

## 4.4 BIOLOGICAL RESOURCES

### 4.4.1 INTRODUCTION

This section updates information for biological resources and wetlands within or along the Phase 1 alignment that was presented in the FEIR and SEIR-1. The sources of updated information are the US Fish and Wildlife Service (USFWS), California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDDB), and field surveys.

### 4.4.2 ENVIRONMENTAL SETTING

The environmental setting presented in the FEIR, and as updated in the SEIR-1, for ruderal vegetation, central coast cotton-wood-sycamore riparian forest, and non-native grassland remains applicable in this SEIR-2. The environmental setting also remains applicable for central California coast steelhead (*Oncorhynchus mykiss*), fall-run/late-fall-run Chinook salmon (*Oncorhynchus tshawytscha*), California red-legged frog (*Rana aurora draytonii*), southwestern pond turtle (*Clemmys marmorata pallida*), western burrowing owl, Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), several bat species, alkali milkvetch (*Astragalus tener var. tener*), diamond-petaled California poppy (*Eschscholzia rhombipetala*), non-special-status raptors, and several swallow species. Please refer to subsections 4.4.2 in both the FEIR and SEIR-1 for the environmental setting discussions.

Notable changes to the environmental setting related to other special-status species and critical habitat and wetlands and waters of the US/State since certification of the FEIR and SEIR-1 are provided below.

#### 4.4.2.1 Special-Status Species and Critical Habitat

The FEIR presented special-status species lists obtained from the USFWS in February 2002 for the US Geological Survey (USGS) 7½-minute Calaveras, Milpitas, San Jose East, San Jose West, and Cupertino quadrangles. These quadrangles included the entire SVRTC. For the SEIR-1, updated lists were obtained in November 2006 for the USGS 7½-minute Milpitas, San Jose East, and San Jose West quadrangles, which included Phase 1. For this SEIR-2, updated lists were obtained in July 2010 for the same quadrangles (**Appendix E**). The only difference between the 2006 and 2010 lists is that the list for the SEIR-1 included the bald eagle as a threatened species. However, effective August 8, 2007, the USFWS removed the bald eagle from the list of threatened and endangered species for the lower 48 states.<sup>1</sup>

---

<sup>1</sup> Endangered and Threatened Wildlife and Plants; Removing the Bald Eagle in the Lower 48 States From the List of Endangered and Threatened Wildlife, 72 Federal Register 130, July 9, 2007. p. 37346.

In addition to the federal special-status species lists, an updated list from the CNDDDB was obtained in July 2010 and compared to information presented in the SEIR-1, which was based on 2006 data; the FEIR, which was based on 2002 and 2003 data; and the *Biological and Wetlands Resources Technical Report*,<sup>2</sup> one of the technical documents that supported information in the FEIR. Of the new species occurrences added to the database since 2006, no new species were reported within 0.5 mile of the Phase 1 area. The closest new species occurrence to the Phase 1 area was burrowing owl, which was found on a vacant lot 0.75 mile west of the Phase 1 area, between Calaveras Boulevard and Great Mall Parkway.

The SEIR-1 discussed the federally listed, threatened California tiger salamander (*Ambystoma californiense*) by stating that suitable but degraded habitat was present in the Phase 1 area, but that the potential for the species to occur was considered minimal. No critical habitat for the California tiger salamander has been identified in the Phase 1 area. It should also be noted that during consultation with the USFWS pursuant to Section 7 of the Federal Endangered Species Act, it was determined that the riparian and aquatic habitats in Los Gatos Creek, Guadalupe River, Coyote Creek, Upper Penitencia Creek, and Lower Silver Creek may provide suitable habitat for tiger salamander, and these creeks could be used as movement corridors for salamanders. Breeding in these creeks within the project site and vicinity is highly unlikely due to channelization and urbanization of the stream corridor, which results in rapid changes in flow and the lack of backwater breeding pools.<sup>3</sup> In addition, as of 2010, there are no CNDDDB records for California tiger salamander within 1 mile of the Phase 1 area.

The California Native Plant Society list was also reviewed. The list has not changed for the Phase 1 area since certification of the FEIR and SEIR-1.

#### **4.4.2.2 Wetlands and Waters of the United States**

In 2003, a wetland delineation of wetlands and waters of the US was conducted for the SVRTC.<sup>4</sup> A subsequent delineation was completed in the fall 2006 for the area from the approved BART Warm Springs Station to Montague Expressway.<sup>5</sup> This delineation included areas that were not previously identified in the 2003 delineation. The 2006 delineation identified a total of 5.39 acres of wetlands and waters of the US (and waters of the State) within the Phase 1 area, as described in the SEIR-1.

---

<sup>2</sup> Parsons Corporation, Biological and Wetlands Resources Technical Report, May 2003 (revised by Santa Clara Valley Transportation Authority, 2003).

<sup>3</sup> US Fish and Wildlife Service, Informal Consultation on the Proposed Silicon Valley Rapid Transit Corridor Project, Santa Clara and Alameda Counties, California, letter to VTA dated January 29, 2010.

<sup>4</sup> Parsons Corporation, Biological and Wetlands Resources Technical Report, May 2003 (revised by Jones & Stokes, 2004).

<sup>5</sup> Jones & Stokes, Silicon Valley Rapid Transit Corridor Project Preliminary Delineation of Waters of the United States, December 2006.

Since certification of the SEIR-1, many of the creeks/drainages along the BART alignment have been addressed in a separate project called the Freight Railroad Relocation and Lower Berryessa Creek Project.<sup>6</sup> This project included upgrading and enlarging box culverts on Agua Caliente Creek/Line F, Agua Fria Creek/Line D, unnamed creek/Line B-1, unnamed creek/Line B, Scott Creek/Line A, Calera Creek, Berryessa Creek, and Wrigley Creek in order to accommodate the design flow and water surface elevations resulting from a 100-year flood event. These improvements were constructed in 2009 and 2010, and no additional work is required for Phase 1. Therefore, Phase 1 would not permanently impact any of these creeks. A revised total of 1.70 acres of wetlands and waters of the US (and waters of the State) remain within the Phase 1 area. In addition, a new 0.04-acre isolated wetland was identified in the project area in July 2010 (**Figure 4.4-1**), and a preliminary delineation was conducted in August 2010 in the vicinity of Montague Expressway. This additional acreage increased the total area of wetlands and waters of the US (and waters of the State) within the Phase 1 area to 1.74 acres, as shown in **Table 4.4-1**.

#### **4.4.2.3 Field Surveys**

On August 4, 2010, a field survey was conducted at the site of the High Voltage Substation SRC and Switching Station SRR near Warm Springs Court in Fremont. The 3.8-acre site is comprised exclusively of ruderal grassland, dominated by non-native species (**Figure 4.4-2**). There are no trees on the property and minimal evidence of ground squirrel burrows. The site provides potential habitat for two special-status species known to occur in the project area: burrowing owl and Congdon's tarplant. However, there is no prior evidence that the site has been used by burrowing owls, and the species was not observed during the site visit. The nearest known occurrence of Congdon's tarplant is 5 miles to the south of Warm Springs Court within the UPRR ROW, and Congdon's tarplant was not observed during the site visit.

Previous field surveys identified Congdon's tarplant east of the UPRR ROW and south of Calaveras Boulevard, as described in the FEIR and SEIR-1. However, the area where the Congdon's tarplant was found is now the site of VTA's Wrigley Creek Improvement Project. The Wrigley Creek Improvement Project would restore and enhance a portion of Wrigley Creek by realigning the existing channel and creating a more natural channel with meanders. The Wrigley Creek Improvement Project includes replanting the 5.6-acre site with native plants, including Congdon's tarplant. At the completion of construction in fall 2010, the site would be protected with a combination of chain-link and split-rail fence.

---

<sup>6</sup> The environmental analysis for this separate project is included in the Freight Railroad Relocation and Lower Berryessa Creek Project Initial Study with Mitigated Negative Declaration (September 2007) and addendums (2007 to 2009).



Source: VTA, 2010.

Figure 4.4-1: Unnamed Ditches North of Aqua Caliente Creek – Wetlands

**Table 4.4-1: Wetlands and Waters of the US in the Phase 1 Area**

<b>Creeks, Siphons, and Drainage Ditches Identified</b>	<b>Characterization</b>	<b>Acres<sup>a</sup></b>
Unnamed ditches north of Agua Caliente Creek – Wetlands	Earthen drainage ditches paralleling railroad corridor.	0.04
Agua Caliente Creek – Waters of the US	Concrete-lined trapezoidal channel managed by ACFCWCD crossing under UPRR mainline in the NUMMI rail yard at Warm Springs.	0.01
Toroges Creek (Line C) – Waters of the US	Concrete-lined and earthen trapezoidal channel where it crosses the UPRR mainline; managed by ACFCWCD.	0.04
Unnamed ditch draining to Toroges Creek – Wetlands	Drainage ditch between VTA ROW and UPRR mainline north of Toroges Creek/Line C.	0.06
Unnamed seasonal wetland north of Scott Creek – Wetlands	Seasonal wetland within VTA ROW north of Scott Creek.	0.01
Unnamed ditch near Dixon Landing Road – Wetlands	Drainage ditch paralleling railroad corridor south of Dixon Landing Road.	0.37
Unnamed ditches near Montague Expressway – Wetlands <sup>b</sup>	Drainage ditches paralleling railroad corridor managed by City of Milpitas.	0.19
Lower/East Penitencia Creek – Siphon	Inverted siphon where Lower Penitencia Creek crosses the railroad corridor, discharging into a drainage ditch maintained by SCVWD.	0.00
Upper Penitencia Creek – Waters of the US	Well-defined bed and bank and well-developed riparian woodland fringe where it borders Berryessa Road crossing the railroad corridor.	0.28
Coyote Creek – Waters of the US	Natural perennial stream managed by SCVWD with rich riparian woodland where it parallels proposed BART alignment at site of proposed staging and laydown area near Mabury Road.	0.72
Lower Silver Creek – Waters of the US <sup>c</sup>	Excavated perennial stream managed by SCVWD and programmed for enlargement and habitat restoration.	0.02
<b>Total</b>	<b>n/a</b>	<b>1.74</b>

Notes: ACFCWCD = Alameda County Flood Control and Water Conservation District

SCVWD = Santa Clara Valley Water District

<sup>a</sup> Rounded to two decimal places.

<sup>b</sup> A new 0.04-acre isolated wetland was identified in 2010 (0.15 acre was previously identified).

<sup>c</sup> BART would run through a tunnel passing beneath Lower Silver Creek. No significant impacts to this creek are anticipated.

Sources: Jones & Stokes, 2008; ICF International, 2010.



Source: VTA, 2010.

**Figure 4.4-2: High Voltage Substation SRC and Switching Stations SRR Site (City of Fremont)**

---

### 4.4.3 REGULATORY SETTING

The regulatory setting presented in the FEIR described the Federal Endangered Species Act, Migratory Bird Treaty Act, Magnuson-Stevens Fishery Conservation and Management Act, federal Clean Water Act, Executive Order 11990 (Protection of Wetlands), Executive Order 13112 (Invasive Species), the California Endangered Species Act, the California Native Plant Protection Act, the California Fish and Game Code, the Porter-Cologne Water Quality Control Act, and other agency consultations; this regulatory setting remains applicable in the SEIR-2. Please refer to subsection 4.4.2.2 of the FEIR for this discussion.

### 4.4.4 PROJECT IMPACTS AND MITIGATION MEASURES

This section includes a discussion of permanent impacts to biological resources and wetlands. Temporary impacts due to construction of Phase 1 are discussed in **Section 4.19, Construction**, of this SEIR-2.

#### 4.4.4.1 Special-Status Species and Critical Habitat

No disturbance to Congdon's tarplant is anticipated by Phase 1 activities, as VTA's Wrigley Creek Improvement Project is located where the plants were previously identified. However, it is possible that Congdon's tarplant could still be found in the general area outside the limits of the Wrigley Creek Improvement Project. Therefore, the mitigation measure that calls for replacing Congdon's tarplant, as described in the SEIR-1 remains applicable to Phase 1. Part of this measure includes collecting Congdon's tarplant seeds. In 2008 and 2009, VTA collected seeds, which are being stored for future use if needed.

The SEIR-1 concluded that habitat for the California tiger salamander in the Phase 1 area was degraded, and that the potential for tiger salamanders to be present was minimal; however, the SEIR-1 also indicated that Upper Penitencia may provide suitable habitat for tiger salamanders and could be used as movement corridors for this species. Permanent impacts to the riparian habitat at Upper Penitencia Creek would occur due to the BART aerial guideway and Berryessa Station Way bridge. Mitigation for impacts to the riparian habitat is described below under Design Change 20, Berryessa Station.

The discussion of other special-status species and critical habitat in the FEIR, and updates provided in the SEIR-1, remains applicable in the SEIR-2.

#### 4.4.4.2 Wetlands and Waters of the United States

A revised total of 1.74 acres of wetlands and waters of the US (and waters of the State) remain within the Phase 1 area, as shown in **Table 4.4-1**. It is not expected that Phase 1 would permanently impact the entire 1.74 acres. Precise impact acreages will be determined during subsequent engineering phases and the resource agency permit process to be completed prior to construction. For

impacts to wetlands and waters of the US/State due to Phase 1, the mitigation measure calling for replacement habitat, as described in the SEIR-1, remains applicable. See Design Change 20, Berryessa Station, below for updated information about the proposed location for mitigation.

#### **4.4.4.3 Habitat Conservation Plans and Natural Community Conservation Plans**

A discussion of impacts relative to habitat conservation plans, natural community conservation plans, and other plans and ordinances related to the protection of biological resources was not included as part of the FEIR or SEIR-1. This section provides an analysis of the consistency of Phase 1 with such plans and ordinances, as required by CEQA.

As Phase 1 is not located within an area covered by an approved habitat conservation plan or natural community conservation plan, no impacts to or conflicts with the provisions of any such plans would occur as a result of Phase 1.

#### **4.4.4.4 Design Change 3. Systems Facilities Alternate Locations (STA 28+00)**

During preliminary engineering, an alternate location to that described above for the High Voltage Substation SRC and Switching Station SRR was identified in a vacant lot in Fremont between Warm Springs Court and the UPRR ROW. The site provides potential habitat for two special-status species known to occur in the project area: burrowing owl and Congdon's tarplant. These species were not identified at the site during the field survey or have been known to occur at the site.

#### **4.4.4.5 Design Change 5. Drainage Improvements at Toroges Creek (Line C) (STA 101+00)**

Under the approved project, other entities would construct a new box culvert along the alignment at Toroges Creek. Under Phase 1, VTA would now construct this culvert to accommodate BART and the eastside maintenance access road. The wetland delineation included Toroges Creek, as shown in **Table 4.4-1**; the existing conditions at Toroges Creek are shown in **Figure 4.4-3**.

There is no riparian habitat present at this location. Precise impacts to wetlands and waters of the US/State will be determined during subsequent engineering phases and the resource agency permit process to be completed prior to construction. The mitigation measure calling for replacement habitat, as described in the SEIR-1, remains applicable.





Source: VTA, 2010.

Figure 4.4-3: Toroges Creek – Existing Conditions

#### **4.4.4.6 Design Change 6. Eliminate Drainage Improvements at Unnamed Creek (STA 146+00)**

Under the approved project, VTA would construct a new box culvert along the alignment at Line B. However, the construction of this box culvert was completed in 2009 as part of VTA's Freight Railroad Relocation/Lower Berryessa Creek Project (**Figure 4.4-4**). Therefore, impacts to wetlands and waters of the US/State were addressed and mitigated under that project. No additional impacts to the creek would occur due to Phase 1.

#### **4.4.4.7 Design Change 9. Eliminate Drainage Improvements at Berryessa Creek (STA 246+00)**

Under the approved project, VTA would construct a new multi-cell box culvert along the alignment at Berryessa Creek. However, the construction of this box culvert was completed in 2010 as part of VTA's Freight Railroad Relocation/Lower Berryessa Creek Project. Therefore, impacts to wetlands and waters of the US/State were addressed and mitigated under that project. No additional impacts to the creek would occur due to Phase 1.

#### **4.4.4.8 Design Change 11. Eliminate South Calaveras Future Station (STA 292+00)**

Under the approved project, the South Calaveras Future Station area would be located in midtown Milpitas, south of Calaveras Boulevard, and on the east side of the UPRR ROW. The configuration of the station required that Wrigley Creek within the station footprint be relocated several feet to the west. Since the South Calaveras Future Station has been eliminated, Wrigley Creek would no longer be impacted due to Phase 1. It should be noted that a portion of the previously identified station footprint is now the location of VTA's Wrigley Creek Improvement Project.

#### **4.4.4.9 Design Change 20. Berryessa Station (STA 533+00)**

Under the approved project, the Berryessa Station footprint is set back approximately 150 to 200 feet from the tops of the banks of both Upper Penitencia Creek and Coyote Creek (except where access is provided from Berryessa Road). During preliminary engineering, this distance was redefined as follows: either a 150-foot setback from the near banks of these creeks or a 100-foot setback from the riparian tree dripline (outer edges of the tree canopy), whichever is greater. This distance conforms to the *San Jose Riparian Corridor Policy Study* guidelines (1999), which require "a minimum of 100 feet from the edge of the riparian corridor (or top of bank, whichever is greater)."



Source: VTA, 2010.

Figure 4.4-4: Freight Railroad Relocation/Lower Berryessa Creek Project - Line B Box Culvert

The exceptions to this setback occur at the following locations: (1) where the BART aerial guideway crosses over Upper Penitencia Creek, (2) where a new street on the east side of the UPRR ROW—Berryessa Station Way—crosses over Upper Penitencia Creek to/from Berryessa Road, and (3) where Berryessa Station Way intersects with Mabury Road at a point approximately 200 feet north along Coyote Creek. The City of San Jose has approved encroachment into the riparian setback near Mabury Road. Documentation of this approval is provided in **Appendix E**. An estimate of impacts to wetlands and waters of the US/State is provided in **Table 4.4-1**, and the estimate of impacts to riparian habitat remains as described in the FEIR and SEIR-1. Precise impacts to these habitats will be determined during subsequent engineering phases and the resource agency permit process to be completed prior to construction.

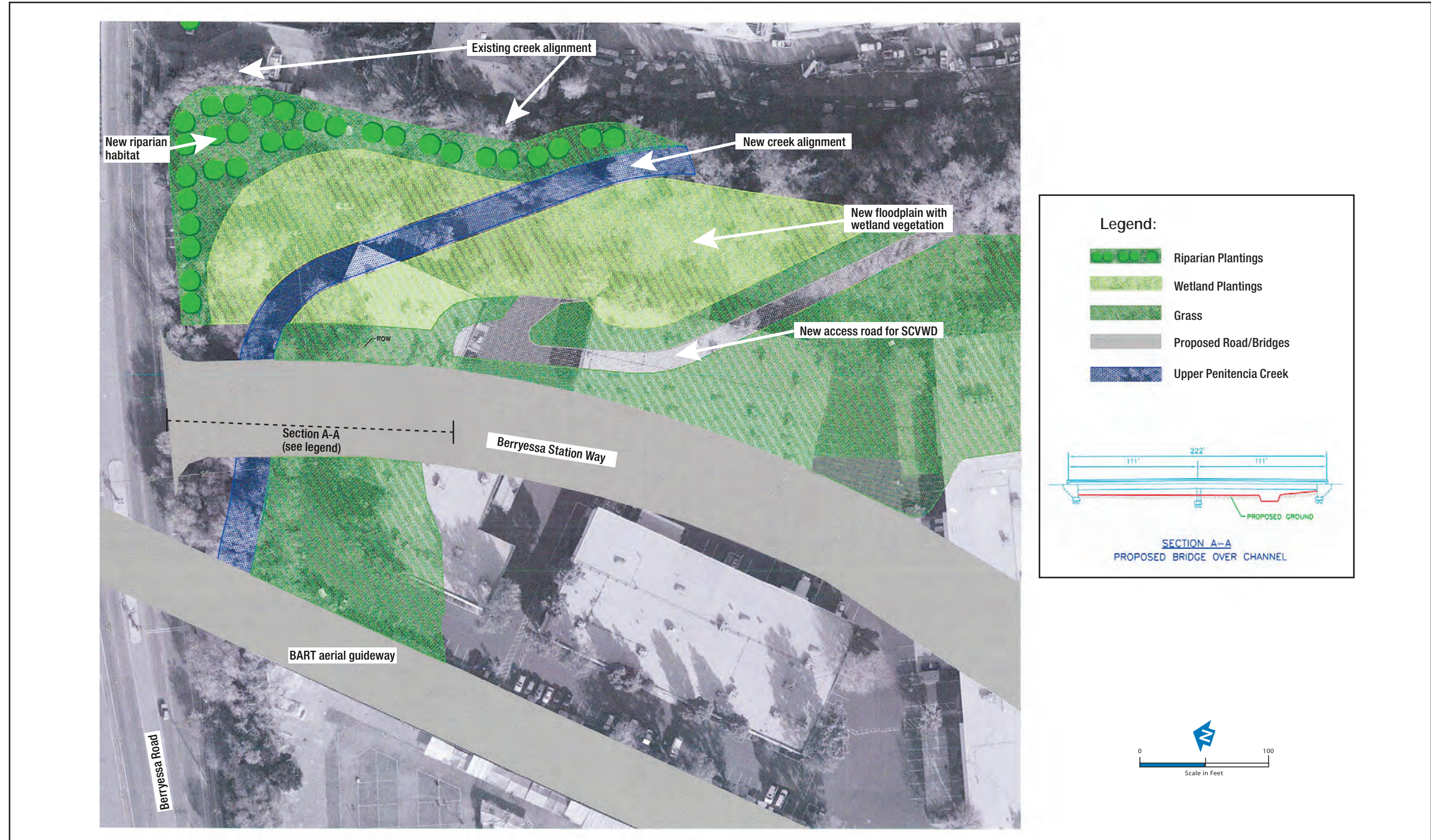
The mitigation measure for impacts to riparian habitat has been slightly revised to include up-to-date information on the ratios for replacement habitat.

**Mitigation Measure BIO-1: Replacement of Riparian Habitat.** VTA will design all project facilities to avoid temporary and permanent adverse impacts to riparian habitat to the maximum extent practicable. If avoidance is not feasible, permanent impacts to the riparian habitat will be mitigated at a ratio of 3:1.<sup>7</sup> Mitigation will be in-kind, except that non-native species will be replaced with native species common to the planting area and will be planted onsite to the maximum extent practicable. If mitigation cannot be accommodated entirely onsite, VTA will coordinate with CDFG to identify other potential riparian mitigation sites within the affected watershed. A qualified biologist, in coordination with resource agency personnel, will prepare a mitigation and monitoring plan for adverse impacts to riparian habitat resulting from the project. This plan will provide for the replacement of lost acreage as well as values and functions of riparian habitat, including shaded riverine aquatic cover vegetation. Temporary impacts will be mitigated by restoring the habitat onsite.

VTA has been coordinating with the US Army Corps of Engineers, National Marine Fisheries Service, USFWS, CDFG, Regional Water Quality Control Board, and Santa Clara Valley Water District to offset Phase 1 impacts to riparian habitat (and wetlands and waters of the US/State) by designing and implementing onsite mitigation at the northeast corner of Berryessa Station that will improve existing conditions along a portion of Upper Penitencia Creek. The conceptual plan for the mitigation site includes realigning the channel to soften a >90-degree turn; creating a flood bench; removing existing hardscape (e.g., box culvert, riprap); and planting native wetland and riparian vegetation (**Figure 4.4-5**). The design of the mitigation site will accommodate the proposed Upper

---

<sup>7</sup> This mitigation ratio is derived from the USFWS, Informal Consultation on the Proposed Silicon Valley Rapid Transit Corridor Project, Santa Clara and Alameda Counties, California, letter to VTA dated January 29, 2010.



Source: VTA, 2010.

Figure 4.4-5: Upper Penitencia Proposed Mitigation Site

*This page intentionally left blank.*

Penitencia Creek Flood Control Project. It is anticipated that construction of the site, including planting, would occur during summer/fall 2012. The proposed mitigation activities will be analyzed in a separate environmental document.

#### **4.4.5 CONCLUSION**

None of the design changes or other changes to the status of existing biological resources would result in a significant impact on any special-status species or critical habitat, wetlands, or waters of the US/State, riparian habitat, or other sensitive natural community. The mitigation measures listed in the FEIR, as updated in the SEIR-1 and SEIR-2, would reduce impacts to biological resources to a less-than-significant level. The mitigation measure for impacts to riparian habitat has been slightly revised in this SEIR-2 to include up-to-date information on the ratios for replacement habitat. No other changes have occurred.

*This page intentionally left blank.*