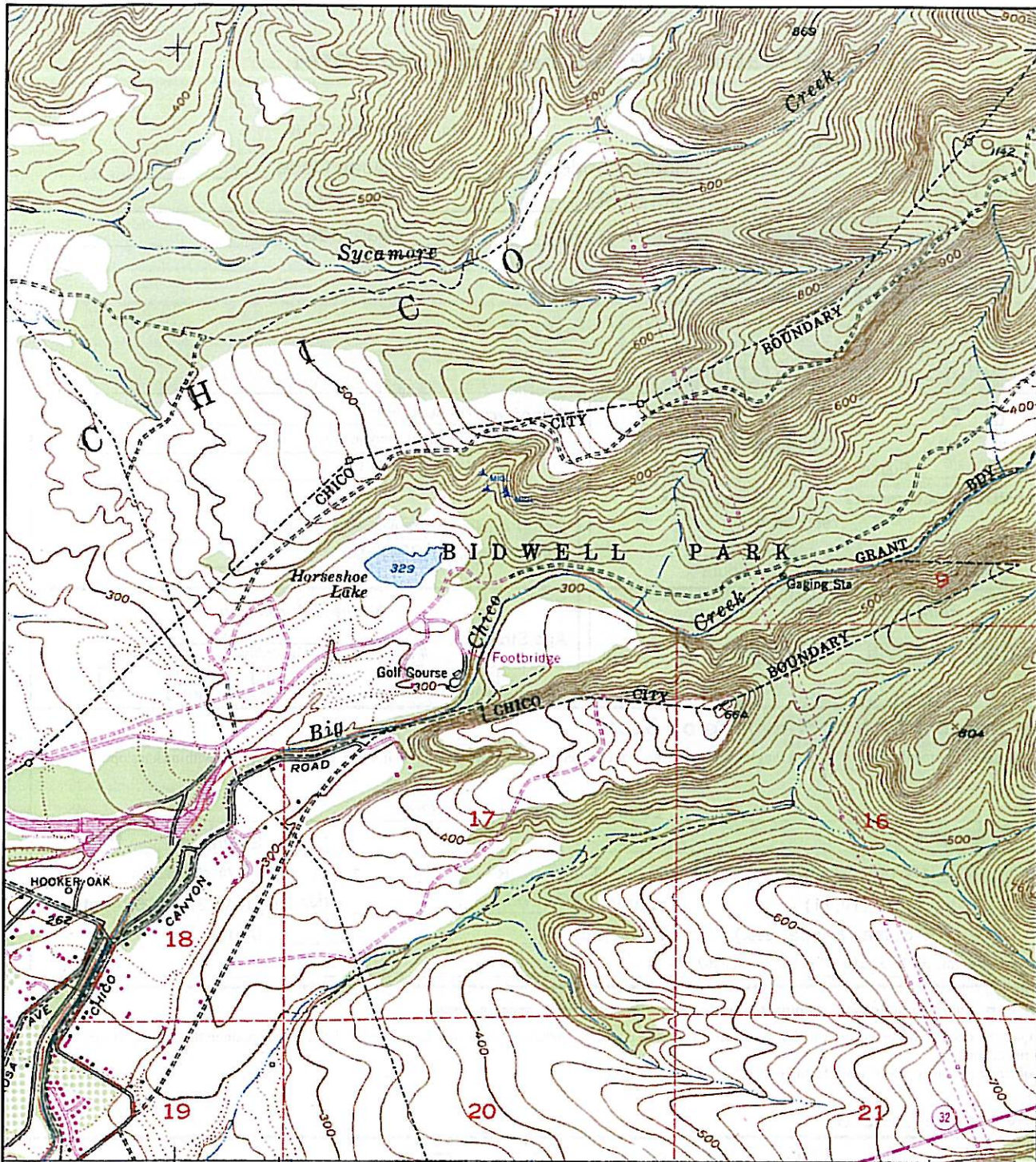
By another person (name): _____

Other: _____

Photographs: (check one or more)

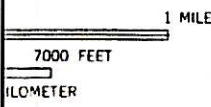
	Slide	Print
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



47°30'
44°05'
44°04'
44°03'
44°02'00m N.
39°45'
121°45'

603 47°30' 604 605
606 600m E



● INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1985
3.3 MI. TO CALIF. 99
CHICO (CITY HALL) 5 MI.

ROAD CLASSIFICATION

Heavy-duty ————— Light-duty —————
Medium-duty ————— Unimproved dirt —————
○ State Route

FOREST RANCH 12 MI.
51 MI. TO CALIF. 36 & 89
(HAMILIN CANYON)
1888 11 NW

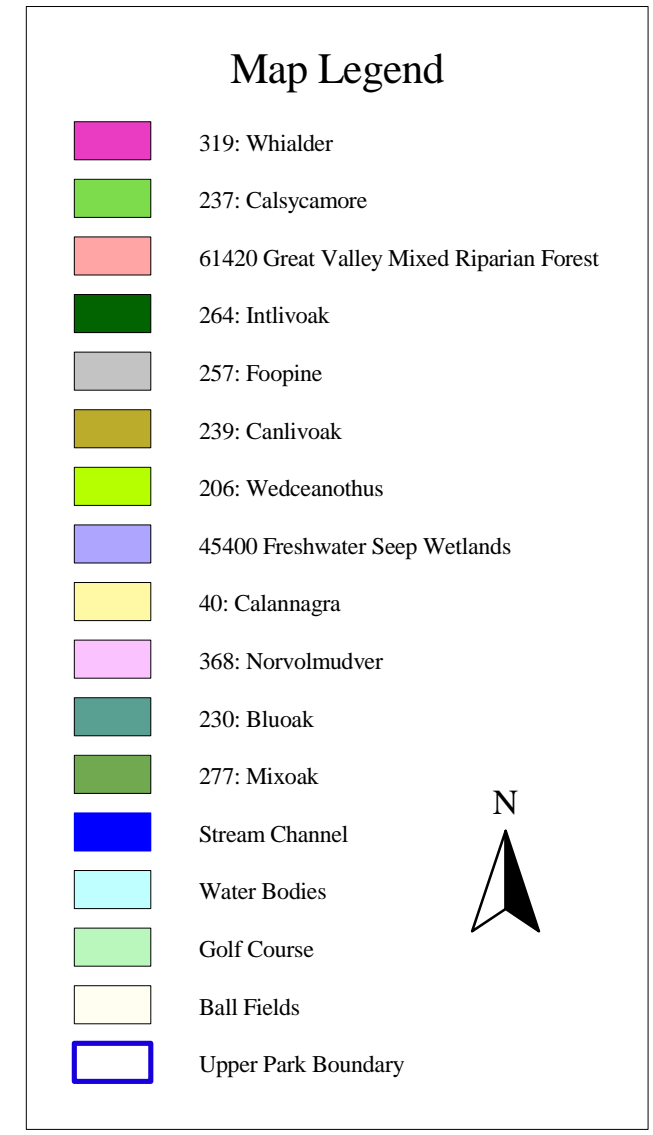
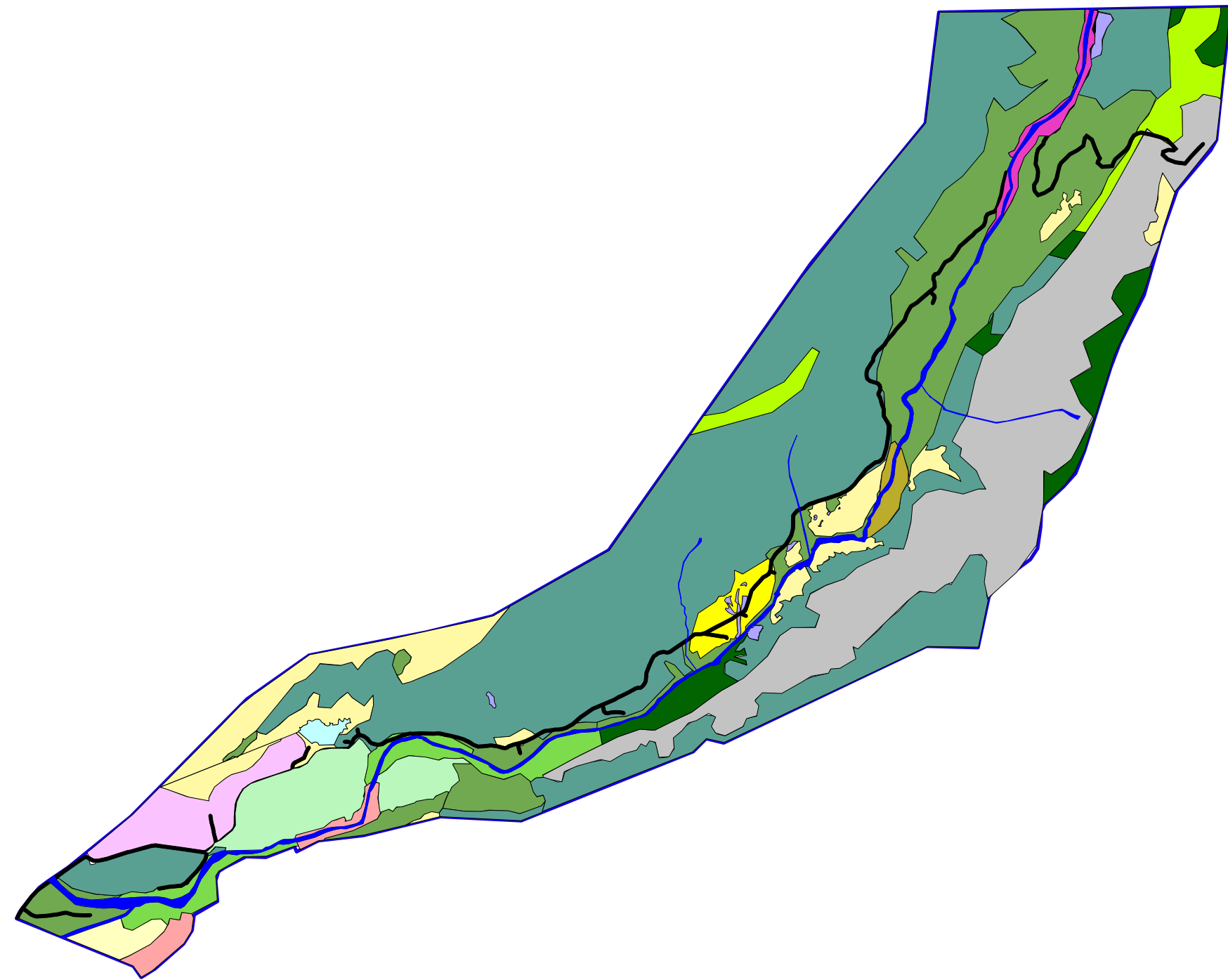
RICHARDSON SPRINGS, CALIF.
SE/4 RICHARDSON SPRINGS 15' QUADRANGLE
39121-G7-TF-024

N. VIRGINIA 22092
REQUEST

Revisions shown in purple compiled in cooperation with California Department of Water Resources from aerial photographs taken 1969. This information not field checked
Purple tint indicates extension of urban areas

1951
PHOTOREVISED 1969
DMA 1663 IV SE—SERIES V895

Figure 2. Plant Communities of Upper Bidwell Park



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**Survey for Special Status Botanical Species for the
City of Chico's Bidwell Park Trails Project**

Butte County, CA

Spring & Summer 2002 Surveys

August 15, 2002

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EXECUTIVE SUMMARY

Portions of City of Chico's Lower and Upper Bidwell Park were surveyed for the presence of special status plant species. Surveys began in March of 2002 and ended in August of 2002. The surveys yielded six special status plant species within the project area (Table 2) and the potential for nine others to occur. The distributions of these species are widespread throughout Upper Bidwell Park. Out of thirty-two focus areas only five were without rare plant occurrences (Figure 3). Of these five focus areas other environmental concerns are present. For example, the presence of wetlands, ephemeral and perennial stream drainages, and host plants that harbor special status invertebrates (i.e. Valley Elderberry Longhorn Beetle). It is the recommendation of this report that a qualified botanical monitor be present during trail construction activities so as to avoid impacts to special status species and habitat areas.

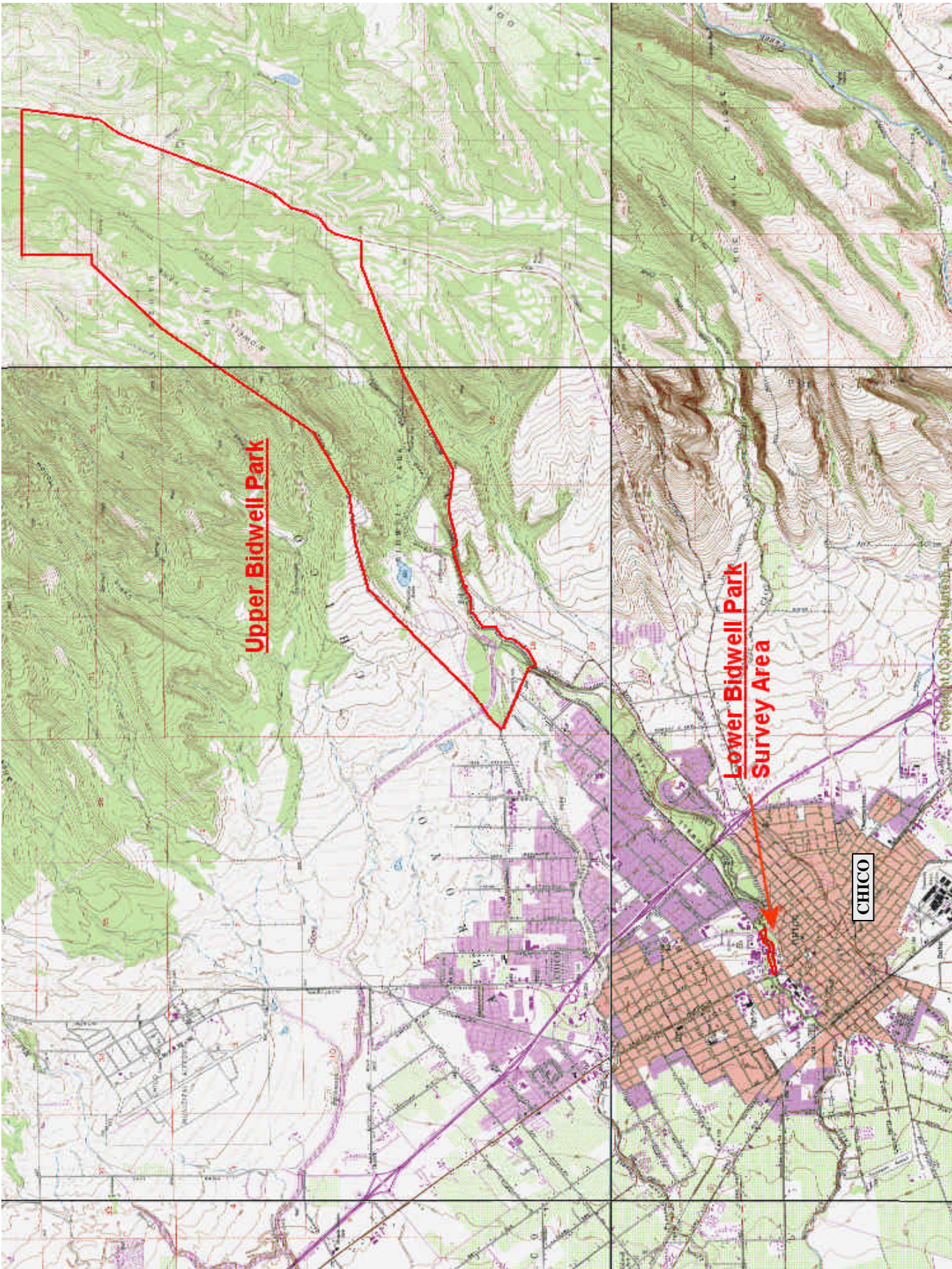


Figure 1. Bidwell Park Survey Areas (boundaries are approximate)

INTRODUCTION

Location

The study area evaluated for this sensitive plant report is known as Bidwell Park and resides in the City of Chico, Butte County, California. Bidwell Park is the nations third largest municipal park with a total acreage of 3,670 acres. Bidwell Park is divided into two sections commonly referred to as Lower Park and Upper Park. The two sections are separated by Manzanita Ave. on the east side of Chico. In this survey, portions of both sections were surveyed for rare plant occurrences. Specifically, in Lower Park a stretch of the Annie Bidwell Trail from 25th & Main Street to Pine Street was surveyed (Figure 1). In Upper Park, thirty-two separate focus areas were surveyed (Figure 2).

Habitat/Environment

The Lower Park survey area is located on either side of Big Chico Creek within the downtown area of the City of Chico. As one would expect, this area has been greatly impacted by the urban interface. Many of the dominant plant species along this corridor are ornamental species that had been planted many years ago. Most of the understory area receives a great deal of foot traffic and is inhabited by non-native invasive species like Himalayan blackberry. However, remnants do exist of the once native population. For example, valley oak, white alder, California sycamore and blue elderberry are still present and are good examples of species that would reside in this area under natural conditions.

The Upper Park survey area is approximately 3,500 acres in size and includes 12 plant communities within its borders. Elevation within the upper park ranges from 1,660 ft in the east end of the park to 260 ft in the west end of the park. The canyon walls can drop in elevation from 1,600 to approximately 800 ft within a half a mile resulting in a steep 28% average grade. The unique geomorphology or land forms found in Upper Bidwell Park has a significant role in the plant communities that reside there and also lends itself to harboring unique species of plants of which some are considered rare or endangered.

Three distinct geological features are responsible for the canyon formation that is seen in Upper Park. The underlying layer is known as the Chico formation which is formed from soft sandstone and therefore erodes readily under fluvial conditions. Above the Chico Formation is a layer known as Lovejoy Basalt that can be easily seen forming the vertical rock walls at Bear Hole and other swimming areas further up Big Chico Creek. Lastly, the Tuscan Formation overlies the previous two formations and is formed from successive ancient volcanic mud flow events that have become cemented layers of mud and rock debris known as fanglomerate. This fanglomerate layer and the relative depth of alluvial soil found above it is partially responsible for the many different types of plant communities found in Upper Park. For example, many of the vernal pool and vernal swale wetland features found at the Upper Park entrance and to the north of Wildwood Ave. are the result of an impermeable rock layer (i.e. the fanglomerate) just below the soil surface that keeps water from percolating through the soil layers. There are other areas, for example North Rim Trail, where the Tuscan Formation is exposed and very

little soil exists. This habitat lends itself to that of annual species that are able to capitalize on this unique yet formidable medium. Plants have adapted over millions of years to these unique geological conditions. Again, these unique conditions have led to plants that are uniquely adapted to these conditions and hence are of limited distribution albeit sometimes abundant locally.

Thirteen different plant communities were delineated onsite. Table 1 shows the plant community codes and their names.

Table 1. Plant Communities Encountered within the Bidwell Park Study Area

Code	Community Name
40: Calannagra	California Annual Grassland Series
206: Wedceanothus	Wedgeleaf Ceanothus Series
230: Bluoak	Blue Oak Series
237: Calsycamore	California Sycamore Series
239: Canlivoak	Canyon Live Oak Series
257: Foopine	Foothill Pine Series
264: Intlivoak	Interior Live Oak Series
277: Mixoak	Mixed Oak Series
319: Whialder	White Alder Series
368: Norvolmudver	Northern Volcanic Mudflow Vernal Pool
61420 (Holland)	Great Valley Mixed Riparian Forest
61430 (Holland)	Great Valley Valley Oak Riparian Forest
45400 (Holland)	Freshwater Seep Wetlands

These plant communities have been delineated and labeled, in Figure 3, per the codes and plant community names found in Table 1. The codes and names were derived from the CNPS publication “A Manual of California Vegetation” (Sawyer and Keeler-Wolf 1995) except where noted (e.g. Holland).

The two dominant plant communities found onsite were the Blue Oak and Foothill Pine Series. Blue oaks (*Quercus douglasii*) are typically found in the lower foothills of the lower Cascade Range and the Sierra Nevada’s. This species can occur as dense stands or open savannah type areas with an understory of annual herbs and grasses. In Upper Park, the blue oaks are commonly found adjacent to annual grasslands on the north side of Big Chico Creek. The dominant species in the Foothill Pine Series is the gray pine (*Pinus sabiniana*) also known as foothill pine. This species does not form dense canopies but is rather dispersed with a dense understory of common manzanita and wedgeleaf ceanothus which are both common chaparral species. The Foothill Pine Series occupies the majority of the south side of Upper Park.

METHODS

Methodology

All field surveys were conducted on foot throughout the project area as directed and undirected searches. Surveys began in March 2002 and extended to mid August 2002 in the attempt of preparing a floristic level survey. Each focus area was surveyed at least twice: once in the spring and once in the summer. During each survey a list of all plant species encountered was prepared for each focus area. These lists were later compiled into one master list (see Table 4). Notes were taken concerning existing environmental conditions and plant phenology at the time of survey. Navigation throughout the survey area was accomplished using aerial photographs and topographic maps, supplied the Park Department, that had a GIS overlay of all the focus areas and proposed and existing trails.

The California Department of Fish and Game Natural Diversity Database for Butte County (rev. April 05, 1999) and for the Chico, Richardson Spring and Paradise West 7.5' Quadrangles (March 21, 2002) were consulted for existing state and federally listed threatened and endangered plant species that may be present on site. The electronic inventory Rarefind 2 was used to query the quadrangle databases.

Special status plant occurrences were mapped using a handheld GPS unit (Trimble GeoExplorer III). The data points gathered with the GPS unit were later differentially corrected and then exported to a GIS platform.

For each rare plant occurrence a Dept. of Fish and Game (DFG), California Native Species Field Survey Form was filled out in the field and then later typed into an electronic form for legibility (Appendix B). These forms will be sent to DFG to be added to their Natural Diversity Database.

Some samples of special status plants were taken for identification purposes. Per the mandate of a DFG collection permit, these samples will be donated to the California State University, Chico's Biological Sciences Herbarium.

All plants were identified based on the taxonomy of *The Jepson Manual of Higher Plants of California* and were completed to the subspecies or variety level when possible.

Any plant species that were not identifiable at the project site were collected, later identified and then added to the original species list.

Plant communities were identified using *A Manual of California Vegetation* in the field and delineated onto an aerial photograph in the field and then transferred to a GIS.

Many species common names were acquired from The CalFlora Database which is an online electronic resource.

Invasive exotic plant species were reviewed at the California Department of Food and Agriculture's "Encycloweediea" and CalEPPC's online database for status and noxious properties.

RESULTS

Special Status Plant Species

The California Department of Fish and Game Natural Diversity Database (CNDDDB) list 42 vascular plant species that are of special concern for Butte County (See Appendix A). Of these 42 species 15 would have the potential for being within the project study area.

Based on geographic subdivision, habitat present, edaphic conditions and site elevation (between 100' and 2,000') the following sensitive species in Table 2 would have the potential for being on site.

Table 2. Special Status Vascular Plants that Are Known or May Have the Potential to Occur Within the Bidwell Park Study Area.

Common Name (<i>Scientific Name</i>)	Status Federal/State/CNPS	Plant Communities	General Habitat	Period Identifiable
Depauperate Milkvech (<i>Astragalus pauperculus</i>)	- / - / 4 (1-1-3)	Valley Grassland, Foothill Woodland	Exposed Tuscan Fanglomerate, Thin Soils	March - June
Butte County Calycadenia (<i>Calycadenia oppositifolia</i>)	- / - / 1B (2-2-3)	Chaparral, Foothill Woodland, Meadows, Seeps	Occurs in Volcanic or Serpentine Substrate	April - July
Butte County Morning Glory * (<i>Calystegia atriplicifolia</i> ssp. <i>buttensis</i>)	- / - / 1B (2-1-3)	Foothill Woodland, Yellow Pine Forest (elev. 1,950' – 4,000')	Occurs in volcanic Substrate	May - July
White-stemmed Clarkia * (<i>Clarkia gracilis</i> ssp. <i>albicaulis</i>)	- / - / 1B (3-2-3)	Chaparral, Foothill Woodland	Occasional in Serpentine	May - July
Butte County Fritillary * (<i>Fritillaria eastwoodiae</i>)	- / - / 3 (?-2-3)	Chaparral, Foothill Woodland, Lower Montane Forest	Forest Openings, Occasional in Serpentine	March - May
Adobe Lily * (<i>Fritillaria pluriflora</i>)	- / - / 1B (2-2-3)	Chaparral, Foothill Woodland, Valley Grassland	Often found in Adobe Substrate	February - April
Rose Mallow * ‡ (<i>Hibiscus lasiocarpus</i>)	- / - / 2 (2-2-1)	Hillside Seeps, Marshes, Swamps	Wetlands	July - September
Red Bluff Dwarf Rush * (<i>Juncus leiospermus</i> var. <i>leiospermus</i>)	- / - / 1B (2-3-3)	Chaparral, Foothill Woodland, Meadows, Seeps, Annual Grassland	Often Associated with Vernal Pool Habitats.	March - May
Humboldt Lily ‡ (<i>Lilium humboldtii</i> ssp. <i>humboldtii</i>)	- / - / 4 (1-2-3)	Chaparral, Foothill Woodland, Lower Montane Forest	Forest Openings	May - July
Butte County Meadowfoam * (<i>Limnanthes floccosa</i> ssp. <i>californica</i>)	E / E / 1B (3-3-3)	Annual Grassland, Foothill Grassland	Vernal Pool & Vernal Swale Habitats	March - May

Common Name (<i>Scientific Name</i>)	Status Federal/State/CNPS	Plant Communities	General Habitat	Period Identifiable
Shield-bracted Monkeyflower ‡ (<i>Mimulus glaucescens</i>)	- / - / 4 (1-1-3)	Chaparral, Foothill Woodland, Valley Grassland, Meadows, Seeps	Seeps, Ephemeral Stream Beds, Stream Margins, Highly Variable	February - August
Ahart's Paronychia * (<i>Paronychia ahartii</i>)	- / - / 1B (3-2-3)	Foothill woodland, Foothill & Valley Grasslands, Vernal Pools	Vernally Flooded Conditions in Vernal Pool Habitat	March - June
Bidwell's Knotweed ‡ (<i>Polygonum bidwelliae</i>)	- / - / 4 (1-1-3)	Foothill Woodland	Thin Soils Associated with Tuscan Fanglomerate	April - August
California Beaked-Rush * ‡ (<i>Rhynchospora californica</i>)	- / - / 1B (3-3-3)	Hillside Seeps, Fresh Water Marshes	Closely Associated with Deer Grass in Seep Habitats	May - August
Butte County Checkerbloom * ‡ (<i>Sidalcea robusta</i>)	- / - / 1B (2-2-3)	Chaparral, Foothill Woodland	Hillside Slopes, Drainage Slopes, Cover of Oaks & Native Shrubs, Occasional in Grassy Openings	April - June

* Indicates species that are listed as known occurrences on the Chico, Richardson Springs, and / or the Paradise West Quadrangles per the CNDDDB list (See Appendix A).

‡ Indicates special status species that were identified within the project area during this survey.

() CNPS RED Code

Table 2. Continued

Status Definitions

FEDERAL

E – listed as endangered under the Endangered Species Act (50 CFR 17.11)

T – listed as threatened under the Endangered Species Act (50 CFR 17.11)

SC – species of special concern

-- no listing

STATE

E – listed as endangered under the California Endangered Species Act (California Fish and Game Code, Section 2062)

T - listed as threatened under the California Endangered Species Act (California Fish and Game Code, Section 2067)

R – listed as rare under the California Endangered Species Act (California Fish and Game Code, Section 1901)

SC – species of special concern

-- no listing

CNPS – CALIFORNIA NATIVE PLANT SOCIETY

1a – plants considered extinct in California and elsewhere

1b – plants rare, threatened, or endangered in California and elsewhere. Species on this list presumably met the criteria for listing as threatened or endangered under the state Endangered Species Act.

2 – rare, threatened or endangered in California but more common elsewhere.

- 3 – plants for which we need more information – review list
- 4 – plants of limited distribution – watch list

R E D Code

R – Rarity

- 1 – Rare in California but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.
- 2 – Distributed in a limited number of occurrences, occasionally more if each occurrence is small.
- 3 – Distributed in California in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported

E - Endangerment

- 1 – Not very endangered in California
- 2 – Fairly endangered in California
- 3 – Seriously endangered in California

D – Distribution

- 1 – More or less wide spread outside California
- 2 – Rare outside California
- 3 – Endemic to California

If plants with the CNPS rankings of 1a, 1b or 2 occur within the project boundaries or will somehow be impacted by project activities it is **mandatory** that they be fully considered during the preparation of environmental documents relating to CEQA. It is also strongly **recommended** by Ca DFG that plants with rankings of 3 or 4 be considered during the preparation of environmental documents relating to CEQA.

Depauperate Milkvetch (*Astragalus pauperculus*)

Depauperate milkvetch is an annual herb species belonging to the Fabaceae (Pea) family of plants. This species is known to inhabit thin volcanic soils in annual grassland and blue oak woodland habitats (Hickman 1993). In California, this species has been recorded in Shasta, Tehama and Butte Counties.

This species was selected as being potentially present within the project site based on its geographic range and habitat preference. Many of the thin soil areas associated with the Tuscan fanglomerate terraces, found throughout Upper Park, would be suitable habitat for this species.

Butte County Calycadenia (*Calycadenia oppositifolia*)

Butte County calycadenia is an annual herb species belonging to the Asteraceae (Sunflower) family of plants. It has been found in valley grassland, chaparral and foothill woodland habitats. This species also inhabits serpentine soils.

The habitats this species occupies typifies most of the habitats encountered in Upper Park. This species was found in Upper Park by Dittes (date unknown) and the relative location is located outside any of the focus areas surveyed for this report.

Butte County Morning Glory (*Calystegia atriplicifolia ssp. buttensis*)

Butte County morning glory is a perennial rhizomatous herb species belonging to the Convolvulaceae (Morning Glory) family of plants. This species inhabits dry rocky soil in open forest and chaparral habitats. The minimum elevation for this species (according to Hickman 1993) is 600 m which outside the elevation range of Upper Park yet close enough to be a potential candidate. A specimen was located just north of the park boundaries adjacent to Hwy 32.

It is unlikely that this species would be found within the park boundaries but has been included on this list due to the close proximity of a known occurrence.

White-Stemmed Clarkia (*Clarkia gracilis ssp. albicaulis*)

White-stemmed clarkia is an annual herb species belonging to the Onagraceae (Evening Primrose) family of plants. This species inhabits chaparral and foothill woodland habitats at an approximate elevation of 500 m.

Based on habitat preference and elevation this species is a likely candidate for being within upper northeast reaches of Upper Park. However, there are no known

observations of this species within Upper Park and this survey did not yield any observations of this species within any of the focus areas.

Butte County Fritillary (*Fritillaria eastwoodiae*)

Butte County fritillary is a bulbiferous, perennial herb species belonging to the Liliaceae (Lily) family of plants. This species like many bulb bearing plants has visible flowers only during the spring months. The Butte County fritillary occupies chaparral, foothill woodland and yellow pine habitats. This species is also known to inhabit serpentine (mafic) soils.

Potential habitat for this species can be found throughout most of Upper Park in elevations above 500 ft. Only one specimen of Fritillary was found that could not be determined to the species level due to lacking floral features and hence should be suspect until it can be identified with floral structures present. This observation, however, was found outside of focus area 15 and would not be impacted from the proposed trail construction.

Adobe Lily (*Fritillaria pluriflora*)

Adobe lily is a perennial bulbiferous herb species belonging to the Liliaceae (Lily) family of plants. This species occupies valley grassland, chaparral and foothill woodland habitats. The elevation range for this species is 0 to 1,500 feet which includes most of the habitat and elevation range of Upper Park. As the common name suggests this species is commonly found in adobe soils.

This species would most likely be found in Upper Park within alluvial fans that had adobe deposits. The survey of these types of areas did not reveal the presence of this species. Hence it is unlikely that it occurs in Upper Park.

Rose Mallow (*Hibiscus lasiocarpus*)

Rose mallow is a perennial shrub species that belongs to the Malvaceae (Mallow) family of plants (Plate 1a, b Appendix C). This species occupies freshwater marsh and hillside seep habitats in elevations lower than 500 ft.

Rose mallow is known to occur in Upper Park in the hillside seep wetlands just north of the Bear Hole Parking area (Figure 2, CNDDDB form Appendix B, maps Appendix D). During this survey repeated searches were made to relocate this occurrence. Finally, it was found in mid August when the flowers were present. This population has approximately one hundred individuals and appears to be stable. Even though this species was not found to be within any of the focus areas, indirect impacts from project activities could be detrimental to this species. Such impacts may include addition of fill

material from upslope trail construction that may alter the hydrological regime found at this seep area; hence, making the population more accessible to pedestrians who may not know that this flowering hibiscus is an endangered species.

Red Bluff Dwarf Rush (*Juncus leiospermus var. leiospermus*)

Red Bluff dwarf rush is an annual herb species belonging to the Juncaceae (Rush) family of plants. This species inhabits vernal moist habitats (including vernal pools) within valley grassland, chaparral and foothill woodland habitats.

This species has the potential to occupy any of the described habitats above in Upper Park. However, during this survey no representatives of this species were found in the focus areas in Bidwell Park.

Humboldt Lily (*Lilium humboldtii ssp. humboldtii*)

Humboldt lily is a bulbiferous, perennial herb species belonging to the Liliaceae (Lily) family of plants (Plate 2a, b Appendix C). This species is rather robust in stature measuring above seven feet tall. Humboldt lily is typically found in chaparral and yellow pine forest habitats but at an occurrence in Upper Park was located within the high water mark of Big Chico Creek (focus area 13b). The other location was within chaparral habitat on the borders of focus areas 11 and 12.

Butte County Meadowfoam (*Limnanthes floccosa ssp. californica*)

Butte County meadowfoam is an annual herb species belonging to the Limnathaceae (Meadowfoam) family of plants. This species is known to occupy vernal pool habitats within valley grasslands at an elevation range of 200 ft to 1,200 ft.

The only suitable habitat within Upper Park for this species was surveyed and no representatives of this species were found.

Shield-bracted Monkeyflower (*Mimulus glaucescens*)

Shield-bracted monkeyflower is an annual herb species belonging to the Scrophulariaceae (Figwort) family of plants (Plate 3, Appendix C). This species can be found occupying seeps and ephemeral drainages within valley grassland, chaparral and foothill woodland habitats.

Shield-bracted monkeyflower was found to be ubiquitous in seep and ephemeral drainages in Upper Park. This species appears to be a generalist in that it can occupy several different microhabitats providing the soil remains saturated long enough to support this species.

Ahart's Paronychia (*Paronychia ahartii*)

Ahart's paronychia is an annual herb species belonging to the Caryophyllaceae (Pink) family of plants. It is known to occupy thin soils of vernal moist areas and vernal pools in annual grassland and foothill woodland habitats. It has an elevation range of 100 to 300 ft.

Suitable habitat for this species does exist in Upper Park. However, this survey did not reveal any occurrences of this species in those areas.

Bidwell's knotweed (*Polygonum bidwelliae*)

Bidwell's knotweed is an annual herb species belonging to the Polygonaceae (Buckwheat) family of plants (Plate 4 Appendix B). This species occupies thin soil habitats usually associated with the Tuscan Formation in annual grassland and foothill woodland habitats. This species is particularly diminutive in size and thus can be very difficult to find.

Bidwell's knotweed was located in several locations in Upper Park occupying the habitats stated above (map Appendix D). This species appears to tolerate foot traffic well and may even be dependent upon this disturbance regime in areas where competing vegetation would otherwise overgrow this species. An example of this can be seen on an established foot trail extending away from Parking Area O towards the Yahi Trail.

California Beaked-Rush (*Rhynchospora californica*)

California beaked rush is a perennial herb species belonging to the Cyperaceae (Sedge) family of plants (Plate 5 Appendix B). This species is known to occupy freshwater marshes, bogs and seeps in elevations less than 1000 m and is commonly associated with deer grass (*Muhlenbergia rigens*) on the outer edges of seep areas.

California beaked-rush was known to occupy two different locations in Upper Park. Both of these occurrences were relocated and have been added to the CNDDDB inventory. During this survey, an additional location was found in a hillside seep area in Upper Park. This new location is of similar habitat to that described above and is found west of the power lines that run north to south through Upper Park (map Appendix D).

Butte County Checkerbloom (*Sidalcea robusta*)

Butte County checkerbloom is a perennial herb species belonging to the Malvaceae (Mallow) family of plants (Plate 6a, b, & c Appendix B). When growing under heavy

shade areas it reaches heights up to five feet but is typically found averaging three feet in height. This species is endemic to Butte County and occupies blue oak savannah, chaparral and foothill woodland habitats. Butte County checkerbloom is readily found growing within perennial woody shrub species, under the shade of blue oaks, at the base of basalt or Tuscan exposed outcrops, within the banks of ephemeral drainages and occasionally in open grassy areas. This species occupies elevations ranging from 300 to 1,200 ft.

This species was found approximately 335 times throughout both the north and south sides of Upper Park as single occurrences and in dense populations numbering into the hundreds (Figure 2, maps Appendix D). This species would be considered locally abundant but of very limited distribution. It is interesting to note, that Butte County checkerbloom apparently responds favorably to post fire conditions. In areas that burned in previous years the above ground foliage and flowering structures were particularly robust.

Invasive Exotic Plant Species (Weeds)

Invasive exotic plant species differ from the classification of non-native or introduced species by their ability to displace, on a grand scale, native species and thereby altering the visual aesthetics, the usability and the overall agricultural value of the occupied land. Invasive exotic species, second to urban development, are the leading cause for the rarity of many native species which is true of plant and animal species. Many, such as yellow star-thistle, have become a fixture in our wild lands such to the point that they are readily overlooked. As with star thistle some of these invasive exotic species are referred to as being noxious or harmful. This designation has been broadly applied to weeds in general but should be used sparingly to designate only those species that may be harmful to humans, live stock and agricultural plant species.

Several invasive exotic vascular plant species were identified during the botanical survey. The California Department of Fish & Game increasingly has made the mitigation of the proliferation of weed species an imperative in project planning. Typical mitigation measures would include minimizing ground disturbance and cleaning tools and vehicles that may have come in contact with certain weed species. Table 3 below lists the invasive exotic plants encountered during this survey that are of special concern by the California Department of Food and Agriculture and / or the California Exotic Pest Plant Council (CalEPPC).

Table 3. Invasive Exotic Plant Species Found Within the Bidwell Park Study Area

Common Name (Scientific Name)	Status CalEPPC / State	Noxious Rating	Habitat	Control Methods
Periwinkle (<i>Vinca major</i>)	B / --	--	Riparian Forest, Woodlands	Manual Extraction, Herbicide
Salt Cedar, Tamarisk (<i>Tamarix gallica</i>)	A-1 / --	Allelopathic: Translocation of Salts to Soil	Riparian Corridor, Stream Corridor	Manual Extraction, Herbicide
English Ivy (<i>Hedera helix</i>)	B / --	--	Riparian, Oak Woodland	Manual Extraction, Herbicide
Yellow Star-thistle (<i>Centaurea solstitialis</i>)	A-1 / C	Equine toxicity	Grassland, Foothill Woodland	Fire, Mowing, Manual Extraction, Herbicide
Bull Thistle (<i>Cirsium vulgare</i>)	B / --	--	Riparian areas, marshes, seeps	Manual Extraction, Herbicide, Biological
Black Mustard (<i>Brassica nigra</i>)	B / --	--	Grassland, Foothill Woodland	Manual Extraction, Herbicide, Biological
Field Bindweed (<i>Convolvulus arvensis</i>)	-- / C	Equine toxicity, agricultural crops	Grassland	Manual Extraction, Herbicide
Scotch Broom (<i>Cytisus scoparius</i>)	A-1 / C	Toxicity to Humans & Livestock (except goats)	Ruderal, Oak Woodlands, Foothill Woodlands	Manual Extraction, Grazing by Goats, Shading by Trees
Black Locust (<i>Robinia pseudoacacia</i>)	B / --	Ingestion Fatal to Humans & Livestock	Riparian Areas, Canyons	Manual Extraction, Herbicide
Spanish Broom (<i>Spartium junceum</i>)	B / --	Toxicity to Humans & Livestock	Grassland, Wetlands, Oak Woodland, Riparian Areas	Manual Extraction, Grazing by Goats, Shading by Trees
Klamath Weed (<i>Hypericum perforatum</i>)	B / C	Toxicity to Livestock	Grassland, Foothill Woodland	Manual Extraction, Biological
Edible Fig (<i>Ficus carica</i>)	A-2 /	--	Foothill Woodlands, Riparian Areas	Manual Extraction, Herbicide
Olive (<i>Olea europea</i>)	B / --	--	Foothill Woodlands, Riparian Areas	Manual Extraction
Downy Brome (<i>Bromus tectorum</i>)	A-1 / --	--	Grassland, Foothill Woodland	Fire, Grazing
Tall Fescue (<i>Festuc arundinacea</i>)	B / --	--	Grassland, Foothill Woodland	Fire, Grazing
Johnson Grass (<i>Sorghum halepense</i>)	-- / C	Ingestion Fatal to Humans & Livestock	Wetlands, Riparian Areas	Manual Extraction, Close Mowing
Medusa Head (<i>Taeniatherum caput- medusae</i>)	A-1 / C	Unpalatable to Livestock due to Silica Content	Grassland, Foothill Woodland, Chaparral	Fire, Grazing, Native Grass Restoration
Common Mullein (<i>Verbascum thapsus</i>)	B / --	--	Grassland	Manual Extraction, Herbicide

Common Name (Scientific Name)	Status CalEPPC / State	Noxious Rating	Habitat	Control Methods
Tree of Heaven (<i>Ailanthus altissima</i>)	A-2 / --	--	Grassland, Wetlands, Riparian Areas	Manual Extraction, Herbicide
Puncture-vine (<i>Tribulus terrestris</i>)	-- / C	Foliage toxic to Livestock (esp. sheep)	Grassland	Biological

Table 3. Continued

Status Definitions

CalEPPC

- A - Most Invasive Wildland Pest Plants; documented as aggressive invaders that displace natives and disrupt natural habitats. Includes two sub-lists:
 - A-1 - Widespread pests that are invasive in more than 3 Jepson regions (see bottom of List A page)
 - A-2 - Regional pests invasive in 3 or fewer Jepson regions.
- B - Wildland Pest Plants of Lesser Invasiveness; invasive pest plants that spread less rapidly and cause a lesser degree of habitat disruption; may be wide- spread or regional.

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- F - Federal Noxious Weed, as designated by the USDA; targeted for federally-funded prevention, eradication or containment efforts.
- A - CA Dept. of Food & Agriculture, on “A” list of Noxious Weeds; agency policies call for eradication, containment
- B - CA Dept. of Food & Agriculture, on “B” list of Noxious Weeds; includes species that are more widespread, and therefore more difficult to contain; agency allows county Agricultural Commissioners to decide if local eradication or containment is warranted.
- C - CA Dept. of Food & Agriculture, on “C” list of Noxious Weeds; includes weeds that are so widespread that the agency does not endorse state or county-funded eradication or containment efforts except in nurseries or seed lots.
- Q - CA Dept. of Food & Agriculture’s designation for temporary “A” rating pending determination of a permanent rating.

Limitations

This report represents several surveys beginning in March of 2002 and ending in August of 2002. Within this span of time all species that would occur in Bidwell Park could be identified to the species level. All areas of Bidwell Park were accessible by foot except in a few small locations where the density of brush made foot travel impossible.

Mitigations

Mitigation measures or avoidance measures will be necessary to avoid disturbance to vernal pools and other wetland habitat. It is strongly recommended that a wetland delineation per the Corps Wetland Delineation Manual (Environmental Laboratory 1987) be performed if any wetland areas will be impacted (i.e. addition of fill material) by project activities. Also, a Stream Bed Alteration Agreement issued by the California Department of Fish and Game (CaDFG) may be necessary if any project activities will be within the ordinary high water mark (OHWM) of any drainages with evident bed and bank. Another consideration is the addition of fill material to Big Chico Creek as an indirect impact of ground disturbance activities within jurisdictional drainages. These activities may prove to be a nexus for the United State Army Corps of Engineers (USACOE), the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) involvement due to the threatened spring-run Chinook salmon which utilize clean gravels in Big Chico Creek for spawning.

Mitigation measures for special status plant occurrences are limited to avoidance. The distance that ground disturbance may be acceptable in relation to an existing special status plant will be relative to the existing environmental conditions. For example, the acceptable distance for ground disturbance on a steep slope above a known rare plant occurrence will be greater than that of ground disturbing activities on level ground. The effect of impacts and hence acceptable distance will also depend on the species in question.

While not a special status plant species itself the blue elderberry (*Sambucus mexicana*) is the host plant for the federally endangered Valley Elderberry Longhorn Beetle (*Desmocerus californicus ssp. dimorphus*). Consultation with the USFWS will be necessary to determine appropriate distances for ground disturbing activities that are proximal to the blue elderberry plant itself. This report has included only the locations of the blue elderberry shrub where trail improvements or implementation were proposed.

Lastly, it is the recommendation of this report that a qualified botanical monitor be present during the layout and implementation of the proposed trails as part of the project mitigation.

Findings

This report has identified six special status vascular plant species within the focus areas surveyed in Upper Park (see Table 2). One species in particular, the Butte County checkerbloom, may prove to be a project constraint due to its broad distribution and abundance throughout Upper Park. Careful consideration of trail placement will be necessary to avoid impacts to this species. Other special status species found in Upper Park are of a much more localized distribution which should make avoidance of these areas easier. No special status species were found in the Lower Park survey area.

Table 4. Comprehensive List of Plant Species Encountered During the Bidwell Park Botanical Survey, Chico, CA.

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Perennial	Aceraceae	Acer macrophyllum	big-leaf maple	Native		
Perennial	Aceraceae	Acer negundo var. californicum	California box elder	Native		
Perennial	Aceraceae	Acer saccharinum	silver maple	Ornamental		
Perennial	Alismataceae	Alisma plantago	water plaitain	Native		
Annual	Amaranthaceae	Amaranthus albus	tumbleweed	Introduced		
Perennial	Anacardiaceae	Pistacia chinensis	Chinese pistacio	Introduced		
Perennial	Anacardiaceae	Rhus trilobata	skunkbrush	Native		
Perennial	Anacardiaceae	Toxicodendron diversilobum	poison oak	Native		
Annual	Apiaceae	Anthriscus caucalis	bur-chervil	Introduced		
Perennial	Apiaceae	Chlorogalum pomeridianum var. pomeridianum	wavyleaf soap plant	Native		
Perennial	Apiaceae	Conium maculatum	poison hemlock	Native		
Perennial	Apiaceae	Eryngium castrense	Great Valley button-celery	Native		
Perennial	Apiaceae	Lomatium caruifolium	alkali parsnip	Native		
Perennial	Apiaceae	Lomatium dasycarpum ssp.tomentosum	wholly-fruited lomatium	Native		
Perennial	Apiaceae	Lomatium marginatum var. marginatum	Hartweg's lomatium	Native		
Perennial	Apiaceae	Lomatium utriculatum	common lomatium	Native		
Perennial	Apiaceae	Perideridia kelloggii	yampah	Native		
Perennial	Apiaceae	Phacelia egena	rock phacelia	Native		
Perennial	Apiaceae	Sanicula crassicaulis	gamble weed	Native		
Perennial	Apiaceae	Sanicula bipinnata	poison sanicle	Native		
Perennial	Apiaceae	Sanicula bipinnatifida	purple sanicle	Native		
Perennial	Apiaceae	Sanicula crassicaulis	gamble weed	Native		
Annual	Apiaceae	Scandix pecten-veneris	shepherd's needle	Introduced		
Perennial	Apiaceae	Tauschia hartwegii	Hartweg's tauschia	Native		
Annual	Apiaceae	Torilis arvensis ssp. arvensis	field hedge-parsley	Introduced		
Perennial	Apocynaceae	Vinca major	periwinkle	Introduced		B / --
Perennial	Araliaceae	Hedera helix	English ivy	Introduced		B / --
Perennial	Aristolochiaceae	Aristolochia californica	California pipevine	Native		
Perennial	Asclepiadaceae	Asclepias cordifolia	purple milkweed	Native		
Perennial	Asclepiadaceae	Asclepias eriocarpa	Indian milkweed	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Perennial	Asclepiadaceae	<i>Asclepias fascicularis</i>	narrow-leaved milkweed	Native		
Perennial	Asclepiadaceae	<i>Asclepias speciosa</i>	showy milkweed	Native		
Perennial	Asteraceae	<i>Achillea millefolium</i>	common yarrow	Native		
Annual	Asteraceae	<i>Achyraea mollis</i>	blow-wives	Native		
Perennial	Asteraceae	<i>Agoseris grandiflora</i>	California Dandelion	Native		
Annual	Asteraceae	<i>Agoseris heterophylla</i>	mountain dandelion	Native		
Perennial	Asteraceae	<i>Anaphalis margaritacea</i>	pearly everlasting	Native		
Perennial	Asteraceae	<i>Artemisia douglasiana</i>	mugwort	Native		
Perennial	Asteraceae	<i>Baccharis pilularis</i>	coyote brush	Native		
Annual	Asteraceae	<i>Blennosperma nanum</i> var. <i>nanum</i>	yellow carpet	Native		
Annual	Asteraceae	<i>Calycadenia fremontii</i>	Fremont's calycadenia	Native		
Annual	Asteraceae	<i>Calycadenia truncata</i>	rosin weed	Native		
Annual	Asteraceae	<i>Centaurea cyanus</i>	batchelor button	Introduced		
Annual	Asteraceae	<i>Centaurea solstitialis</i>	yellow star-thistle	Introduced		A-1 / C
Annual	Asteraceae	<i>Chamomilla suaveolens</i>	pineapple weed	Introduced		
Perennial	Asteraceae	<i>Cirsium occidentale</i> var. <i>venustum</i>	Venus thistle	Native		
Annual	Asteraceae	<i>Cirsium vulgare</i>	bull thistle	Introduced		B / --
Annual	Asteraceae	<i>Conyza bonariensis</i>	horseweed	Introduced		
Annual	Asteraceae	<i>Conyza canadensis</i>	horseweed	Native		
Perennial	Asteraceae	<i>Erigeron divergens</i>	spreading fleabane	Native		
Perennial	Asteraceae	<i>Erigeron foliosus</i> var. <i>hartwegii</i>	Hartweg's fleabane	Native		
Perennial	Asteraceae	<i>Eriophyllum lanatum</i> var. <i>grandiflorum</i>	common woolly sunflower	Native		
Annual	Asteraceae	<i>Filago californica</i>	filago	Native		
Annual	Asteraceae	<i>Filago gallica</i>	narrow-leaved filago	Introduced		
Annual	Asteraceae	<i>Gnaphalium luteo-album</i>	weedy cudweed	Introduced		
Perennial	Asteraceae	<i>Grindelia camporum</i> var. <i>camporum</i>	Great Valley gumweed	Native		
Perennial	Asteraceae	<i>Grindelia hirsutula</i> var. <i>davyi</i>	Davey's gumweed	Native		
Annual	Asteraceae	<i>Helianthus bolanderi</i>	Bolander's sunflower	Native		
Annual	Asteraceae	<i>Hemizonia fitchii</i>	Fitch's spikeweed	Native		
Annual	Asteraceae	<i>Hesperivax acaulis</i> var. <i>acaulis</i>	dwarf evex	Native		
Annual	Asteraceae	<i>Hesperivax acaulis</i> var. <i>robustior</i>	big evax	Native		
Annual	Asteraceae	<i>Hypochaeris glabra</i>	smooth cat's ears	Introduced		
Perennial	Asteraceae	<i>Lactuca biennis</i>	biennial wild-lettuce	Introduced		
Annual	Asteraceae	<i>Lactuca serriola</i>	prickly lettuce	Introduced		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Annual	Asteraceae	<i>Lasthenia californica</i>	common goldfields	Native		
Annual	Asteraceae	<i>Lasthenia fremontii</i>	common goldfields	Native		
Annual	Asteraceae	<i>Lasthenia glaberrima</i>	smooth goldfields	Native		
Annual	Asteraceae	<i>Layia fremontii</i>	Fremont's tidy-tips	Native		
Perennial	Asteraceae	<i>Leontodon taraxacoides</i>	lesser hawkbit	Introduced		
Annual	Asteraceae	<i>Lessingia nemaclada</i>	slender-stem lessingia	Native		
Annual	Asteraceae	<i>Madia gracilis</i>	gumweed	Native		
Annual	Asteraceae	<i>Madia minima</i>	little tarweed	Native		
Annual	Asteraceae	<i>Madia subspicata</i>	slender tarweed	Native		
Annual	Asteraceae	<i>Micropus californicus</i> var. <i>californicus</i>	Q-tips	Native		
Annual	Asteraceae	<i>Microseris acuminata</i>	Sierra foothills microseris	Native		
Annual	Asteraceae	<i>Microseris douglasii</i>	Douglas' microseris	Native		
Annual	Asteraceae	<i>Psilocarphus brevissimus</i>	woolly marbles	Native		
Annual	Asteraceae	<i>Senecio vulgaris</i>	old man of spring	Introduced		
Annual	Asteraceae	<i>Silybum marianum</i>	milk thistle	Introduced		
Annual	Asteraceae	<i>Sonchus asper</i> ssp. <i>asper</i>	prickly sow thistle	Introduced		
Annual	Asteraceae	<i>Sonchus oleraceus</i>	common sow thistle	Introduced		
Perennial	Asteraceae	<i>Taraxacum officinale</i>	dandelion	Introduced		
Annual	Asteraceae	<i>Xanthium strumarium</i>	cocklebur	Native		
Perennial	Berberidaceae	<i>Berberis aquifolium</i> var. <i>dictyota</i>	Jepson's Oregon grape	Native		
Perennial	Betulaceae	<i>Alnus rhombifolia</i>	white alder	Native		
Perennial	Betulaceae	<i>Corylus cornuta</i> var. <i>californica</i>	California hazel	Native		
Perennial	Bignoniaceae	<i>Catalpa speciosa</i>	northern catalpa	Introduced		
Annual	Boraginaceae	<i>Amsinckia menziesii</i> var. <i>intermedia</i>	common fiddleneck	Native		
Annual	Boraginaceae	<i>Amsinckia menziesii</i> var. <i>menziesii</i>	fiddle-neck	Native		
Perennial	Boraginaceae	<i>Cynoglossum grande</i>	Western houndstongue	Native		
Annual	Boraginaceae	<i>Pectocarya pusilla</i>	little combseed	Native		
Annual	Boraginaceae	<i>Plagiobothrys austinae</i>	Austin's popcornflower	Native		
Annual	Boraginaceae	<i>Plagiobothrys canescens</i>	valley popcornflower	Native		
Annual	Boraginaceae	<i>Plagiobothrys fulvus</i>	fulvous popcorn flower	Native		
Annual	Boraginaceae	<i>Plagiobothrys glyptocarpus</i> var. <i>glyptocarpus</i>	sculptered popcornflower	Native		
Annual	Boraginaceae	<i>Plagiobothrys greenei</i>	Greene's popcornflower	Native		
Annual	Boraginaceae	<i>Plagiobothrys nothofulvus</i>	rusty-haired popcorn flower	Native		
Annual	Boraginaceae	<i>Plagiobothrys shastensis</i>	Shasta popcorn flower	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Annual	Boraginaceae	Plagiobothrys stipitatus var. micranthus	stalked popcornflower	Native		
Annual	Boraginaceae	Plagiobothrys stipitatus var. stipitatus	stalked popcornflower	Native		
Annual	Boraginaceae	Plagiobothrys tenellus	popcorn flower	Native		
Perennial	Brassicaceae	Arabis breweri var. austiniae	Brewer's rockcress	Native		
Perennial	Brassicaceae	Arabis glabra	smooth rock-cress	Native		
Annual	Brassicaceae	Athysanus pusillus	dwarf athysanus	Native		
Annual	Brassicaceae	Brassica nigra	black mustard	Introduced		B / --
Annual	Brassicaceae	Capsella bursa-pastoris	shepherd's purse	Introduced		
Annual	Brassicaceae	Cardamine californica var. californica	milk maids	Native		
Annual	Brassicaceae	Cardamine oligosperma	bitter-cress	Native		
Perennial	Brassicaceae	Cardamine californica	bitter cress	Native		
Annual	Brassicaceae	Draba verna	Whitlow grass	Native		
Annual	Brassicaceae	Lepidium nitidum var. nitidum	shining peppergrass	Native		
Perennial	Brassicaceae	Rorippa nasturtium-aquaticum	water cress	Native		
Annual	Brassicaceae	Sisymbrium officinale	hedge mustard	Introduced		
Annual	Brassicaceae	Thysanocarpus curvipes	fringe pod	Native		
Perennial	Buxaceae	Buxus microphylla var. japonica	Japanese boxwood	Ornamental		
Annual	Callitrichaceae	Callitriche marginata	California water starwort	Native		
Perennial	Calycanthaceae	Calycanthus occidentalis	spicebush	Native		
Perennial	Caprifoliaceae	Lonicera hispidula var. vacillans	California honeysuckle	Native		
Perennial	Caprifoliaceae	Lonicera interrupta	chaparral honeysuckle	Native		
Perennial	Caprifoliaceae	Sambucus mexicana	blue elderberry	Native		
Perennial	Caprifoliaceae	Symphoricarpos albus var. laevigatus	common snowberry	Native		
Annual	Caryophyllaceae	Cerastium glomeratum	mouse-eared chickweed	Introduced		
Annual	Caryophyllaceae	Minuartia californica	California sandwort	Native		
Annual	Caryophyllaceae	Petrorhagia dubia	windmill pink	Native		
Annual	Caryophyllaceae	Sagina apetala	annual pearlwort	Native		
Annual	Caryophyllaceae	Silene californica	California scarlet campion	Native		
Annual	Caryophyllaceae	Silene gallica	common catchfly	Introduced		
Annual	Caryophyllaceae	Spergularia bocconeii	Boccone's sand spurry	Introduced		
Annual	Caryophyllaceae	Stellaria media	common chickweed	Introduced		
Perennial	Castanaceae	Aesculus californica	California buckeye	Native		
Annual	Chenopodiaceae	Chenopodium album	lanb's quarter	Introduced		
Perennial	Convolvulaceae	Calystegia occidentalis ssp. occidentalis	western morning glory	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Perennial	Convolvulaceae	Convolvulus arvensis	field bindweed	Introduced		-- / C
Perennial	Cornaceae	Cornus florida	eastern dogwood	Ornamental		
Perennial	Cornaceae	Cornus glabrata	brown dogwood	Native		
Annual	Crassulaceae	Crassula aquatica	water pigmyweed	Native		
Annual	Crassulaceae	Crassula solieri	little pygmyweed	Native		
Annual	Crassulaceae	Crassula tillaea	Mediterranean pygmy-weed	Introduced		
Perennial	Crassulaceae	Dudleya cymosa ssp. cymosa	canyon dudleya	Native		
Annual	Crassulaceae	Parvisedum pumilum	Sierra stonecrop	Native		
Perennial	Crassulaceae	Sedum spathulifolium	yellow stone-crop	Native		
Perennial	Cucurbitaceae	Marah fabaceus	California manroot	Native		
Perennial	Cucurbitaceae	Marah fabaceus var. agrestis	California manroot	Native		
Perennial	Cupressaceae	Calocedrus deccurens	incense cedar	Native		
Perennial	Cyperaceae	Carex barbarae	valley	Native		
Perennial	Cyperaceae	Carex bolaneleri	Bolander's sedge	Native		
Perennial	Cyperaceae	Carex feta	feta sedge	Native		
Perennial	Cyperaceae	Carex nebrascensis	Nebraska sedge	Native		
Perennial	Cyperaceae	Carex nudata	naked sedge	Native		
Perennial	Cyperaceae	Carex praegracilis	field sedge	Native		
Perennial	Cyperaceae	Cyperus eragrostis	tall flatsedge	Native		
Perennial	Cyperaceae	Cyperus niger	black flatsedge	Native		
Perennial	Cyperaceae	Eleocharis macrostachya	spike-rush	Native		
Perennial	Cyperaceae	Eleocharis parishii	Parish's spikerush	Native		
Perennial	Cyperaceae	Rhynchospora californica	California beaksedge	Native		
Perennial	Cyperaceae	Scirpus acutus var. occidentalis	common tule	Native		
Perennial	Dipsacaceae	Dipsacus follonum	Fuller's teasel	Introduced		
Perennial	Dryopteridaceae	Dryopteris arguta	California wood fern	Native		
Perennial	Equisetaceae	Equisetum arvense	common horsetail	Native		
Perennial	Equisetaceae	Equisetum hyemale ssp. affine	common scouring rush	Native		
Perennial	Ericaceae	Arctostaphylos manzanita ssp. manzanita	big manzanita	Native		
Annual	Euphorbiaceae	Eremocarpus setigerus	turkey mullein	Native		
Annual	Euphorbiaceae	Euphorbia crenulata	Chinese caps	Native		
Annual	Fabaceae	Astragalus gambelianus	loco weed	Native		
Perennial	Fabaceae	Cercis occidentalis	western redbud	Native		
Perennial	Fabaceae	Cytisus scoparius	scotch broom	Introduced		A-1 / C

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Perennial	Fabaceae	Lathyrus jepsonii var. californicus	California tule pea	Native		
Perennial	Fabaceae	Lathyrus nevadensis var. nevadensis	Sierra Nevada pea	Native		
Perennial	Fabaceae	Lathyrus sulphureus	sulphur pea	Native		
Perennial	Fabaceae	Lotus corniculatus	bird's-foot trefoil	Introduced		
Annual	Fabaceae	Lotus humistratus	bird's foot lotus	Native		
Annual	Fabaceae	Lotus purshianus var. purshianus	Spanish clover	Native		
Perennial	Fabaceae	Lupinus albifrons	silver bush lupine	Native		
Annual	Fabaceae	Lupinus bicolor	bicolored lupine	Native		
Annual	Fabaceae	Lupinus microcarpus var. densiflorus	chick lupine	Native		
Annual	Fabaceae	Lupinus nanus	sky lupine	Native		
Annual	Fabaceae	Lupinus succulentus	arroyo lupine	Native		
Annual	Fabaceae	Medicago polymorpha	bur clover	Introduced		
Biennial	Fabaceae	Melilotus alba	sweet clover	Introduced		
Annual	Fabaceae	Melilotus indica	yellow sweet clover	Introduced		
Annual	Fabaceae	Pisum sativum	garden pea	Introduced		
Perennial	Fabaceae	Quercus berberidifolia	scrub oak	Native		
Perennial	Fabaceae	Quercus dumosa	scrub oak	Native		
Perennial	Fabaceae	Robinia pseudoacacia	black locust	Introduced		B / --
Perennial	Fabaceae	Spartium junceum	Spanish broom	Introduced		B / --
Annual	Fabaceae	Trifolium ciliolatum	foothill clover	Native		
Annual	Fabaceae	Trifolium depauperatum var. depauperatum	cowbag clover	Native		
Annual	Fabaceae	Trifolium hirtum	rose clover	Introduced		
Annual	Fabaceae	Trifolium microcephalum	small-headed clover	Native		
Perennial	Fabaceae	Trifolium repens	white clover	Introduced		
Annual	Fabaceae	Trifolium willdenovii	tomcat clover	Native		
Annual	Fabaceae	Vicia benghalensis	purple vetch	Introduced		
Annual	Fabaceae	Vicia sativa	garden vetch	Introduced		
Perennial	Fagaceae	Quercus berberidifolia	scrub oak	Native		
Perennial	Fagaceae	Quercus chrysolepis var. chrysolepis	canyon live oak	Native		
Perennial	Fagaceae	Quercus douglasii	blue oak	Native		
Perennial	Fagaceae	Quercus durata	leather oak	Native		
Perennial	Fagaceae	Quercus kelloggii	black oak	Native		
Perennial	Fagaceae	Quercus lobata	valley oak	Native		
Perennial	Fagaceae	Quercus wislizenii	interior live oak	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Annual	Gentianaceae	Cicendia quadrangularis	Oregon timwort	Native		
Annual	Geraniaceae	Erodium botrys	broad-leaf filaree	Introduced		
Annual	Geraniaceae	Erodium brachycarpum	foothill filaree	Introduced		
Annual	Geraniaceae	Erodium cicutarium	red-stemmed filaree	Introduced		
Annual	Geraniaceae	Geranium carolinianum	Carolina geranium	Native		
Annual	Geraniaceae	Geranium dissectum	cut-leaved geranium	Introduced		
Annual	Geraniaceae	Geranium molle	dove's-foot geranium	Introduced		
Perennial	Grossulariaceae	Ribes roezlii	Sierra gooseberry	Native		
Perennial	Hippocastanaceae	Aesculus californica	California buckeye	Native		
Perennial	Hydrophyllaceae	Eriodictyon californicum	yerba santa	Native		
Annual	Hydrophyllaceae	Nemophila heterophylla	small baby blue eyes	Native		
Annual	Hydrophyllaceae	Nemophila menziesii	baby blue eyes	Native		
Annual	Hydrophyllaceae	Phacelia egena	rock phacelia	Native		
Perennial	Hydrophyllaceae	Phacelia imbricata	imbricate phacelia	Native		
Perennial	Hypericaceae	Hypericum perforatum	Klamath weed	Introduced		B / C
Perennial	Iridaceae	Iris macrosiphon	long-tubed iris	Native		
Perennial	Iridaceae	Iris tenuissima ssp. purdyiformis	Purdy's iris	Native		
Perennial	Iridaceae	Sisyrinchium bellem	blue-eyed grass	Native		
Perennial	Juncaceae	Juncus balticus var. balticus	Baltic rush	Native		
Annual	Juncaceae	Juncus bufonius var. bufonius	toad rush	Native		
Perennial	Juncaceae	Juncus effusus var. pacificus	Common rush	Native		
Perennial	Juncaceae	Juncus mexicanus	Mexican rush	Native		
Perennial	Juncaceae	Juncus patens	common rush	Native		
Perennial	Juncaceae	Juncus xiphioides	iris-leaved rush	Native		
Perennial	Juncaceae	Luzula comosa var. comosa	common wood-rush	Native		
Perennial	Juncaceae	Luzula comosa var. subsessilis	common wood-rush	Native		
Perennial	Juglandaceae	Juglans regia	English walnut	Introduced		
Perennial	Lamiaceae	Lamium amplexicaule	henbit	Introduced		
Perennial	Lamiaceae	Lepechinia calycina	pitcher sage	Native		
Perennial	Lamiaceae	Marrubium vulgare	common horehound	Introduced		
Perennial	Lamiaceae	Mentha arvensis	Field mint	Native		
Perennial	Lamiaceae	Mentha pulegium	pennyroyal	Introduced		
Annual	Lamiaceae	Mentha spicata var. spicata	spearmint	Introduced		
Annual	Lamiaceae	Monardella lanceolata	mustang mint	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Perennial	Lamiaceae	Monardella sheltonii	coyote mint	Native		
Perennial	Lamiaceae	Monardella villosa	coyote mint	Native		
Perennial	Lamiaceae	Murrubium vulgare	common horehound	Introduced		
Annual	Lamiaceae	Pogogyne douglasii	Douglas' mesamint	Native		
Annual	Lamiaceae	Pogogyne zizyphoroides	Sacramento mesamint	Native		
Perennial	Lamiaceae	Prunella vulgaris var.lanceolata	self-heal	Native		
Perennial	Lamiaceae	Stachys ajugoides	hedga nettle	Native		
Perennial	Lamiaceae	Stachys pycnantha	shortspike hedgenettle	Native		
Annual	Lamiaceae	Trichostemma lanceolatum	vinegarweed	Native		
Perennial	Lauraceae	Umbellularia californica	California bay	Native		
Perennial	Lemnaceae	Lemna minor	common duckweed	Native		
Perennial	Liliaceae	Agave sp.	agave	Ornamental		
Perennial	Liliaceae	Allium amplexans	narrow-leaved onion	Native		
Perennial	Liliaceae	Allium peninsulare var. peninsulare	Mexicali onion	Native		
Perennial	Liliaceae	Brodiaea californica	California brodiaea	Native		
Perennial	Liliaceae	Brodiaea coronaria ssp.coronaria	crown brodiaea	Native		
Perennial	Liliaceae	Brodiaea elegans ssp. elegans	Elegant brodiaea	Native		
Perennial	Liliaceae	Brodiaea minor	dwarf brodiaea	Native		
Perennial	Liliaceae	Calochortus luteus	yellow mariposa lily	Native		
Perennial	Liliaceae	Calochortus monophyllus	yellow star tulip	Native		
Perennial	Liliaceae	Calochortus tolmiei	hairy star tulip	Native		
Perennial	Liliaceae	Chlorogalum angustifolium	narrow-leaved soaproot	Native		
Perennial	Liliaceae	Chlorogalum pomeridianum var. pomeridianum	wavyleaf soap plant	Native		
Perennial	Liliaceae	Dichelostemma capitatum ssp. capitatum	blue dicks	Native		
Perennial	Liliaceae	Dichelostemma multiflorum	many-flowered brodiaea	Native		
Perennial	Liliaceae	Dichelostemma volubile	twining brodiaea	Native		
Perennial	Liliaceae	Erythronium multiscapoideum	Sierra fawn lily	Native		
Perennial	Liliaceae	Fritalaria affinis var. affinis	checker lily	Native		
Perennial	Liliaceae	Fritillaria recurva	scarlet fritillary	Native		
Perennial	Liliaceae	Lilium humboldtii ssp. humboldtii	Humboldt's lily	Native	-- / -- / 4 RED 123	
Perennial	Liliaceae	Smilacina stellata	False solomon seal	Native		
Perennial	Liliaceae	Triteleia bridgesii	Bridge's brodiaea	Native		
Perennial	Liliaceae	Triteleia hyacinthina	white brodiaea	Native		
Perennial	Liliaceae	Triteleia laxa	Ithuriel's spear	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Perennial	Liliaceae	<i>Triteleia lilacina</i>	foothill triteleia	Native		
Perennial	Liliaceae	<i>Zigadenus fremontii</i>	death camas	Native		
Annual	Limnanthaceae	<i>Limnanthes douglasii</i> ssp. <i>rosea</i>	Douglas' meadowfoam	Native		
Annual	Lythraceae	<i>Lythrum hyssopifolium</i>	hyssop loosestrife	Introduced		
Perennial	Malvaceae	<i>Hibiscus lasiocarpus</i>	rose-mallow	Native	-- / -- / 2 RED 311	
Annual	Malvaceae	<i>Sidalcea hartwegii</i>	Harweg's sidalcea	Native		
Perennial	Malvaceae	<i>Sidalcea robusta</i>	Butte County checkerbloom	Native	-- / -- / 1B RED 223	
Perennial	Moraceae	<i>Ficus carica</i>	edible fig	Introduced		A-2 / --
Perennial	Moraceae	<i>Morus alba</i>	Mulberry	Introduced		
Perennial	Oleaceae	<i>Fraxinus dipetala</i>	California ash	Native		
Perennial	Oleaceae	<i>Fraxinus latifolia</i>	Oregon ash	Native		
Perennial	Oleaceae	<i>Fraxinus</i> sp.	ornamental ash	Introduced		
Perennial	Oleaceae	<i>Ligustrum lucidum</i>	Privet	Ornamental		
Perennial	Oleaceae	<i>Olea europaea</i>	olive	Introduced		B / --
Annual	Onagraceae	<i>Clarkia concinna</i> ssp. <i>concinna</i>	red ribbons	Native		
Annual	Onagraceae	<i>Clarkia gracilis</i> ssp. <i>gracilis</i>	slender clarkia	Native		
Annual	Onagraceae	<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i>	purple clarkia	Native		
Annual	Onagraceae	<i>Clarkia unguiculata</i>	elegant clarkia	Native		
Annual	Onagraceae	<i>Epilobium brachycarpum</i>	tall annual willowherb	Native		
Annual	Onagraceae	<i>Epilobium densiflorum</i>	dense-flowered boisduvalia	Native		
Annual	Onagraceae	<i>Epilobium pygmaeum</i>	smooth spike-primrose	Native		
Annual	Onagraceae	<i>Gayophytum heterozygum</i>	zigzag groundsmoke	Native		
Perennial	Orchidaceae	<i>Epipactis gigantea</i>	stream orchid	Native		
Perennial	Orchidaceae	<i>Piperia elongata</i>	dense-flowered rein orchid	Native		
Perennial	Orobanchaceae	<i>Orobanche uniflora</i>	Orobanchaceae	Native		
Perennial	Papaveraceae	<i>Eschscholzia californica</i>	California poppy	Native		
Annual	Papaveraceae	<i>Eschscholzia lobbii</i>	fryingpans	Native		
Perennial	Philadelphaceae	<i>Philadelphus lewisii</i>	Lewis' mock orange	Native		
Perennial	Philadelphaceae	<i>Whipplea modesta</i>	whipplea	Native		
Perennial	Pinaceae	<i>Cedrus deodara</i>	Deodar cedar	Ornamental		
Perennial	Pinaceae	<i>Pinus ponderosa</i>	ponderosa pine	Native		
Perennial	Pinaceae	<i>Pinus sabiniana</i>	foothill pine	Native		
Annual	Plantaginaceae	<i>Plantago elongata</i>	long-leaf plantain	Native		
Annual	Plantaginaceae	<i>Plantago erecta</i>	California plantain	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
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Perennial	Plantaginaceae	Plantago lanceolata	English plantain	Native		
Perennial	Plantanceae	Platanus racemosa	California sycamore	Native		
Perennial	Poaceae	Achnatherum lemmonii	Lemmon's needlegrass	Native		
Annual	Poaceae	Aira caryophyllea	silver hairgrass	Introduced		
Annual	Poaceae	Avena barbata	slender oats	Introduced		
Annual	Poaceae	Avena fatua	wild oat	Introduced		
Annual	Poaceae	Brachypodium distachyon	false brome	Introduced		
Annual	Poaceae	Briza minor	little quaking grass	Introduced		
Annual	Poaceae	Bromus arenarius	Australian brome	Introduced		
Annual	Poaceae	Bromus carinatus var. carinatus	California brome	Native		
Annual	Poaceae	Bromus diandrus	Bromegrass	Introduced		
Annual	Poaceae	Bromus hordeaceus	soft chess	Introduced		
Annual	Poaceae	Bromus japonicas	Japanese brome	Introduced		
Annual	Poaceae	Bromus madritensis ssp. rubens	foxtail	Introduced		
Annual	Poaceae	Bromus madritensis ssp. madritensis	foxtail chess	Introduced		
Annual	Poaceae	Bromus madritensis ssp. rubens	foxtail brome	Introduced		
Annual	Poaceae	Bromus tectorum	downy brome	Introduced		A-1 / --
Annual	Poaceae	Cynodon dactylon	bermuda grass	Introduced		
Annual	Poaceae	Cynosurus echinatus	annual dogtail	Introduced		
Annual	Poaceae	Deschampsia danthonioides	annual hairgrass	Native		
Perrenial	Poaceae	Elymus elemoides var. californicus	squirreltail	Native		
Perennial	Poaceae	Elymus glaucus	blue wild rye	Native		
Annual	Poaceae	Eragrostis cilianensis	stinkgrass	Introduced		
Annual	Poaceae	Eragrostis pectinacea var. pectinacea	tufted lovegrass	Native		
Perennial	Poaceae	Festuca arundinacea	tall fescue	Introduced		B / --
Annual	Poaceae	Gastridium ventricosum	nit grass	Introduced		
Perennial	Poaceae	Holcus lanatus	velvet graa	Introduced		
Perennia	Poaceae	Hordeum jubatum	foxtail barley	Native		
Annual	Poaceae	Hordeum murinum ssp. glaucum	smooth barley	Introduced		
Annual	Poaceae	Hordeum murinum ssp. leporinum	foxtail	Introduced		
Annual	Poaceae	Lolium multiflorum	Italian rye-grass	Introduced		
Perennial	Poaceae	Lolium perenne	perennial rye-grass	Introduced		
Perennial	Poaceae	Melica californica	California melicgrass	Native		
Perennial	Poaceae	Melica torreyana	Torrey's melica	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
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Annual	Poaceae	Muhlenbergia filiformis	pullup muhly	Native		
Perennial	Poaceae	Muhlenbergia rigens	deergrass	Native		
Annual	Poaceae	Nassella pulchra	purple needlegrass	Native		
Annual	Poaceae	Panicum acuminatum var. acuminatum	western panicum	Native		
Annual	Poaceae	Panicum capillare	witchgrass	Native		
Perennial	Poaceae	Paspalum dilitatum	dallis grass	Introduced		
Perennial	Poaceae	Phragmites australis	common reed	Native		
Annual	Poaceae	Poa annua	annual blue grass	Introduced		
Perennial	Poaceae	Poa bulbosa	bulbous blue grass	Introduced		
Annual	Poaceae	Poa howellii	Howell's bluegrass	Native		
Perennial	Poaceae	Poa pratensis ssp. pratensis	Kentucky bluegrass	Introduced		
Annual	Poaceae	Polypogon monspeliensis	rabbitsfoot grass	Introduced		
Annual	Poaceae	Senecio vulgaris	old man of spring	Introduced		
Annual	Poaceae	Setaria viridis	green foxtail	Introduced		
Perennial	Poaceae	Sorghum halepense	Johnsons grass	Introduced		-- / C
Annual	Poaceae	Taeniatherum caput-medusae	Medusa-head	Introduced		A-1 / C
Annual	Poaceae	Vulpia bromoides	six-weeks fescue	Introduced		
Annual	Poaceae	Vulpia microstachys var. ciliata	Eastwood fescue	Native		
Annual	Poaceae	Vulpia microstachys var. confusa	Tracy's fescue	Native		
Annual	Poaceae	Vulpia microstachys var. pauciflora	few-flowered fescue	Native		
Annual	Poaceae	Vulpia myuros var. hirsuta	foxtail fescue	Introduced		
Annual	Poaceae	Vulpia myuros var. myuros	fescue	Introduced		
Annual	Polemoniaceae	Gilia tricolor	bird's eyes	Native		
Annual	Polemineaceae	Navarretia pubescens	purple navarretia	Native		
Annual	Polemoniaceae	Navarretia leucocephala ssp. leucocephala	whitehead navarretia	Native		
Annual	Polemoniaceae	Gilia tricolor ssp. tricolor	bird's-eye gilia	Native		
Annual	Polemoniaceae	Linanthus androsaceus	showy linanthus	Native		
Annual	Polemoniaceae	Linanthus bicolor	bicolor linanthus	Native		
Annual	Polemoniaceae	Linanthus dichotomus	evening-snow	Native		
Annual	Polemoniaceae	Linanthus parviflorus	common linanthus	Native		
Annual	Polemoniaceae	Navaretia pubescens	purple navaretia	Native		
Annual	Polemoniaceae	Navarretia intertexta ssp. intertexta	needleleaf navarretia	Native		
Annual	Polemoniaceae	Navarretia leucocephala ssp. leucocephala	white-flowered navarretia	Native		
Annual	Polemoniaceae	Navarretia pubescens	purple navaretia	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Annual	Polemoniaceae	Naverretia tagetina	navarretia	Native		
Annual	Polemoniaceae	Nemophila heterophylla	small baby blue eyes	Native		
Perennial	Polygalaceae	Polygala cornuta var. cornuta	Sierra milkwort	Native		
Annual	Polygonaceae	Chorizanthe membranacea	pink spineflower	Native		
Annual	Polygonaceae	Chorizanthe stelluata	starlet spineflower	Native		
Perennial	Polygonaceae	Eriogonum nudum var. pubiflorum	hairy-flowered buckwheat	Native		
Annual	Polygonaceae	Polygonum bidwelliae	Bidwell's knotweed	Native	-- / -- / 4 RED 113	
Annual	Polygonaceae	Polygonum lapathifolium	common knotweed	Native		
Annual	Polygonaceae	Polygonum persicaria	lady's thumb	Introduced		
Perennial	Polygonaceae	Rumex acetosella	common sheep sorrel	Introduced		
Perennial	Polygonaceae	Rumex conglomeratus	cluster dock	Introduced		
Perennial	Polygonaceae	Rumex crispus	curly dock	Introduced		
Perennial	Polypodiaceae	Polypodium glycyrrhiza	licorice fern	Native		
Annual	Portulacaceae	Calandrinia ciliata	redmaids	Native		
Annual	Portulacaceae	Claytonia exigua ssp. exigua	little spring beauty	Native		
Annual	Portulacaceae	Claytonia parviflora ssp. parviflora	narrow-leaved miner's lettuce	Native		
Annual	Portulacaceae	Claytonia perfoliata	miner's lettuce	Native		
Annual	Primulaceae	Anagallis arvensis	pimpernel	Introduced		
Annual	Primulaceae	Centunculus minimus	chaffweed	Native		
Annual	Primulaceae	Dodecatheon clelandii	shooting star	Native		
Perennial	Pteridaceae	Adiantum capillus-veneris	Maidenhair fern	Native		
Perennial	Pteridaceae	Adiantum jordanii	California maiden-hair	Native		
Perennial	Pteridaceae	Pellaea andromedifolia	coffee fern	Native		
Perennial	Pteridaceae	Pellaea mucronata var. mucronata	bird's-foot fern	Native		
Perennial	Pteridaceae	Pentagramma triangularis ssp. semipallida	pale gold-black fern	Native		
Perennial	Pteridaceae	Pentagramma triangularis ssp. triangularis	gold-back fern	Native		
Perennial	Ranunculaceae	Clematis lasiantha	chaparral clematis	Native		
Perennial	Ranunculaceae	Clematis ligusticifolia	Virgin's bower	Native		
Perennial	Ranunculaceae	Delphinium hansenii ssp. hansenii	Hansen's larkspur	Native		
Perennial	Ranunculaceae	Delphinium nudicaule	red larkspur	Native		
Perennial	Ranunculaceae	Delphinium patens	spreading larkspur	Native		
Perennial	Ranunculaceae	Delphinium variegatum ssp. variegatum	royal larkspur	Native		
Perennial	Ranunculaceae	Ranunculus aquatilis	whitewater crowfoot	Native		
Annual	Ranunculaceae	Ranunculus hebecarpus	delicate buttercup	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
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Perennial	Ranunculaceae	Ranunculus muricatus	buttercup	Native		
Perennial	Ranunculaceae	Ranunculus occidentalis	western buttercup	Native		
Perennial	Rhamnaceae	Ceanothus cuneatus	wedgeleaf ceanothus	Native		
Perennial	Rhamnaceae	Ceanothus integerrimus	buck brush	Native		
Perennial	Rhamnaceae	Rhamnus crocea	redberry	Native		
Perennial	Rhamnaceae	Rhamnus ilicifolia	hollyleaf redberry	Native		
Perennial	Rhamnaceae	Rhamnus rubra	Sierra coffeeberry	Native		
Perennial	Rhamnaceae	Rhamnus tomentella ssp. tomentella	hoary coffeeberry	Native		
Annual	Rosaceae	Aphanes occidentalis	western lady's mantle	Native		
Perennial	Rosaceae	Cercocarpus betuloides var. betuloides	birch-leaf mountain-mahogany	Native		
Perennial	Rosaceae	Fragaria vesca	California strawberry	Native		
Perennial	Rosaceae	Heteromeles arbutifolia	Toyon	Native		
Perennial	Rosaceae	Potentilla glandulosa ssp. reflexa	sticky cinquefoil	Native		
Perennial	Rosaceae	Prunus dulcis	almond	Introduced		
Perennial	Rosaceae	Prunus subcordata	Sierra plum	Native		
Perennial	Rosaceae	Rosa californica	California wild rose	Native		
Perennial	Rosaceae	Rubus discolor	Himalayan blackberry	Introduced		
Perennial	Rosaceae	Rubus ursinis	California blackberry	Native		
Perennial	Rubiaceae	Cephalanthus occidentalis var. californicus	buttonbush	Native		
Annual	Rubiaceae	Galium aparine	goose grass	Native		
Annual	Rubiaceae	Galium parisiense	wall bed straw	Introduced		
Annual	Rubiaceae	Galium porrigens var. tenue	climbing bedstraw	Native		
Annual	Rubiaceae	Sherardia arvensis	field madder	Introduced		
Perennial	Salicaceae	Populus fremontii ssp. fremontii	cottonwood	Native		
Perennial	Salicaceae	Salix exiqua	narrow leaf willow	Native		
Perennial	Salicaceae	Salix gooddingii	Gooding's willow	Native		
Perennial	Salicaceae	Salix laevigata	red willow	Native		
Perennial	Salicaceae	Salix lasiolepis	arroyo willow	Native		
Perennial	Salicaceae	Salix lucida ssp. lasiandra	yellow willow	Native		
Perennial	Santalaceae	Comandra umbellata ssp. californica	bastard toadflax	Native		
Perennial	Saxifragaceae	Darmera peltata	Indian rhubarb	Native		
Perennial	Saxifragaceae	Lithophragma bolanderi	Bolander's woodland star	Native		
Annual	Saxifragaceae	Saxifraga californica	California saxifrage	Native		
Perennial	Saxifragaceae	Saxifraga integrifolia	smooth-leaf saxifrage	Native		

Habit	Family	Scientific Name	Common Name	Origin	Status	
					State/Fed/CNPS	CalEPPC / State
Annual	Scrophulariaceae	Castilleja affinis ssp. affinis	Indian paintbrush	Native		
Annual	Scrophulariaceae	Castilleja attenuata	valley tassels	Native		
Annual	Scrophulariaceae	Castilleja campestris	vernal pool Indian paintbrush	Native		
Annual	Scrophulariaceae	Castilleja lacera	cutleaf Indian paint-brush	Native		
Annual	Scrophulariaceae	Collinsia heterophylla	chinese houses	Native		
Annual	Scrophulariaceae	Collinsia parviflora	blue-eyed mary	Native		
Annual	Scrophulariaceae	Collinsia sparsiflora var. sparsiflora	few flowered collinsia	Native		
Perennial	Scrophulariaceae	Keckiella breviflora var. glabrisepala	hairless gaping keckiella	Native		
Perennial	Scrophulariaceae	Mimulus aurantiacus	island monkeyflower	Native		
Annual	Scrophulariaceae	Mimulus douglasii	purple mouse-ears	Native		
Annual	Scrophulariaceae	Mimulus glaucescens	shield-bracted monkey flower	Native	-- / -- / 4 RED 113	
Annual	Scrophulariaceae	Mimulus guttatus	seep monkeyflower	Native		
Annual	Scrophulariaceae	Mimulus torreyi	Torrey's monkeyflower	Native		
Perennial	Scrophulariaceae	Penstemon heterophyllus var. heterophyllus	foothill penstemmon	Native		
Perennial	Scrophulariaceae	Penstemon heterophyllus var. purdyi	Purdy's foothill penstemon	Native		
Annual	Scrophulariaceae	Tonella tenella	small-flowered tonella	Native		
Annual	Scrophulariaceae	Triphysaria eriantha	johnny-tuck	Native		
Perennial	Scrophulariaceae	Verbascum blattaria	moth mullein	Introduced		
Perennial	Scrophulariaceae	Verbascum thapsus	common mullein	Introduced		B / --
Annual	Scrophulariaceae	Veronica peregrina ssp. xalapensis	purslane speedwell	Native		
Perennial	Selaginellaceae	Selaginella hansenii	Hansen's spike-moss	Native		
Perennial	Simaroubaceae	Ailanthus altissima	tree-of-heaven	Introduced		A-2 / --
Perennial	Solanaceae	Solanum parishii	Parish's nightshade	Native		
Perennial	Taxodiaceae	Sequoia sempervirens	coast redwood	Ornamental		
Perennial	Thyphaceae	Typha domingensis	cattail	Native		
Perennial	Thyphaceae	Typha latifolia	broad leaf cattail	Native		
Annual	Valerianaceae	Plectritis ciliosa ssp. ciliosa	long-spurred plectritis	Native		
Annual	Valerianaceae	Plectritis ciliosa ssp. insignis	showy plectritis	Native		
Perennial	Violaceae	Viola pedunculata	California golden violet	Native		
Perennial	Visaceae	Phoradendron villosum	oak mistletoe	Native		
Perennial	Vitaceae	Vitis californica	California grape	Native		
Annual	Zygophyllaceae	Tribulus terrestris	puncture-vine	Introduced		-- / C

Species listed in Table 4 are sorted by Family and Scientific Name.

Citations

- CalFlora: Information on California plants for education, research and conservation. [web application]. 2000. Berkeley, California: The CalFlora Database [a non-profit organization]. Available: <http://www.calflora.org/>. [Accessed: February - August, 2002]
- California Department of Fish and Game, Natural Diversity Database. January, 2002. Special Vascular Plants, Bryophytes, and Lichens List. Biannual publication, Mimeo. 141 pp.
- California Department of Food and Agriculture. ENCYCLOWEEDIA. In Cooperation with: Non-Cropland Weed Group of the UC Cooperative Extension Service, in the Weed Science Program, Department of Vegetable Crops, University of California, Davis, CA 95616. Available: <http://pi.cdfa.ca.gov/weedinfo/> [Accessed: February - August, 2002]
- Hickman, J.C. (ed.) 1993. The Jepson Manual: Higher Plants of California. University of California Press, Berkeley, CA.
- Holland, R.F. 1986. *Preliminary Description of the Terrestrial Natural Communities of California*. California Department of Fish and Game, Sacramento, CA.
- Nakamura, Gary and Julie Kierstead Nelson (eds.). 2001. Illustrated Field Guide to Selected Rare Plants of Northern California. University of California Agricultural & Natural Resources Publication 3395. Oakland, CA.
- Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society. Sacramento, CA.

Appendix A

CHICO QUADRANGLE

RICHARDSON SPRINGS QUADRANGLE

PARADISE WEST QUADRANGLE

Appendix B

Appendix C

Plate 1a. Rose mallow (*Hibiscus lasiocarpus*)



Photo by Kristiaan Stuart

Plate 1b. Rose mallow (*Hibiscus lasiocarpus*)



Photo by Kristiaan Stuart

Plate 2. Humboldt Lily (*Lilium humboldtii* ssp. *humboldtii*)



Photo by Kristiaan Stuart

Plate 3. Shield-bracted Monkeyflower in fruit (*Mimulus glaucescens*)



Photo by Steve Schoenig (used by permission)

Plate 4. Bidwell's Knotweed (*Polygonum bidwelliae*)



Photo by Kristiaan Stuart

Plate 5. California Beaked-Rush (*Rhynchospora californica*)



Photo by Kristiaan Stuart

Plate 6a. Butte County Checkerbloom (*Sidalcea robusta*)



Photo by Kristiaan Stuart

Plate 6b. Butte County Checkerbloom Foliage (*Sidalcea robusta*)



Photo by Kristiaan Stuart

Plate 6c. Butte County Checkerbloom Fruits (*Sidalcea robusta*)



Photo by Kristiaan Stuart

Appendix D