

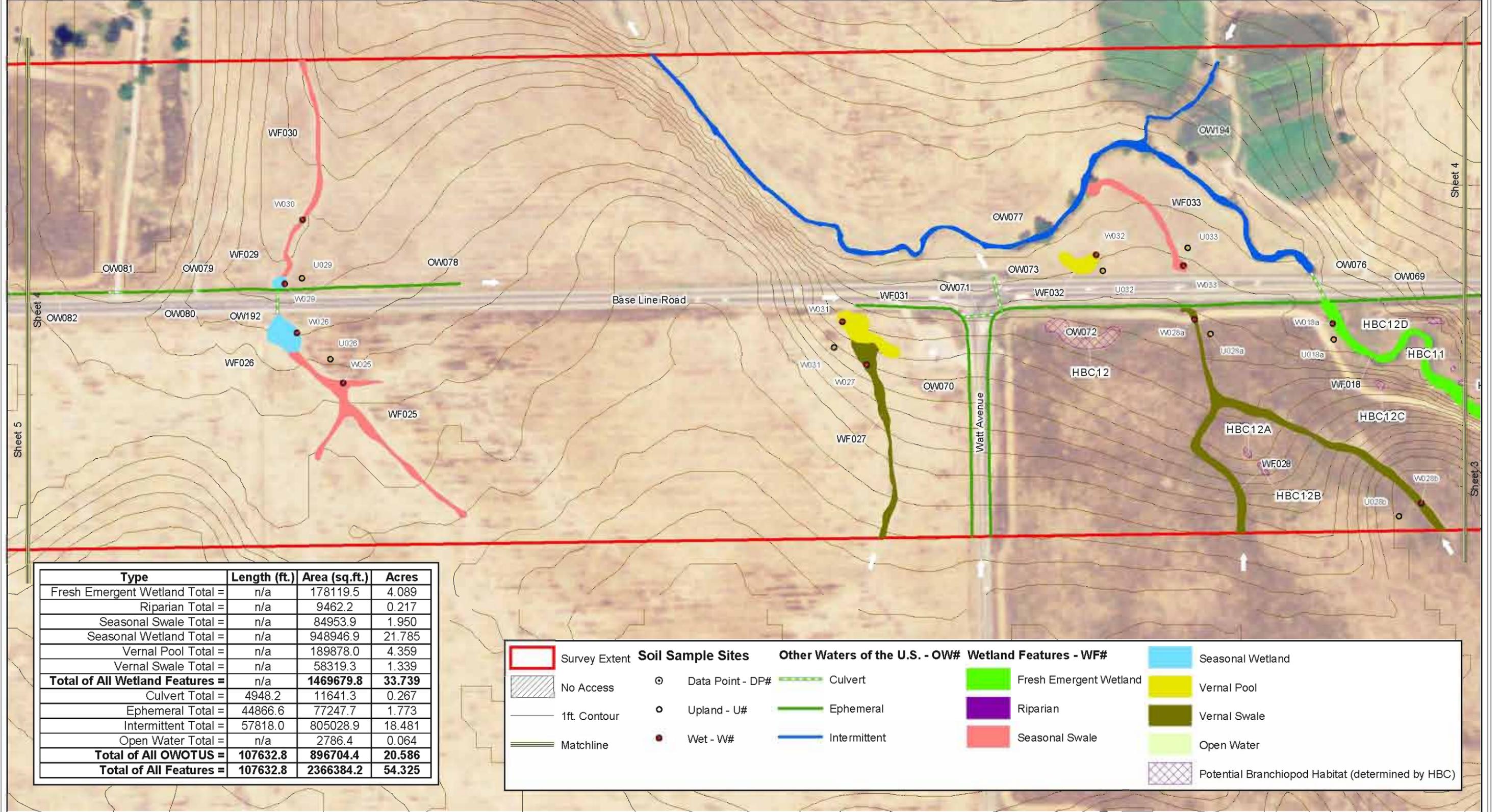
Survey Extent	<b>Soil Sample Sites</b>	<b>Other Waters of the U.S. - OW#</b>	<b>Wetland Features - WF#</b>	Seasonal Wetland
No Access	Data Point - DP#	Culvert	Fresh Emergent Wetland	Vernal Pool
1ft. Contour	Upland - U#	Ephemeral	Riparian	Vernal Swale
Matchline	Wet - W#	Intermittent	Seasonal Swale	Open Water
				Potential Branchiopod Habitat (determined by HBC)

Type	Length (ft.)	Area (sq.ft.)	Acres
Fresh Emergent Wetland Total =	n/a	178119.5	4.089
Riparian Total =	n/a	9462.2	0.217
Seasonal Swale Total =	n/a	84953.9	1.950
Seasonal Wetland Total =	n/a	948946.9	21.785
Vernal Pool Total =	n/a	189878.0	4.359
Vernal Swale Total =	n/a	58319.3	1.339
<b>Total of All Wetland Features =</b>	<b>n/a</b>	<b>1469679.8</b>	<b>33.739</b>
Culvert Total =	4948.2	11641.3	0.267
Ephemeral Total =	44866.6	77247.7	1.773
Intermittent Total =	57818.0	805028.9	18.481
Open Water Total =	n/a	2786.4	0.064
<b>Total of All OWOTUS =</b>	<b>107632.8</b>	<b>896704.4</b>	<b>20.586</b>
<b>Total of All Features =</b>	<b>107632.8</b>	<b>2366384.2</b>	<b>54.325</b>



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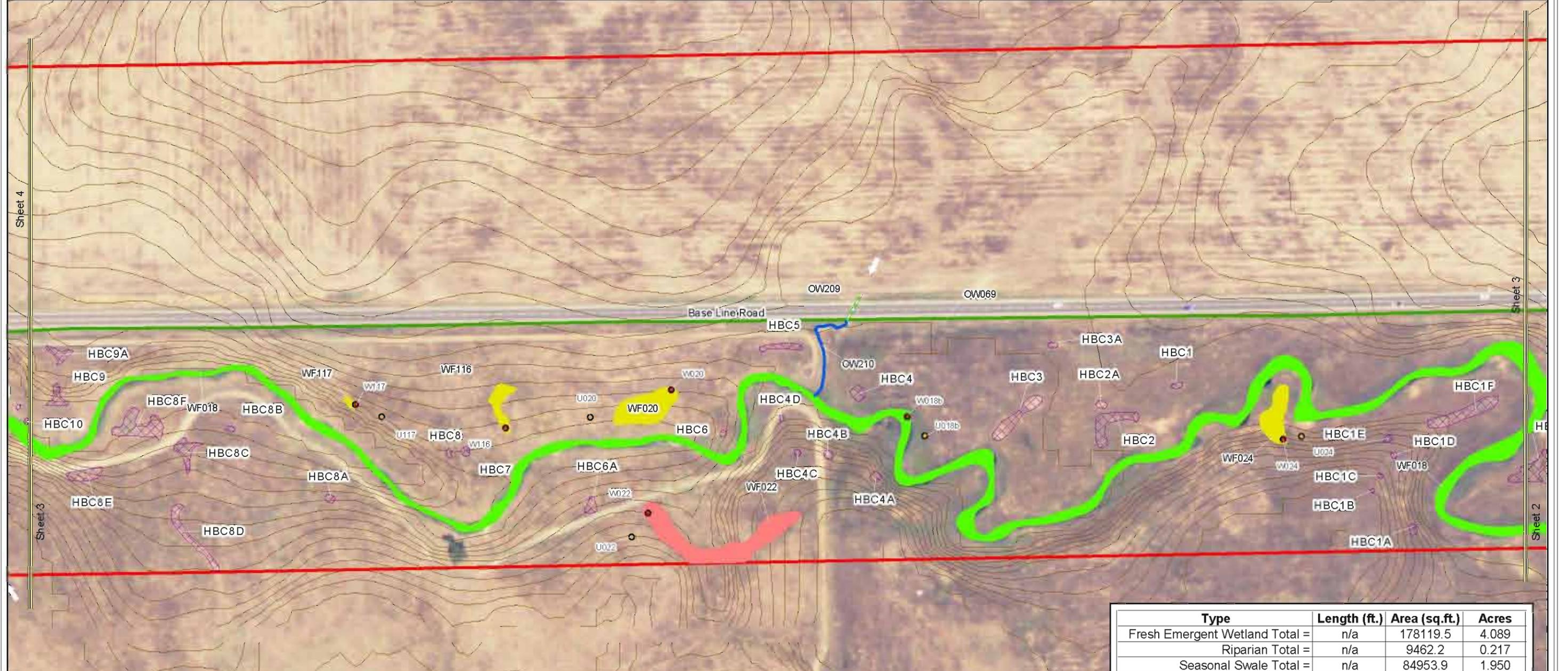
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Survey Extent	Data Point - DP#	Culvert	Other Waters of the U.S. - OW#	Wetland Features - WF#	Seasonal Wetland
No Access	Upland - U#	Ephemeral	Intermittent	Fresh Emergent Wetland	Vernal Pool
1ft. Contour	Wet - W#	Matchline		Riparian	Vernal Swale
Matchline				Seasonal Swale	Open Water
					Potential Branchiopod Habitat (determined by HBC)



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No Access	Data Point - DP#	Culvert	Fresh Emergent Wetland	Vernal Pool
1ft. Contour	Upland - U#	Ephemeral	Riparian	Vernal Swale
Matchline	Wet - W#	Intermittent	Seasonal Swale	Open Water
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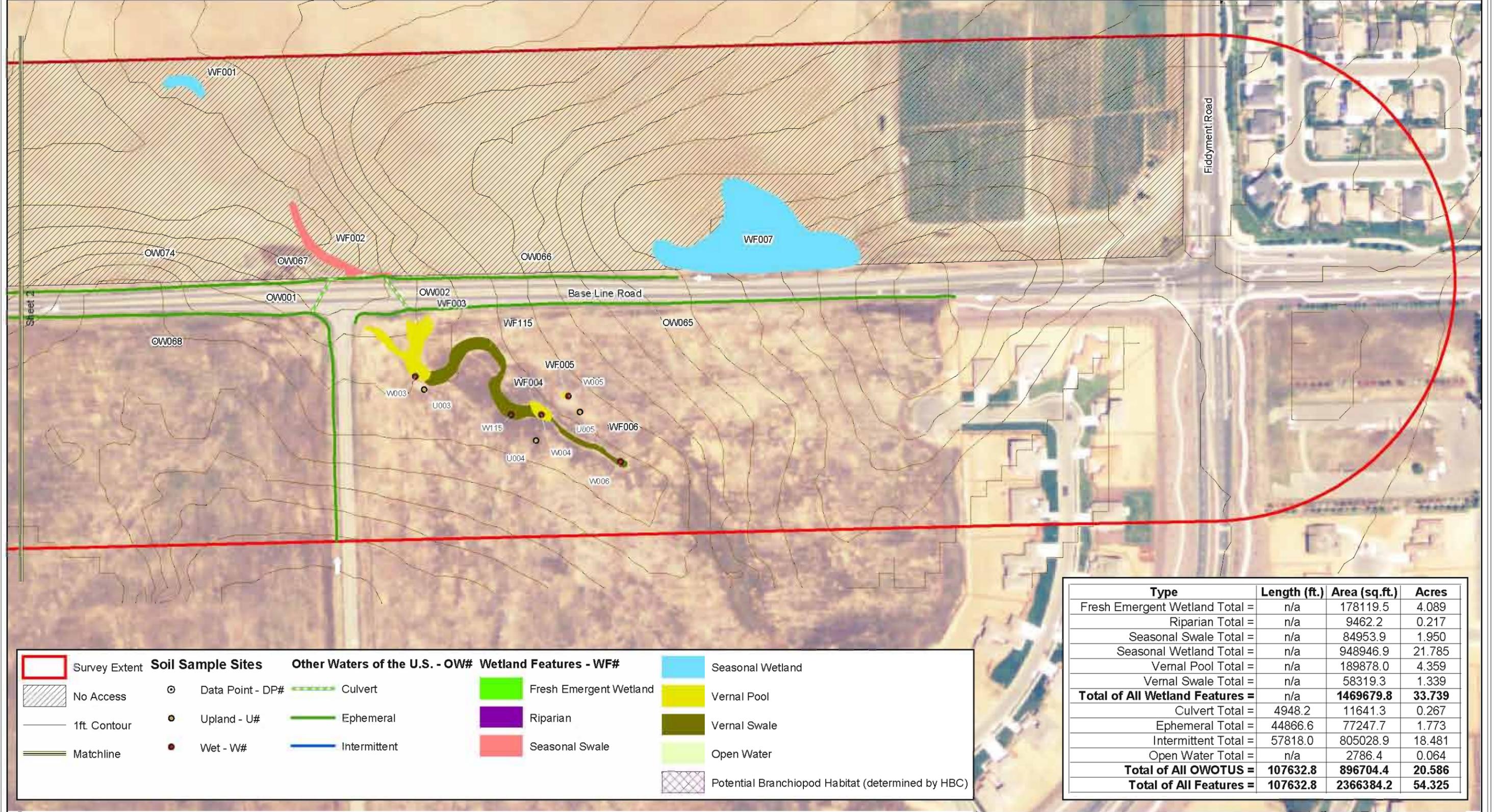
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No Access	Data Point - DP#	Culvert	Fresh Emergent Wetland	Vernal Pool
1ft. Contour	Upland - U#	Ephemeral	Riparian	Vernal Swale
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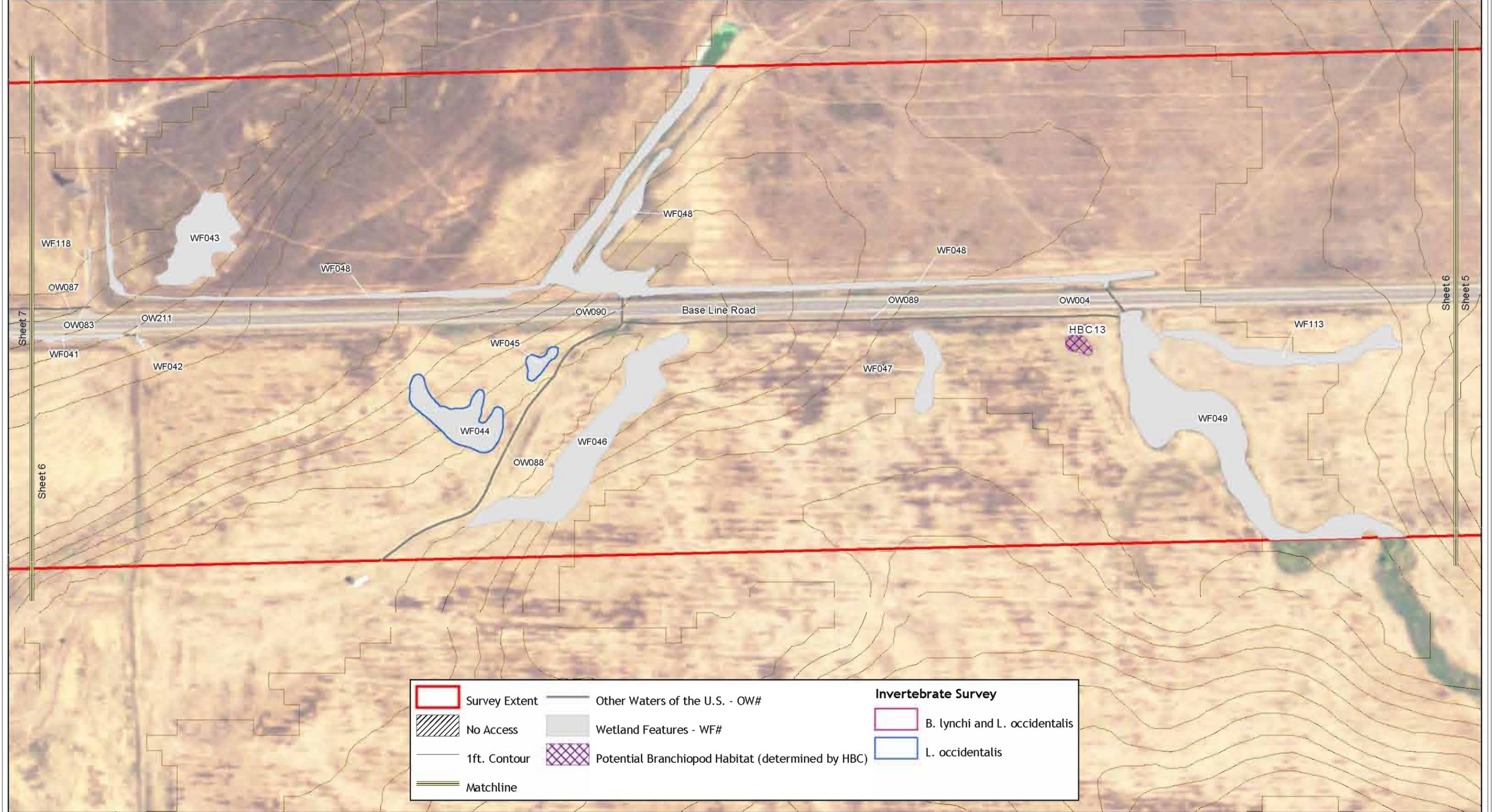
**Attachment B**  
2007-08 Wet Season Invertebrate Sampling Results Maps



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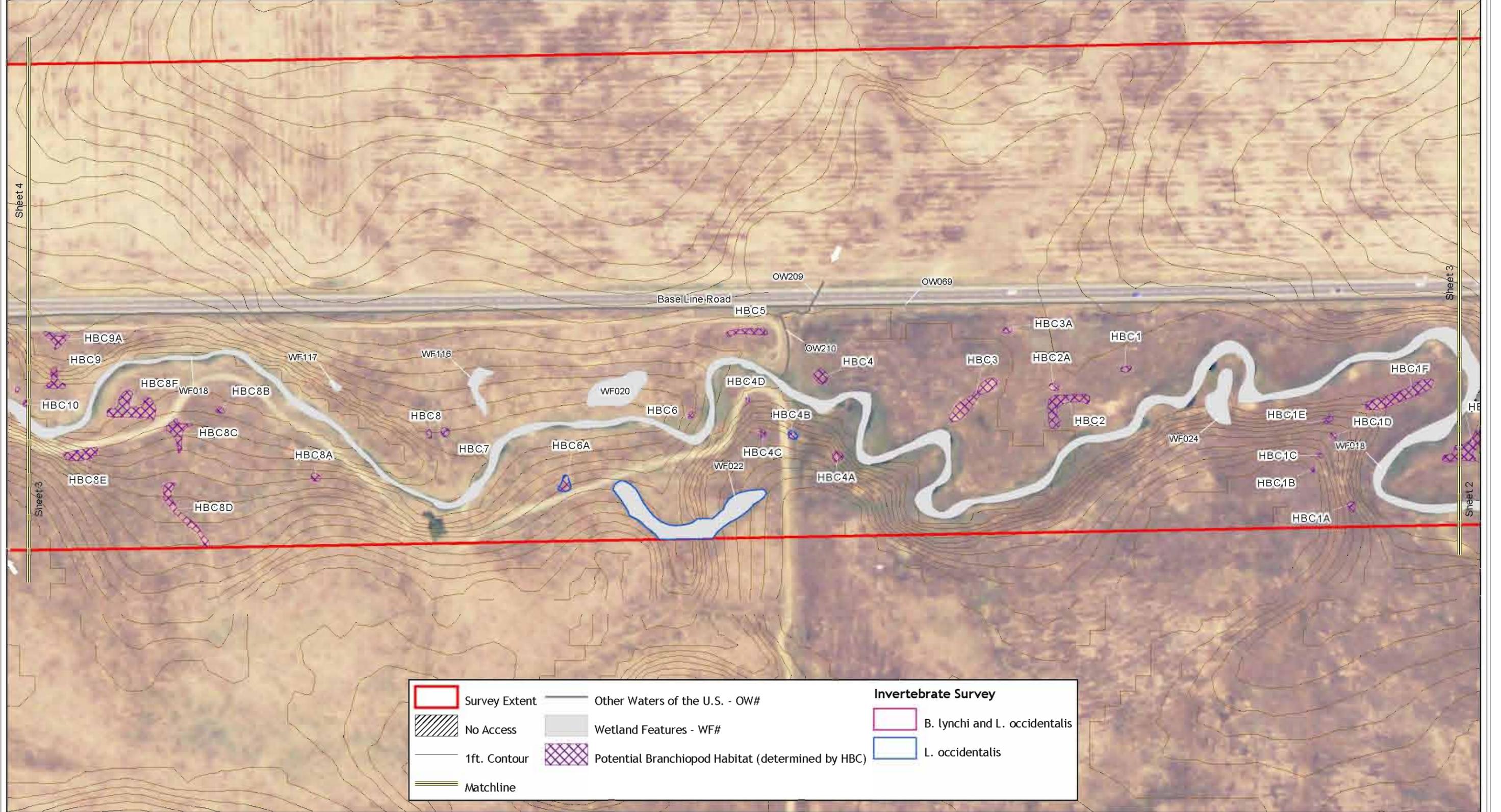


**GALLAWAY**  
CONSULTING, INC.



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	Survey Extent		Other Waters of the U.S. - OW#	<b>Invertebrate Survey</b>	
	No Access		Wetland Features - WF#		B. lynchi and L. occidentalis
	1ft. Contour		Potential Branchiopod Habitat (determined by HBC)		L. occidentalis
	Matchline				



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# Appendix A

## USFWS Approval to Conduct Surveys

**Trish Ladd**

**From:** Christy Dawson  
**Sent:** Tuesday, November 20, 2007 10:43 AM  
**To:** Jody Gallaway; Trish Ladd  
**Subject:** FW: Wet season brachiopod authorization for [REDACTED] and the PG&E 123 site

Christy Dawson  
Project Manager/Senior Biologist  
Gallaway Consulting, Inc.  
117 Meyers Street, Suite 110  
Chico, CA 95928  
Phone: 530.343.8327  
Cell: 530.864.4874  
Fax: 530.343.8312  
christy@gallawayconsulting.net

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**From:** Michelle\_Tovar@fws.gov [mailto:Michelle\_Tovar@fws.gov]  
**Sent:** Monday, November 19, 2007 4:46 PM  
**To:** Christy Dawson  
**Cc:** Jana\_Milliken@fws.gov; David\_Kelly@fws.gov; [REDACTED]  
**Subject:** Wet season brachiopod authorization for [REDACTED] and the PG&E 123 site

Ms. Christy Dawson,

By this email message, you are authorized to conduct wet-season surveys of listed vernal pool crustaceans per the conditions of permit TE-049693-0, at the [REDACTED] and the PG&E site located in Butte, Sacramento, Placer and Sutter Counties, California, as specified in your November 15, 2007 electronic message to our office. **Please note:** that the wet season is fast approaching and we recommend surveyors be out to the site during the first inundation of pools to ensure surveys are done according to the guidelines.

[REDACTED]

by rural residential, agricultural buildings, agricultural fields, and open land. Sampling is proposed in approximately 140 pools/swales mainly occurring along the western portion of the site in which the property owners have proposed to establish a mitigation bank.

[REDACTED] The proposed project involves development of the northern portion of the property and the southern portion of the property will be preserved and utilized for on-site mitigation. Sampling is proposed for approximately 400 vernal pools/swales and 46 seasonal wetlands/swales.

The PG&E Line 123 / Line 407 (phase 1) / Metro Air Park Distribution Feeder Main site located in Sacramento, Sutter and Placer counties. The survey area for the project encompasses an approximately 1811.2 acres corridor of rural, urban, and developed land in portions of Verona, Rio Linda, Roseville, Citrus Heights, Taylor Monument, and Pleasant Grove. Sampling is proposed for approximately 91 wetland features.

Please remember to have all biologists carry a copy of their permit while doing the work, and to follow the terms and conditions of the permit and the survey protocol, including the reporting requirements. Please include the recovery permit numbers and all persons involved in the reports of the results of surveys, and the date of this

authorization, to help ensure that we correctly record the fulfillment of the reporting requirement under this authorization.

We appreciate that you send separate copies of the report(s) at the time of any formal or informal consultation under section 7 of the Endangered Species Act with the Fish and Wildlife Service. Please let us know if the surveys are not performed as authorized, or if they are done by a different permittee under a separate authorization. Also include a summary of what surveys were authorized, who was authorized, when the surveys were done, and who did the surveys in your annual report for each recovery permit involved with this survey authorization.

Sincerely,  
Michelle Tovar

Michelle Tovar  
Fish & Wildlife Biologist  
Endangered Species Division  
U.S. Fish & Wildlife Service  
2800 Cottage Way, Suite W2605  
Sacramento, Ca 95825-3901  
(916)-414-6646

# Appendix B

USFWS Permit



DEPARTMENT OF THE INTERIOR  
U.S. FISH AND WILDLIFE SERVICE

3-201  
(1/97)

**FEDERAL FISH AND WILDLIFE PERMIT**

1. PERMITTEE

JODY M. GALLAWAY  
115 MEYERS STREET SUITE 120  
CHICO, CA 95928  
U.S.A.

2. AUTHORITY-STATUTES  
16 USC 1539(a)  
16 USC 1533(d)

REGULATIONS (Attached)  
50 CFR 17.22  
50 CFR 17.32

50 CFR 13

3. NUMBER  
**TE049693-1** AMENDMENT

4. RENEWABLE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	5. MAY COPY <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
----------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

6. EFFECTIVE 12/11/2006	7. EXPIRES 08/17/2009
----------------------------	--------------------------

8. NAME AND TITLE OF PRINCIPAL OFFICER (if #1 is a business)

9. TYPE OF PERMIT  
THREATENED AND ENDANGERED SPECIES

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED  
ON LANDS SPECIFIED WITHIN THE ATTACHED SPECIAL TERMS AND CONDITIONS

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. Further conditions of authorization are contained in the attached Special Terms and Conditions.

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS  
ANNUAL REPORT DUE: 1/31

ISSUED BY  
*Angela Belluomini*

TITLE  
ENDANGERED SPECIES PROGRAM MANAGER

DATE  
12/11/2006

Page 1 of 6  
TE-049693-1

### SPECIAL TERMS AND CONDITIONS

Jody M. Gallaway

1. This permit was previously issued on August 18, 2005. The terms and conditions set forth in that permit are hereby superseded by this amendment.
2. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the General Conditions for Native Endangered and Threatened Wildlife Species Permits," 50 CFR Part 13, 50 CFR 17.22 (endangered wildlife), and/or 50 CFR 17.32 (threatened wildlife), as applicable (copies attached). In addition, the permittee must have all other applicable State and Federal permits prior to the commencement of activities authorized by this permit.
3. The permittee is authorized to take (harass by survey and collect and sacrifice) the Conservancy fairy shrimp (*Branchinecta conservatio*), the longhorn fairy shrimp (*Branchinecta longiantenna*), the vernal pool fairy shrimp (*Branchinecta lynchi*), and the vernal pool tadpole shrimp (*Lepidurus packardii*) in conjunction with surveys for the purpose of enhancing their survival, as specified in the permittee's October 4, 2006, permit request, in accordance with the conditions stated below.
4. Permitted activities are restricted to the following geographic areas in California:

Butte, Glenn, Tehama, Shasta, Sacramento, Placer, and Sutter Counties.

Proposals to conduct sampling activities for the above listed species shall be submitted in writing to the Recovery Permit Coordinator at the U.S. Fish and Wildlife Service's (Service) Sacramento Fish and Wildlife Office (SFWO), 2800 Cottage Way, W-2605, Sacramento, California 95825 (telephone: 916-414-6600; fax: 916-414-6710).

The proposals shall include, as appropriate: (a) an explanation of the purpose of the study and a clear description of methods, including the names of field personnel and the number and dates of surveys; (b) the number of vernal pools or number of acres proposed to be surveyed; (c) the number of individuals proposed to be collected; (d) the name of the individual who will be completing the soil processing and/or preliminary vernal pool branchiopod cyst identification; (e) a map (at a minimum, a 1:24,000 scale U.S. Geological Survey (USGS) topographical map) depicting the location of the survey site(s); (f) the assessor's parcel number (APN) for the site (if possible); and (g) geographic information system (GIS) data depicting the survey site or global positioning system (GPS) coordinates (if possible). Information may be submitted electronically if pre-arranged with the Recovery Permit Coordinator.

The permittee shall not commence activities authorized by this permit in a new area or in a previously authorized site at a new time until permission is received from the SFWO. If the permittee is denied authorization to survey at the requested location(s), including previously authorized sites, a request for reconsideration may be submitted to the

Page 2 of 6  
TE-049693-1

Endangered Species Program Manager, at the Service's California/Nevada Operations Office (CNO), 2800 Cottage Way, Room W-2606, Sacramento California, as provided in 50 CFR 13.29. The procedures specified in 50 CFR 13.29(b) must be followed.

5. Authorized individuals:

Only individuals on the attached List of Authorized Individuals (List) are authorized to conduct activities pursuant to this permit. The List, printed on Service letterhead, may identify special conditions or circumstances under which individuals are authorized to conduct activities and must be retained with these Special Terms and Conditions. Each named individual shall be responsible for compliance with the terms and conditions of this permit.

To request changes to the List, the permittee shall submit written requests to the Recovery Permit Coordinator at the SFWO. Two copies of the request shall be submitted at least 30 days prior to the requested effective date. The request shall be signed and dated by the permittee and include:

- a. The name of each individual to be appended to the List;
- b. The resume/qualifications statement of each person to be appended to the List, detailing their experience with each species and type of activity for which authorization is requested;
- c. The names and phone numbers of a minimum of two references; and
- d. The names of the individuals to be deleted from the List.

Note: This procedure is for personnel changes only. For requests to renew/amend this permit, a complete application must be submitted to the Endangered Species Program Manager, at the CNO.

6. Taking of the Conservancy fairy shrimp, the longhorn fairy shrimp, the vernal pool fairy shrimp, and the vernal pool tadpole shrimp (hereafter collectively referred to as vernal pool branchiopods):

The permittee is authorized to harass by survey and collect voucher specimens of the vernal pool branchiopods (both hatched individuals and eggs) within the geographic boundaries specified above, and the time limitation specified in the permit, provided that:

- a. The permittee must implement all of the actions included in the attached *Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods* (Guidelines), dated April 19, 1996. The Guidelines will be updated periodically and the permittee must follow the most recent Guidelines after receipt of such.

Page 3 of 6  
TE-049693-1

Any deviation from these Guidelines shall first be approved verbally or in writing by the SFWO.

- b. As specified in the Guidelines, sampling/collecting of hatched individuals or eggs is not authorized at any specific location until the permittee obtains approval from the SFWO.

Note: The sampling and preservation of voucher specimens from locations that have been previously surveyed will not be authorized, except in cases where the adequacy of the earlier survey work is in doubt or otherwise should be repeated as determined by the Service.

- c. The number of voucher specimens authorized to be collected and preserved is limited as follows:

No more than 20 hatched individuals of each species from each vernal pool (or swale) per sampling visit or less than 10 percent of the subpopulation in the vernal pool (or swale) during the sampling visit, whichever is the lesser amount.

- d. The permittee is authorized to collect an unquantifiable number of vernal pool branchiopod eggs contained within soil samples taken following the most recent Guidelines. The total amount of soil samples each calendar year shall not exceed a ratio of 1 liter per each 10 square meters (approximately 1 percent at 1 centimeter deep) of estimated vernal pool surface area surveyed.

- e. The permittee shall provide the Recovery Permit Coordinator at the SFWO with a 90-day report containing all of the survey information specified in the Guidelines no more than 90 calendar days after completing the last field visit of the season at each project site. Use the appropriate Vernal Pool Data Sheet, where applicable, as the reporting form. The following statement shall be signed by all surveyors: "I certify that the information in this survey report and attached exhibits fully and accurately represents my work." The date of signature and the surveyor's permit number shall be included. Information may be submitted electronically if pre-arranged with the Recovery Permit Coordinator.

- f. The permittee shall disinfect sampling and field gear as follows:

- i. Remove mud, snails, algae, and other debris from nets, traps, boots, vehicle tires, and all other surfaces. Rinse cleaned items with sterilized (e.g., boiled or treated) water before leaving each survey site.
- ii. Boots, nets, traps, etc. must be scrubbed with 70 percent alcohol (i.e., isopropyl or ethanol) or 3 to 6 percent sodium hypochlorite solution and



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TE-049693-1

Branch, 1416 Ninth Street, Sacramento, California 95814 (telephone: 916-653-4875).

- c. The appropriate parts of any dead specimen shall be preserved in accordance with standard museum practices. Before expiration of the permit, all preserved specimens will be properly labeled and deposited with one of the designated depositories. The permittee shall supply the depository with a copy of this permit to validate that the specimens supplied to the museum were taken pursuant to a permit.
  8. The permittee is authorized to salvage all vernal pool branchiopod carcasses to be provided to one of the designated depositories.
  9. Designated depositories:

The California Academy of Sciences, Golden Gate Park, San Francisco, California; the Los Angeles County Museum of Natural History, Los Angeles, California; the Bohart Museum, University of California, Davis, California; the SFWO; or any other institution designated in writing by the SFWO.
  10. California Natural Diversity Database forms shall be completed, as appropriate, for each listed species addressed herein and submitted to the Wildlife Habitat Data Analysis Branch, CDFG - WHDAB, 1807 13th Street, Suite 202, Sacramento, California 95814 (also accessible online at: <http://www.dfg.ca.gov/whdab/html/animals.html>), with copies submitted to the SFWO. Copies of the form can be obtained from the CDFG at the above address (telephone: 916-324-3812). Each form sent to the CDFG shall have an accompanying 1:24,000 scale USGS map of the site (or an exact scale photocopy of the appropriate portion(s) of the map).
- All reports or other documents that include information gathered under the authority of this permit (e.g., reports prepared by consulting firms for their clients) shall reference this permit. Copies of such documents shall be provided to the SFWO upon their completion. Draft documents, raw/field data, and other information resulting from work conducted under the authority of this permit shall be submitted to the Service upon request.
11. Annual reports:
    - a. An annual report of activities shall be submitted to the Recovery Permit Coordinator at the SFWO by January 31, following each year this permit is in effect. The report shall be in the following format: (i) an introduction section addressing reasons and objectives for taking the species; (ii) a methodology section addressing data collection and analysis procedures; (iii) a results section that provides the data collected, including the number of individuals incidentally killed (include dates, locations, circumstances of take, and depository receiving the preserved specimens), and information on any other federally listed species

detected while conducting activities authorized under this permit; and (iv) a conclusion section that specifically provides recommendations for recovery of the species. If no activities took place over the course of a year, indication of such shall be submitted as an annual report. Information may be submitted electronically if pre-arranged with the Recovery Permit Coordinator.

- b. The 90-day survey reports prepared in accordance with the Guidelines may be submitted as the annual report, and any recovery recommendations can be attached. If the 90-day reports have been previously submitted to meet the required 90-day deadline for submission of reports for each project site, the permittee shall submit as an annual report a letter that includes any recovery recommendations, the date that the 90-day report was submitted, and its exact title.

- 12. Failure to comply with reporting requirements may result in the non-renewal or suspension/revocation of this permit.

12/11/06  
Date

Linda Belluomini  
for Endangered Species Program Manager



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1888



### LIST OF AUTHORIZED INDIVIDUALS

TE-049693-1.1

1. Individual authorized to independently conduct activities pursuant to this permit:

Jody M. Gallaway, Christy Dawson, and Trish Ladd.

Supervised individuals may conduct activities pursuant to this permit only under the direct, on-site supervision of an independently authorized individual listed above.

03 March 2008  
Date

E. Tattersall  
Eric Tattersall, Acting Division Chief  
Endangered Species Program

This List is only valid if it is dated on or after the permit issuance date.

# Appendix C

USFWS Vernal Pool Data Sheets

**U.S. Fish and Wildlife Service Vernal Pool Data Sheet**  
**Wet Season Survey**

Note: Please fill out the required information completely for each site visit.

This form is being submitted to serve as part of the 90-day report: \_\_\_ no X yes

Required color slides and/or photographs for the project site are included: \_\_\_ no X yes

Date: 2/8/08 Time: 13:00 County: Sutter Quad: Pleasant Grove

Collector(s): J. Gallaway, T. Ladd Permit #: TE-049693-1

Site/Project Name: PG&E Line 407 Pool #: 91

Township: 10N Range: 5E Section: 1

38°45'03.75"N lat. / 121°29'33.8"W long.

Temperature: Water: 13 °C Air: 18 °C

Pool Depth:	Surface Area:
at time of sampling: <u>32</u> cm	at time of sampling: <u>15</u> m x <u>6</u> m
estimated maximum: <u>32</u> cm	estimated maximum: <u>15</u> m x <u>6</u> m

Habitat Condition: (circle where appropriate)

- <u>undisturbed</u>	disturbed:	tire tracks	garbage	discing/plowing	
- <u>ungrazed</u>	grazed:	cattle	horses	sheep	other _____
		light		moderate	heavy

- land use of habitat: *Vacant area. Located between raised gravel road and railroad track.*

Notes:

WF 92 had surface connection to WF 91 along Riego Road. Both WF 91 and 92 were completely dry during sampling on 2/22/08.

**U.S. Fish and Wildlife Service Vernal Pool Data Sheet**  
**Wet Season Survey**

Note: Please fill out the required information completely for each site visit.

Species Observations: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: *Branchinecta lynchi*- reproductive males and females (10's),  
*Lindleriella occidentalis*- reproductive males and females (100's)  
 (note reproductive status)

Notostracans: N/A  
 (note reproductive status)

Species Observations (Optional):

Cladocerans:	yes	no
Conchostracans:	yes	no
Copepods:	yes	no
Ostracods	yes	no
Fish	yes	no
Frogs	yes	no
Salamanders	yes	no
Waterfowl	yes	no
Other (specify) _____		

Insects: (adult or larvae)		
Anisoptera:	yes	no
Zygoptera:	yes	no
Hydrophilidae:	yes	no
Dytiscidae:	yes	no
Corixidae:	yes	no
Notonectidae:	yes	no
Belostomatidae:	yes	no
Other (specify) _____		

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

<u>Species</u>	<u># Individuals</u>	<u>Accession/Catalog #</u>	<u>Pool #</u>
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N/A

**U.S. Fish and Wildlife Service Vernal Pool Data Sheet  
Wet Season Survey**

Note: Please fill out the required information completely for each site visit.

This form is being submitted to serve as part of the 90-day report: \_\_\_ no X yes

Required color slides and/or photographs for the project site are included: \_\_\_ no X yes

Date: 2/8/08 Time: 13:00 County: Sutter Quad: Pleasant Grove

Collector(s): J. Gallaway, T. Ladd Permit #: TE-049693-1

Site/Project Name: PG&E Line 407 Pool #: 92

Township: 10N Range: 5E Section: 1

38°45'03.75"N lat. / 121°29'33.8"W long.

Temperature: Water: 13 °C Air: 18 °C

Pool Depth:	Surface Area:
at time of sampling: <u>32</u> cm	at time of sampling: <u>15</u> m x <u>6</u> m
estimated maximum: <u>32</u> cm	estimated maximum: <u>15</u> m x <u>6</u> m

Habitat Condition: (circle where appropriate)

- <u>undisturbed</u>	disturbed:	tire tracks	garbage	discing/plowing	
- <u>ungrazed</u>	grazed:	cattle	horses	sheep	other _____
		light	moderate	heavy	

- land use of habitat: *Vacant area. Located between raised gravel road and railroad track.*

Notes:

WF 92 had surface connection to WF 91 along Riego Road. Both WF 91 and 92 were completely dry during sampling on 2/22/08.

**U.S. Fish and Wildlife Service Vernal Pool Data Sheet**  
**Wet Season Survey**

Note: Please fill out the required information completely for each site visit.

Species Observations: state none or estimate # of individuals present in terms of an order of magnitude (e.g., 10's, 100's, 1000's)

Anostracans: *Branchinecta lynchi*- reproductive males and females (10's),  
*Lindleriella occidentalis*- reproductive males and females (100's)  
 (note reproductive status)

Notostracans: N/A  
 (note reproductive status)

Species Observations (Optional):

Cladocerans:    yes    no  
 Conchostracans: yes    no  
 Copepods:       yes    no  
 Ostracods       yes    no  
 Fish             yes    no  
 Frogs            yes    no  
 Salamanders    yes    no  
 Waterfowl       yes    no  
 Other (specify) \_\_\_\_\_

Insects: (adult or larvae)  
 Anisoptera:       yes    no  
 Zygoptera:        yes    no  
 Hydrophilidae:   yes    no  
 Dytiscidae:       yes    no  
 Corixidae:        yes    no  
 Notonectidae:    yes    no  
 Belostomatidae: yes    no  
 Other (specify) \_\_\_\_\_

Voucher Specimens

Specimens shall be preserved according to the standards of the institution in which they will be accessioned.

<u>Species</u>	<u># Individuals</u>	<u>Accession/Catalog #</u>	<u>Pool #</u>
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N/A

**Appendix D**  
Copy of CNDDDB Field Survey Forms

Mail to:  
California Natural Diversity Database  
Department of Fish and Game  
1807 13<sup>th</sup> Street, Suite 202  
Sacramento, CA 95811  
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 02/08/2008

Reset

### California Native Species Field Survey Form

Send Form

Scientific Name: Branchinecta lynchi

Common Name: Vernal pool fairy shrimp

Species Found?  Yes  No \_\_\_\_\_ If not, why? \_\_\_\_\_

Total No. Individuals 10's Subsequent Visit?  yes  no

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

Collection? If yes: N/A \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Gallaway Consulting, Inc.

Address: 117 Meyers Street Suite 110  
Chico, CA 95928

E-mail Address: trish@gallawayconsulting.net

Phone: (530) 343-8327

#### Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

#### Animal Information

100 50 \_\_\_\_\_  
# adults # juveniles # larvae # egg masses # unknown  
 breeding  wintering  burrow site  rookery  nesting  other

#### Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Sutter Landowner / Mgr.: unknown- permission aquired by Caltrans

Quad Name: Pleasant Grove Elevation: 40

T 10N R 5E Sec 1, \_\_\_\_\_ ¼ of \_\_\_\_\_ ¼, Meridian:  H  M  S Source of Coordinates (GPS, topo. map & type): USGS topo

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ ¼ of \_\_\_\_\_ ¼, Meridian:  H  M  S GPS Make & Model \_\_\_\_\_

**DATUM:** NAD27  NAD83  WGS84  Horizontal Accuracy \_\_\_\_\_ meters/feet

Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)

Coordinates: 38degrees 45'03.75"N lat / 121degrees 29'33.8"W long

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

Vacant area located between a raised gravel road with Steelhead Creek to the west, railroad tracks to the east and Riego Road bordering the north.

Plant species in wetland features: Eryngium castrense, Plagiobothrys stipitatus var. micranthus and Blennosperma nanum

Other rare taxa seen at THIS site on THIS date: Linderiella occidentalis  
(separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use: Railroad tracks, canal, residential housing with agricultural fields

Visible disturbances: Roadside trash in vernal pools

Threats: N/A

Comments: Found in two pools that connected during high precipitation events. Heavily vegetated with water depths averaging 32 cm, dried quickly following two weeks without rain in February 2008.

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

- Keyed (cite reference): Erickson & Belk
- Compared with specimen housed at: \_\_\_\_\_
- Compared with photo / drawing in: \_\_\_\_\_
- By another person (name): \_\_\_\_\_
- Other: \_\_\_\_\_

#### Photographs: (check one or more)

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

May we obtain duplicates at our expense? yes  no

**Appendix E**  
Copy of GCI Field Data Sheets  
*Only Available in Hard Copy*