



California Regional Water Quality Control Board
San Francisco Bay Region

VTA
ENV. ANALYSIS

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Arnold Schwarzenegger
Governor

2007 FEB 27 P 4: 20

LETTER S-1

Date: FEB 23 2007
File No. 2188.05 (BKW)

Santa Clara Valley Transportation Authority
Attn: Tom Fitzwater
3331 North First Street, Building B
San Jose, CA 95134

**Re: Draft Supplemental Environmental Impact Report, BART Extension to
Milpitas, San Jose, and Santa Clara
SCH # 2002022004**

Dear Mr. Fitzwater:

Regional Water Quality Control Board (Water Board) staff have reviewed the *Draft Supplemental Environmental Impact Report, BART Extension to Milpitas, San Jose, and Santa Clara* (DSEIR). The DSEIR evaluates the potential environmental impacts that might reasonably be anticipated to result from the construction of a 16.1-mile long extension of BART through the cities of Milpitas, San Jose, and Santa Clara, in Santa Clara County (Project). Project impacts were originally evaluated in the Draft EIR for the Project that was certified in December of 2004. The DSEIR evaluates the environmental impacts of proposed design changes that have occurred since December of 2004. Water Board staff have the following comments on the DSEIR.

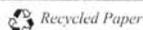
Comment 1

BART Crossing Over Berryessa Creek (Executive Summary page 6, Table 1.5-1 (Design Change 9), and Chapter 3, page 8, Chapter 4, pages 72, 75, 76, and 216).

In the DEIR, BART tracks crossed over Berryessa Creek on a new, 100-foot long free span bridge. In the SEIR, BART would cross over Berryessa Creek on a new double box culvert. The DSEIR notes that the new box culvert would be consistent with a proposed flood control project on Berryessa Creek that is being planned by the Santa Clara Valley Water District (SCVWD) and the U.S. Army Corps of Engineers (USACE). However, the proposed replacement of the originally proposed free-span bridge with a box culvert may not be consistent with the requirements of the *San Francisco Bay Basin Water Quality Control Plan* (Basin Plan). Consistency with the Basin Plan requires that the Water Board should only issue permits for a project if that project represents the least environmentally damaging practicable alternative to achieve the project goal. At Berryessa Creek, the Project's goal is to provide a rail line crossing over the creek channel. Free span bridges are much less environmentally damaging than box culverts, which invariably impact the geomorphic stability of channels. Since the DEIR already established that the use of a free-span bridge at Berryessa Creek is practicable, the Water Board is not likely to issue permits (Clean Water Act Section 401 water quality certification and/or Waste Discharge

S-1.1

California Environmental Protection Agency



Mr. Fitzwater

- 2 - DSEIR BART Extension, Milpitas, San Jose, Santa Clara

Requirements under the State's Porter-Cologne Water Quality Act) for the box culverts proposed in the DSEIR.

Water Board staff expressed our concerns with respect to the construction of new culverts to support BART tracks in the May 2, 2003, letter of comment on the *Draft Supplemental Environmental Impact Report, BART Warm Springs Extension* (SCH Number 20020320410):

Comment 1

Section 2.3.3 Ancillary Facilities, Drainage Improvements, page 2-37 and 2-38.

The text on these pages discusses the construction of new culverted crossings over several Alameda County Flood Control District (ACFCD) channels. Please note that, although these channels are identified as flood control channels by ACFCD, some of these channels are re-aligned creeks (e.g., see Figure 3.3-1, in which Line K-1 is identified as Washington Creek, Line K is identified as Crandell Creek, etc.). Any new crossings of these channels will require Clean Water Act (CWA) Section 404 Permits from the Army Corps of Engineers (ACOE), CWA Section 404 Certification from the Regional Board, and/or the issuance of Waste Discharge Requirements (WDRs) from the Regional Board. Please note that Regional Board staff discourage the use of culverts for channel crossings. If a free span crossing is not feasible, new culverts should be designed to have an open bottom (e.g., a three-sided culvert, or a culvert with the bottom side buried beneath the channel floor). An open bottom culvert design is less disruptive of any habitat values present in the channel and has fewer impacts on channel stability.

In addition, Regional Board staff would like to discourage the placement of Channel K-1 (a.k.a., Washington Creek) in a culvert within the station limits of the optional Irvington Station. Appropriate permits for this action would not be issued unless an alternatives analysis had demonstrated that there were no feasible options for avoiding the culverting.

Although the channel of Berryessa Creek currently has concrete-lined sidewalls, wetland habitat has established in the channel bottom, as is evident in pictures of the channel in the DSEIR. Future flood control projects on Berryessa Creek will require permits from the Water Board. As a condition of such permits, it is very likely that the Water Board would require that the banks of a widened channel be returned to a more natural state than the current concrete lining. Therefore, Water Board staff recommend that the Project be revised to restore the originally proposed free-span bridge at Berryessa Creek.

S-1.1 cont.

Comment 2

Berryessa Station (Executive Summary page 6, Table 1.5-1 (Design Change 9), Chapter 3, page 17, and Chapter 4, pages 73, 76, and 302).

The Berryessa Station will be located between Berryessa Road and Mabury Road. In the current design, the footprint of the station would be set back about 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.

Section 4.4.4 of the DSEIR (Chapter 4, page 73) notes that, “with implementation of the Army Corps of Engineer’s Upper Penitencia Creek Flood Control Project, which will widen the creek near the Berryessa Station, it would be necessary to have columns within the channel to support both the BART aerial structure and the roadway overpass.” The new columns should be placed outside of the active channel of the creek, as high in the flood plain as possible. Placement of the columns in the upper flood plain will reduce the potential for pier scour downstream of the columns. Pier scour downstream of any columns in the active channel could disrupt the fluvial geomorphic stability of Upper Penitencia Creek.

S-1.2

As the DSEIR notes, both Upper Penitencia Creek and Coyote Creek have been designated as critical habitat for the endangered Central Coast California steelhead population. Therefore, it is important to minimize potential impacts to the riparian corridor of both of these creeks. At the Berryessa Station, the BART aerial structure and the roadway overpass to the station over Upper Penitencia Creek may be cumulatively significant in combination with the City of San Jose’s King Road widening project, just upstream of the proposed station, and the creek crossings proposed for the development of the San Jose Flea Market site. The current design for the Flea Market site calls for two crossings of Upper Penitencia Creek at the Flea Market. Therefore, current plans, including the BART extension, include the construction, or reconstruction, of five bridges in the short distance of the creek channel between the confluence with Coyote Creek and King Road. Since each bridge will have a negative impact on riparian habitat within critical habitat for steelhead trout, the cumulative impact of all of these crossings may be significant. The Project should evaluate options for creating access bridges in coordination with the Flea Market Project and the King Road Widening Project in order to reduce the total number of crossings in this reach of Upper Penitencia Creek.

S-1.3

In addition, the Project should continue to coordinate with the USACE and the SCVWD in order ensure that the proposed footprint of the station provides sufficient right of way to accommodate the USACE/SCVWD Upper Penitencia Creek Flood Protection Project floodplain alternative.

S-1.4

The Project should also evaluate potential impacts on the station footprint and access road alignments associated with the proposed Mid-Coyote Flood Protection project. As Water Board staff noted in February 2007, comments on the *Draft Environmental Impact Report*

S-1.5

for the San Jose Flea Market General Plan Amendment and Planned Development Rezoning:

The District [SCVWD] is in the planning phase for the Mid-Coyote Flood Protection Project between Interstate 280 and Montegue Expressway, which includes the reach of Coyote Creek adjacent to the Project area. The Project proponent should provide ample riparian setback in all locations and not constrain the flood project cross-section in this location. Relocation of the major connector road [Mabury Road] should be considered. Coyote Creek is a confined channel but the flood project has the potential to widen and improve the existing cross-section in order to increase flood conveyance and riparian habitat. Water Board staff recognize that the Mid-Coyote Project has not been designed and that a cross-section in the Project reach is undetermined but at the same time, it is critical that all parties coordinate and not preclude an environmentally superior alternative.

S-1.5 cont.

Mitigation for impacts to riparian habitat is discussed on page 76 of Chapter 4 of the DSEIR. Text on this pages states, "Impact ratios of 3:1, 2:1, and 1:1 (replacement area: loss area) will be applied for impacts to high-quality, medium quality, and lower-quality habitats, respectively." At Upper Penitencia Creek, all riparian habitat should be considered high-quality, since this creek provides critical habitat for the endangered steelhead trout. As described in the Upper Penitencia Creek Limiting Factors Analysis, (Stillwater Sciences 2006) Upper Penitencia Creek is one of the few South Bay streams to support steelhead and it is considered to have the best habitat. Any planned structures in the riparian setback areas should take this into account. To protect these resources, priority use for the riparian setback areas should include maximizing riparian vegetation and establishing adequate wildlife buffers while avoiding or minimizing the development of structural facilities

S-1.6

In addition, since the DSEIR does not provide a protocol for determining the quality of riparian habitat, Water Board staff cannot comment on whether or not the establishment of these criteria are appropriate. Any protocol for evaluating the relative quality of riparian habitat should include an evaluation of the local significance of the habitat. Even "lower-quality habitat" may be significant if it is the only locally-available habitat.

Finally, mitigation for impacts to riparian habitat should not be expressed solely in terms of the area of impact. Impacts to riparian habitats should also be expressed in terms of linear feet of impacts, since the functions and values of riparian corridors are a function of their linear character. Therefore, mitigation should also be provided on a linear foot basis.

Comment 3

Pump Station (Chapter 4, page 217).

Text on page 217 of Chapter 4 of the DSEIR notes that pump stations will discharge water to either the storm sewer system or the sanitary sewer system and would comply with

S-1.7

Mr. Fitzwater

- 5 - DSEIR BART Extension, Milpitas, San Jose, Santa Clara

NPDES and/or MS4 permit requirements and/or publicly owned treatment works pretreatment requirements to reduce pollutants. At pump stations that discharge water to the storm sewer system, the pump stations should be operated in a manner that prevents the discharge of water with low dissolved oxygen (DO) levels to surface waters. In some existing pump stations, biological activity in accumulated water has led to extremely low DO levels in the water. When the pump stations discharge this water to surface waters, local fish kills have occurred.

S-1.7 cont.

Comment 4

Cumulative Impacts (Chapter 4, page 285).

The discussion of cumulative impacts should include the cumulative impacts associated with new and replaced bridges near the Berryessa Station, as described above in Comment 2.

S-1.8

Comment 5

Incorrect Name for Design Change 9 (Tables 1.5-1 and 4.21-1).

In these two tables, under the subheading, "Design Change 9, Berryessa Creek," the following text actually describes impacts at Upper Penitencia Creek associated with the Berryessa Station. Impacts to Berryessa Creek are discussed in the previous rows of these tables.

S-1.9

If you have any questions, please contact me at (510) 622-5680 or e-mail bwines@waterboards.ca.gov.

Sincerely,



Brian Wines
Water Resources Control Engineer

cc: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044
Santa Clara Valley Water Control District, Attn: Sue Tippets, Community Projects Review Unit 5750 Almaden Expressway, San Jose, Ca 95118-3686
CDFG, Central Coast Region, Attn: Robert Floerke, Regional Manager, P.O. Box 47, Yountville CA 94599
National Marine Fisheries Service, Attn: Gary Stern, 777 Sonoma Avenue, Suite 325, Santa Rosa, CA 95404
USACE, San Francisco District, Attn: Regulatory Branch, 333 Market Street, San Francisco, CA 94105 –2197
Guadalupe-Coyote Resource Conservation District, 888 North 1st Street, Rm. 204, San Jose, CA 95112

California Environmental Protection Agency



RESPONSE TO COMMENT LETTER S-1

California Regional Water Quality Control Board

S-1.1

The clear span bridge for the existing UPRR freight and future BART tracks was a design developed early on during the Conceptual Engineering phase to span only the length of the existing Berryessa Creek crossing. During the Preliminary Engineering phase, the design was changed to accommodate the Santa Clara Valley Water District's flood protection project, which would widen Berryessa Creek from 100 feet to 140 feet at the railroad crossing. The design was also changed to reflect engineering constraints related to the railroad crossing of both the Abel Street overpass and Berryessa Creek. The structural and operational constraints at Berryessa Creek include:

- *The existing UPRR and future BART tracks must pass both below the Abel Street overpass and over the creek, with these crossings occurring in the same general location. The UPRR top of rail elevation cannot change due to the vertical clearance requirement from top of rail to bottom of soffit for the Abel Street overpass. Therefore, the freight tracks cannot be raised on a bridge structure without removing or reconstructing the existing Abel Street bridge. The BART Extension Project does not include removing or reconstructing the Abel Street overpass, which is a viable city roadway.*
- *If a clear span bridge were constructed at grade to provide the required clearance from top of rail to bottom of soffit for the Abel Street overpass, the bridge would not provide for enough clearance for floodwaters to pass underneath. The 140-foot clear span bridge can not be made "thinner" to allow for proper clearance, as the structure would not support the weight of the trains. Also, the creek invert cannot be changed at this location. Lowering the creek at the railroad crossing would mean that the elevation of the creek bed would be higher upstream and downstream, causing water flow restrictions.*

The multi-cell box culvert overcomes these engineering constraints. The culvert may be at grade to allow for the vertical clearance requirement from top of rail to bottom of soffit for the Abel Street overpass. It also can be made thinner to allow for enough clearance for floodwaters to pass because it has supports within the creek to accommodate the weight of the trains.

Please also refer to the Santa Clara Valley Water District's Comment letter R-4, page 2, under the heading "UPRR Crossing of Berryessa Creek." The information in this letter contains additional details as to why the multi-cell box culvert is the more appropriate design. Also, refer to Response to Comment L-2.7 regarding impacts to waters of the U.S.

S-1.2

The Preliminary Engineering design of the bridge columns and column footings for the aerial structure over Berryessa Road and Upper Penitencia Creek places these support structures outside the existing creek channel. However, the planned widening of the creek by the Santa Clara Valley Water District would result in two of the columns being located within the new, widened channel, which would include the low flow channel and a "bench cut" that receives water overflow in high flow/flooding events.

To provide structural support, the columns would be placed at 70-foot spans for the aerial structure that includes Berryessa Station and 80- and 140-foot spans for the aerial structure that includes the BART trackway north of Berryessa Station. The longest span of 140 feet would begin at the centerline of Berryessa Road, which eliminates the need

to reconfigure the roadway, and ends south of the existing creek channel. Once the creek is widened by the District, two of the columns would be located on the bench cut. No structures would be located within the low flow channel.

VTA will continue to coordinate with the District during subsequent engineering phases on design issues related to both the BART Extension Project and the flood protection project on Upper Penitencia Creek. This coordination effort will include addressing potential pier scour downstream of the columns.

S-1.3 VTA is designing the aerial structure and roadway bridge for the BART Extension Project. The aerial structure is unique in that it supports the BART trackway as it travels south into the Berryessa Station area. This structure would replace an existing freight railroad timber bridge over Upper Penitencia Creek. The roadway bridge is required to provide vehicular and pedestrian access from Berryessa Road to the northern portion of station area, which is on the east side of the railroad ROW. (The flea market development is on the west side of the railroad ROW.) This roadway bridge would replace an existing business complex bridge.

While VTA is coordinating with the Santa Clara Valley Water District and the City of San Jose, the BART aerial structure would not be a shared facility. The planned VTA roadway bridge would be a public facility in the City of San Jose and would support BART operations, as well as future developments in this area. (Also, see Response to Comment S-1.8.)

S-1.4 VTA will continue to coordinate with both the Santa Clara Valley Water District and the Army Corp of Engineers regarding the design interface between the Berryessa Station area for the BART Extension Project and the planned flood protection project on Upper Penitencia Creek. To date, this coordination has resulted in the riparian setback requirement that allows for the proposed widening of the creek for flood control.

S-1.5 The VTA Board of Directors certified the Final Environmental Impact Report and approved the BART Extension Project in December 2004 in accordance with the California Environmental Quality Act. The Santa Clara Valley Water District's proposed Mid-Coyote Creek Project between Interstate 280 and Montague Expressway is in the very early planning stages, with no environmental document available. It is not required by this SEIR to evaluate the impacts of the approved BART Extension Project on the proposed Mid-Coyote Creek Project. In addition, this SEIR does not include any design changes that impact the Coyote Creek riparian set back at the Berryessa Station. Nevertheless, it is anticipated that this setback would accommodate any planned improvements on Coyote Creek near the Berryessa Station.

Early conceptual plans for the Mid-Coyote Flood Protection Project shows a widened creek with a 100-foot setback from the existing riparian dripline to the edge of the "bench cut" portion. The Berryessa Station area includes a more conservative setback to ensure that enough room is provided for the future project. This setback was determined by using whichever is larger: either 100 feet from the riparian dripline or 150 feet from the top of existing creek bank. VTA has also been coordinating with the City of San Jose regarding this area, including considering the widening of Mabury Road as part of the City of San Jose and Caltrans US 101/Mabury Road Interchange Project.

S-1.6

Due to the complex mosaic of habitats often found within riparian corridors, impacts are assessed based on three habitat quality categories. This methodology ensures that, regardless of the type of habitat impacted, the relative value of the habitat is taken into account in quantifying impacts.

Habitat quality categories are based on observed vegetation characteristics that correspond to fish and wildlife habitat values such as the presence or absence of overstory vegetation, as well as density; the presence or absence of native species; and the complexity of vegetation structure (i.e., presence of tree, shrub, and herbaceous layers). The three habitat quality categories are:

- *High quality – Native overstory with continuous understory or occurring in dense thickets; dense native overstory with sparse, non-native or no understory; and native willow thicket.*
- *Medium quality – Sparse native overstory with sparse, non-native or no understory; non-native overstory with native understory; and dense non-native overstory with sparse, non-native or no understory.*
- *Lower quality – Sparse non-native overstory with sparse, non-native or no understory. In addition, any areas not included in medium or high quality categories that will be covered with riprap, gabions, etc. (e.g., non-native herbaceous habitat and bare ground).*

The 2004 FEIR provided some information regarding habitat quality and mitigation. The SEIR builds upon the information in the FEIR. However, it is the combination of the information in both documents that result in the assessment of habitat impacts and the proposal of mitigation.

The 2004 FEIR, Sections 4.4.3.5 and 4.19.5.3, states, "Where riparian vegetation will be affected unavoidably, habitat quality will be assessed and confirmed with regulatory agencies. ...The site-specific mitigation plan will assure replacement, or enhancement, of habitat values, such as the density of the overstory vegetation, reintroduction of native species, and development of complex vegetation structure, to the maximum extent practicable." It should be noted that the FEIR provided information on the potential total impact of riparian habitat due to the Project (2.6 acres) but did not include a break down of this total by habitat quality. This assessment will be included in a riparian restoration plan. Section 4.4.3.5, states, "A detailed riparian restoration plan will be prepared. 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, and locations of restoration opportunities, with a technical approach to create high-quality riparian and shaded riverine aquatic cover habitat." The restoration plan will be subject to review and approval by the California Department of Fish and Game and other resources agencies, as appropriate.

As stated in the SEIR, Section 4.4.4, the following information supplements the information in the FEIR.

Mitigation Measure: Replacement of Riparian Habitat. VTA will design all Project facilities to avoid temporary and permanent impacts to riparian habitat to the maximum extent practicable. If avoidance is not feasible, impacts to the riparian habitat will be mitigated at ratios based on the quality of habitat to be impacted. Impact ratios of 3:1, 2:1, and 1:1 (replacement area: loss area) will be applied for impacts to high-quality, medium-quality, and lower-quality habitats, respectively. Mitigation for impacts to riparian habitat will be in-kind, except that non-native species will be replaced with commercially available native species common to the planting area, and on-site to the maximum extent

practicable. If mitigation cannot be accommodated entirely on-site, VTA will coordinate with resource agency personnel to identify other potential riparian mitigation sites within the impacted watershed, if possible. A qualified biologist, in coordination with resource agency personnel, will prepare a mitigation and monitoring plan for impacts to riparian habitat due to the Project.

Note that the SEIR provides more details regarding mitigation for impacts to riparian habitat based on quality. However, the impacts are not quantified by habitat type. This detailed assessment will occur in subsequent engineering phases of the Project, when more is known about the Project design and construction. Also, note that what was referred to as a riparian restoration plan in the FEIR is now referred to as a mitigation and monitoring plan in the SEIR. The mitigation and monitoring plan for impacts to riparian habitat will be subject to review and approval by the California Department of Fish and Game and other resources agencies, as appropriate.

Impacts to riparian habitat are not anticipated at the creek crossings where drainage improvements will be constructed by others prior to construction of the BART Extension Project. These creeks include Agua Fria Creek/Line D, Toroges Creek/Line C, Scott Creek/Line A, and Wrigley Creek. There are no improvements planned at Line B-1 or Calera Creek. Impacts to riparian habitat are also not anticipated at Coyote Creek near Berryessa Station, as a riparian setback is in place, or at Coyote Creek, Guadalupe River, or Los Gatos Creek along Santa Clara Street, as BART is beneath the streets and the creeks in a tunnel. Where impacts will occur, the quantification of impacts will include both acreage and linear feet. Currently, it is anticipated that the impacts at Upper Penitencia Creek, which is considered high quality habitat, would include 75 linear feet.

S-1.7 *Standing water left in sumps at pump stations for extended periods of time may result in low-dissolved oxygen levels in discharges to the storm drain system. During subsequent engineering phases for the Project, VTA will refine the design for pump stations that discharge to this system to operate in a way that minimizes this potential problem.*

S-1.8 *As described in Comment #2 in the letter (marked as Comment S-1.3 for purposes of this SEIR), there would be five structures crossing Upper Penitencia Creek within a short distance (between Coyote Creek and King Road). The Berryessa Station includes two of these five structures. One is the BART aerial structure that would span the length of the existing Penitencia Creek channel. However, with implementation of the Santa Clara Valley Water District's Upper Penitencia Creek Flood Protection Project that is still in the planning stage, two supports for this aerial structure would be located in the "bench cut" portion of the widened channel (Refer to Response to Comment S-1.2). The second structure associated with the Project is a new roadway bridge ("Berryessa Station Way"), located just east of the BART aerial structure. The bridge would provide access to the Berryessa Station from Berryessa Road. The design for this structure will be developed during subsequent engineering phases.*

VTA recognizes that construction and operation of five new/reconstructed structures crossing Upper Penitencia Creek could potentially cause a cumulative impact to the creek, particularly if the planned Upper Penitencia Creek Flood Protection Project is not considered in the design of these structures. VTA has considered this flood protection project in the design of the BART aerial structure. This design has been developed in coordination with the Santa Clara Valley Water District and the City of San Jose. VTA will continue to coordinate with the District and the City in the development of the design for "Berryessa Station Way," and will coordinate with these agencies, as well as

the private developer, to minimize impacts to Upper Penitencia Creek due to these various crossings.

S-1.9 *The comment is correct. The subheadings in these tables should state "Design Change 23. Berryessa Station." These changes are included in Chapter 4 "Revisions to the Draft SEIR."*

DEPARTMENT OF TRANSPORTATION

P. O. BOX 23660
OAKLAND, CA 94623-0660
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*Flex your power!
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LETTER S-2

February 28, 2007

SCL-General
SCL000147
SCH 2002022004

Mr. Tom Fitzwater
Santa Clara Valley Transportation Authority
3331 N. First Street
San José, CA 95134-1906

Dear Mr. Fitzwater:

Silicon Valley Rapid Transit Corridor, BART Extension to Santa Clara - Draft Supplemental Environmental Impact Report (DSEIR)

Thank you for continuing to include the California Department of Transportation (Department) in the environmental review process for the proposed Silicon Valley Rapid Transit Corridor, BART Extension to Santa Clara. We have reviewed the DSEIR and have the following comments to offer:

Forecasting

Level of Service (LOS) Threshold for Basic Freeway Segment

Table 4.2-14, the freeway segment LOS definition is based on the Santa Clara Valley Transportation Authority (SCVTA) Congestion Management Program (CMP) Guidelines. This underlying methodology demonstrates an inconsistent Level of Service (LOS) threshold of basic freeway segments, when compared to the Highway Capacity Manual (HCM) 2000. The basic freeway segment, defined as a nationwide facility, is more appropriately analyzed and consistent with the national standard in the Highway Capacity Manual (HCM) 2000 to evaluate its LOS. The SCVTA CMP Guidelines used in the Traffic Impact Analysis are better used to determine the Santa Clara County local streets' LOS. The traffic impact analysis and associated mitigation measures for freeway segments LOS should be revised using the HCM 2000. This will demonstrate a much lower threshold for LOS D, E & F. In particular, note the much higher LOS F threshold in Table 4.2-14 which contributes to a misleading outcome by reducing the number of LOS F basic freeway segments.

S-2.1

"Caltrans improves mobility across California"

Mr. Tom Fitzwater
Santa Clara Valley Transit Authority
February 28, 2007
Page 2

<u>LOS</u>	<u>Density in Table 4.2-14</u>	<u>Density in HCM 2000</u>
D	46	35
E	58	45
F	> 58	> 45

S-2.1 cont.

Please submit the revisions for our review and comment.

Additional comments, if any, from our other functional review branches will be forwarded as soon as they are received.

Should you require further information or have any questions regarding this letter, please call José L. Olveda of my staff at (510) 286-5535.

Sincerely,



TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan (State Clearinghouse)

RESPONSE TO COMMENT LETTER S-2

California Department of Transportation

S-2.1 *The comment is correct that VTA did not use the HCM 2000 methodology. The SCVTA CMP Guidelines were developed to ensure that freeway impacts are assessed based on a methodology generally consistent with the procedures outlined in HCM 2000. Both the CMP methodology and the 2000 HCM methodology are based on speed and density. The CMP methodology adjusts the LOS D and E upper thresholds based on traffic data collected on Santa Clara County freeway segments. The reason for the adjustment is to ensure that the speed estimate at these thresholds is consistent with previous Caltrans/HCM definitions for congested flow. The 2000 HCM methodology yields speed estimates of 59.7 MPH to 65 MPH for LOS D, and 52.2 to nearly 60 MPH for LOS E. LOS E is defined as having a speed of 52.2 or less. The CMP procedures, on the other hand, yields speed estimates of 46 MPH to 66 MPH for LOS D, and 35 MPH to 46 MPH for LOS E. Speeds below 35 MPH are defined as LOS F.*

The VTA CMP methodology is described in more detail in a memorandum titled "Traffic LOS Analysis Guidelines Update, Proposed Changes to Freeway LOS Analysis" published March 10, 2003 that is available on request.



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Cynthia Bryant
Director

LETTER S-3

March 9, 2007

Tom Fitzwater
Santa Clara Valley Transportation Authority
3331 North First Street, Bldg B
San Jose, CA 95134

Subject: Silicon Valley Rapid Transit Corridor -- BART Extension to Milpitas, San Jose and Santa Clara
SCH#: 2002022004

Dear Tom Fitzwater:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on March 8, 2007, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

2007 MAR 15 P 2:08
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Document Details Report
State Clearinghouse Data Base

SCH# 2002022004
Project Title Silicon Valley Rapid Transit Corridor -- BART Extension to Milpitas, San Jose and Santa Clara
Lead Agency Santa Clara Valley Transportation Authority

Type EIR Draft EIR
Description The BART Extension Project would begin at the planned BART Warm Springs Station (to be implemented by 2013) in Fremont and proceed on the former Union Pacific Railroad right-of-way through Milpitas to near Las Plumas Avenue in San Jose. The extension would then descend into a subway tunnel, continue through downtown San Jose, and terminate at the grade in Santa Clara near the Caltrain Station. The total length of the alignment would be 16.1 miles. Six stations are proposed with an additional future station in Milpitas. Passenger service for the BART Extension Project would start in 2016, assuming funding is available.

Lead Agency Contact

Name Tom Fitzwater
Agency Santa Clara Valley Transportation Authority
Phone (408) 321-5789 **Fax**
email
Address 3331 North First Street, Bldg B
City San Jose **State** CA **Zip** 95134

Project Location

County Santa Clara, Alameda
City Milpitas, San Jose, Santa Clara
Region
Cross Streets Multiple
Parcel No. Multiple
Township **Range** **Section** **Base**

Proximity to:

Highways 237, 87, 880, 680, 101
Airports Mineta SJIA
Railways Union Pacific, Caltrain
Waterways Berryessa, Wrigley, Lower Penitencia, Lower Silver, and Coyote Creeks; Guadalupe River
Schools Multiple
Land Use Commercial, Residential, Industrial

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Noise; Other Issues; Population/Housing Balance; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Wildlife

Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 2; Department of Parks and Recreation; Native American Heritage Commission; Public Utilities Commission; Office of Historic Preservation; Department of Fish and Game, Region 3; Department of Water Resources; Department of Conservation; California Highway Patrol; Caltrans, District 4; Caltrans, Division of Aeronautics; Air Resources Board, Transportation Projects; Department of Toxic Substances Control; State Lands Commission

Date Received 01/22/2007 **Start of Review** 01/23/2007 **End of Review** 03/08/2007

Note: Blanks in data fields result from insufficient information provided by lead agency.

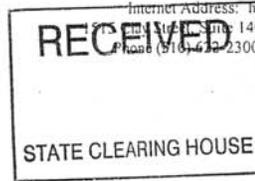


Linda S. Adams
Secretary for
Environmental
Protection

California Regional Water Quality Control Board
San Francisco Bay Region



Arnold Schwarzenegger
Governor



Internet Address: <http://www.swrcb.ca.gov>
1400, Oakland, California 94612
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Santa Clara Valley Transportation Authority
Attn: Tom Fitzwater
3331 North First Street, Building B
San Jose, CA 95134

OTCAV
3-8-07
LCA

Re: Draft Supplemental Environmental Impact Report, BART Extension to
Milpitas, San Jose, and Santa Clara
SCH # 2002022004

Dear Mr. Fitzwater:

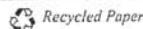
Regional Water Quality Control Board (Water Board) staff have reviewed the *Draft Supplemental Environmental Impact Report, BART Extension to Milpitas, San Jose, and Santa Clara* (DSEIR). The DSEIR evaluates the potential environmental impacts that might reasonably be anticipated to result from the construction of a 16.1-mile long extension of BART through the cities of Milpitas, San Jose, and Santa Clara, in Santa Clara County (Project). Project impacts were originally evaluated in the Draft EIR for the Project that was certified in December of 2004. The DSEIR evaluates the environmental impacts of proposed design changes that have occurred since December of 2004. Water Board staff have the following comments on the DSEIR.

Comment 1

BART Crossing Over Berryessa Creek (Executive Summary page 6, Table 1.5-1 (Design Change 9), and Chapter 3, page 8, Chapter 4, pages 72, 75, 76, and 216).

In the DEIR, BART tracks crossed over Berryessa Creek on a new, 100-foot long free span bridge. In the SEIR, BART would cross over Berryessa Creek on a new double box culvert. The DSEIR notes that the new box culvert would be consistent with a proposed flood control project on Berryessa Creek that is being planned by the Santa Clara Valley Water District (SCVWD) and the U.S. Army Corps of Engineers (USACE). However, the proposed replacement of the originally proposed free-span bridge with a box culvert may not be consistent with the requirements of the *San Francisco Bay Basin Water Quality Control Plan* (Basin Plan). Consistency with the Basin Plan requires that the Water Board should only issue permits for a project if that project represents the least environmentally damaging practicable alternative to achieve the project goal. At Berryessa Creek, the Project's goal is to provide a rail line crossing over the creek channel. Free span bridges are much less environmentally damaging than box culverts, which invariably impact the geomorphic stability of channels. Since the DEIR already established that the use of a free-span bridge at Berryessa Creek is practicable, the Water Board is not likely to issue permits (Clean Water Act Section 401 water quality certification and/or Waste Discharge

California Environmental Protection Agency



Requirements under the State's Porter-Cologne Water Quality Act) for the box culverts proposed in the DSEIR.

Water Board staff expressed our concerns with respect to the construction of new culverts to support BART tracks in the May 2, 2003, letter of comment on the *Draft Supplemental Environmental Impact Report, BART Warm Springs Extension* (SCH Number 20020320410):

Comment 1

Section 2.3.3 Ancillary Facilities, Drainage Improvements, page 2-37 and 2-38.

The text on these pages discusses the construction of new culverted crossings over several Alameda County Flood Control District (ACFCD) channels. Please note that, although these channels are identified as flood control channels by ACFCD, some of these channels are re-aligned creeks (e.g., see Figure 3.3-1, in which Line K-1 is identified as Washington Creek, Line K is identified as Crandell Creek, etc.). Any new crossings of these channels will require Clean Water Act (CWA) Section 404 Permits from the Army Corps of Engineers (ACOE), CWA Section 404 Certification from the Regional Board, and/or the issuance of Waste Discharge Requirements (WDRs) from the Regional Board. Please note that Regional Board staff discourage the use of culverts for channel crossings. If a free span crossing is not feasible, new culverts should be designed to have an open bottom (e.g., a three-sided culvert, or a culvert with the bottom side buried beneath the channel floor). An open bottom culvert design is less disruptive of any habitat values present in the channel and has fewer impacts on channel stability.

In addition, Regional Board staff would like to discourage the placement of Channel K-1 (a.k.a., Washington Creek) in a culvert within the station limits of the optional Irvington Station. Appropriate permits for this action would not be issued unless an alternatives analysis had demonstrated that there were no feasible options for avoiding the culverting.

Although the channel of Berryessa Creek currently has concrete-lined sidewalls, wetland habitat has established in the channel bottom, as is evident in pictures of the channel in the DSEIR. Future flood control projects on Berryessa Creek will require permits from the Water Board. As a condition of such permits, it is very likely that the Water Board would require that the banks of a widened channel be returned to a more natural state than the current concrete lining. Therefore, Water Board staff recommend that the Project be revised to restore the originally proposed free-span bridge at Berryessa Creek.

Comment 2

Berryessa Station (Executive Summary page 6, Table 1.5-1 (Design Change 9), Chapter 3, page 17, and Chapter 4, pages 73, 76, and 302).

The Berryessa Station will be located between Berryessa Road and Mabury Road. In the current design, the footprint of the station would be set back about 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.

Section 4.4.4 of the DSEIR (Chapter 4, page 73) notes that, “with implementation of the Army Corps of Engineer’s Upper Penitencia Creek Flood Control Project, which will widen the creek near the Berryessa Station, it would be necessary to have columns within the channel to support both the BART aerial structure and the roadway overpass.” The new columns should be placed outside of the active channel of the creek, as high in the flood plain as possible. Placement of the columns in the upper flood plain will reduce the potential for pier scour downstream of the columns. Pier scour downstream of any columns in the active channel could disrupt the fluvial geomorphic stability of Upper Penitencia Creek.

As the DSEIR notes, both Upper Penitencia Creek and Coyote Creek have been designated as critical habitat for the endangered Central Coast California steelhead population. Therefore, it is important to minimize potential impacts to the riparian corridor of both of these creeks. At the Berryessa Station, the BART aerial structure and the roadway overpass to the station over Upper Penitencia Creek may be cumulatively significant in combination with the City of San Jose’s King Road widening project, just upstream of the proposed station, and the creek crossings proposed for the development of the San Jose Flea Market site. The current design for the Flea Market site calls for two crossings of Upper Penitencia Creek at the Flea Market. Therefore, current plans, including the BART extension, include the construction, or reconstruction, of five bridges in the short distance of the creek channel between the confluence with Coyote Creek and King Road. Since each bridge will have a negative impact on riparian habitat within critical habitat for steelhead trout, the cumulative impact of all of these crossings may be significant. The Project should evaluate options for creating access bridges in coordination with the Flea Market Project and the King Road Widening Project in order to reduce the total number of crossings in this reach of Upper Penitencia Creek.

In addition, the Project should continue to coordinate with the USACE and the SCVWD in order ensure that the proposed footprint of the station provides sufficient right of way to accommodate the USACE/SCVWD Upper Penitencia Creek Flood Protection Project floodplain alternative.

The Project should also evaluate potential impacts on the station footprint and access road alignments associated with the proposed Mid-Coyote Flood Protection project. As Water Board staff noted in February 2007, comments on the *Draft Environmental Impact Report*

for the San Jose Flea Market General Plan Amendment and Planned Development Rezoning:

The District [SCVWD] is in the planning phase for the Mid-Coyote Flood Protection Project between Interstate 280 and Montegue Expressway, which includes the reach of Coyote Creek adjacent to the Project area. The Project proponent should provide ample riparian setback in all locations and not constrain the flood project cross-section in this location. Relocation of the major connector road [Mabury Road] should be considered. Coyote Creek is a confined channel but the flood project has the potential to widen and improve the existing cross-section in order to increase flood conveyance and riparian habitat. Water Board staff recognize that the Mid-Coyote Project has not been designed and that a cross-section in the Project reach is undetermined but at the same time, it is critical that all parties coordinate and not preclude an environmentally superior alternative.

Mitigation for impacts to riparian habitat is discussed on page 76 of Chapter 4 of the DSEIR. Text on this pages states, "Impact ratios of 3:1, 2:1, and 1:1 (replacement area: loss area) will be applied for impacts to high-quality, medium quality, and lower-quality habitats, respectively." At Upper Penitencia Creek, all riparian habitat should be considered high-quality, since this creek provides critical habitat for the endangered steelhead trout. As described in the Upper Penitencia Creek Limiting Factors Analysis, (Stillwater Sciences 2006) Upper Penitencia Creek is one of the few South Bay streams to support steelhead and it is considered to have the best habitat. Any planned structures in the riparian setback areas should take this into account. To protect these resources, priority use for the riparian setback areas should include maximizing riparian vegetation and establishing adequate wildlife buffers while avoiding or minimizing the development of structural facilities

In addition, since the DSEIR does not provide a protocol for determining the quality of riparian habitat, Water Board staff cannot comment on whether or not the establishment of these criteria are appropriate. Any protocol for evaluating the relative quality of riparian habitat should include an evaluation of the local significance of the habitat. Even "lower-quality habitat" may be significant if it is the only locally-available habitat.

Finally, mitigation for impacts to riparian habitat should not be expressed solely in terms of the area of impact. Impacts to riparian habitats should also be expressed in terms of linear feet of impacts, since the functions and values of riparian corridors are a function of their linear character. Therefore, mitigation should also be provided on a linear foot basis.

Comment 3

Pump Station (Chapter 4, page 217).

Text on page 217 of Chapter 4 of the DSEIR notes that pump stations will discharge water to either the storm sewer system or the sanitary sewer system and would comply with

Mr. Fitzwater

- 5 - DSEIR BART Extension, Milpitas, San Jose, Santa Clara

NPDES and/or MS4 permit requirements and/or publicly owned treatment works pretreatment requirements to reduce pollutants. At pump stations that discharge water to the storm sewer system, the pump stations should be operated in a manner that prevents the discharge of water with low dissolved oxygen (DO) levels to surface waters. In some existing pump stations, biological activity in accumulated water has led to extremely low DO levels in the water. When the pump stations discharge this water to surface waters, local fish kills have occurred.

Comment 4

Cumulative Impacts (Chapter 4, page 285).

The discussion of cumulative impacts should include the cumulative impacts associated with new and replaced bridges near the Berryessa Station, as described above in Comment 2.

Comment 5

Incorrect Name for Design Change 9 (Tables 1.5-1 and 4.21-1).

In these two tables, under the subheading, "Design Change 9, Berryessa Creek," the following text actually describes impacts at Upper Penitencia Creek associated with the Berryessa Station. Impacts to Berryessa Creek are discussed in the previous rows of these tables.

If you have any questions, please contact me at (510) 622-5680 or e-mail bwines@waterboards.ca.gov.

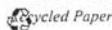
Sincerely,



Brian Wines
Water Resources Control Engineer

cc: ✓ State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044
Santa Clara Valley Water Control District, Attn: Sue Tippets, Community Projects Review Unit 5750 Almaden Expressway, San Jose, Ca 95118-3686
CDFG, Central Coast Region, Attn: Robert Floerke, Regional Manager, P.O. Box 47, Yountville CA 94599
National Marine Fisheries Service, Attn: Gary Stern, 777 Sonoma Avenue, Suite 325, Santa Rosa, CA 95404
USACE, San Francisco District, Attn: Regulatory Branch, 333 Market Street, San Francisco, CA 94105 –2197
Guadalupe-Coyote Resource Conservation District, 888 North 1st Street, Rm. 204, San Jose, CA 95112

California Environmental Protection Agency



DEPARTMENT OF TRANSPORTATION

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February 28, 2007

SCL-General
SCL000147
SCH 2002022004

Mr. Tom Fitzwater
Santa Clara Valley Transportation Authority
3331 N. First Street
San José, CA 95134-1906

*Clear
3.8.07
e*

Dear Mr. Fitzwater:

Silicon Valley Rapid Transit Corridor, BART Extension to Santa Clara - Draft Supplemental Environmental Impact Report (DSEIR)

Thank you for continuing to include the California Department of Transportation (Department) in the environmental review process for the proposed Silicon Valley Rapid Transit Corridor, BART Extension to Santa Clara. We have reviewed the DSEIR and have the following comments to offer:

Forecasting

Level of Service (LOS) Threshold for Basic Freeway Segment

Table 4.2-14, the freeway segment LOS definition is based on the Santa Clara Valley Transportation Authority (SCVTA) Congestion Management Program (CMP) Guidelines. This underlying methodology demonstrates an inconsistent Level of Service (LOS) threshold of basic freeway segments, when compared to the Highway Capacity Manual (HCM) 2000. The basic freeway segment, defined as a nationwide facility, is more appropriately analyzed and consistent with the national standard in the Highway Capacity Manual (HCM) 2000 to evaluate its LOS. The SCVTA CMP Guidelines used in the Traffic Impact Analysis are better used to determine the Santa Clara County local streets' LOS. The traffic impact analysis and associated mitigation measures for freeway segments LOS should be revised using the HCM 2000. This will demonstrate a much lower threshold for LOS D, E & F. In particular, note the much higher LOS F threshold in Table 4.2-14 which contributes to a misleading outcome by reducing the number of LOS F basic freeway segments.

"Caltrans improves mobility across California"

Mr. Tom Fitzwater
Santa Clara Valley Transit Authority
February 28, 2007
Page 2

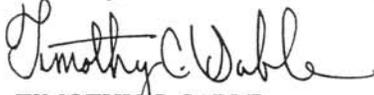
<u>LOS</u>	<u>Density in Table 4.2-14</u>	<u>Density in HCM 2000</u>
D	46	35
E	58	45
F	> 58	> 45

Please submit the revisions for our review and comment.

Additional comments, if any, from our other functional review branches will be forwarded as soon as they are received.

Should you require further information or have any questions regarding this letter, please call José L. Olveda of my staff at (510) 286-5535.

Sincerely,



TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan (State Clearinghouse)

RESPONSE TO COMMENT LETTER S-3

California Governor’s Office of Planning and Research

S-3.1 *This letter provided copies of state agency comments. Refer to Response to Comment S-1 regarding the California Regional Water Quality Control Board comment and S-2 regarding the Department of Transportation comment.*