

EXHIBIT E.1 – CREDIT EVALUATION

Credit Methodology and Projected Total Credits

The Bank is established to provide credits for several state and federally listed threatened or endangered species. Species credits to be provided at the Bank include:

- Vernal pool fairy shrimp (*Branchinecta lynchi*) (VPFS);
- Vernal pool tadpole shrimp (*Lepidurus packardii*) (VPTS);
- Conservancy fairy shrimp (*Branchinecta conservatio*) (CFS);
- California tiger salamander (*Ambystoma californiense*) (CTS);
- Swainson's Hawk (*Buteo swainsoni*) (SWHA); and
- Burrowing owl (*Athene cunicularia*) (BUOW).

In addition, Delta green ground beetle (*Elaphrus viridis*) (DGGB) has been documented on the Bank, and sale of uplands or Playa Pool wetlands may be used to offset impacts to this species or its habitat on a case by case basis upon approval by the USFWS.

The invertebrate species for which credits are authorized occur in the wetland habitats. Delta green ground beetle and California tiger salamander utilize the playa pools and an upland/wetland matrix during their life cycle. The raptor species utilize uplands areas for foraging, and the Swainson's hawk is known to have nested on site. To simplify crediting calculations and tracking, mitigation at the Bank will be at a 1:1 ratio for wetland and upland habitats. All acreage on the Bank is proposed for credits, except the drainage and fresh water marsh (totaling 2.412 ac), which does not directly contribute to species habitat, and acreage that occurs within existing easement alignments.

Upon initial approval of the Bank, credits were allocated upon submittal of a wetlands delineation. Subsequent to approval of the Conservation Bank Agreement (Agreement), the wetlands delineation was verified by the U.S. Army Corps of Engineers. The wetlands acreages increased, resulting in a corresponding decrease of the upland acreages. Table 1 depicts the adjustment to habitat acreages and total credit amounts, and Tables 2 & 3 break down the sub-habitats or acreages, outside existing easement areas, which support each species.

TABLE 1 – Habitat Acreages

Habitat	Verified Acreage ¹	Amendment #2 Authorized Credits ²	Acreage in the Bank Agreement	Initial Bank Credits ^{2,3}
Playa Pools	10.60	10.60	10.52	10.52
Vernal Pool/Swale Complex	125.24	120.80	96.50	92.55
Playa Wetlands	148.48	142.20	136.58	130.31
Other Wetlands	2.41	0.0	2.66	0.00
Uplands (within 0.7 mile of Playa Pools)	564.41	534.67	593.90	563.65
Uplands (outside of 0.7 mile of Playa Pools)	113.00	112.29	0.00	0.00
Total	964.14	920.563	964.14	797.03

1. Acreages are based upon the Corps verified wetlands delineation dated September 21, 2010 (Attached).

2. Credits are based on habitat acreage minus existing easements.

3. Initial Bank Credits are based upon the Bank Agreement and Amendment #1.

TABLE 2 – Wetlands Crediting

Credit Area	Total Ac	Excluded Ac ¹	Credit Acreage	VPFS/ VPTS	CFS	DGGB ²	CTS breeding
Playa Pools	10.60	0.0	10.60	X	X	X	X
Vernal Pool - Swales Complex	125.24	4.44	120.80	X			
Playa Wetlands	148.48	6.28	142.20	X			
Total Acres	284.32	10.71	273.61				

1 – Excluded areas are those which currently are encumbered by an existing easement.

2 – DGGB have been documented on site, but a crediting methodology has not been established by the USFWS.

The playa pool credits may be used to offset impacts for this species on a case by case basis.

Upland areas on the Bank are grasslands habitat, which supports CTS, burrowing owl, Swainson’s hawk foraging, and general avian use. CTS are generally considered to use uplands within 0.7 mile of the playa pools for dispersal and estivating habitat. This results in a total acreage of 534.67 acres of credits. Two wintering owls were observed within the bank area in 2007 (central and southern portions of the bank), one owl in 2011 (central). Burrowing owls move on average 0.3 to 0.5 mile from their burrow to forage during the nesting season. This equates to between 279 and 512 acres per pair of foraging range. The 512 fully overlaps the CTS uplands habitat. As of the date of approval of Amendment #2, 403.24 credits associated with CTS uplands have already been sold. The remaining 131.43 credits are available for both CTS and burrowing owl. The upland areas used by CTS and burrowing owl, as well as the remaining uplands on the bank, are considered suitable foraging habitat for Swainson’s hawk and general avian species. Credits for these species correspond to the applicable acreage, as depicted in Table 3.

TABLE 3 – Uplands Crediting

Credit Area	Total Ac	Excluded Ac ¹	Credits	CTS	BUOW	SWHA ²
Uplands (inside 0.7 mile radius)	564.41	29.74	534.67	X	X	X
Uplands (outside 0.7 mile radius)	113.00	0.71	112.29			X

1 – Excluded areas are those which currently are encumbered by an existing easement.

2 – SWHA foraging credits are only applicable for impacts to Valley Floor grasslands habitat as described in the Final Administrative Draft Solano HCP dated June 15, 2009, and shown in Exhibit C of Amendment #2, and not other agricultural areas.

Swainsons hawk nesting habitat credits may be made available based on confirmation of Swainsons hawk nesting activity during the same hawk nesting season as the credit sale or during the previous year’s breeding season. A nest is considered an active nest when it supports egg-laying and chick-rearing, not only courtship behavior or nest building. One nesting habitat credit would be allocated to one Swainsons hawk nest, and this would be a one-time sale. If two active nests are confirmed during the same breeding season, a second credit could become available. Credit availability will change to reflect current conditions and will be based on presence of active nests as defined above, not on the history of nesting on the site.

Credits for specific species may be deducted from any single Credit Area, or combination of Credit Areas (i.e., playa pools or other wetlands), to fulfill the mitigation required for a project acquiring credits. Credits sales will be tracked in the Sales Ledger (Exhibit E.2).

Credit Release

Wetlands

Wetlands credits serve both invertebrates and CTS breeding.

Invertebrates

Wetlands features serving as credits for invertebrates will achieve full release based upon the achievement of the following conditions:

- Execution of the Agreement;
- Recordation of the Conservation Easement; and
- Documentation of either: 1) vernal pool fairy shrimp or vernal pool tadpole shrimp within the playa wetlands by an authorized 10(a) approved surveyor, or 2) verification of the acreage documented in the wetlands delineation by the Army Corps of Engineers.

CTS Breeding

CTS breeding only occurs in Playa Pools. Availability of these credits to offset impacts to CTS breeding will be available upon execution of Amendment #2 to the Agreement, recording of the Amended Conservation Easement, and the following credit release schedule:

- Credit Release 1: 15% (Completed)
- Credit Release 2: 25% (Completed)
- Credit Release 3: 25% (Completed)

- Credit Release 4: 15% based upon
 - Completion of 2011/2012 surveys documenting suitable hydrology and larvae at a stage of development which indicates metamorphosis would be completed as described in the Exhibit D - Attachment B to the Agreement;
 - Submittal of the annual monitoring report as described in Exhibit D to the Agreement.
 - Implement year 1 monitoring of the Predator Management Measures for the Burke Ranch California Tiger Salamander Breeding Ponds as described in the Exhibit D - Attachment E of the Agreement.
- Credit Release 5: 20% based upon
 - Completion of three years (beginning winter 2011/2012) of surveys documenting suitable hydrology and larvae at a stage of development which indicates metamorphosis would be completed as described in the Exhibit D - Attachment B to the Agreement;
 - Submittal of the annual monitoring reports for each survey year as described in Exhibit D to the Agreement.
 - Implement three years monitoring of the Predator Management Measures for the Burke Ranch California Tiger Salamander Breeding Ponds as described in the Exhibit D - Attachment E of the Agreement.

Uplands

Uplands credits serve as CTS upland habitat, burrowing owl and Swainson's hawk foraging habitat.

CTS Upland Credits

CTS upland habitat was approved and fully released by the USFWS upon approval of the execution of the Bank Agreement, recordation of the Conservation Easement, and funding of the endowment. Approximately 75% of the CTS upland credits have been sold as of the date of approval of Amendment #2. The remaining credits are authorized by DFG to fulfill joint state and Federal Endangered Species Act compensation requirements upon execution of Amendment #2 to the Agreement, recording of the Amended Conservation Easement, and the following credit release schedule:

- Credit Release 1: 15% (Completed)
- Credit Release 2: 25% (Completed)
- Credit Release 3: 25% (Completed)
- Credit Release 4: 15% based upon
 - Completion of 2011/2012 surveys documenting suitable hydrology and larvae at a stage of development which indicates metamorphosis would be completed as described in the Exhibit D - Attachment B to the Agreement;
 - Submittal of the annual monitoring report as described in Exhibit D to the Agreement.
 - Implement year 1 monitoring of the Predator Management Measures for the Burke Ranch California Tiger Salamander Breeding Ponds as described in the Exhibit D - Attachment E of the Agreement.
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- Submittal of the annual monitoring reports for each survey year as described in Exhibit D to the Agreement.
- Implement three years monitoring of the Predator Management Measures for the Burke Ranch California Tiger Salamander Breeding Ponds as described in the Exhibit D - Attachment E of the Agreement.

Burrowing Owl Credits

Upland credits for burrowing owl will be full released upon the achievement of the following conditions:

- Execution of Amendment #2; and
- Recordation of the Amended Conservation Easement

Swainson's Hawk Credits

Upland credits for Swainson's hawk will be full released upon the achievement of the following conditions:

- Execution of Amendment #2; and
- Recordation of the Amended Conservation Easement

