

**Final
Environmental Impact Statement
and 4(f)/6(f) Evaluation
BART Warm Springs Extension**

VOLUME 2: RESPONSE TO PUBLIC COMMENTS



U.S. Department of Transportation
Federal Transit Administration



June 2006

**BART Warm Springs Extension,
Fremont, California**

**Final Environmental Impact Statement
and Section 4(f)/Section 6(f) Evaluation**

Volume 2: Response to Public Comments

Prepared by:

Federal Transit Administration
U.S. Department of Transportation

and

San Francisco Bay Area Rapid Transit District

Cooperating Agencies:

National Park Service
U.S. Department of the Interior

June 2006

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1.1 Project Overview

The San Francisco Bay Area Rapid Transit District (BART) has been in operation since 1972 and currently operates in four Bay Area counties: San Francisco, Alameda, Contra Costa, and San Mateo. In southern Alameda County, BART operates service to downtown Fremont. Fremont service currently terminates at the Fremont BART Station, which is near the Fremont Civic Center. In response to public policies and support for the extension of BART in southern Alameda County, BART proposed a 5.4-mile extension of the BART system south from the existing Fremont Station to a new station at Warm Springs with an optional station at Irvington. This extension is the Proposed Action analyzed in the Draft Environmental Impact Statement (DEIS). The Proposed Action also includes an optional station at Irvington.

BART previously prepared an Environmental Impact Report (EIR) in 1992 and Supplemental EIR (SEIR) in 2003 for this project in accordance with the California Environmental Quality Act (CEQA). At the conclusion of CEQA review, the BART Board of Directors adopted the project on June 26, 2003. Recent changes in state transportation funding priorities have caused BART to seek federal funding for the project. BART and the Federal Transit Administration (FTA), as federal lead agency, are preparing this Environmental Impact Statement (EIS) to enable BART to apply for federal funding. This EIS is intended to satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA) and other environmental requirements that apply to federal actions, such as Section 4(f) of the Department of Transportation Act (49 U.S. Government Code [USC] Section 303) and Section 106 of the National Historic Preservation Act. FTA will consider the Final EIS (FEIS) in reaching its decision and will prepare a Record of Decision (ROD) to complete the NEPA process.

1.2 Project Description

The Proposed Project would consist of constructing and operating a 5.4-mile extension south from the Fremont BART Station to a terminus at Warm Springs, with an optional Irvington Station. The extension alignment would generally parallel portions of the Union Pacific Railroad (UP) corridor and Interstates 680 and 880 in southern Alameda County. The initial segment of the Proposed Project would begin on an embankment at the southern end of the existing elevated Fremont BART Station. The alignment would pass over Walnut Avenue on an aerial structure and descend into a cut-and-cover subway north of Stevenson Boulevard. The alignment would continue southward in the subway structure under Fremont Central Park and the eastern arm of Lake Elizabeth, and surface to at grade north of Paseo Padre Parkway. The alignment would pass over grade-separated Paseo

Padre Parkway, and then continue southward at grade, passing under grade-separated Washington Boulevard. From Washington Boulevard, the Proposed Project alignment would continue at grade south to a terminus station at Warm Springs and South Grimmer Boulevards in the Warm Springs district. The optional Irvington Station would be located in the Irvington District at the Washington Boulevard/Osgood Road intersection. Two alternatives are considered in the DEIS and FEIS: the WSX Alternative and the No-Action Alternative.

1.3 Purpose of the FEIS

As the federal lead agency, FTA is responsible for considering this EIS. Under NEPA, FTA is required, after completion of a DEIS, to consult with public agencies and provide the public with an opportunity to comment on the DEIS. FTA is also required to respond to significant environmental issues raised in the review and consultation process.

This response-to-comments volume has been prepared to respond to public agency and general public comments received on the DEIS for the WSX project. FTA issued a Notice of Intent (NOI) for the WSX project on April 6, 2004, and sent copies of the NOI to appropriate federal, state, and local agencies. FTA published and circulated the DEIS for a 45-day public review period from March 11 to April 25, 2005. BART also held a public hearing at the Washington Township Veterans Memorial in Fremont, California, on April 12, 2005, to hear comments on the DEIS. This document contains the public comments received on the DEIS, written responses to those comments, and changes made to the DEIS in response to the comments. Upon completion of the FEIS, FTA will publish a notice of availability. FTA will consider the FEIS in reaching its decision and prepare an ROD, completing the NEPA process.

The FEIS consists of two volumes: Volume 1 presents the DEIS, which has been revised to incorporate any changes made as a result of public comments or as initiated by BART staff. Volume 2 provides responses to comments received on the DEIS. FTA will consider the FEIS in reaching its decision and will prepare a ROD to complete the NEPA process.

1.4 Format of FEIS Volume 2 (Response to Public Comments)

The two-volume FEIS was prepared in response to public comments received on the DEIS and to incorporate changes initiated by BART staff. Volume 1 presents all revisions to the DEIS. This volume, Volume 2, presents comments received by the public, BART's response to those comments, and the specific revisions made to Volume 1. This volume contains the following chapters.

- **Chapter 1: Introduction.**
- **Chapter 2: Comments on the DEIS and Responses.** During the public review period, comments were received on the DEIS from federal, state, regional, and local agencies; public groups and organizations; and private individuals. Chapter 2 contains copies of all the written comments on the DEIS and all the verbal comments received at the public meeting (in the form of the transcript of the meeting). Table 2-1 lists each letter and comment received on the DEIS.

Each letter and each comment within each letter has been numbered. Each letter is given an identifying name in the top margin (e.g., Letter 2), with individual comments within the letter numbered in the right margin (e.g., 2-3 for the third comment in the second letter). Each letter is followed by responses to all the comments contained in the letter in order of occurrence. The response numbers correspond to the comment numbers. The verbal comments in the written transcript of the public meeting are numbered similarly.

Chapter 2 also provides responses to substantive and significant environmental issues raised in the comments as required by NEPA. If a comment is not directed to significant environmental issues related to the WSX Alternative or the DEIS, the comment is noted but no response is warranted.

Responses to comments generally provide clarification, explanation, or elaboration. In some cases, the responses indicate that changes, modifications, or corrections to the text of the DEIS are required. Text in standard print is original text from the DEIS. Underlined (underlined) text indicates additions to the original text, and strikethrough (~~strikethrough~~) text indicates deletions to the original text.

Comments on the Draft EIS and Responses

2.1 List of Comments Received

Letter Number	Commenter	Date	Comment	Topic
Federal Agencies				
1	United States Environmental Protection Agency	04-14-05	1-1	Wetlands/Flood Storage
			1-2	Noise and Vibration
			1-3	Hazardous Materials
			1-4	Earthquake Safety
2	United States Department of the Interior	12-09-05	2-1	Letter of Concurrence
3A	United States Department of the Interior, National Park Service	04-19-05	3A-1	Late comment
			3A-2	Fremont Central Park
3B	United States Department of the Interior, National Park Service	05-06-05	3B-1	Federal grant money
			3B-2	Conversion of parkland
			3B-3	Noise and Vibration
			3B-4	Noise
			3B-5	Noise
			3B-6	Conversion of Parkland
			3B-7	Replacement property
			3B-8	NEPA Process
3C	United States Department of the Interior, National Park Service	10-14-05	3C-1	Section 6(f)(3) conversion of parkland concurrence.
3D	United States Department of the Interior, National Park Service	10-21-05	3D-1	Final EIS review and concurrence
State Agencies				
4	State of California, Department of Transportation	04-18-05	4-1	Fiber Optics
			4-2	Cultural Resources

Letter Number	Commenter	Date	Comment	Topic
			4-3	Highway Operations
			4-4	Highway Operations
			4-5	Highway Operations
			4-6	Traffic Analysis
			4-7	Traffic Analysis
5	California Regional Water Quality Control Board	04-25-05	5-1	Hydrology
			5-2	Hydrology
			5-3	Hydrology
			5-4	Wetlands
6	Department of Toxic Substance Control	04-22-05	6-1	Hazardous Materials
			6-2	Hazardous Materials
Regional and Local Agencies				
7	AC Transit	04-22-05	7-1	Alternatives Analysis
			7-2	Transit-oriented development
			7-3	Transit-oriented development
8	Alameda County Water District (ACWD)	04-25-05	8-1	Hydrology
			8-2	Hydrology
			8-3	Hydrology
			8-4	Hydrology
			8-5	Hydrology
			8-6	Hydrology
			8-7	Hydrology
			8-8	Hydrology
			8-9	Hydrology
			8-10	Water Distribution System
			8-11	Utility Disruptions
			8-12	Utility Disruptions
			8-13	Utility Relocations
			8-14	Agency Name
			8-15	ACWD Service Area
			8-16	Agency Coordination
9	Bay Area Air Quality Management District (BAAQMD)	04-25-05	9-1	Air Quality and Land Use
10	City of Fremont	04-22-05	10-1	General
			10-2	Purpose and Need
			10-3	Purpose and Need
			10-4	Hazardous Materials

Letter Number	Commenter	Date	Comment	Topic
		10-5		Hydrology
		10-6		Hydrology
		10-7		Hydrology
		10-8		Wetlands
		10-9		Wetlands
		10-10		Biological Resources
		10-11		Land Use and Planning
		10-12		Land Use and Planning
		10-13		Land Use and Planning
		10-14		Land Use and Planning
		10-15		Land Use and Planning
		10-16		Land Use and Planning
		10-17		Land Use and Planning
		10-18		Parks and Recreation
		10-19		Parks and Recreation
		10-20		Parks and Recreation
		10-21		Parks and Recreation
		10-22		Parks and Recreation
		10-23		Parks and Recreation
		10-24		Parks and Recreation
		10-25		Noise and Vibration
		10-26		Noise and Vibration
		10-27		Noise and Vibration
		10-28		Noise and Vibration
		10-29		Noise and Vibration
		10-30		Noise and Vibration
		10-31		Noise and Vibration
		10-32		Utilities and Public Service
		10-33		Cumulative Impacts
		10-34		Cumulative Impacts
		10-35		Section 4(f)/6(f) Evaluation
		10-36		Section 4(f)/6(f) Evaluation
		10-37		Section 4(f)/6(f) Evaluation
		10-38		Section 4(f)/6(f) Evaluation
		10-39		Section 4(f)/6(f) Evaluation
		10-40		Section 4(f)/6(f) Evaluation
		10-41		Section 4(f)/6(f) Evaluation
		10-42		Section 4(f)/6(f) Evaluation
		10-43		Section 4(f)/6(f) Evaluation

Letter Number	Commenter	Date	Comment	Topic
			10-44	Section 4(f)/6(f) Evaluation
			10-45	Section 4(f)/6(f) Evaluation
11	County of Alameda, Public Works Agency	04-25-05	11-1	Flood Storage Capacity
12	Santa Clara Valley Transportation Authority (VTA)	04-25-05	12-1	SVRTC Project Description
			12-2	SVRTC Project Description
			12-3	SVRTC Project Description
			12-4	SVRTC Project Description
			12-5	SVRTC Project Description
			12-6	SVRTC Project Description
			12-7	Ridership forecasts
			12-8	Ridership clarification
			12-9	Parking demand clarification
			12-10	SVRTC Project Description
			12-11	SVRTC Project Description
			12-12	SVRTC Project Description
			12-13	SVRTC Project Description
Groups and Organizations				
13	BayRail Alliance	04-25-05	13-1	Document Availability
			13-2	BART Hotline
			13-3	Transit-oriented Development
			13-4	Transit-oriented Development
			13-5	VTA Express Bus Ridership
			13-6	Project Cost
			13-7	Project Cost
			13-8	Environmental Justice
14	Citizen's Advisory Committee to ACTIA	04-09-05	14-1	Funding/Cost
			14-2	Funding
			14-3	Intermodal Access
			14-4	Interagency Coordination
15	Irvington Business Association	04-18-05	15-1	Irvington Station
16	League of Women Voters	04-18-05	16-1	Transit-oriented Development
			16-2	NEPA
			16-3	Alternatives Analysis
			16-4	Land Use
			16-5	Transit-oriented Development
			16-6	Alternatives Analysis
			16-7	Independent Utility

Letter Number	Commenter	Date	Comment	Topic
17	Math-Science Nucleus	04-14-05	17-1	Paleontological Resources
			17-2	Cultural Resources
			17-3	Hydrology
			17-4	Hydrology
			17-5	Habitat/Biological Resources
18	Math-Science Nucleus	03-26-05	18-1	Paleontological Resources
19	Sierra Club	04-25-05	19-1	General
			19-2	Ridership/cost
			19-3	Cost
			19-4	Model Validity
			19-5	Land Use
			19-6	Alternatives Considered
			19-7	Section 4(f)
			19-8	Funding
			19-9	Air Quality
			19-10	Energy
			19-11	Noise and Vibration
			19-12	Cost
20	Sierra Club	05-07-05	20-1	Cost
21	TRANSDEF, Schonbrunn	04-25-05	21-1	General
			21-2	Segmentation
			21-3	Logical Terminus
			21-4	Independent Utility
			21-5	Funding
			21-6	Travel Times
			21-7	Transit-oriented Development
			21-8	Transit-oriented Development
			21-9	Environmental Justice
			21-10	Environmental Justice
			21-11	Environmental Justice
			21-12	Alternatives Analysis
			21-13	Independent Utility
			21-14	Alternatives Analysis
			21-15	Alternatives Analysis
			21-16	Transit-oriented Development
			21-17	Alternatives Analysis
			21-18	Alternatives Analysis
			21-19	Funding
22	TRANSDEF, Chytilo	04-25-05	22-1	General

Letter Number	Commenter	Date	Comment	Topic
			22-2	Purpose and Need
			22-3	Alternatives Analysis
			22-4	Cumulative Impacts
			22-5	Segmentation
			22-6	NEPA
			22-7	Mitigation and Funding
23	Urban Habitat	–	23-1	Social Equity
			23-2	Social Equity
			23-3	Cost Effectiveness
			23-4	Model Validity
			23-5	Transit-oriented Development
24	Warm Springs Transit Village	04-25-05	24-1	Transit-oriented Development
			24-2	Transit-oriented Development
Individuals				
25	Anonymous	03-28-05	25-1	General
			25-2	Noise and Vibration
			25-3	Fremont Central Park
			25-4	Fremont Central Park
26	Cameron, Charlie	04-13-05	26-1	Contact Information
			26-2	Contact Information
			26-3	Contact Information
			26-4	Contact Information
			26-5	Contact Information
			26-6	Contact Information
			26-7	AC Transit
			26-8	Contact Information
			26-9	Contact Information
			26-10	Contact Information
			26-11	Contact Information
			26-12	Station Design
27	Cameron, Charlie	04-21-05	27-1	AC Transit
			27-2	AC Transit
			27-3	Contact Information
28	Cauthen, Gerald	04-24-05	28-1	General
			28-2	Funding
			28-3	General
			28-4	BART Operations
29	Corbett, Arnold	04-11-05	29-1	General
30	Corbett, Arnold	04-11-05	30-1	General

Letter Number	Commenter	Date	Comment	Topic
31	Gearhart, Susan	03-28-05	31-1	Project Description
32	Ingber, Philip	04-01-05	32-1	Project Notification List
33	Kennedy, Christy	04-19-05	33-1	General
34	Wilkin, M	04-14-05	34-1	Transportation
35	Martin, Elliot	04-18-05	35-1	Transit
			35-2	Bicycles
			35-3	Bicycles
			35-4	Transit-oriented development
			35-5	Transit-oriented development
			35-6	Transit-oriented development
36	McGowen, Michael	03-28-05	36-1	Subway
37	Nakadegawa, Roy	04-25-05	37-1	NEPA
			37-2	Transit-oriented Development
			37-3	Social Equity
			37-4	Transit-oriented Development
			37-5	Cost
			37-6	Access
			37-7	Social Equity
			37-8	Access
			37-9	Cost
			37-10	Cost
			37-11	Social Equity
			37-12	Transit-oriented Development
			37-13	Transit-oriented Development
			37-14	Social Equity
			37-15	Regional Perspective, Access
			37-16	Access
			37-18	General
			37-19	Ridership
			37-20	System Expansion Criteria
			37-21	Cost
			37-22	System Expansion Criteria
			37-23	Access
			37-24	Access
			37-25	Cumulative Impacts
			37-26	Transit-oriented Development
			37-27	Land Use
			37-28	Land Use
			37-29	Cost

Letter Number	Commenter	Date	Comment	Topic
			37-30	Land Use
			37-31	Land Use
			37-32	Land Use
			37-33	Land Use
			37-34	Cost
			37-35	Land Use
			37-36	Parking
			37-37	Ridership
			37-38	Bus Alternative
			37-39	Traffic
			37-40	Parking
			37-41	Transit-oriented Development
			37-42	Bus Rapid Transit
			37-43	Bus Rapid Transit
			37-44	Project Alternatives
38	Nelson, Mark	04-01-05	38-1	Optional Irvington Station
39	Rasko, George	04-25-05	39-1	BART Extension
40	Thomas, Carol	04-04-05	40-1	Project Notification List
41	Tustin, Don	03-28-05	41-1	Project Notification List
Public Hearing Transcript				
42	Heath, Robert	04-12-05	42-1	Ventilation Structures
			42-2	At-grade alignment
			42-3	Fremont Central Park
			42-4	Ventilation Structures
	Perkell, Roy	04-12-05	42-5	SVRTC
	Cameron, Charlie	04-12-05	42-6	Transportation
	Matta, George	04-12-05	42-7	Irvington Station
	Quinson, Roberta	04-12-05	42-8	Vibration
			42-9	Sound Walls
	Martin, Elliot	04-12-05	42-10	Development
	Schonbrunn, David	04-12-05	42-11	Logical Terminus
			42-12	Independent Utility
			42-13	Smart Growth
			42-14	Cost
			42-15	Smart Growth
			42-16	High-speed Rail
	Louey, Tony	04-12-05	42-17	Access
			42-18	Access
			42-19	Transit-oriented Development

Letter Number	Commenter	Date	Comment	Topic
	McConnel, Randy	04-12-05	42-20	Transit
			42-21	Transit
	Matta, George	04-12-05	42-22	Irvington Station
	Bacon, Anne	04-12-05	42-23	Transit-oriented Development
			42-24	Smart Growth

2.2 Comment Letters and Responses

BART received comments from the public on its Draft EIS in a variety of ways:

- Written comment letters from public agencies received during the public comment period,
- Written comments as letters or email received from groups or individuals during the public comment period,
- Comment cards received during the Public Hearing of April 12, 2005, and
- Verbal comments recorded during the Public Hearing of April 12, 2005.

This section presents all written and verbal comments received on the Draft EIS and BART's response to each substantive comment on environmental issues. Each comment letter is reproduced in its entirety, including any supplemental material, and followed by BART's response to each comment in the letter.

If a proposed comment results in a change to the EIS, the proposed comment is discussed. Deleted text is stricken (~~deleted~~), an additional text is underlined (additional text). The text changes have been made in the Final EIS.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Letter 1

RECEIVED
APR 16 2005

April 14, 2005

Ms. Lorraine Lerman
U.S. Department of Transportation
Federal Transit Administration, Region IX
201 Mission Street, Suite 2210
San Francisco, CA 94105

Subject: Draft Environmental Impact Statement (Draft EIS) for the Bay Area Rapid Transit District Warm Springs Extension, Alameda County, California (CEQ # 050095)

Dear Ms. Lerman:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act.

Based on our review, EPA has rated the Draft EIS as Lack of Objections (LO). In addition, we note that the Draft EIS is well written and has addressed EPA's previous scoping comments (May 17, 2004). While EPA has no objections to the Warm Springs Extension Project, our review has identified mitigation measures that could be accomplished to further minimize environmental impacts of the proposed project. Our enclosed comments address impacts on wetlands and flood storage capacity, noise impacts, hazardous materials, and earthquake safety. A Summary of EPA Rating Definitions is also enclosed.

We appreciate the opportunity to review this Draft EIS. When the Final EIS is released for public review, please send two copies to the address above (mail code: CED-2). If you have any questions, please contact me or Connell Dunning, the lead reviewer for this project. Connell can be reached at 415-947-4161 or dunning.connell@epa.gov.

Sincerely,

for Lisa B. Hanf, Manager
Environmental Review Office

Enclosures: Summary of EPA Rating Definitions
Detailed Comments

cc: Ms. Shari Adams, BART Warm Springs Group Manager

**U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action***

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE BAY AREA RAPID TRANSIT DISTRICT WARM SPRINGS EXTENSION IN ALAMEDA COUNTY, CALIFORNIA, APRIL 12, 2005

Impacts to Wetlands and Flood Storage Capacity

Page 4.5-14 of the Draft Environmental Impact Statement (Draft EIS) states that the Warm Springs Extension Project will require filling a portion of Tule Pond South, resulting in a loss of flood storage capacity. Page 4.6-9 states that the required filling of Tule Pond South will affect up to 0.7 acres of seasonal wetlands habitat. Mitigation Measure H-3 (page 4.5-14) proposes to (1) expand Tule Pond South and/or (2) create an additional flood storage facility, or detention pond, at the same location to mitigate for the impact of lost flood storage capacity. The Draft EIS does not discuss the feasibility of each option, or what additional impacts may result from the proposed options if implemented individually or together.

1-1

Recommendations:

Clarify the description of Mitigation Measure H-3 to indicate the feasibility of expanding Tule Pond South and/or creating an additional flood detention pond. In light of the estimated impacts to seasonal wetlands habitat, address the potential beneficial and negative impacts that may result from the implementation of either measure and identify any additional measures to further minimize impacts.

The Draft EIS incorporates many measures to avoid and minimize impacts. The Final EIS should quantify the benefits and reduced impacts that are a result of any additional avoidance, minimization, or mitigation measures that are identified between the Draft and Final EIS.

Noise and Vibration Impacts

The Draft EIS presents the Federal Transit Administration's (FTA) guidance for noise mitigation and indicates that for all residences with severe noise impacts, mitigation is proposed, and for all residences with moderate noise impacts, mitigation is recommended (page 4.13-18). However, Table 4.13-9 (page 4.13-21) identifies the benefits of mitigation when proposed measures are applied to both severe and moderate impacts (totaling 393 residences), implying that mitigation will be implemented to reduce impacts where both severe and moderate impacts are anticipated.

1-2

Recommendation:

Clarify the proposed mitigation for noise and vibration impacts that will accompany this project. The Final EIS should clearly indicate whether FTA and Bay Area Rapid Transit (BART) propose mitigation for all 393 residences with moderate and severe noise impacts, or whether mitigation is proposed for only the 146 residences with severe noise impacts. Modify Table 4.13-9, if necessary, to reflect actual noise mitigation

commitments. If FTA and BART determine that additional noise mitigation to residences with moderate impacts is warranted, the Final EIS should include this commitment and quantify the number of residences that will benefit from mitigation.

1-2
cont.

Hazardous Materials and Hazardous Waste

The Draft EIS identifies that the proposed extension will include the construction of a vehicle maintenance shop building and a three-acre fenced maintenance yard. While the Draft EIS addresses procedures for responding to potential hazards associated with gas leaks, hazardous materials, and toxic spills during construction and operation of the proposed extension, the document does not address procedures for minimizing hazardous material usage and preventing production of hazardous waste. A hazardous materials management plan can potentially reduce the volume and/or toxicity of waste requiring subsequent management as hazardous waste under the Resource Conservation and Recovery Act (RCRA) and California's RCRA implementation provisions.

1-3

Recommendations:

Address the expected types and volumes of hazardous materials associated with the maintenance yard and other facilities. Evaluate alternate processes potentially using a smaller volume of hazardous materials and/or less toxic materials, especially as project mitigation. Identify expected storage, disposal, and management plans and provide an estimate of the reduction in hazardous material usage.

Earthquake Safety Measures

The proposed Warm Springs Extension will cross the Hayward Fault Zone (HFZ) twice. The Draft EIS does a good job of disclosing the potential seismic activity along the HFZ, including an estimated 32% chance for an earthquake of magnitude equal to or greater than 6.7 to occur between 2000 and 2030 (page 4.3-8). Given the high potential for fault activity and resulting safety concerns, it is critical that the BART and FTA clearly outline in the Draft EIS how the construction and operation of the new facility will incorporate the latest technology to ensure human safety.

1-4

Recommendations:

Expand upon the mitigation measures proposed for potential impacts resulting from earthquake-induced ground shaking and ground rupture (page 4.3-13). Specifically, the Draft EIS should further describe measures and new technologies that will be utilized to construct a safe facility. In addition, the Draft EIS should identify how BART's Earthquake Safety Program and ongoing seismic vulnerability studies will inform the construction and operation of the proposed facility.

Response to Comment Letter 1

1-1: BART's engineering analysis determined that the creation of additional flood storage at a new location was the only feasible alternative, and it determined that the right-of-way is sufficiently large to construct the additional flood control area.

No substantial negative impacts would be anticipated for either option noted under mitigation measure H-3, as the current habitat at that location consists of disturbed grassland. In addition, the benefit of constructing the replacement flood storage capacity at this location is that the mitigation would provide on-site, in-kind replacement of wetland habitat functions.

1-2: In the discussion of Mitigation Measure N-1, the terms "proposed" and "recommended" are synonymous. Both terms refer to locations where BART would implement mitigation as part of the proposed project.

As described on pages 4.13-10 and 4.13-11 of the DEIS there are two types of noise impacts as defined by FTA: severe impacts and moderate impacts. For the purposes of identifying areas in which mitigation will be applied, moderate impacts are broken down into two categories: those cases where the increase in noise from the project is 5 dB or greater, and those cases where the increase is less than 5 dB. So in summary the following three categories of impacts are used in the analysis:

- Severe impacts,
- Moderate impacts with a 5 dB increase, and
- Moderate impacts with less than 5 dB increase.

The locations where each of these impacts are predicted to occur are identified in Figure 4.13 of the DEIS. Table 4.13-7 shows the number of residences subject to all three types of impacts.

As discussed on page 4.13-18 of the DEIS, BART will implement mitigation at locations subject to severe impacts and at locations subject to moderate impacts with a 5dB increase. Mitigation will not be implemented at locations subject to moderate impacts and an increase of less than 5dB. It is important to understand, however, that BART's planned mitigation for locations with severe impacts and locations with moderate impacts and a 5db increase could, in some cases, benefit locations with moderate impacts and less than a 5dB increase as well. Such a situation occurs at residences located on the east side of the track between Walnut Avenue and Stevenson Boulevard. As can be seen in Figure 4.13-6a, residences with moderate impacts and a less than 5dB increase (noted a green) are located behind residences with moderate impacts and a 5dB increase (noted in blue).

Table 4.13-9 identifies locations where noise barriers are proposed as mitigation. This mitigation addresses all residences subject to severe impacts and all residences subject to a moderate impact and 5dB increase, with the exception of two residences, which are located between Paseo Parkway and Washington Boulevard, and subject to severe impacts. The planned noise barrier at this location would not fully mitigate the severe impacts at these two residences. As stated in Table 4.13-9, building sound insulation is the only feasible mitigation to fully mitigate the severe impacts at these residences.

At this time, BART plans to provide mitigation (the combination of barriers and insulation) at all 393 residences listed in Table 4.13-9. In the event that additional site-specific studies demonstrate that mitigation is appropriate at specific locations, the list of residences presented in Table 4.13-9 will be modified based on the results of the additional studies.

- 1-3:** The comment advocates the development of a hazardous materials management plan to reduce the volume and/or toxicity of hazardous material generated through operations of the maintenance facility.

The proposed maintenance facility will only have capacity for 1 or 2 vehicles at a time. Experience with current maintenance of BART's electric vehicles produces a minimum amount of hazardous waste. BART's four maintenance facilities, which perform dedicated maintenance on up to 200 vehicles, are not designated as large quantity generators of hazardous waste. The majority of waste generated by BART's maintenance operations is recycled per current BART operating procedures. Because BART has not been a routine large quantity hazardous waste generator, a written waste minimization program required for such under Title 22 is not necessary. However, BART does incorporate waste minimization in all of its activities with efforts to minimize waste streams, identify obsolete products and substitute products that are more environmentally friendly, and classify hazardous waste as universal waste, as appropriate, in an effort to encourage recycling and reuse and minimize cost. Compliance with local, state, and federal applicable laws for the storage, handling, and transportation of hazardous materials will ensure that any impact is less than significant.

- 1-4:** BART has employed state-of-the-art analytical methods to determine the seismic characteristics of the locations where the WSX alignment crosses the Hayward Fault. As noted in the comment, the WSX Alignment will cross the Hayward Fault in two locations. The northern fault crossing will be made on an earthen embankment, and the southern fault crossing will be at grade. An earthen embankment is more tolerant of differential fault movement than rigid structures and the safest way to cross the fault. An engineered embankment is a proven solution to the problem of fault shaking or fault rupture. The southern fault crossing is at grade, and no embankment is necessary. Fault rupture would be immediately detectable by BART's seismic sensors and the BART train control system would immediately halt service. BART's seismic design program directly informs BART seismic design criteria, which was used on all structures on the WSX project. The title for Mitigation Measure G-2, which appears on page 4.3-13 of the DEIS, is misleading, as the BART fault crossings will not be made on elevated structures. The word elevated will be removed from the Title of the mitigation measure and from the second sentence as follows:

Mitigation Measure G-2—Design and construct ~~elevated~~ BART tracks on engineered embankments. In general, engineered earthen embankments are more tolerant of the differential fault movement than are rigid structures that could otherwise be used to support elevated BART tracks. Accordingly, ~~elevated~~ segments of the proposed BART tracks that cross known traces of the HFZ will be constructed on engineered earthen embankments instead of rigid structures. The embankment design will be prepared in accordance with the BART Extensions Program Design Criteria, Volume II, 1990, and specific recommendations developed for the fault crossing near Walnut Avenue (Bay Area Transit Consultants 1989). The design criteria established for the Walnut Avenue crossing will include adequate crest width

to accommodate track realignment that could become necessary due to fault rupture and/or fault creep, 2:1 side slopes, and removal of unstable foundation materials.



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240



ER 05/207

Letter 2

DEC 09 2005

Ms. Lorraine Lerman
Community Planner
Federal Transit Administration - Region IX
210 Mission Street, Suite 2210
San Francisco, California 94105

Dear Ms. Lerman:

This is in response to your request for the Department of the Interior's (DOI) comments on the Draft Environmental Impact Statement and Section 4(f)/6(f) Evaluation for the San Francisco Bay Area Rapid Transit (BART) District, **Warm Springs Extension Project**, City of Fremont, Alameda County, California.

The National Park Service, as a cooperating agency in the preparation of the subject project, provided the attached comments to the Federal Transit Administration on October 21, 2005, indicating that its concerns have now been adequately addressed.

We concur that there is no prudent and feasible alternative to the proposed project, if project objectives are to be met. We also concur with the proposed measures to minimize harm to historic resources.

For further information, please contact Gary Munsterman, Program Coordinator, National Park Service at 510-817-1445.

Sincerely,

Willie R. Taylor
Director, Office of Environmental Policy
and Compliance

Attachment: NPS letter dated October 21, 2005

Response to Comment Letter 2

2-1: No response is required.

Page 1 of 1

Letter 3A

From: Gary_Munsterman@nps.gov
To: "bartwarmsspringsextension@bart.gov"
 <bartwarmsspringsextension@bart.gov>
cc: rrend@parks.ca.gov
Date: Tuesday, April 19, 2005 11:19AM
Subject: Comment Extension Request

RECEIVED

APR 19 2005

The National Park Service (NPS) requests an extension for BART receipt of comments from April 25 till May 6. The California Department of Park and Recreation, the city of Fremont, and NPS met in March concerning the conversion of the portion of Fremont Central Park to be occupied by BART ventilation structures and adjoining replacement property. We had anticipated but have yet to receive a formal request from the city for the conversion of this portion of the park which is protected by Section 6(f)(3) requirements associated with prior Land and Water Conservation Fund grants funded improvements at the park. We seek to obtain and submit this request into the record of the DEIS with other NPS comments in order that this review satisfy NEPA requirements associated with the parkland conversion. Failure to properly characterize both the converted area and replacement property within the subject DEIS could result in the need for subsequent environmental reviews for the parkland conversion action with possible resulting delays. Please reply indicating your willingness to grant the requested extension.

3A-1

3A-2

Gary Munsterman
 National Park Service
 1111 Jackson Street, Suite 700
 Oakland, CA 94607-4807
 Voice 510-817-1445
 Fax 510-817-1505

[http://notes-c01.adm.bart.gov/mail/web0006.nsf/\(\\$Inbox\)/41F2475B5804965E88256FE80...](http://notes-c01.adm.bart.gov/mail/web0006.nsf/($Inbox)/41F2475B5804965E88256FE80...) 4/19/2005

Response to Comment Letter 3A

3A-1: BART agreed to accept a late comment from the National Park Service (NPS). See comment letter no. 3B of May 6, 2005.

3A-2: A formal request for conversion of the portion of Fremont Central Park protected by Section 6(f)3 associated with prior Land and Water Conservation Fund grants was made by the City of Fremont subsequent to this letter. The conversion request is attached to the following letter (letter no. 3B) from the National Park Service.

Letter 3B



United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
1111 Jackson Street, Suite 700
Oakland, California 94607-4807



IN REPLY REFER TO:
PWR-L3217

May 6, 2005

Ms. Shari Adams
San Francisco Bay Area Rapid Transit District
300 Lakeshore Drive
21st Floor
Oakland, CA 94612

RECEIVED
BART
MAY 11 2005
TRANSIT SYSTEM
DEVELOPMENT

Subject: Comments on Draft Environmental Impact Statement and 4(f)/6(f) Evaluation
BART Warm Springs Extension

Dear Ms. Adams:

The National Park Service (NPS) has reviewed portions of the subject document as it pertains to the impact of the proposed project on Fremont Central Park, the location of two Land and Water Conservation Fund grants (Grant Nos. 06-00332 and 06-00394). We submit the following comments in accordance with a prior requested comment extension granted by BART and the Federal Transit Administration. The subject grants provided for the improvement of a pathway along the northern and eastern shore of Lake Elizabeth and the utility, landscape and ballfield improvements on a 66 acre portion of the park located north of the former state highway parcel, subsequently acquired by the city.

Section 4.9.1 describes Fremont Central Park and the role of the California Department of Parks and Recreation (CDPR) and National Park Service Land as a result of the Land and Water Conservation Fund (LWCF) grants described in this section. It should be clarified the LWCF grants were awarded to CDPR and subsequently assigned by CDPR to the city of Fremont for the described projects.

3B-1

The National Park Service recognizes the unavoidable impact associated with construction activities associated with the project in general and within Fremont Central Park in particular. BART has identified mitigation measures which addresses these impacts to the extent practicable. Our review is principally directed to the conversion of portions of Central Park pursuant to Section 6(f) of the Land and Water Conservation Fund Act of 1965, as amended (P.L. 88-578) and implementing regulations at 36 CFR 59.3.

3B-2

Section 4.13 of the Draft Environmental Impact Statement (DEIS) describes the noise and vibration impacts of proposed BART operations along the project route. Receptor locations along the route which exceed an increase greater than 5 db are identified. Central Park is neither identified as a noise receptor location or an area expected to be either moderately or severely impacted by increased noise. Noise impacts were a principal stated objection of NPS in response to the 1992 DEIS and evaluation of the potential conversion of the park as a result of the elevated track proposed at that time. While BART representatives have assured that the noise impacts within the park will not be significant, we request that the impact be further evaluated in the FEIS. While urban background noise is prevalent throughout the park, the Lake Elizabeth pathways provide an opportunity for quiet reflection often sought within parks in urban areas. NPS requests further evaluation of the impacts of noise emissions from the proposed ventilation structures and the southern portal. We request BART further quantify the anticipated noise

3B-3

3B-4

3B-5



National Park Service
Page 2

effects resulting from proposed BART operations on trail users. The Section 4(f) evaluation suggests that acoustically rated vents is likely to reduce noise impacts below a level of impairment. This requirement is not however contained a mitigation measure nor is such a measure quantified as having the anticipated effect.

3B-5
Cont.

NPS has also reviewed Section 6.4.2 of the DEIS containing the 4(f) evaluation of the proposed project on Central Park. The proposed construction of a subway section across and under the park is qualifies the the project as providing for only temporary use of park land during the period of construction pursuant to Section 4(f). Similarly, Section 675.9.5(a) of the Land and Water Conservation Fund Manual exempts underground utilities as exempt from 6(f) conversion requirements. NPS finds this provision to be applicable to proposed project's subway portions in as much as BART serve as a municipal utility providing for the transport of persons throughout the Bay Area., also subject to California State Public Utility Commission safety oversight.

The proposed ventilation structures estimate to occupy approximately approximately 24,484 s.f. of property improved with the referenced LWCF grants are considered to be a conversion and subject to review and replacement pursuant to Section 6(f). NPS acknowledges the adequacy of the referenced 4(f) evaluation, including avoidance alternatives and mitigation measures. This analysis contains information pertinent to the evaluation required by Section 6(f) criteria contained within 36 CFR 59.3 and corresponding requirements contained within Section 675.9.3 of the LWCF Manual.

The city of Fremont's request for the conversion of the area to be occupied by the ventilation structures within Central Park addresses the subject requirements. The city's request is enclosed and we request that it be included within the Final EIS record for the purpose of satisfying environmental review requirements associated with the requested federal action by NPS on the conversion request. Due to the late arrival of this formal request, neither NPS nor CDPR have had an opportunity to fully review the justification and response to the referenced criteria. The submittal identifies a proposed replacement parcels, containing approximately 1.6 acres, adjoining Central Park's eastern boundary and including a portion of the Union Pacific Railroad (UPRR) line, which is proposed to be relocated as a part of a railroad grade separation project. The location of the parcel is identified on a Section 6(f)(3) boundary map incorporated by referenced. We request BART include a copy of this map within the FEIS as a part of NPS' comments. NPS finds that the proposed replacement property would provide similar recreation utility as the area proposed to be occupied by the ventilation structures.

3B-6

3B-7

NPS will further evaluate the city's recent submittal and respond following the completion of BART environmental review, including consideration of any public comments on the effect of the project on Central Park. Although the proposed replacement property was not disclosed in the DEIS and therefore has not been subject to public review, we believe that this action will qualify for a categorical exclusion from further environmental review under NPS rules implementing the National Environmental Policy Act (Director's Order 12 Section 3.4.F.2). We invite any public comments on the proposed application of such an exemption to the designation of the proposed replacement property.

3B-8

If you have any questions, please do not hesitate to contact me at 510-817-1445.

Sincerely,



Gary Munsterman
Grants Programs Coordinator

Enclosure
C Richard Rendon, CDPR



Parks and Recreation Department
 P.O. Box 5006, Fremont, CA 94537-5006
 www.fremont.gov

May 3, 2005

Mr. Richard Rendon
 Project Officer
 State of California, Department of Parks and Recreation
 P.O. Box 942896
 Sacramento, CA 94296-0001

Dear Mr. Rendon:

In response to your letter dated December 1, 2004, I am writing to request the approval of the conversion of approximately 0.56 acres of land in Fremont's Central Park from public outdoor recreational use, in order to accommodate the siting and development of two above-ground-ventilation structures required by the BART Warm Springs Extension project. The converted land will be replaced by a greater amount of park land (approximately 1.6 acres), as described in this letter and reflected in the attached maps.

The City understands it is the position of the National Park Service (NPS) and the State Department of Parks and Recreation (State) that the siting and development of the two ventilation structures constitutes a conversion per Chapter 675.9(3)(A)(4) of the Land and Water Conservation Grants Manual, which states that conversions generally occur when "Public outdoor recreation use of property acquired or developed with Land and Water Conservation Fund (LWCF) assistance is terminated." The City further understands that the involvement of the NPS, through the State, is a result of the use of funds from two LWCF grants for recreational improvements to Central Park: Grant 06-00332, which provided \$14,455 for the partial development of a bicycle trail along the northern and eastern shores of Lake Elizabeth, and Grant 06-00394, which provided \$95,562 for utility construction, installation of an irrigation system, construction of two baseball fields, and landscaping for 5.83 acres in the northeast portion of the park. However, the City also notes the absence of a boundary map delineating the areas approved with these grant funds, since the grants were approved prior to the practice of requiring the preparation of such a map.

In light of the absence of a boundary map for the two LWCF grants to the City, and the fact that neither of the vent structures are situated on land acquired nor approved with LWCF assistance, the City disputes the conclusion that the siting of the two ventilation structures in Central Park constitutes a conversion of property acquired or developed with the LWCF grant funds. However, in the interest of reaching an expedited resolution to the conversion issue, the City is prepared to comply with the requirements imposed by the State, and hereby seeks approval of the conversion as outlined in this letter. To this end,



Parks Division Corporation Yard
 87350 Sequoia, Fremont
 510 713-5700 ph | 510 713-5700 fax

Recreation Division
 3300 Capitol Avenue, Fremont
 510 494-6900 ph | 510 494-4753 fax

Mr. Richard Rendon
 May 3, 2005

the City has attached a proposed Section 6(f)(3) Boundary Map prepared according to the requirements you provided.

It should be noted that, in the City's opinion, the underground portion of the BART subway through Central Park qualifies as an exception to conversion per the language in Section 5(a) of the Manual, which states "Underground utility easements that do not have significant impacts upon the recreational utility of the park will not constitute a conversion." The City will be granting an underground easement to BART for construction and operation of the trains, and no surface rights will be granted that adversely affect the recreational utility of the park. Therefore, the City requests approval from the State that this underground easement is exempt from the conversion requirements as an "underground utility easement" pursuant to Section 5(a) of the Manual.

In response to the "Prerequisites for Consideration of Conversions" (Part 675.9, Section 3(B)(1-12) described in the LWCF Grants Manual, I offer the following information. I have numbered each section to reflect the numbering in the Grants Manual, for ease of review.

B. (1) All practical alternatives to the conversion of the land have been evaluated in Chapter 3 of the "Draft Environmental Impact Statement and Draft 4(f)/6(f) Evaluation, BART Warm Springs Extension", February 2005, prepared by the Federal Transit Administration, U.S. Department of Transportation, and the San Francisco Bay Area Rapid Transit District (Draft EIS).

B. (2) Enclosed with this letter is a copy of an appraisal report that estimates the fair market value of the property to be converted and the property proposed for substitution. This appraisal was prepared in accordance with uniform Federal appraisal standards and has been discussed by City staff with Bob Basilla, National Park Service, who will review the appraisal. The appraisal report values the parkland impacted by the two BART ventilation structures. It should be noted that although the appraisal values the entire 12,500 square feet of property impacted by the northern ventilation structure, only 2,400 square feet of this site is considered as converted parkland.

Using these square footages, the values of the property to be converted and the property to be replaced are as follows:

Park Property

Northern Ventilation Structure Parcel:	2,400 sq. ft. x \$25.00 per square foot =	\$60,000
Southern Ventilation Structure Parcel:	22,084 sq. ft. x \$0.916 per square foot =	\$20,250 (rounded)
Total:		\$ 80,250

Mr. Richard Rendon
May 3, 2005

Replacement Parcel: 69,696 sq. ft. x \$5.25 per square foot = \$366,000

B. (3) The City of Fremont's City Council and Recreation Commission have evaluated the proposed replacement property for its equivalent usefulness and location as the land that is being converted, according to specific criteria included in the *Parks and Recreation Chapter* of the City's General Plan. The replacement land is adjacent to Central Park, and will therefore serve the same community as the converted property. Also, the replacement land will be administered by the same political jurisdiction (i.e. the City of Fremont) as the converted property.

B. (3)(a) A small portion of the converted property is currently used as a parking lot; this parking will be replaced in kind in an undeveloped area immediately adjacent to the existing lot. The remaining converted property, which is woodlands, will be replaced with similar land. Overall, the balance of open space/natural area and developed park land will be maintained through the land conversion and replacement transaction.

B. (3)(b) The replacement property will be incorporated into Central Park, and is close to the two converted areas. The replacement property will ultimately be adjacent to Central Park, once the land currently owned by Union Pacific Railroad is brought into ownership by the City. This will occur as a result of another project, the City of Fremont's Washington Boulevard/Paseo Padre Grade Separation Project.

The Grade Separation Project will enable the BART Warm Springs Extension to remain at grade between the area south of Central Park and south of Washington Boulevard. Therefore, it is understood by the City and BART that the City Grade Separation Project must precede the BART Extension.

As part of the Grade Separation Project, the City will relocate the Union Pacific Railroad (UPRR) onto a new alignment east of the property proposed for Central Park replacement (see Section 6(f)(3) Boundary Map). At such time that UPRR freight operations are moved to the new alignment (expected to occur approximately two years after award of the Grade Separation construction contract, which is anticipated to happen in late 2005), the City will provide UPRR with title to the new alignment property and UPRR, in turn, will transfer title of the current UPRR alignment to City. This alignment currently lies between Central Park and the proposed Central Park replacement property, thereby providing access to the replacement property. The City plans to convert the former railroad alignment to a pedestrian and bicycle path. This property exchange is included in a Property Exchange Agreement between the City and UPRR that is anticipated to be executed within the next two months (by June, 2005). As a result, prior to the start of construction of the BART Warm Springs Extension Project, the City will own the existing UPRR property between Central Park and the proposed Central Park replacement property.

B. (3)(c) This section is not applicable since project sponsor is replacing converted property.

Mr. Richard Rendon
May 3, 2005

B. (3)(d) This section is not applicable to this request.

B. (4) The replacement property meets the requirements of Part 640.2.1 (C). A portion of the land will be converted to wetlands as mitigation for the Paseo Padre Parkway Grade Separation Project, thereby providing special recreational opportunities.

B. (4) (a-d) These sections are not applicable to this request.

B. (5) The proposed conversion of approximately 0.56 acres of Fremont's 433.90-acre Central Park constitutes a partial conversion. The impacts of the siting of the northern vent structure will be mitigated through the replacement, in kind and in close proximity, of all recreational facilities and parking that will be affected by the conversion. The impacts of the siting of the south vent structure will be mitigated through the replacement of woodlands with wetlands. Public use and enjoyment, and the recreational viability of the unconverted areas of the park, will continue with little to no disruption.

The Draft EIS has identified the following mitigation measures to "potential adverse effects on visual quality and character of Fremont Central Park from proposed ventilation structures" (see page 4.11-14):

- "Coordinate with the City of Fremont in developing criteria for design of the structures to be placed in the park. BART will ensure that the final designs of the structures and the plantings will be consistent with visual resources of the immediate project vicinity, including park maintenance facilities and landscaping.
- Use surface treatments, forms, textures and colors that reflect Fremont's architectural character and that help blend the ventilation structures and ancillary equipment into the surroundings.
- Establish plantings (e.g. trees and shrubs) along the edges of buildings and any fencing. The plantings will be consistent with the character of existing vegetation in the park."

The City of Fremont is in agreement with these mitigation measures.

B. (6) and (7) All necessary coordination with Federal Agencies has been addressed through the preparation of the Draft EIS.

B. (8) Intergovernmental Review System (E. O. 12372) requires federal agencies to notify the designated state clearinghouse of proposed federal actions. BART has notified the Governor's Office of Planning and Research about the preparation of the Draft EIS, thereby satisfying this requirement.

B. (9) The proposed conversion is not inconsistent with the State Comprehensive Outdoor Recreation Plan (SCORP), since the issue of conversion is not addressed in the 2002 SCORP.

Mr. Richard Renslow
May 3, 2005

B. (10) No comment is required in response to this section.

B. (11) This section is not applicable to this request.

B. (12) The southern vent structure is located on land owned by the Alameda County Flood Control and Water Conservation District. The District and the City of Fremont entered into a Real Property license agreement on August 20, 1968, which granted the City the right to use approximately 174 acres of land owned by the District for recreational purposes. This Agreement expired on August 19, 2004, and was renewed with a one-year Real Property License Agreement that will expire on August 19, 2005. The two agencies are currently working to finalize a long-term (25-year) agreement, which will allow the City to continue operating the District's holdings for recreational purposes. Both the original agreement and the one-year extension are enclosed for your reference.

And, lastly, the recorded deed for the replacement property will be submitted upon completion of the transaction.

Please feel free to contact me at 510.494.4363 or arakley@ci.fremont.ca.us if you have any questions.

Sincerely,



Amy N. Rakley, AICP
Park Planning Manager

Enclosures:

1. Appraisals of converted parkland and replacement land
 2. Original (expired) and current License Agreements, City of Fremont and Alameda County Flood Control and Water Conservation District
 3. Section 6(f)(3) boundary map
- C:
- Michael Barrett, Assistant City Attorney, City of Fremont
 - Jim Pierson, Assistant City Engineer, City of Fremont
 - Randy Sabado, Real Property Manager, City of Fremont
 - Larissa Seto, Senior Deputy City Attorney, City of Fremont
 - ✓ Gary Munsterman, National Park Service
 - Shari Tavaf Adams, Warm Springs Group Manager, Bay Area Rapid Transit District



Response to Comment Letter 3B

3B-1: Section 4.9 has been revised to incorporate the comment. The second full paragraph on page 4.9-2 has been amended by adding the following text after the fourth sentence:

The grants were awarded to DPR and subsequently assigned by DPR to the City of Fremont for improvements in Fremont Central Park.

3B-2: Comment noted.

3B-3: Page 4.13-4 of the draft EIS states that Fremont Central Park is a noise-sensitive receptor. However, in response to concerns raised by the NPS regarding noise impacts on the park from the elevated track proposed in 1992, BART modified the project design to put the track underground in the vicinity of primary use areas in the park thus eliminating adverse noise effects from train passages to park users. (See also the response to comment 3.5.)

3B-4: Refer to the responses to Comments 3.3 and 3.5.

3B-5: Fremont Central Park is a multiple use facility with sports fields, Lake Elizabeth, picnic grounds and a footpath, which skirts the lake. Consequently, the existing ambient noise environment and the potential for impact are different depending on which portion of the park is affected. For example, the sports fields (baseball diamond and basketball courts) are not as sensitive to noise as the footpath. The ambient noise environment in the park also varies. Close to the major roadways (Stevenson Boulevard on the north and Paseo Padre Parkway on the west) motor vehicle traffic noise is the dominant source. On the east side of the park is an active freight railroad corridor owned by the Union Pacific Railroad. The park is also in the flight path of the regional airport in Hayward and subject to low flying small aircraft.

As reported in the DEIS, ambient noise measurements were conducted in Fremont Central Park near the walking trail. (See Figure 4.13-3 of the DEIS, location ST-1.) Audible noise sources that occurred during the measurement were distant traffic and distant construction noise. The measured sound level was 49dBA-Leq over 1 hour. This is a low sound level for an urban setting and is considered to be representative of the generally low sound level in the park.

There are three potential noise sources from BART related to the park:

- Airborne noise from BART trains moving through the subway that will be emitted from the vent structures in the park;
- Airborne noise that will be emitted from the vent structures when the ventilation fans operate in the subway; and
- BART trains in the south portal area and on ballasted tracks south of the south portal (The north portal is north of Stevenson Boulevard and sufficiently far from the park that train noise will not cause a significant noise impact to the sports fields on the north end of the park.)

The BART train noise from the south portal and from the vent shafts would be a frequent

occurrence, whereas noise from the ventilation fans would be a very infrequent event. The ventilation fans would be used only during an emergency or for nighttime or for weekend maintenance work hours (when trains do not operate).

An independent analysis conducted by Wilson-Ihrig Associates indicates that acoustical treatments incorporated into the vent structures will limit noise from train passages to 45 dBA or less just outside the structure itself. This is well below the transient noise criterion of 55 dBA identified in Table 4.13-6 of the EIS for ancillary facilities.

As discussed on page 4.13-26 of the DEIS, noise impacts from ventilation fan operation at the proposed ventilation structures could exceed BART's Design Criteria for land use Category II. To reduce potential noise impacts from fan operations at the ventilation structures, Mitigation Measure N-3 identifies measures that BART will employ to mitigate impacts from this source of noise. This measure includes a performance standard of 45 dBA for continuous noise as specified in Table 4.13-6 for Category II open space. Specific design measures to reduce noise from fan operations to acceptable levels, such as noise dampers, will be identified as part of the project final design. With noise from ventilation fan operations being at or below 45 dBA at active park use areas, the combined sound level of vent operations and the existing ambient noise level would be at most 51 dBA. Accordingly the increase in noise associated with ventilation fan operations would be 2 dB or less at active park use areas. A 3 dB increase is normally considered the threshold of a perceptible noise increase. Therefore, fan operations at the vent structures are not considered to result in a substantial noise increase at the park.

The WIA analysis also states that noise from BART trains near the south portal will be less than 70 dBA at the closest area of the park that could be occupied, which is the footpath on the east side of the lake. This corresponds to an hourly equivalent sound level of less than 55 dBA. With the ambient noise level at 49 dBA, the FTA threshold for moderate impacts is 58 dBA (see Table 4.13-3). Noise from BART trains at the portal, therefore, will be less than the threshold for moderate impacts at active park use areas.

In conclusion, the design team evaluated the potential noise impacts for the WSX BART project on the park and designed mitigation to reduce any impacts to a less than significant level. With the identified mitigation, there should be no significant noise impacts to the park.

- 3B-6:** The City of Fremont's request for conversion of land within Fremont Central Park for the proposed BART ventilation structures has been included as an attachment to this letter and is a part of this Final EIS.
- 3B-7:** The Section 6(f)3 boundary map of Fremont Central Park is included as part of the City of Fremont's formal request for parkland conversion. See response to comment no. 3B-5.
- 3B-8:** Pages 6-44 to 6-45 of the Draft EIS describe the property exchange that will occur between BART and the City of Fremont to fulfill Section 6(f)(3) requirements as well as requirements under the California Public Preservation Act of 1971. As described, the City would transfer approximately 1.0 acre to BART to construct the necessary ventilation structure(s), and BART would transfer approximately 1.6 acres east of the UP tracks to the City. The Section 6(f)3 boundary map attached to this letter illustrates the location of the parcels that would be exchanged.

The comment indicates that NPS anticipates additional NEPA review of the City of Fremont's parkland replacement request following completion of BART's environmental review of the WSX project because the replacement property has not been described in the DEIS. However, the parkland replacement issues are included in the Section 6(f) discussion presented on pages 6-41 to 6-45 of the DEIS and the property proposed for replacement parkland is described on page 6-44 of the DEIS. The location of the proposed replacement parkland area is shown on the map prepared by the City of Fremont, which is included in this Final EIS following Letter 3B. The Final EIS and ROD incorporate all consultation with federal agencies involved in the WSX NEPA review, and specifically the NPS as a cooperating agency. FTA, as the federal lead agency, will issue a Record of Decision (ROD) for the WSX project. FTA will not approve the ROD unless there is concurrence from NPS that the NEPA review was adequate and complete for NPS purposes. Based on subsequent letters and conversations with NPS representatives, NPS did not require any additional environmental review of the parkland replacement issue.¹ Subsequent to this letter, the NPS and DOI concurred with the 6(f)(3) analysis. (Please refer to letters 3C and 3D that follow.)

¹ Gary Munsterman, Grants Program Coordinator, National Park Service. Personal communication, May 19, 2005.

Letter 3C



United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
1111 Jackson Street, Suite 700
Oakland, California 94607-4807



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PWR-12217

October 14, 2005

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7-18.3.1
7-18.3.8
7-18.3.12
7-18.4.13

Ms. Shari Adams
San Francisco Bay Area Rapid Transit District
300 Lakeshore Drive
21st Floor
Oakland, CA 94612

Subject: Supplemental Comments on 6(f)(3) Conversion of Portions of Fremont Central Park
BART Warm Springs Extension Project

Dear Ms. Adams:

In supplement to our earlier comments on the subject project Draft Environmental Impact Statement, the National Park Service has conducted an additional evaluation of May 3, 2005 letter of request submitted by the City of Fremont to the California Department of Parks and Recreation (CDPR) and attached to our prior comments.

The National Park Service understands the city's dispute concerning 6(f)(3) jurisdiction and is willing to accept the conversion request as presented, pending formal submission by the CDPR, the grantee, who subsequently assigned the reference grants to the city of Fremont.

As indicated in our prior comments, we also agree with the city's opinion that the underground subway portion of the subject project under Fremont Central Park, including portions subject to 6(f)(3) protection are exempted from conversion requirements pursuant to Section 675.9.3.A.(5)(a) as an underground utility easement. NPS finds that impacts resulting from the project will be temporary and limited to the period of construction, and therefore not significantly impact the recreation utility of the park.

The city addressed the criteria contained in Section 675.9.3.B of the Land and Water Conservation Fund Manual within their request to CDPR. NPS evaluates their response to their request in the following:

- (1) All practical alternatives to the conversion have been evaluated and rejected on a sound basis. The DEIS evaluates the Warm Springs Extension and No-Build alternatives. NPS understands that the existing BART Fremont Line Alignment, located approximately 1/2 mile north of the park and the need to connect with the existing railroad alignment north of Paseo Padre Parkway, south of the park limit the options for avoiding the park. The ventilation structures are an essential safety feature of the subway design and are required within the mile long subway section.
(2) The fair market value of the property to be converted has been established and the property proposed for substitution is of at least equal fair market value An appraisal commissioned by the city of Fremont and reviewed and approved by the Department of the Interior Appraisal Services Directorate found the conversion parcels, jointly containing 0.79 acres have a value of \$322,750, with the proposed replacement property containing 1.6 acres and located adjoining the



National Park Service

October 14, 2005

Page 2

park and containing land adjoining the southern subway portal has a value of \$366,000, resulting in the replacement property with a value greater than the converted property. As mentioned in the city's review, only approximately 2,400 a.f. of the 12,500 a.f. to be occupied by the proposed northern vent structure is located within the 6(f)(3) boundary, with the remaining portion occupying property acquired by the city following the award and completion of the grant assisted project. The appraised value of the replacement property, more than offsets the value of both the larger area appraised conversion area or the smaller area which is actually subject to 6(f)(3) requirements.

- (3) *The property proposed for replacement is of reasonably equivalent usefulness and location as that being converted...* The city indicates that it has evaluated the proposed replacement property in accordance with the requirements contained within the city's general plan. The replacement property is located adjoining the park and includes a portion of the Southern Pacific Railroad Line which the city is relocating as a part of a grade separation project at Pasco Padre Parkway. The realigned rail track way alignment will form the new eastern park boundary. The replacement land area is predominately forested wetland area, excepting the existing rail bed, which the city proposes to convert to a pedestrian/bicycle trail. The southern vent structure will be located in similar terrain, while the portion of the northern vent structure contained within the 6(f)(3) boundary is within or immediately adjoining the park's main parking area. The displaced parking will be accommodated by an enlargement of the adjoining parking area. The replacement area is considered as having equivalent usefulness under criteria (a) under this section in that it contains an urban wetland area and provide an opportunity for additional trail based recreation opportunities, similar to the converted area.

- (4) *The property proposed for substitution meets eligibility requirements for LWCF assisted acquisition... must constitute or be a part of a viable recreation area...* A portion of the proposed was acquired by BART for the WSX project. BART and the City of Fremont have negotiated an agreement to provide for an exchange of the replacement land area for the area to be occupied by the ventilation structures and the right to construct the underground subway under the park. The City of Fremont has a similar agreement with the Union Pacific Railroad for the realignment project. The replacement property is being acquired for other lands and rights of value and has not been dedicated to park use.

The converted property is associated with a development project and the land value associated with improved parkland was not an element of the match. The replacement property meets the LWCF acquisition eligibility requirements and will be a part of the adjoining Central Park. The proposed replacement project complies with this Section and sub-criteria (d).

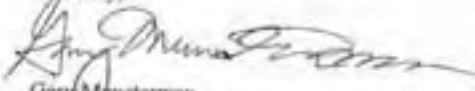
- (5) *In the case of assisted sites which are wholly rather than partially converted, the impact of the converted portion on the remainder shall be considered. If such a conversion is approved, the unconverted area must remain recreationally viable or be replaced as well.* A letter prepared by Wilson, Irig, and Associates (WIA) dated September 19, 2006 further analyzed potential noise impacts emanating from the proposed ventilation structures. WIA concluded that the noise impacts would be negligible. NPS concludes based upon the WIA's analysis that the impacts would be below a level of significance and the impact resulting from the conversion will not affect the recreation utility of the remainder. The area proposed for conversion to accommodate the physical improvements involved with the ventilation structures is sufficient for the maintenance of the recreation utility of the remaining park property.
- (6) *All necessary coordination with other Federal Agencies has been satisfactorily accomplished.* The DEIS has provided for all necessary coordination with other federal agencies.

National Park Service
 October 14, 2005
 Page 3

- (7) *The guidelines for environmental evaluation have been satisfactorily completed and considered by NPS...* The subject DEIS, pending FEIS, and Record of Decision will provide for necessary evaluation.
- (8) *Intergovernmental review procedures have been adhered to...* BART has informed the State Clearinghouse contained in the Governor's Office of Planning and Research of the WSX project DEIS, including the subject conversion proposal.
- (9) *The proposed conversion and substitution are in accordance with the SCORP.* NPS agrees with the city's assessment. The current California Outdoor Recreation Plan (2002) does not address conversion of park land as an issue or provide other guidance on replacement land acquisition, therefore the subject action is in accordance with the SCORP.
- (10) *Staff Consideration...* Staff finds no reason for disapproval.
- (11) *Satisfaction of Several Approved Conversions...* Not Applicable
- (12) *Restrictive Leasing Policy...* The City of Fremont obtained a grant for the improvement of property leased from the Alameda County Flood Control District in August 1968 for a 25 year term. The agreement was renewed for one year in August 2004 and a long term lease agreement is expected to be completed before the end of the renewal term. The city has proposed to include a portion of the leased acreage improved with the grant in the revised 6(f)(3) boundary. NPS accepts this proposal.

Based upon the National Park Services preceding review of the city's proposal, National Park Service is prepared to conclude that the proposed conversion meets Land and Water Conservation Fund program requirements. A statement from our Regional Director to the Federal Transit Administration concurring with the FEIS, supplemented with the referenced WIA analysis and conclusions is being forwarded under separate cover. If you have any questions regarding NPS involvements in the Warm Springs Extension project, please contact me at 510-817-1445.

Sincerely,



Gary Munsterman
 Grants Programs Coordinator

C Richard Renslow, CDPR

Response to Comment Letter 3C

3C-1: No response is required.

Letter 3D



United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
1111 Jackson Street, Suite 700
Oakland, California 94607-4807



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7.18.7.13

Ms. Lorraine Lerman
Federal Transit Administration
201 Market Street, Suite 2210
San Francisco, CA 94103

Subject: Final Environmental Impact Statement - BART Warm Springs Extension Project (ER-05-207)

Dear Ms. Lerman:

The National Park Service (NPS) has completed a review of the subject Administrative Draft Final Environmental Impact Statement (FEIS) and the September 19, 2005 letter from Wilson, Irig, and Associates (WIA) addressing potential noise generated from the subway section of the line extension through proposed ventilation structures within the City of Fremont's Central Park. The park was improved by two Land and Water Conservation Fund grants (06-00332 and 06-00394) and as a result the improved area of the park is required as a condition of the grant to be maintained in park and recreation use pursuant to section 6(f)(3) of the LWCF Act and associated regulations and guidelines.

NPS concurs with the analysis contained within the FEIS concerning the conversion of the area to be occupied by ventilation structures on the recreation utility of the park. As expressed in our prior comments and in a July 2005 meeting between BART and NPS staff, the question of increased noise on the park has been an area of remaining concern. The recent WIA letter addresses NPS' concerns. We conclude from the consultant's analysis that the project design will reduce noise impacts generated as a result of transit and maintenance operations at the ventilation structures to below a level of significance based upon Federal Transit Administration criteria. As a result the proposed conversion area, containing the ventilation structures as identified in the FEIS and the proposed replacement property will meet 6(f)(3) conversion requirements. The National Park Service requests that the WIA letter be made a part of the record and appropriately referenced within the FEIS.

The National Park Service concurs with the FEIS with the above requested adjustment to incorporate reasonable measures to minimize foreseeable harm. We also conclude that given this adjustment, that there are no suitable alternatives to the proposed action. The National Park Service appreciates the opportunity to consolidate 4(f) evaluation and environmental review requirements associated with the 6(f)(3) conversions pertaining to the project. If you or others have any questions regarding these or prior comments, please contact Gary Munsterman, Program Coordinator at 510-817-1445 or gary_munsterman@nps.gov.

Sincerely,

Jonathan B. Jarvis

Jonathan B. Jarvis
Regional Director, Pacific West Region

C Shari Adams, BART





WILSON, IHRIG & ASSOCIATES, INC.
ACOUSTICAL AND VIBRATION CONSULTANTS

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19 September 2005

Ms. Sharareh Tavaf Adams
BART Project Manager
BART Warm Springs Extension
PO Box 12688
Oakland, California 94604-2688

Subject: Response to NPS Comment on BART WSX Project Noise
Affecting Central Park, Fremont

Dear Ms. Adams:

As requested, Wilson, Ihrig & Associates (WIA) is responding to the comment made by the National Park Service (NPS) regarding noise that would be emitted from subway vent shafts once BART operation begins on the planned Warm Springs Extension (WSX) alignment underneath Central Park in Fremont, California. The fact that the WSX alignment through Central Park will be underground automatically results in a quieter environment. The following incorporates some of our previous response on this issue with elaboration.

During Preliminary Engineering (PE) for the BART WSX Project (Project) the BART Design Team evaluated the noise impacts from BART facilities with regard to Fremont's Central Park (Park). WIA conducted the analysis for noise and evaluation of potential impacts. WIA has been responsible for numerous similar analyses for BART extensions involving subway (e.g., SFO), and other transit systems with subways (e.g., MARTA, WMATA, Baltimore MRT, LA Metro Red Line, LA Gold Line). WIA's analysis for vent shaft noise emission is based on over 30 years of experience and direct measurement of transit system noise in communities.

The vent shaft structures are potential Project sources of airborne noise that could adversely affect people using Central Park, unless properly controlled. There is no potential for impact due to groundborne noise, because the Park is outdoors and groundborne noise would only be an issue for enclosed spaces in buildings. All sources of airborne noise for the Project were addressed in PE. Where operational impacts were projected, WIA has recommended noise control, and these recommendations have been incorporated into the Project design.

1.0 Background

The Park is a multiple-use, community facility with sports fields, picnic grounds, a lake (Lake Elizabeth) and a footpath, which circles the lake. The existing ambient noise environment in different parts of the Park, and the potential for impact vary depending on which portion of the Park is affected. For example, the sports fields (baseball diamond and basketball courts) are not as sensitive to noise as the footpath, which is used for more contemplative recreation (e.g., walking, bird watching).

The existing ambient noise environment within the Park varies depending on proximity to existing transportation sources of noise. Close to major roadways in the area (Stevenson Boulevard on the north and Paseo Padre Parkway on the west) motor vehicle traffic noise is the dominant source. Adjacent to the east side of the Park there is an active freight railroad corridor owned by the Union Pacific Railroad. The Park is also in the flight path of the regional airport in Hayward and subject to noise from small aircraft descending in their approach to the airport.

In preparation of the DSEIR in 2003, a short-term (1 hour in duration) noise measurement obtained on the "walking path" at the northern edge of the lake indicated a noise level of L_{eq} 49 dBA for that time period starting at 0735 on May 16, 2002. Considering the proximity of the railroad tracks (about 900 feet), it would appear that the measurement was not obtained during a time with a freight train running in the corridor, which is confirmed by the list of noise sources observed during the measurement. Inclusion of a freight train passby during the ambient measurement would presumably have resulted in a higher noise level.

Currently there is a grade-crossing at Paseo Padre Parkway, and the southbound freight trains sound their warning horn directly opposite the lake. The City of Fremont's "Paseo Padre Parkway and Washington Boulevard Grade Separation" project will eliminate this grade crossing, thereby dramatically improve the noise environment in the Park as a result, by eliminating the need for freight locomotives to sound their warning horn in this area.

2.0 BART Airborne Train Noise Levels in Central Park

The vent shafts will be a new source of noise for the Park. The noise will be generated by BART trains in the subway which are relatively frequent. The vent shafts will also emit noise when the emergency ventilation fans operate in the subway. Emergency fan noise will be very infrequent. The emergency fans are tested regularly (nominally once a month) and occasionally the emergency fans will be used for ventilation of the subway during weekend maintenance work by BART.

The projected noise levels for the vent shafts are obtained from empirical models developed by WIA based on its extensive experience with rail transit noise. The train noise model accounts specifically for the noise emission characteristics of a BART train, and the attenuation of noise coming from the subway tunnel transmitted to the surface through an acoustically treated vent shaft. A similar type of acoustic model is used to project noise from the emergency fans. The fan noise model accounts for the specific acoustic energy emitted by the fans, and the attenuation provided by the recommended fan silencers and vent shaft acoustic treatment.

3 Vent Shaft Noise Impacts & Central Park

Post construction noise measurements were obtained for the BART SFO Extension project, for a similar situation involving a vent shaft and BART trains running at 65 mph in the subway below. The measurements indicated that the noise level at 50 feet from the edge of the vent shaft was less than 55 dBA for BART trains in the subway. Ambient noise levels due to motor vehicle traffic near the site prevented measurement of the actual level of train noise, but it was observed that the trains were barely audible.

The FTA criteria do not specifically address noise from a vent shaft. The noise impact criterion used in the vent shaft evaluation is contained in the BART Design Criteria document, which is based on APTA noise criteria and has been in use for over 30 years. The criterion for this type of airborne noise in the Park is 55 dBA for frequent transient events or infrequent continuous events. The design goal is to achieve a level of no more than 55 dBA at 50 feet from the vent shaft even though noise sensitive receptors will be further away than this.

On the WSX Project, the vent shafts will be treated by lining them with a very efficient and durable acoustical material, which absorbs sound. The maximum airborne noise level from trains running in the subway tunnel is projected to range from 43 to 45 dBA or less at 50 feet from either of the two vent shafts. The southern vent structure is designated LES and the northern structure is CPS. The footpath on the eastern side of Lake Elizabeth is closest to the LES Vent Structure. The sports fields on the northern end of the Park are closest to the CPS Vent Structure.

The nearest point on the footpath approaches to the LES Vent Structure is 80 feet. At this distance, the maximum airborne train noise emitted from the vent shaft is projected to be approximately 39 to 40 dBA on the footpath. This is considerably less than the criterion of 55 dBA, and consequently, as designed, the airborne train noise from the LES vent shaft will not result in a noise impact to the Park.

The CPS Vent Structure will be located between two baseball fields and a basketball court. The vent shaft will be treated acoustically and the maximum airborne noise level from trains in the subway tunnel is from 43 to 45 dBA or less at 50 feet from either of the two vent shafts. This design goal is much more stringent than the environmental impact criterion for a sports field (i.e., 75 to 80 dBA for intermittent noise).

The closest edge of the two baseball fields is approximately 100 feet from the CPS Vent Structure. The closest basketball court is even farther away than this. At a distance of 100 feet, the airborne train noise emitted from the vent shaft is projected to be approximately 37 to 39 dBA, much less than the criterion of 55 dBA. Consequently, as designed, the airborne train noise from the CPS vent shaft will not result in a noise impact to the Park.

3.0 Emergency Fan Noise Levels in Central Park

The emergency fan operation is a very infrequent event. Typically the noise criterion for infrequent events is higher than the impact criterion for frequent events. Even so, the design goal established by the BART Design Team and BART for emergency fan noise is also 55 dBA at 50 feet from the vent shaft. This goal will be achieved by noise emission limits for the fans themselves, inclusion of fan silencers, and implementation of acoustic treatment within the vent

4 Vent Shaft Noise Impacts & Central Park

shaft. Similar to the subway train noise emitted from the vent shaft, the fan noise level at the nearest occupied place in the park on the footpath will be less than 55 dBA since it is 80 feet away from the CPS Vent Structure.

The projected levels of fan noise are based on empirical models developed by WIA from measurements and experience on previous similar projects. The models employ sound power data for the fans, which will be purchased from specifications limiting the noise emission levels, the noise attenuation characteristics of the silencers, and properties of the acoustical treatment applied to the surfaces of the vent shaft. The emergency fan noise will be very infrequent and primarily occur either at night (monthly testing or maintenance) or during the day (maintenance, possibly once a year). This will not cause impact to the Park area near CPS Vent Structure where there are sports fields, for the same reason the subway train noise would not cause impact.

The southern Vent Structure LES is between the footpath and the eastern edge of the Park. At the footpath around the Lake, the highest projected noise level from emergency fan operation is 47 dBA at 80 feet from the vent structure. Slightly higher than the projected level of airborne noise from subway trains, but still substantially less than the criterion of 55 dBA. Given the very infrequent nature of the emergency fan operation, there would be no significant noise impact for this vent structure affecting the Park.

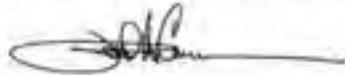
4.0 Summary

In conclusion, the BART Design Team has evaluated the potential noise impacts for the WSX BART project on the Park and selected appropriate noise control mitigation measures for the vent shafts and emergency fans, and included them into the Project design to reduce any noise impacts to a level that is less than significant. With implementation of this mitigation, there should be no significant noise impacts to the Park.

Should you have any further questions or need clarification, please do not hesitate to call.

Very truly yours,

WILSON, IRIG & ASSOCIATES, INC.



Richard A. Carman, Ph.D., P.E.
Principal

cc: Hoppe Harrison
Gary Griggs
Paul Medved

Response to Comment Letter 3D

The commenter requested that the September 19, 2005 letter from Wilson Ihrig & Associates, Inc., be made a part of the record. The letter has been provided as an attachment to Letter 3D.

Letter 4

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION, AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR

DEPARTMENT OF TRANSPORTATION

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OAKLAND, CA 94623-0660
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April 18, 2005

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ALA680309

Ms. Shari Tavaf Adams
San Francisco Bay Area Rapid Transit District
300 Lakeside Drive, 21st Floor
P.O. Box 12688
Oakland, CA 94604-2688

Dear Ms. Adams:

BART Warm Springs Extension (WSX) - Draft Environmental Impact Statement (DEIS) & Draft 4(f)/6 (f) Evaluation

Thank you for continuing to include the California Department of Transportation (Department) in the environmental review process for the proposed BART WSX project. We have reviewed the DEIS and Draft 4(f)/6 (f) Evaluation and have the following comments to offer:

Traffic Systems

Caltrans has exclusive rights to use certain fiber optic strands in BART's fiber optic communication system and the right to access the system at certain locations under the Airspace Lease signed December 22, 1994.

4-1

Please include fiber optic strands and access points, for the Department's use, in BART's WSX fiber optic communication system.

Archaeological/ Cultural

No ground-disturbing activities within the Department's right-of-way (ROW) are indicated within the DEIS for the BART WSX. The Cultural Resources Section of the DEIS has identified potential cultural resources within the project area as well as an appropriate mitigation plan for these resources. Should the project change and include

4-2

"Caltrans improves mobility across California"

Ms. Shari Tavaf Adams
 San Francisco Bay Area Rapid Transit District
 April 18, 2006
 Page 2

ground-disturbing activities within the Department's ROW, a cultural resource study would need to be conducted and submitted for our review and comment. 4-2 cont.

Highway Operations

1. Tables 4.2-15 and 4.2-16 on pages 4.2-35 and 4.2-37, indicate that the LOS at the intersection of Warm Springs Boulevard and Mission Boulevard on SR-262 for both the 2010 and 2025 WSX Alternative with and without Irvington Station are LOS F for the AM and PM peak hour. On the following pages, Impact TRN-7, 14 and 19 state that no feasible mitigation measures are available to mitigate these adverse impacts. Please explain. 4-3

2. There seem to be minor discrepancies on the 2000 Traffic Volumes given in Table 4.2-1 on page 4.2-3 as compared to the numbers given in Figure 4.2-2. For example, at I-680 from SR-262 to Durham Road, the table indicates 147,000 ADT compared to 130,000 in figure 4.2-2. Please rectify. 4-4

Forecasting

1. No Growth on Peak Hour / Intersection Traffic
 The peak hour traffic of quite a few intersections near state facilities shows little or no growth between existing year and 2010 no-build scenario. For example, peak hour traffic demonstrates no growth at intersections 10, 13, 14 and 15 between Figure 4.2-5, Existing Turning Movement Counts and Figure 4.2-8, 2010, No Build Peak Hour Turning Movements. Please explain why. 4-5

2. Highway Capacity Manual 2000
 It appears that the intersection analysis for the entire project was based upon the Transportation Research Board (TRB) Circular 212 methodology (1980), which is out-of-date (20-years-old), and completely different from the methodology demonstrated in the Highway Capacity Manual (HCM) 2000. For instance, primary service measures for determining LOS of signalized intersections is average volume-to-capacity (V/C ratio), shown in the TRB Circular 212, whereas average control delay per vehicle is utilized in the HCM 2000. All new capacity analysis beginning after October 1, 2002 should use the HCM 2000 methodology as per US Department of Transportation, Federal Highway Administration memorandum dated May 1, 2001. The Highway Capacity Manual 2000 is available at the following website address: <http://www.nationalacademies.org/trb/bookstore> 4-6

3. Basic Freeway and Highway Segment Analysis Needed
 The Department is aware that the report does not include traffic analysis on basic freeway and highway segments. It is of particular importance to note that some approaching volumes would increase 800 to 1000 vph, from 2000 to 2025, when 4-7

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Ms. Shari Tavaf Adams
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April 18, 2006
Page 3

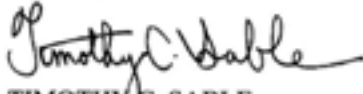
comparing Figures 4.2-5 and 4.2-8 through 4.2-15. The Department believes that the increase in traffic, generated by the project, between existing, 2010, and 2025, is likely to utilize adjacent state facilities. The state facilities near this study area include I-880, I-680, SR-238 and SR-262, between Stevenson Blvd. and SR-262. We would like to ensure that the latest measure of effectiveness (MOE), shown in HCM 2000, is applied to determine LOS of basic freeway and highway segments.

4-7
cont.

Additional comments, if any, from various other Departmental functional branch reviewers 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: A.Chow, Traffic Systems
P.Lau, Highway Operations
P.Cox, Forecasting
J.Pape, Cultural Resources

"Caltrans improves mobility across California"

Response to Comment Letter 4

- 4-1:** The comment does not address an environmental impact. However, please note that under the lease to which the comment refers, Caltrans would have rights to the use of fiber optic strands and access points only if BART places a commercial conduit system in certain areas specified in the lease. BART does not intend to do so for the WSX Alternative.
- 4-2:** Comment noted.
- 4-3:** As noted in Tables 4.2-15 and 4.2-16 of the DEIS, the LOS at the intersection of Warm Springs Boulevard and Mission Boulevard would be LOS F for both the AM and PM peak hours in 2010 and 2025 with the WSX Alternative (with and without Irvington Station). As stated in Impacts TRN-7, TRN-14, and TRN-19, no feasible mitigation measures are available to mitigate these adverse impacts. In order to reduce congestion and alleviate impacts, widening existing lanes and adding turning lanes, as well as utility relocation, would be necessary. The intersection of Warm Springs Boulevard and Mission Boulevard is bound on its four corners by commercial development. The intersection is built out on each approach. Therefore widening or adding turning lanes is not feasible.
- 4-4:** The DEIS included some five discrepancies between the average daily traffic (ADT) volumes presented in Table 4.2-1 and shown on Figure 4.2-2. In each case, the table was correct, and the discrepancies on the figure appear to have been typographical errors. Figure 4.2-2 has been revised to reflect the correct 2000 ADT volumes for the following five segments:

Segment	Revision	
I-880 from SR 262 /Mission Boulevard to Auto Mall Parkway	168,000	161,000
I-680 from SR 262 /Mission Boulevard to Durham Road	130,000	147,000
I-680 from Durham Road to Washington Street	123,000	136,000
I-680 from Washington Street to Mission Boulevard SR 238	120,000	131,000
Blacow Road from Fremont Boulevard to Grimmer Boulevard	21,200	16,600

The table and the figure are provided only for informational purposes. The analysis of peak hour transportation impacts on which the impact and significance criteria are based did not rely on average daily traffic volumes.

- 4-5:** The transportation analysis indicates little or no growth at a number of intersections between existing conditions and conditions in 2010. Conditions in 2010 were projected from 2010 model forecast data and a list of approved projects, which were both provided by the City of Fremont. There were several instances where no traffic growth was indicated at an intersection. In these cases, either there is no development (with attendant traffic growth) in the area, or changing traffic patterns resulted in fewer trips passing through a particular location. To be conservative and avoid having fewer trips at an intersection than in the scenario for a prior analysis year, the future volume was kept constant rather than show a reduction in vehicle trips. BART performed technical analyses for future year modeling, forecasting, and intersection turning movements during preparation of the 2003 Supplemental

Environmental Impact Report (SEIR) for the proposed project, and the methodology is documented in Appendix N of that document.

- 4-6:** The methodology and significance criteria for the transportation analysis are described in the DEIS. They were consistent with the City of Fremont and the Alameda County Congestion Management Program traffic impact guidelines at the time the analysis was conducted. Typically a transportation analysis follows the guidelines of the local community and agency. The City and Alameda Congestion Management Agency (CMA) did not require use of the most recent version of the Highway Capacity Manual (HCM), as noted in the comment. Use of the 2000 HCM has not been adopted by many local jurisdictions in the Bay Area.
- 4-7:** LOS analysis was completed for freeway and highway segments included in the Metropolitan Transportation System (MTS) and is documented in the *BART WSX DSEIR Draft Technical Report – Transportation* (DKS Associates 2003), which can be obtained from BART. The traffic volumes that were analyzed were projected according to detailed travel demand forecasting methods that included mode choice models. As discussed in response 4-6, TRB Circular 212 methods were utilized for LOS analysis, as directed by the local jurisdictions. Although these methods are less current than those presented in the 2000 Highway Capacity Manual, the conclusions based on these analysis methods would be expected to be consistent, namely because the traffic volumes analyzed would be the same, regardless of the LOS analysis method used.

This analysis shows that with or without the proposed project, area freeways already reflect congested conditions that would be expected to deteriorate further between now and 2025. In general, the analysis indicates that state highways would experience improved LOS conditions under the different project alternatives, as compared to the 2010 and 2025 No Project conditions. This is consistent with expectations, as the proposed project would provide an alternative means of travel for regional designations, it would not be expected to increase vehicular demand on regional highway routes.

It would be reasonable to expect that the project could generate additional traffic at the proposed stations, but these impacts would potentially affect local roadways rather than the regional state routes. As the extension would provide easier access to alternative transportation for travelers in the south Bay Area, it would accommodate travelers who would otherwise travel on the freeways to regional destinations, or to the next nearest BART station.



Ms. Adams

2

WSX EIS

could cause additional flooding and channel bank and/or bed scouring. Mitigation Measure H-1 for this potential impact states that BART will design and implement a stormwater management system and will develop and put into operation a stormwater management plan to convey flows up to and including the 100-year storm. Other measures are mentioned, such as the possibility of using stormwater detention facilities to temporarily store the increased flows from storms up to and including the 15-year storm.

5-1
cont

The EIS states in several places that the WSX Alternative would increase conveyance capacity at the creek channel crossings as needed. The EIS does not appear to discuss any potential impacts that could be associated with modifications that would be made to the channels at these locations to increase conveyance capacity, or mitigation measures that would be implemented to compensate for any impacts. During the permit review process for the project, Water Board staff will be evaluating the application for completeness based on inclusion of appropriate analysis and discussion of any impacts associated with modifications of the channels, and efforts taken to consider alternatives for avoidance of impacts. This evaluation would also be appropriate at locations where culverts may be proposed for the WSX crossing of the creek drainages where flooding is not anticipated to be a problem, and/or where culverts do not presently exist. Mitigation will be required for these impacts as well.

5-2

Another mitigation measure that should be included for Impact H-1 is the inclusion of design measures in the stormwater management plan that will result in the reduction of impervious surface area associated with the project (and also the directly connected impervious area). The use of permeable pavements, and/or other appropriate best management practices should be considered.

5-3

Section 4.6, Wetlands

Impact WL-1 is stated to be permanent loss of wetlands habitat. Impacts would be related to filling of emergent seasonal wetlands at Tule Pond South and in the vicinity of the proposed Warm Springs Station site. Approximately 0.7 acre of seasonal wetlands habitat at Tule Pond South and an additional 0.1-acre of wetlands habitat east of the Union Pacific alignment and south of the proposed Warm Springs Station site could be lost. Mitigation Measure WL-1 indicates that BART will compensate for the loss of wetland habitat at these, and any other affected locations, through a combination of onsite restoration/creation and offsite protection and enhancement of at least 0.8 acres of wetland habitat. The EIS further states that the size and location(s) of the area(s) to be restored/created will be determined based on appropriate mitigation ratios derived in consultation with the Corps. The EIS should note that the Water Board would also be consulted regarding the development of an effective mitigation plan.

5-4

If you have any questions, please contact me at (510) 622-2356 or by email at khart@waterboards.ca.gov.

Ms. Adams

2

WSX EIS

Sincerely,

Kathryn R. Hart
Water Resources Control Engineer
South/East Bay Watershed Section

Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 50 years



Response to Comment Letter 5

- 5-1:** Comment noted.
- 5-2:** BART is working with the Alameda County Flood Control District to maintain conveyance capacity at creek channel crossings. At this time, detailed design of the proposed channel modifications has not yet been done. Regional Water Quality Control Board (RWQCB) approval of any proposed channel modifications is required through the formal permit process. RWQCB permit requirements will be incorporated into the final project design.
- 5-3:** BART's design team will consider reducing the amount of impervious surface associated the proposed project, the use of permeable pavement materials, and other appropriate best management practices (BMPs) in conjunction with Mitigation Measure H-1.
- 5-4:** RWQCB will be consulted on matters regarding wetlands as part of the permit process associated with Section 404 of the Clean Water Act. The first paragraph of Mitigation Measure WL-1—Restore, create, and protect wetland habitat to mitigate the loss of wetland habitat, which begins on page 4.6-9 of the DEIS, will be revised as follows:

A mitigation plan will be prepared by a wetland biologist experienced in mitigation and restoration. The plan will be implemented under the biologist's guidance. The California Regional Water Quality Control Board will be consulted regarding the effectiveness of the proposed mitigation plan. Subject to approval by the Corps, the wetland mitigation plan will address temporary and permanent impacts (temporary impacts are addressed below under Impact WL-5).



Department of Toxic Substances Control

700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Letter 6



Arnold Schwarzenegger
Governor

April 22, 2005

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APR 20 2005

Ms. Shari Adams
300 Lakeside Drive
P.O. Box 12688
Oakland, CA 94604-2688

Re: Draft Environmental Impact Statement (EIS) for the BART Warm Springs Extension (WSX) Project

Dear Ms. Adams:

Thank you for the opportunity to comment on the *BART Warm Springs Extension Project, Draft EIS*. As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a potential Responsible Agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project to address the California Environmental Quality Act (CEQA) adequately addresses any required remediation activities which may be required to address any hazardous substances release.

As part of the environmental assessment performed for this project, historical and current land uses were evaluated. Results of the research indicated potential and known subsurface contamination along the WSX project corridor. Potential and known contaminants include, but are not limited to, asbestos, arsenic, lead, petroleum hydrocarbons, polychlorinated biphenyls, polynuclear aromatic hydrocarbons and BTEX compounds. Part of the mitigation measures proposed for the project is to conduct additional site characterization, preparation and implementation of a site-specific health and safety plan, and development and implementation of a soil/groundwater management plan. If hazardous substances are determined to have been released, it will need to be addressed in the CEQA compliance document.

6-1

Additionally, DTSC can assist your agency in overseeing characterization and remediation activities through our Voluntary Cleanup Program. A fact sheet describing this program is enclosed. We are aware that projects such as this one are typically on a compressed schedule, and in an effort to use the available review time efficiently, we request that DTSC be included in any meetings where issues relevant to our statutory authority are discussed.


6-2

♻️ Printed on Recycled Paper

Ms. Adams
April 22, 2005
Page 2

If you have any questions, please call Ed Gillera of my staff at (510) 540-3826 or email him at egillera@dtsc.ca.gov.

Sincerely,

 for Denise Tsuji

Denise Tsuji, Unit Chief
Northern California - Coastal Cleanup
Operations Branch

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APR 29 2005

Enclosure

cc: (without enclosure)

Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95814-3044

Guenther Moskat
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806



California Environmental Protection Agency
Department of Toxic Substances Control



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APR 20 2003

The Voluntary Cleanup Program

The California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) has introduced a streamlined program to protect human health, cleanup the environment and get property back to productive use. Corporations, real estate developers, local and state agencies entering into Voluntary Cleanup Program agreements will be able to restore properties quickly and efficiently, rather than having their projects compete for DTSC's limited resources with other low-priority hazardous waste sites. This fact sheet describes how the Voluntary Cleanup Program works.

Prior to initiation of the Voluntary Cleanup Program, project proponents had few options for DTSC involvement in cleaning up low-risk sites. DTSC's statutory mandate is to identify, prioritize, manage and cleanup sites where a release of hazardous substances has occurred. For years, the mandate meant that, if the site presented grave threat to public health or the environment, then it was listed on the State Superfund list and the parties responsible conducted the cleanup under an enforcement order, or DTSC used state funds to do so. Because of staff resource limitations, DTSC was unable to provide oversight at sites which posed lesser risk or had lower priority.

DTSC long ago recognized that no one's interests are served by leaving sites contaminated and unusable. The Voluntary Cleanup Program allows motivated parties who are able to fund the cleanup -- and DTSC's oversight -- to move ahead at their own speed to investigate and remediate their sites. DTSC has found that working cooperatively with willing and able project proponents is a more efficient and cost-effective approach to site investigation and cleanup. There are four steps to this process:

- / Eligibility and Application
- / Negotiating the Agreement
- / Site Activities
- / Certification and Property Restoration

The rest of this fact sheet describes those steps and gives DTSC contacts.

October 2002

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APR 20 2005

The Voluntary Cleanup Program

Step 1: Eligibility and Application

Most sites are eligible. The main exclusions are if the site is listed as a Federal or State Superfund site, is a military facility, or if it falls outside of DTSC's jurisdiction, as in the case where a site contains only leaking underground fuel tanks. Another possible limitation is if another agency currently has oversight, e.g., a county (for underground storage tanks). The current oversight agency must consent to transfer the cleanup responsibilities to DTSC before the proponent can enter into a Voluntary Cleanup Program agreement. Additionally, DTSC can enter into an agreement to work on a specified element of a cleanup (risk assessment or public participation, for example), if the primary oversight agency gives its consent. The standard application is attached to this fact sheet.

If neither of these exclusions apply, the proponent submits an application to DTSC, providing details about site conditions, proposed land use and potential community concerns. No fee is required to apply for the Voluntary Cleanup Program.

Step 2: Negotiating the Agreement

Once DTSC accepts the application, the proponent meets with experienced DTSC professionals to negotiate the agreement. The agreement can range from services for an initial site assessment, to oversight and certification of a full site cleanup, based on the proponent's financial and scheduling objectives.

The Voluntary Cleanup Program agreement specifies the estimated DTSC costs, scheduling for the project, and DTSC services to be provided. Because every project must meet the same legal and technical cleanup requirements as do State Superfund sites, and because DTSC staff provide oversight, the proponent is assured that the project will be completed in an environmentally sound manner.

In the agreement, DTSC retains its authority to take enforcement action if, during the investigation or cleanup, it determines that the site presents a serious health threat, and proper and timely action is not otherwise being taken. The agreement also allows the project proponent to terminate the Voluntary Cleanup Program agreement with 30 days written notice if they are not satisfied that it is meeting their needs.

Step 3: Site Activities

Prior to beginning any work, the proponent must have: signed the Voluntary Cleanup Program agreement; made the advance payment; and committed to paying all project costs, including those associated with DTSC's oversight. The project manager will track the project to make sure that DTSC is on schedule and within budget. DTSC will bill its costs quarterly so that large, unexpected balances will not occur.

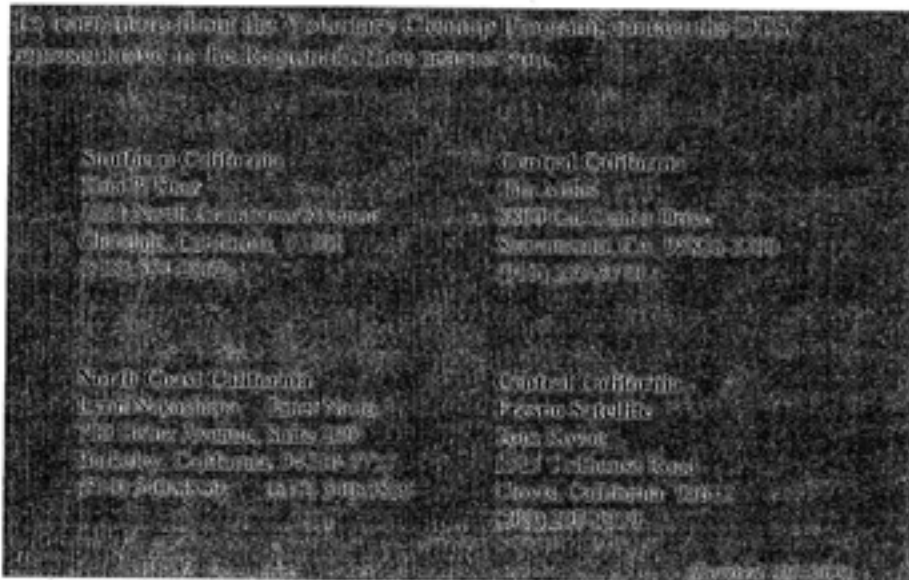
October 2002

Once the proponent and DTSC have entered into a Voluntary Cleanup Program agreement, initial site assessment, site investigation or cleanup activities may begin. The proponent will find that DTSC's staff includes experts in every vital area. The assigned project manager is either a highly-qualified Hazardous Substances Scientist or Hazardous Substances Engineer. That project manager has the support of well-trained DTSC toxicologists, geologists, industrial hygienists and specialists in public involvement.

The project manager may call on any of these specialists to join the team, providing guidance, review, comment and, as necessary, approval of individual documents and other work products. That team will also coordinate with other agencies, as appropriate, and will offer assistance in complying with other laws, such as the Resource Conservation and Recovery Act.

Step 4: Certification and Property Restoration

When remediation is complete, DTSC will issue either a site certification of completion or a "No Further Action" letter, depending on the project circumstances. This means "The Site" is now property that is ready for productive economic use.



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October 2002

State of California – California Environmental Protection Agency

Department of Toxic Substances Control

APR 2 2005

VOLUNTARY CLEANUP PROGRAM APPLICATION

The purpose of this application is to obtain information necessary to determine the eligibility of the site for acceptance into the Voluntary Cleanup Program. Please use additional pages, as necessary, to complete your responses.

SECTION 1 PROPONENT INFORMATION

Proponent Name	

Principal Contact Name	Phone () _____

Address	

Proponent's relationship to site	

Brief statement of why the proponent is interested in DTSC services related to site	

SECTION 2 SITE INFORMATION

Is this site listed on Calsites? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes, provide specific name and number as listed			

Name of Site			

Address	City	County	ZIP
_____	_____	_____	_____

(Please attach a copy of an appropriate map page)

DTSC 1254 (3/02)

A-1

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Department of Toxic Substances Control
APR 20 2006

State of California - California Environmental Protection Agency

SECTION 2 SITE INFORMATION (continued)

Current Owner Name _____ Address _____ Phone () _____
Background: Previous Business Operations Name _____ Type _____ Years of Operation _____ If known, list all previous businesses operating on this property _____ _____ _____
What hazardous substances/wastes have been associated with the site? _____ _____
What environmental media is/was/may be contaminated? <input type="checkbox"/> Soil <input type="checkbox"/> Air <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface water
Has sampling or other investigation been conducted? <input type="checkbox"/> Yes <input type="checkbox"/> No Specify _____ _____ _____
If Yes, what hazardous substances have been detected and what were their maximum concentrations? _____ _____ _____

DTSC 1254 (3/02) A-2

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 Department of Pesticide Substances Control

State of California – California Environmental Protection Agency

SECTION 2 SITE INFORMATION (continued)

Are any Federal, State or Local regulatory agencies currently involved with the site? Yes No
 If Yes, state the involvement, and give contact names and telephone numbers

Agency	Involvement	Contact Name	Phone

What is the future proposed use of the site? _____

What oversight service is being requested of the Department?
 PEA RI/FS Removal Action Remedial Action RAP Certification
 Other (describe the proposed project) _____

Is there currently a potential of exposure of the community or workers to hazardous substances at the site?
 Yes No If Yes, explain _____

SECTION 3 COMMUNITY PROFILE INFORMATION

Describe the site property (include approximate size) _____

Describe the surrounding land use (including proximity to residential housing, schools, churches, etc) _____

Describe the visibility of activities on the site to neighbors _____

DTSC 1254 (3/02) A-3

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State of California – California Environmental Protection Agency Department of Toxic Substances Control
P.O. Box 4000

SECTION 3 COMMUNITY PROFILE INFORMATION (continued)

What are the demographics of the community (e.g., socioeconomic level, ethnic composition, specific language considerations, etc.)? _____

Local Interest
Has there been any media coverage? _____

Past Public Involvement
Has there been any past public interest in the site as reflected by community meetings, ad hoc committees, workshops, fact sheets, newsletters, etc.? _____

Key Issues and Concerns
Have any specific concerns/issues been raised by the community regarding past operations or present activities at the site? _____
Are there any concerns/issues anticipated regarding site activities? _____
Are there any general environmental concerns/issues in the community relative to neighboring sites? _____

Key Contacts
Please attach a list of key contacts for this site, including: city manager; city planning department; county environmental health department, local elected officials; and any other community members interested in the site. (Please include addresses and phone numbers.) _____

SECTION 4 CERTIFICATION

The signatories below are authorized representatives of the Project Proponent and certify that the preceding information is true to the best of their knowledge.

Proponent RepresentativeDateTitle

DTSC 1254 (3/02) A-4

Response to Comment Letter 6

6-1: BART has identified further action in relation to contaminated soil found at two sites within the project area. Following consultation with relevant agencies, BART will develop a project soil management plan including the potential need for remediation.

Specific remedial activity for contaminated soils at these two sites has yet to be defined. BART intends to manage much of the contaminated soil in place, if feasible. If hazardous materials are encountered at any of the sites identified on Table 4.4-1 or 4.4-2, BART and its contractors will apply Mitigation Measure HazMat-3, which will address potential workers, public, and environmental exposure of contaminated soil in terms of dust control measures, sediment and erosion control measures, and potential air monitoring.

Please note that the Draft EIS was prepared pursuant to the National Environmental Policy Act (NEPA) rather than the California Environmental Quality Act (CEQA).

6-2: BART intends to consult with DTSC on issues relevant to its statutory authority.



Letter 7

1600 Franklin Street, Oakland, CA 94612 - Ph. 510/891-4716 - Fax. 510/891-7157

Nancy Skowbo
Deputy General Manager - Service Development

April 22, 2005

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APR 27 2005

Shari Adams
Warm Springs Group Manager
San Francisco Bay Area Rapid Transit District
300 Lakeside Drive, P.O. Box 12688
Oakland, CA 94604

Re: Draft Environmental Impact Statement, BART Warm Springs Extension

Dear Ms Adams:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (EIS) for the BART Warm Springs Extension.

The project being studied in the EIS would extend BART south from Fremont station to Warm Springs, in southern Fremont. The EIS is the federally required environmental review document under the National Environmental Policy Act (NEPA). In 2003, BART prepared the Environmental Impact Report (EIR) for this project required under the California Environmental Quality Act. To a great extent, the environmental impacts evaluated in this EIS were also evaluated in that EIR. BART is preparing this document to make the project eligible for federal funds. The proposed extension from Warm Springs to San Jose/Santa Clara County is being evaluated through its own EIR/EIS process.

AC Transit staff has participated in the Technical Advisory Committee for this project. The planned 7 bus bays at Warm Springs Station transit center and 5 bus bays at the optional (and not currently funded) Irvington station should be sufficient to meet reasonably anticipated needs.

In the 2003 EIR process, AC Transit requested that a bus alternative be studied. BART and its EIR consultants were responsive to this request, fashioning a well-defined bus alternative. BART ultimately concluded that the Busway Alternative in that EIR did not meet its objectives as well as a rail extension. While AC Transit did not necessarily agree with that conclusion, we appreciated the serious effort to evaluate a bus alternative.

Therefore, we recommend that the 2003 bus alternative be carried forwarded into this EIS. We are not asserting that BART is legally required to do so. However, if the bus alternative were carried forward, it would improve the comprehensiveness of the EIS, and help to assure that the "range of alternatives" needed for NEPA analysis is being considered.

7-1

Inclusion of the bus alternative in the EIS would allow for consideration of transit-oriented development (TOD) at a number of bus stations, rather than simply the planned Warm Springs BART station. The Warm Springs station site is located in an industrial area, near Northern California's only auto production plant, substantially limiting the possibility for transit-oriented

Shari Adams
Draft Environmental Impact Statement, BART Warm Springs Extension
April 22, 2005
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residential development at this time. In AC Transit's comments on the 2003 EIR, we noted that transit-oriented development was important around rail or bus stations, and that it was uncertain at Warm Springs. That uncertainty remains and the discussion of transit-oriented development, increasingly important in federal transit funding, is very brief and general in this EIS. This is unfortunate, given the emphasis placed on transit-oriented developed by BART's own policies, by the Metropolitan Transportation Commission, by the City of Fremont and AC Transit

7-1
cont.

In its response to AC Transit's comments on the EIR, BART discounted the possibility of transit-oriented development occurring around bus rather than rail transit. However, there are an increasing number of examples of bus-based TOD in Seattle, Portland, San Francisco, San Diego, and elsewhere. The frequency, speed, convenience, and amenity of service are the decisive factors, not necessarily the mode of service.

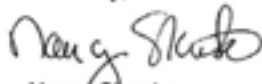
7-2

The optional Irvington station is a strong candidate for transit-oriented development now. It is located adjacent to an active mixed-use area that serves as a neighborhood commercial hub. The area is served by several bus routes that could easily be routed to the new station. The Irvington Concept Plan clearly states the City of Fremont's interest in developing additional, higher-density residential uses in the area. It is important that the BART project bring an Irvington station at the earliest possible date.

7-3

We look forward to continuing to work with BART to improve transit in Southern Alameda County. If you have any questions about this letter, please contact Nathan Landau, Senior Transportation Planner, at 891-4792.

Sincerely,



Nancy Skowbo
Deputy General Manager
Service Development Department

cc: AC Transit Boardmembers
Jim Gleich
Tina Spencer
Anthony Bruzzone
Tony Divito
Nathan Landau

Response to Comment Letter 7

7-1: As explained on pages 3-25 to 3-40 of the DEIS, the prior analysis and conclusions regarding alternatives, including the 2003 Bus Alternative, remain applicable. DOT policy encourages reliance on prior planning and analysis to select the alternatives to be evaluated in a NEPA document. (For more information, refer to *FHWA-FTA Program Guidance on Linking the Transportation Planning and NEPA Processes*; February 22, 2005).

The commenter notes the uncertainty of TOD at Warm Springs. While there is always some uncertainty in projections of future land use, the City of Fremont is working with BART and other stakeholders to prepare a specific plan for the Warm Springs area. The *Warm Springs BART Area Specific Plan-Existing Conditions Report* was issued in June 2004, and three alternative land use scenarios have been developed. Private developers are participating in the specific plan process and have already proposed high-density land uses adjacent to the proposed station site. The Warm Springs Transit Village is a proposal that has been submitted to the City of Fremont for consideration for the long-term development of a combined 74.5 acres adjacent to the Warm Springs Station site on the east. (See comment letter 24, Warm Springs Transit Village.) Accordingly, there is no reason to conclude that TOD is not feasible at Warm Springs. Please refer to the response to comment no. 21-7 for additional information.

BART's System Expansion Policy commits to encouraging development at increased densities to sustain transit. Through this policy, BART is specifically committed to encouraging opportunities for TOD, as are the other agencies that the commenter mentions. The greater likelihood that the WSX Alternative would act as a catalyst for TOD is among the reasons that the 2003 Bus Alternative was rejected. TOD is discussed in the DEIS on pages 2-4 to 2-5, 3-39, 4.8-13 to 4.8-14, and pages 5-43 to 5-46.

7-2: BART agrees that transit-oriented development (TOD) is possible with bus transit as well as rail transit. However, well-documented transportation and land use research, both on the national and the local level, demonstrates that private developers are more likely to invest around fixed-rail stations because they know that the large public investment in fixed-rail infrastructure will not be moved or relocated. This reduces the risk for developers and encourages investment. Sources for this rail-related investment-land use relationship include Michael Bernick and Robert Cervero,² the City of Seattle,³ the *Journal of Public Transportation*,⁴ and White and McDaniel.⁵

7-3: As described in Section 3.4.4, "Optional Irvington Station" and Section 7.3, "Financial Feasibility and Local Financial Commitment" of the Draft EIS, the Irvington Station is optional because local funding for the station has not been identified at this time. The City of Fremont is investigating an amendment to the 1998 Redevelopment Plan that could

² Michael Bernick and Robert Cervero, *Transit Villages in the 21st Century*, McGraw-Hill, 1997.

³ City of Seattle, *Transit-Oriented Development Case Studies-Twelve Analytical Rail Systems*, Strategic Planning Office, August 1999.

⁴ "Benefits of Proximity to Rail on Housing Markets: Experiences in Santa Clara County," *Journal of Public Transportation*, Vol. 5, No. 1, pp. 1 - 18, 2002.

⁵ S. M. White and J. B. McDaniel. "The Zoning and Real Estate Implications of Transit-Oriented Development." *TCRP Legal Research Digest 12*. Transportation Research Board of the National Academies. 1999.

contribute funds to the construction of the Irvington Station, which is considered a significant component of the redevelopment effort for the Irvington area. BART included the evaluation of the environmental effects of the optional Irvington Station in this EIS in an effort to expedite station development once funding is secured.



Letter 8

DIRECTORS
MARTIN L. KOLLER
President
JUDY C. HUANG
Vice President
JAMES G. GUNTHER
ARTHUR LAMPERT
JOHN H. WEED

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MANAGEMENT
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ROBERT SHAVER
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Operations Manager
WILLIAM J. ZENONI
Finance and Administration Manager

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APR 26 2005

April 25, 2005

San Francisco Bay Area Rapid Transit District
Attention: Shari Adams
Warm Springs Extension Group Manager
MS LKS-21
P.O. Box 12688
Oakland, CA 94604-2688

Dear Ms. Adams:

Subject: Comments on the BART Warm Springs Extension Draft Environmental Impact Statement (EIS) Prepared under the National Environmental Policy Act (NEPA)

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the proposed BART Warm Springs Extension project. The Alameda County Water District (ACWD) provided comments to the Draft Supplemental Environmental Impact Report that was prepared in accordance with the California Environmental Quality Act (CEQA) and submitted to your office in a letter dated May 8, 2003. In addition, ACWD provided comments to the Scope of the Proposed Environmental Impact Statement that was prepared under the National Environmental Policy Act and submitted to your office in a letter dated May 17, 2004.

Although all of ACWD's previous comments related to the groundwater basin have been incorporated into the DEIS, there are several issues related to the potential depletion of groundwater resources that have not been satisfactorily addressed. Copies of ACWD's May 8, 2003 and May 17, 2004 letters are enclosed with this correspondence for your review. Based on our review of the DEIS, ACWD believes that the DEIS must be revised to address the following comments:

8-1

Comments related to ACWD's Groundwater Protection Program and Impacts to the Niles Cone Groundwater Basin:

1. Public Review Process – Areas of Known Controversy and Issues to be Resolved, page ES-10

Under Areas of Known Controversy, the DEIS correctly identifies, "Impacts of construction and maintenance dewatering on groundwater and hydrological functions."

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APR 25 2005

Ms. Adams
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However, this issue is not identified under the section, "Issues to be Resolved," which is clearly a major issue that still requires resolution as demonstrated by the following comments:

8-1
cont.

2. Table ES-2, Summary of Adverse Effects and Mitigation Measures

The potential depletion of local groundwater resources during construction and long-term maintenance is not identified as an adverse effect and, consequently, mitigation measures for ACWD are not specified.

8-2

3. Section 3.4.3, Ancillary Facilities, Subway Ventilation, Pumping, and Emergency Access Facilities, page 3-12, and Section 4.5.4.2, Alternative Specific Environmental Analysis, Impact H-6 – Potential depletion of local groundwater supplies during operation, page 4.5-16

Section 3.4.3 states that groundwater extraction will occur as part of the normal operation of the subway segment:

"The subway tunnel would also have a sump to collect the normal amount of groundwater seepage. This subway seepage water would be collected and discharged."

The quantity of seepage is then estimated in Section 4.5.4.2:

"A small amount of groundwater leakage within the tunnel section is anticipated. The estimated rate of leakage through the entire length of tunnel section is 8 gallons per minute (gpm)."

8-3

However, in this same section, the DEIS concludes:

"this leakage rate is negligible with respect to depletion of groundwater. Consequently, the presence of the subway segment of the WSX Alternative is not expected to result in substantial depletion of local groundwater supplies."

As stated in ACWD's May 8, 2003 comments on BART's Draft Supplemental Environmental Impact Report, the Replenishment Assessment Act of the Alameda County Water District authorizes ACWD to charge operators of groundwater production facilities an assessment based on the quantity of water produced. The replenishment assessment rate is set annually and the current rate is \$197.00/acre-foot. If the estimated rate of leakage of 8 gpm is correct, the annual rate of groundwater extraction would be approximately 12.9 acre-feet per year. At the current replenishment assessment rate, this would result in an annual bill of approximately \$2,541.30 that would need to be paid to ACWD (please note that ACWD invoices on a quarterly basis). If the actual rate of discharge is greater than estimated or if the replenishment assessment rate increases in

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future years, the annual budget for BART's dewatering operations would also need to be increased. The DEIS must specify that all groundwater pumping will be metered in accordance with ACWD requirements, so that the amount of groundwater extracted can be quantified accurately.

8-3
cont.

4. Section 4.5.2.2, Existing Conditions, Subsurface Hydrology, page 4.5-5

This sections states:

"The bottom of the proposed BART subway along this section of track ranges from 20 to 33 feet below ground surface. For the purposes of this analysis, it is assumed that construction dewatering operations would need to draw groundwater levels down about 5 feet below the bottom of the excavation."

This section seems to conflict with other sections in the DEIS where it is recognized that construction dewatering by conventional means may be technically infeasible. Once again, ACWD must emphasize that the first encountered water-bearing zone is the regional aquifer in the Above Hayward Fault Sub-basin which yields significant quantities of water pumped from the Peralta-Tyson Wellfield for our customers. Given that the ground surface elevation in this area is approximately 50 feet above mean sea level, BART's estimated lowering of groundwater to about 38 feet below ground surface would drop the water level in this sub-basin to below ACWD's normal operating range of 20 to 45 feet mean sea level. Therefore, any significant dewatering operations of the Above Hayward Fault Sub-basin will have a significant impact on ACWD's water supply and ACWD's ability to provide an adequate supply of water to our customers. Alternative construction methods need to be explored and identified in the DEIS, the quantity and duration of groundwater extraction must be estimated, and mitigation for any significant dewatering operations must be specified.

8-4

5. Section 4.5.4.2, Alternative Specific Environmental Analysis, Impact H-8 – Water quality degradation from operational dewatering, pages 4.5-17 to 19

This section of the DEIS states that tunnel seepage will be discharged in one of six methods and that the fifth alternative is groundwater recharge. Although this alternative recognizes that authorization is required from the Regional Water Quality Control Board, the specific method of groundwater recharge is not identified. Depending on the method selected, permits may also be required from ACWD and/or the U.S. Environmental Protection Agency as part the Underground Injection Control program. Any permit from ACWD will require documentation that the quality of water used for recharge (which apparently will be a combination of groundwater and surface water runoff) will not impact the beneficial uses of the groundwater basin. Additional information regarding the groundwater recharge alternative should be included in the DEIS.

8-5

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6. Section 4.5.4.2, Alternative Specific Environmental Analysis, Impact H-10 – Water quality degradation at Lake Elizabeth, Mission Creek, Tule Pond, and Canada de Aliso during construction, page 4.5-21

This section states:

“Limiting or eliminating groundwater intrusion to the subway excavation area through the use of cement slurry walls or other methods appears to be necessary for project construction in this area. Further, hydrologic investigations will be utilized to determine appropriate construction methods.”

8-6

Although this section recognizes that dewatering of the Above Hayward Fault Sub-basin is technically infeasible, the construction method proposed for the project is not described. If cement slurry walls are being proposed, additional information will need to be included in the DEIS since a significant quantity of groundwater extraction would still appear to be necessary during construction. Likewise, any other proposed construction method must quantify the amount of groundwater extraction required and mitigation for significant dewatering operations must be specified.

7. Section 4.5.4.2, Alternative Specific Environmental Analysis, Impact H-12 – Potential depletion of local groundwater supplies during construction, pages 4.5-23 & 24

This section states:

“Dewatering measures may result in localized lowering of shallow groundwater levels. . . . Because the effects of dewatering on shallow groundwater would be temporary and localized (briefer than 6 months and within 1,000 feet of the alignment), they are expected to be minimal.”

8-7

However these statements are in conflict with the very next paragraph in this section which acknowledges ACWD’s use of the groundwater sub-basin with the Peralta-Tyson Wellfield and the fact that groundwater flow is so great that construction dewatering by conventional means may be technically infeasible.

As stated in ACWD’s May 17, 2004 letter, ACWD’s records do not indicate that a shallow water-bearing zone exists above the regional aquifer in the Above Hayward Fault Sub-basin. Therefore the first encountered water-bearing zone is the regional drinking water aquifer in the Above Hayward Fault Sub-basin and impacts on groundwater supplies from construction dewatering are expected to be significant unless a construction alternative is specified to eliminate or minimize groundwater extraction. Additionally, depending on the time of year, effects with durations of even less than six months may be significant.

ACWD is very concerned about impacts to the groundwater supply and anticipates that the project, as proposed, would result in significant impacts to ACWD and our customers.

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Based on the description of construction methodology and timing provided in the DEIS, it appears that the Above Hayward Fault Sub-basin would be substantially de-watered during the construction phase, resulting in not only a loss of water supply, but also a potential loss of ACWD's ability to use its Peralta-Tyson water production wells which are critical to meet demands, particularly in the summer months. BART's analysis of groundwater related impacts as described in the DEIS is inadequate to assess the impacts. Prior to finalizing the DEIS, BART should:

- 1) Complete a comprehensive hydrogeologic assessment of the localized conditions and regional Above Hayward Fault aquifer.
- 2) Determine the local and regional impacts (groundwater level decline, groundwater losses, etc.) due to the de-watering operations.
- 3) Determine the impacts on ACWD groundwater production wells and ACWD water supplies.
- 4) Develop a monitoring and mitigation program to ensure there are no impacts on ACWD's water supply and production facilities. Mitigation may require BART to identify and provide alternate water supplies and/or production to ACWD.

8-7
cont.

As noted, these items should be completed prior to finalizing the DEIS, and in close coordination with ACWD.

8. Section 4.5.4.2, Alternative-Specific Environmental Analysis, Impact BIO-6 – Water quality degradation effects on fish in Mission Creek and Lake Elizabeth from operation dewatering, pages 4.7-28

This section states:

"Groundwater seepage and precipitation would be collected in a pump sump and discharged in one of six methods."

8-8

The collection of groundwater in a sump should be kept separate from the collection of surface water runoff. As stated in comments above on Impact H-6, a replenishment assessment will be assessed on groundwater extraction every calendar quarter. Therefore, the DEIS should specify that groundwater pumping will be metered in accordance with ACWD requirements so that the amount of groundwater extraction can be quantified accurately.

9. Appendix D, Floodplain Finding Report, Section 10.03, L Channel (Mission Creek), page 23

In this section of Appendix D, it states:

"As a result, seepage of groundwater could occur, and operation of the WSX Alternative would potentially require dewatering. BART anticipates operational dewatering on the order of 150 GPM."

8-9

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The estimate of 150 gpm is obviously significantly higher than the 8 gpm estimate described in the DEIS (refer to Impact H-6 – Potential depletion of local groundwater supplies during operation, page 4.5-16). All of the comments above related to Impact H-6 also apply to this section of Appendix D.

8-9
cont.

Comments related to ACWD's Water Distribution System and Potential Impacts to ACWD Operations and Customers:

10. Section 4.16.2.2 Existing Conditions, page 4.16-4

The second paragraph of this section states:

"The existing lines range from 12 to 20 inches in diameter. In addition, a 48-inch-diameter line crosses the WSX Alternative midway between Paseo Padre Parkway and Washington Boulevard."

According to the alignment information provided in the DEIS, the WSX Alternative alignment would also seem to cross the existing 24-inch ACWD pipeline which runs roughly parallel to the existing railroad tracks within the area north of Washington Boulevard, and south of Paseo Padre Parkway. This same pipeline continues south to Washington Boulevard where it again crosses the WSX Alternative alignment. Thus, the subject text should be corrected to state:

8-10

"The existing lines range from 12 to 24 inches in diameter. In addition, 48-inch and 24-inch-diameter lines cross the WSX Alternative in the area between Paseo Padre Parkway and Washington Boulevard."

It should be noted that ACWD pipelines not only cross the WSX Alternative alignment, but also parallel the proposed BART alignment for most of the project length. This configuration may result in impacts related to stray electrical currents (see comment No. 11).

11. Section 4.16.4.1, Alternative-Specific Environmental Analysis, Impact UPS-2 – Potential disruptions of utilities, electrical transmission lines, pipelines, and fiberoptic cables related to the operation of the WSX Alternative, pages 4.16-7 through 4.16-8.

As noted elsewhere in the EIS, ACWD owns and operates the water supply and delivery system for the area which includes a network of water mains and appurtenances, many of which are in the vicinity of the proposed BART system extension. ACWD facilities are protected by an array of passive and active cathodic protection systems. Impact UPS-1 indicates stray electrical currents that are generated by BART operation may adversely impact utility lines near the WSX Alternative corridor. Mitigation Measure UPS-2 (under Impact UPS-2) is intended to minimize impacts from stray electrical currents by insulating rails from the ground in areas of effect. BART should commit to coordinating with

8-11

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ACWD when determining what areas require insulation and what other mitigations may be required to protect ACWD facilities from stray electrical currents. This commitment should be documented as part of Mitigation Measure UPS-2 in the EIS.

The EIS should also specifically state that BART has committed to working with ACWD to correct any stray current problems which arise in the future. This section of the EIS should describe BART's plans to routinely monitor for stray currents during operation and, if detected, to work with the pipeline operator to determine the source of stray currents and correct the installation (repair of insulators or installation of new insulators) to prevent the current from leaving the rail.

Also under Impact UPS-2 in the subsection titled "Water" is the following:
"There would be possible conflicts where the WSX Alternative would cross the existing water systems. Relocation and grade adjustments could be necessary to maintain adequate clearances."

8-11
cont.

The DEIS indicates these impacts are to be mitigated by Mitigation Measure UPS-1 – "Coordinate with the San Francisco Public Utilities Commission staff". As noted above and acknowledged elsewhere in the EIS, ACWD, not SFPUC, is the agency providing water supply and distribution services to the area. BART's discussion of impacts under UPS-2 makes no mention of ACWD. BART should commit to consulting ACWD staff early in the design process to coordinate elements of the design as it plans to do with SFPUC.

12. Section 4.16.4.1, Alternative-Specific Environmental Analysis, Impact UPS-4 – Construction-Related Impacts, page 4.16-9.

The last sentence under the "Water" subsection states:
"Any disturbance to the existing ACWD system would result in interruption of service."

8-12

The intent of this statement is unclear. Any interruption of ACWD services must be by ACWD and must be coordinated well in advance for the protection and convenience of our customers. This statement should be clarified and the DEIS should specify any expected service interruptions and their mitigations.

13. Section 4.16.4.1, Alternative-Specific Environmental Analysis, Mitigation Measure UPS-5, page 4.16-10.

Mitigation Measure UPS-5 states:
"Coordinate with affected utilities, companies, and agencies that own pipelines and underground conduits to arrange necessary relocation and protection of existing lines."

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The proposed BART WSX Alternate project would have significant and potentially disruptive impacts on ACWD's water transmission and distribution system. The project's route is planned to pass across the routes of two major ACWD water transmission pipelines: the 48-inch diameter Irvington Pipeline and the 24-inch diameter Centerville Pipeline. And the project's proposed grade in the area of intersection is planned at elevations which would have BART tracks passing directly through the pipelines themselves or in such close proximity as to be unsafe. These pipelines transport water from ACWD's Water Treatment Plant No. 2 (WTP2) to the Centerville, Central, Irvington and Warm Springs districts of Fremont, as shown in Figure 1 (enclosed). Approximately one third (16 million gallons per day on average) of ACWD's total water production comes from WTP2. Over 100,000 residents of Fremont would be affected by any disruption of water service from WTP2.

The 48-inch Irvington Pipeline originates at Whitfield Reservoir, which stores water produced at WTP2, and extends westward approximately 7,000 feet to the intersection of Union and High Streets in the Irvington district. Prior to this intersection, the pipeline connects with the 24-inch Centerville Pipeline that extends northward toward the Central district of Fremont and southward toward the Irvington district. After the intersection, the 48-inch Irvington Pipeline reduces in size to 36 inches in diameter and continues southward towards the Warm Springs district. These pipelines, and the area in which the WSX Alternate alignment will come into conflict with both, are shown on Figure 2 (enclosed).

Relocating the 48-inch Irvington Pipeline would require it to be isolated from the rest of the distribution system and dewatered. Closing the isolation valves on the 48-inch pipeline will prevent water produced at WTP2 from entering into the distribution system. As a result, the treatment plant would need to be taken offline. Making up the loss of water produced at WTP2 for the extended period of time necessary to construct new outlets on the existing 48-inch pipeline would be impracticable during summer months. Absent implementing extraordinary measures (such as giving notice to all customers of the need for water rationing), if WTP2 is taken off line during the summer, ACWD's production levels would not be sufficient to meet customer demands. Therefore, taking WTP2 offline to construct a lowered 48-inch pipeline must be scheduled during the winter (November through March) when customer demands are at their lowest. Even then, the loss of production from WTP2 (about 13 million gallons per day) would have to be made up by increasing ACWD groundwater pumping and by purchasing additional water from SFPUC. The minimum length of time that the 48-inch Irvington pipeline would be out of service is four weeks; it could be considerably longer.

Past experience associated with taking WTP2 offline for maintenance purposes has shown that some industries in ACWD's service area are adversely affected by the water quality change from the water they received from WTP2 to water received from SFPUC's

8-13
cont.

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facilities. Because the SFPUC water that ACWD receives is typically unfiltered and non-ozonated, it has a higher amount of sediment and certain organic materials than water produced at WTP2. Electronic and glass manufacturing facilities in ACWD's service area are examples of the types of industries that have been adversely affected by this water quality change. These industries typically incur increased water treatment costs within their manufacturing facilities or must reduce production rates since these higher amounts of sediment and organics can be problematic to their in-plant reverse osmosis or deionization treatment systems. It is expected that these industries would experience similar effects during any WTP2 shutdown necessary to relocate the Irvington 48-inch pipeline. Any needed modifications to the ACWD distribution system, particularly those for which shut down of an ACWD production or treatment facility would be required, must be coordinated with ACWD well in advance of design completion.

8-13
cont.

In addition to increasing groundwater production and purchasing additional water from SFPUC, the 24-inch Centerville pipeline must remain in-service while the 48-inch pipeline is out-of-service. The reason for this is to maintain sufficient hydraulic capacity in the distribution system to transport water from the Peralta-Tyson Wellfield and Blending Facility south towards Warm Springs while WTP2 is offline. The relocation of the Centerville 24-inch pipeline would need to occur only after the relocation of the 48-inch bypass pipeline is complete. Again, BART should coordinate needed distribution system modifications with ACWD during design to ensure that impacts on ACWD's operations and customers are minimized.

In general, relocation of government owned utilities is an eligible cost for reimbursement with federal grant funds. ACWD expects that BART will diligently pursue such available grant funds. The direct and indirect costs of relocating ACWD's water pipelines should be paid by BART.

Other Comments:

14. Table 1-1 Agencies with Review, Permit, and/or Approval Authority, page 1-9

ACWD's name should be corrected from "Alameda County Water Department" to "Alameda County Water District."

8-14

15. Sections 3.4.2 Warm Springs Station and 3.4.3 Ancillary Facilities, pages 3-9 and 3-10.

The proposed Warm Springs Station would be located in an area which is outside ACWD's service area and water service to the site will require annexation. BART is encouraged to initiate the annexation process early in the project development process.

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In addition, water service to the Warm Springs Station as well as to other facilities along the WSX Alternative corridor (i.e. electrical substations, train control facilities, subway tunnel and optional Irvington Station), must be coordinated through the ACWD Engineering Department. BART will be required to pay all applicable development-related fees and meet all conditions specified in ACWD's Standard Specifications for Water Main Installation and Development Specifications, which are available at ACWD offices. BART staff should coordinate early in project design with ACWD's Engineering Department with regard to any needed main extensions and water services.

8-16

ACWD appreciates the opportunity to comment on the Draft EIS being prepared in accordance with NEPA. We hope to work cooperatively with BART on this project. However, as described above, ACWD recognizes several major issues remain with respect to impacts to our water supply and groundwater operations as well as impacts to our distribution system and their related costs. ACWD cannot support the project until such impacts are fully mitigated. If you have questions on any of these comments, please contact Robert Shaver at (510) 668-4401.

Sincerely,



Paul Piraino
General Manager

si/es:dlb


attachments


By fax w/o attachments to 510/287-4747

By Certified mail

cc:	Bob Shaver, ACWD	Doug Chun, ACWD
	Steven Inn, ACWD	Eric Cartwright, ACWD
	Ed Stevenson, ACWD	Toni Lyons, ACWD
	Steve Peterson, ACWD	Karl Stinson, ACWD
	Anna Lloyd, ACWD	Jim Reynolds, ACWD
	Juniet Rotter, ACWD	

S. J.





ALAMEDA COUNTY WATER DISTRICT

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--	--	---

May 17, 2004

BART Warm Springs Extension Project
 Attn: Ms. Shari Adams
 MS LKS-21
 P.O. Box 12688
 Oakland, CA 94604-2688

Dear Ms. Adams:

Subject: Comments to the Scope of the Proposed Environmental Impact Statement (EIS) Being Prepared by the Federal Transit Administration (FTA) under the National Environmental Policy Act (NEPA) for the BART Warm Springs Extension

Thank you for the opportunity to comment on the scope of the proposed EIS being prepared by the FTA under the NEPA for the proposed BART Warm Springs Extension project. The Alameda County Water District (ACWD) provided comments to the Draft Supplemental Environmental Impact Report that was prepared in accordance with the California Environmental Quality Act (CEQA) and submitted to your office in a letter dated May 8, 2003.

We have reviewed the response to our comments from BART which were included in the Final Supplemental Environmental Impact Report (FSEIR), prepared in compliance with CEQA, in June 2003. We generally concur with the responses, with the exception of the response made regarding the potential depletion of local groundwater supplies during construction. With reference to the specific concern in question, a copy of our May 8, 2003 letter is enclosed with this correspondence for your review.

Regarding our concern on the potential depletion of groundwater supplies during dewatering to facilitate the construction of the tunnel, the response made was that no drinking water supply wells have been identified to date in the subway excavation area and that borings drilled along the alignment of the proposed tunnel indicate that the subway excavation would be above the gravel layer of the aquifer. The response also indicates that the maximum groundwater lowering would be about 35 to 40 feet below ground surface in the shallow groundwater zone, and not the deeper, drinking water aquifer, and that the radius of influence, as a result of the dewatering operations, would be very limited, and therefore, the ACWD Peralta-Tyson Wellfield would not be affected.

BART Warm Springs Extension Project
Attn: Ms. Shari Adams
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It must be emphasized that the first encountered water-bearing zone is the regional aquifer in the Above Hayward Fault Sub-basin which yields significant quantities of water pumped from the Peralta-Tyson Wellfield for our customers. ACWD's records do not indicate that a shallow water-bearing zone exists above the regional aquifer in the Above Hayward Fault Sub-basin. Given that the ground surface elevation in this area is approximately 50 feet above mean sea level, BART's estimated lowering of groundwater to about 35 to 40 feet below ground surface would drop the water level in this sub-basin to below ACWD's normal operating range of 20 to 45 feet mean sea level. Therefore, the proposed dewatering operations of the Above Hayward Fault Sub-basin will have a significant impact on ACWD's water supply and ACWD's ability to provide an adequate supply of water to our customers.

ACWD requests that this issue be addressed in greater detail as part of the EIS to assess the potential impact of any temporary and permanent dewatering systems to ACWD's groundwater supplies.

ACWD appreciates the opportunity to comment on the scope of the proposed EIS being prepared in accordance with the NEPA. We hope to work cooperatively with BART to address this important issue.

If you have any questions regarding this letter, please contact Rangarajan Sampath at (510) 668-4411.

Sincerely,




Steven D. Inn
Groundwater Resources Manager

bk

cc: Robert Shaver, ACWD
Rangarajan Sampath, ACWD

SENT VIA FACSIMILE (510) 287-4747

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ALAMEDA COUNTY WATER DISTRICT

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May 8, 2003

San Francisco Bay Area Rapid Transit District
 Attn: Richard Wenzel, WSX Environmental Project Director
 P.O. Box 12688, MS 1KB-6
 Oakland, CA 94604-2688

Dear Mr. Wenzel:

Subject: Comments on BART's Draft Supplemental Environmental Impact Report for the BART Warm Springs Extension

Thank you for the opportunity to comment on the Draft Supplemental Environmental Impact Report (DSEIR) for the proposed BART Warm Springs Extension project. The Alameda County Water District (ACWD) is a water retailer that provides potable water to a population of over 320,000 in the Cities of Fremont, Newark, and Union City. ACWD was formed in 1914 by an act of the California Legislature for the purpose of protecting the water in the Niles Cone Groundwater Basin and conserving the water of the Alameda Creek Watershed. Local and imported water is percolated into the Niles Cone Groundwater Basin through percolation both in Alameda Creek and the adjacent recharge ponds in the Quarry Lakes Regional Park. The water is subsequently recovered through ACWD's groundwater production wells and provided as a potable supply to ACWD's customers. From this description, it should be very clear that protecting the groundwater basin continues to be a high priority for ACWD.

Based on our review of the DSEIR, ACWD believes that the DSEIR must be revised to address the following comments:

- Section 3.2.3, Regulatory Setting**

Although the role of the Alameda County Water District was described under "Local Laws and Regulations", the description was not complete. As part of ACWD's Groundwater Protection Program, ACWD entered into Cooperative Agreements with the California Regional Water Quality Control Board - San Francisco Bay Region (Regional Board) and the cities of Fremont, Newark, and Union City, which allow ACWD to provide the technical oversight of investigation and remediation of Leaking Underground Fuel Tank and the majority of the Spills, Leaks, Investigation, and Cleanup sites. Once cleanup has been completed at a site, ACWD submits a case closure summary and recommendation to the Regional Board for final review and case closure.

In addition, the City of Fremont Ordinance No. 950 (adopted on June 26, 1973 and amended by Ordinance No. 963 on October 16, 1973) designates ACWD as the enforcing agency as defined by the Department of Water Resources (DWR). The ordinance regulates the construction, repair, reconstruction, destruction or abandonment of wells within the city boundaries and requires that a

Comments on BART DSEIR

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written permit be obtained from ACWD prior to conducting this type of work. Specific information related to obtaining permits from ACWD can be downloaded from ACWD's website at <http://www.acwd.org/doingbusiness.html>.

2. Section 3.3.2, Environmental Setting

The description of groundwater quality under "Water Quality" is not accurate. The portion of the proposed BART Warm Springs Extension that will be constructed below ground surface is located east of the Hayward Fault in an area referred to as the Above Hayward Fault (AHF) sub-basin. Unlike other areas within the Niles Cone, the AHF sub-basin is largely unconfined and the first encountered water-bearing zone is the regional aquifer, composed of highly permeable soils (i.e., cobbles, gravel, and sand). The tremendous water storage and flow potential of these aquifer materials explain why a major portion of ACWD's recharge and extraction occurs in the AHF sub-basin. The quality of water in the AHF sub-basin is considered to be of highest quality and consistently meets all drinking water standards.

The DSEIR states that groundwater has been identified as containing elevated levels of nitrates and boron. Although it is true that the Department of Water Resources reported in 1968 that excessive amounts (greater than 45 ppm) of nitrates were found, the nitrates were found southwest of Union City and south of the Niles district in Fremont, and not in the project area. In addition, testing for nitrates are routinely conducted from ACWD's groundwater production wells, and the results are significantly below the Maximum Contaminant Level of 45 ppm.

In 1960, DWR reports did indicate that some wells in the vicinity of geologic faults had high concentrations of boron, with the highest observed concentration being 5.3 ppm. However, based on DWR data collected between 1962 and 1967, boron concentrations were below 0.7 ppm in all Niles Cone aquifers. In addition, ACWD collected samples from two AHF monitoring wells (one well is adjacent to the Hayward Fault) in 1998, and boron concentrations were 0.57 and 0.67 ppm. A boron concentration of 2 ppm or less is considered suitable for agricultural use.

Therefore, the DSEIR's general description of groundwater quality, especially related to nitrates and boron, is inaccurate and needs to be corrected.

3. Section 3.3.4, Impact Assessment and Mitigation Measures, Impact H6 – Potential Depletion of Local Groundwater Supplies During Operation

An operational impact identified in the DSEIR is that the subway segment of the Proposed Project would represent a localized barrier to westward flow of groundwater in the vicinity of Lake Elizabeth. According to the DSEIR, since the presence of the subway segment is not expected to result in substantial depletion of local groundwater supplies, the impact is considered less than significant and no mitigation is proposed.

It is not clear from the project description whether any groundwater extraction would be required on a routine basis after the subway segment of the BART extension has been constructed. If a permanent dewatering system is required to maintain this subway segment, the impact of this

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project could be very significant on the groundwater basin. Since ACWD purchases water from the State Water Project to recharge the groundwater basin, it is critical that the amount of water that may be extracted on an annual basis be estimated and documented in the DSEIR. Alternative designs should be evaluated that would minimize or eliminate the need for a dewatering system.

It should also be noted that the Replenishment Assessment Act of the Alameda County Water District authorizes ACWD to charge operators of water production facilities an assessment based on the quantity of water produced. The replenishment assessment rate is set annually and the current rate is \$197.00/acre-foot. However, if dewatering is required as part of long-term operation of the subway resulting in significant water losses from the groundwater basin, ACWD can not simply purchase additional supplies from the State Water Project since ACWD is already maximizing the use of our allocation. Therefore, BART should propose mitigation measures for replacing all significant losses of ACWD's water supplies.

4. **Section 3.3.4, Impact Assessment and Mitigation Measures, Impact H6 – Potential Depletion of Local Groundwater Supplies During Construction**

The DSEIR states that the construction of the subway beneath Lake Elizabeth and Mission Creek would require a dewatering system. It is assumed that the impact would be temporary and localized (less than 6 months and within 1,000 feet) on shallow groundwater. The DSEIR also states that there is no local demand upon the groundwater supplies. The DSEIR concludes that the impact is less than significant and no mitigation is required.

As stated above, the first encountered water-bearing zone is a regional aquifer and ACWD heavily depends on this aquifer with eight production wells in the Peralta-Tyson Wellfield located less than 1.5 miles from the project area. During the last five years, ACWD produced an average of 10,360 acre-feet/year of water from the Peralta-Tyson Wellfield and private pumpers produced an average of 1,000 acre-feet/year of water. Therefore, the DSEIR's statement is incorrect since there is a heavy demand on groundwater supplies.

Figure 2-5d indicates that the proposed BART subway beneath Lake Elizabeth and the park will be at least 23 feet below ground surface to the track. The total depth of the subway, the depth and design of the proposed dewatering system, and the estimated quantity of extracted water needs to be documented in the DSEIR in order to assess the potential impact of the dewatering system on groundwater supplies. As indicated in the DSEIR, the depth to water in the Lake Elizabeth area can be as high as 8 feet below ground surface, so the potential impact of a dewatering system on ACWD's groundwater supplies could be very significant. Although the water extracted during construction of the subway appears to be exempt from the Replenishment Assessment fee, mitigation measures should be proposed to eliminate or minimize the impact of the project on the local drinking water supply.

5. **Project Coordination**

The following ACWD contacts are provided so that the proposed BART project can be coordinated with ACWD:

Comments on BART DSEIR

Page 4

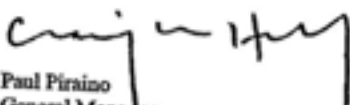
May 8, 2003

- Steven Inn at (510) 659-1970, ext. 441, or by e-mail at steven.inn@acwd.com, for coordination with ACWD's groundwater resources and groundwater protection program.
- Jim Reynolds at (510) 659-1970, ext. 511, or by e-mail at jim.reynolds@acwd.com, for coordination with ACWD's groundwater basin recharge operations.
- Juni Rotter at (510) 659-1970, ext. 487, or by e-mail at juniet.rotter@acwd.com, for coordination with ACWD's existing water facilities.
- Robert Shaver at (510) 659-1970, ext. 423, or by e-mail at robert.shaver@acwd.com, for ACWD's water service-related requirements (e.g., annexation of property to ACWD, applicable service fees and charges, and required on-BART-property or off-BART-property pipelines).

ACWD appreciates the opportunity to comment on the DSEIR. Unfortunately, based on our comments above, the SDEIR does not adequately address ACWD's concerns regarding the impacts of BART's proposed project on ACWD's groundwater resources. We hope to work cooperatively with BART's staff to address these concerns.

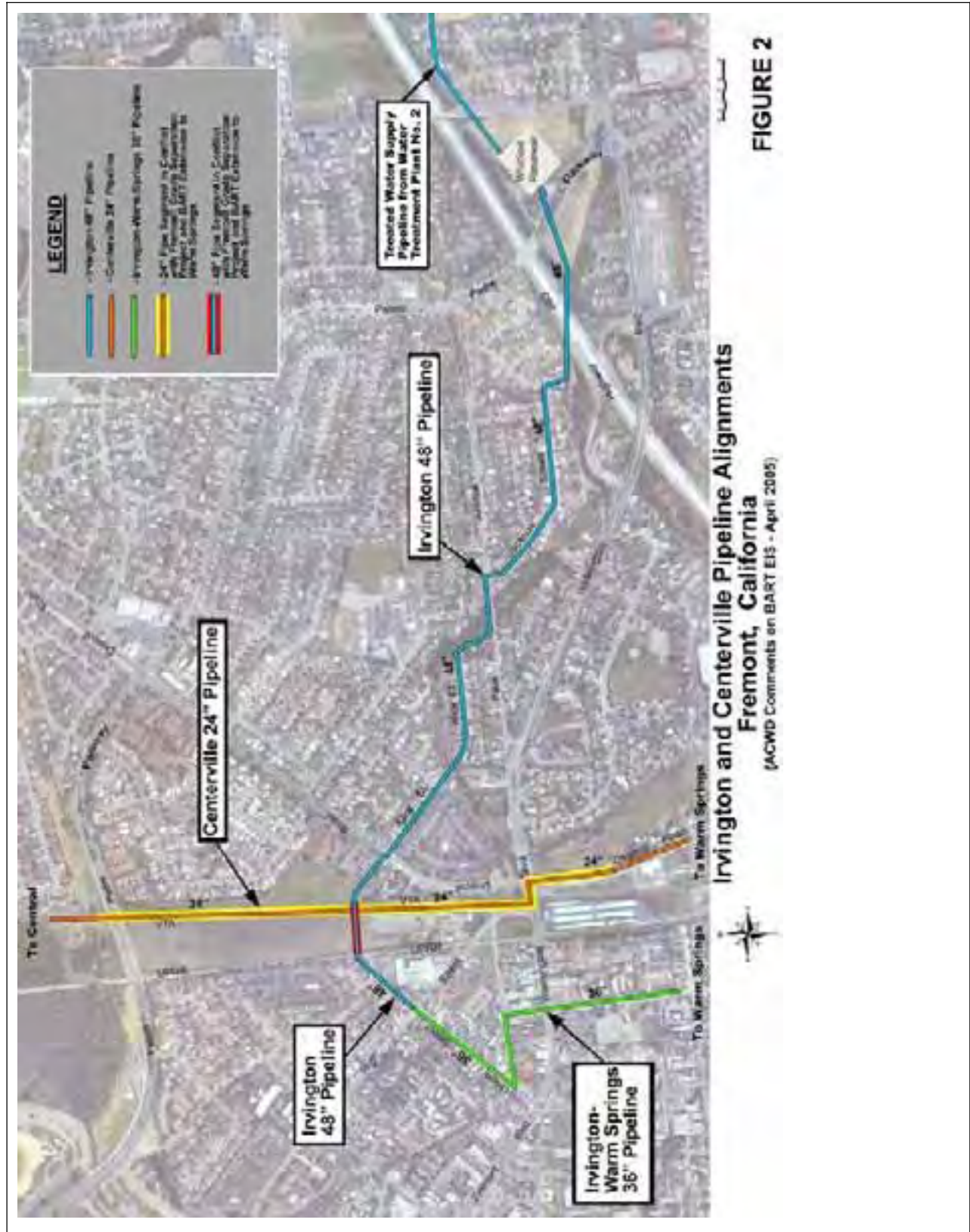
If you have any questions regarding these comments, please contact Steven Inn at (510) 659-1970, ext. 441.

Sincerely,


Paul Piraino
General Manager

si:bk

cc: Craig Hill, ACWD
Steven Inn, ACWD
Jim Ingle, ACWD
Robert Shaver, ACWD
Karl Stinson, ACWD
Doug Chun, ACWD
Jim Reynolds, ACWD
Eric Cartwright, ACWD
Juniet Rotter, ACWD



Response to Comment Letter 8

- 8-1:** As requested by the commenter, a bullet has been added on page ES-10 under the heading “Issues to be Resolved,” which reads as follows:
- Impacts of construction and maintenance dewatering on groundwater and hydrological functions.
- 8-2:** Table ES-2 has been revised to include new Mitigation Measure H-12, which addresses construction impacts on groundwater resources. Please see the response to comment no. 8-4. For long-term maintenance issues, see the response to comment no. 8-3.
- 8-3:** The assessment of a fee for groundwater extraction, to which the commenter refers, is not an impact on the environment for purposes of NEPA. However, BART will comply with any requirements of applicable law.
- 8-4:** The comment is correct that construction dewatering in certain areas could result in a potentially significant impact on groundwater supplies, requiring mitigation. However, at this stage of project engineering development, it is not possible to precisely identify construction methods or quantify the amount of groundwater extraction that would be necessary.

Impact H-12 beginning on page 4.5-23 of the DEIS discusses the potential depletion of local groundwater supplies during construction. The last sentence of the second paragraph on page 4.5-24 has been deleted, and the following mitigation measure (H-12) has been added as follows:

~~...Accordingly, temporary impacts on groundwater supplies from construction dewatering are expected to be minimal.~~

Mitigation Measure H-12—Develop and implement a construction dewatering plan. Prior to construction, BART or BART's contractor will develop and implement a construction dewatering plan based on a comprehensive hydrogeological assessment of groundwater conditions in the Above Hayward Fault aquifer in the vicinity of the WSX alignment. The hydrogeological assessment will be developed with ACWD staff's assistance to determine the potential variations in groundwater levels in the subject aquifer. The location of testing wells will be determined in collaboration with ACWD. The testing will be completed prior to issuance of the notice to proceed to the contractor. BART will require BART's contractor to submit the construction dewatering plan to ACWD for its concurrence. The plan will identify the portions of subway construction that will be constructed using conventional dewatering techniques and those areas that would require alternative construction techniques, such as a jet-grouted base slab and/or deep soil mixing walls to minimize the need for groundwater pumping. The plan will address the potential effects of the selected construction techniques on groundwater level and will incorporate performance criteria developed in consultation with ACWD to limit pumping related to project dewatering.

Consistent with this revision, the construction scenario described in Section 3.4.7 has also been revised to present a more likely construction scheme for the northern portion of the subway, and it reflects the presence of the underlying aquifer in this area. The revised

construction scenario considers the technical infeasibility of construction dewatering in this area. The first full paragraph under Page 3-20 of the DEIS has been revised as follows:

The WSX Alternative alignment would enter a subway immediately north of Stevenson Boulevard. The subway would be constructed using the cut-and-cover method. Wherever possible, the scenario for the cut-and-cover subway would be an open excavation with laid-back side slopes. However, due to the presence of groundwater resources, installation of a relatively watertight excavation support system is anticipated for much of the northern and possibly central portions of the subway. Such a system may consist of cement deep soil mixing walls with a jet grouted base slab installed in advance of the excavation, to provide stability and minimize groundwater intrusion. When the excavation is complete, construction of the base slab would commence, followed by construction of the subway walls and roof. Walls and roof may be constructed as separate operations or together as one operation at the contractor's election. Once the subway box is completed, trackwork would be installed, followed by installation of train systems. The area around the subway box would be backfilled and the site restored to the previous grade.

The following text, which appears in the fourth paragraph of the discussion of "Subsurface Hydrology" on page 4.5-5 of the DEIS, has been revised as follows:

Previous geotechnical studies conducted by Fugro West, Inc. (2003) indicate a surficial fine-grained layer ranging in thickness from 15 to 30 feet along the 2,500-foot long section of proposed track between the north portal and the thicker fine-grained section near Lake Elizabeth. The underlying material consists of coarse sands and gravels with variable silt content to the total depth explored of about 80 feet. The bottom of the proposed BART subway along this section of track ranges from 20 to 33 feet below ground surface. ~~For the purposes of this analysis, it is assumed that construction dewatering operations would need to draw groundwater levels down about 5 feet below the bottom of the excavation.~~

8-5: Mitigation Measure H-8 on page 4.5-19 of the DEIS has been amended to include Item D as follows:

D. If a groundwater recharge method is selected, BART may be required to obtain permits from ACWD and the USEPA. In that event, as part of the permitting process, BART would provide any necessary documentation of water quality to ensure adequate protection of beneficial uses.

8-6: The construction scenario described in Section 3.4.7 of the DEIS has been revised, and Mitigation Measure H-12 has been added to require a hydrogeologic analysis and implementation of a construction dewatering plan, in consultation with ACWD (See response to comment no. 8-4 above.)

8-7: The construction scenario described in Section 3.4.7 has been revised and Mitigation Measure H-12 has been added, which requires hydrogeologic analysis and the implementation of a construction dewatering plan, in consultation with ACWD. (Please refer to the response to comment 8-4.)

- 8-8:** It may not be technically feasible to differentiate between surface water runoff and subway tunnel seepage that collects in the subway sump. If necessary, in order to differentiate between surface runoff and seepage water inflow rates, BART will work with ACWD to establish a baseline estimate for the amount of subway seepage, which will be based on actual operating conditions. Regarding replenishment assessment, please refer to the response to comment 8-3.
- 8-9:** The discrepancy noted in the comment is related to the frequency of pumping. The inflow seepage rate for the subway tunnel is estimated at 8 gallons per minute (GPM). The scenario described in Appendix D (Floodplain Finding Report) referencing the 150 gallons per minute refers to the intermittent sump pump discharge rate. When the subway sump fills, the sump pump will discharge the water at 150 GPM.

To clarify this point, Appendix D, Floodplain Finding Report, has been revised. The fourth sentence of the second paragraph of Section 10.03 (Appendix D, page 23) been revised and a new sentence inserted as follows:

BART anticipates ~~operational dewatering~~ subway seepage on the order of ~~150-8~~ GPM. Operational pumping of the sump water would take place intermittently at a rate of 150 GPM when the sump reaches capacity.

- 8-10:** The second paragraph under Alameda County Water District on page 4.16-4 of the DEIS will be revised to read as follows:

The existing water system crosses the WSX Alternative alignment at Walnut Avenue, Stevenson Boulevard, Paseo Padre Parkway, Washington Boulevard, Blacow Road, Prune Avenue, and Warm Springs Court. The existing water lines range from 12 to ~~20~~ 24 inches in diameter. ACWD water lines parallel the proposed WSX Alternative alignment from north of Paseo Padre Parkway to Washington Boulevard. In addition, a 24-inch and 48-inch diameter lines crosses the WSX Alternative ~~midway in the area~~ between Paseo Padre Parkway and Washington Boulevard.

For information regarding stray electrical current, see the response to comment no. 8-11.

- 8-11:** The following changes have been made in Impact UPS-1 and Mitigation Measures UPS-1 and UPS-2 on pages 4.16-6 and 4.16-7 of the DEIS:

Impact UPS-1—Potential conflicts with Hetch Hetchy water pipelines, electrical transmission lines, and ACWD water lines.

WSX Alternative. BART and SFPUC are currently in the process of negotiating what right-of-way SFPUC needs for potential future expansion. Once the BART extension is constructed, the options for Hetch Hetchy pipeline expansion could be constrained.

It should be noted that no bridge abutment or similar structure of any kind should be located near the pipelines (Zandian pers. comm.). Mitigation Measure UPS-1 would reduce this impact to a minimal level.

In addition to SFPUC, ACWD operates and maintains the local water network serving the project corridor. The future existence of stray electrical currents related

to BART operations may also have adverse impacts on the pipelines. Operation of BART generates stray electrical currents. Utility lines near the WSX Alternative corridor could be affected by stray currents, especially those utilities that run parallel to the BART tracks. In particular, stray current may accelerate the corrosion of metal pipes through the process of electrolysis.

~~It should be noted that no bridge abutment or similar structure of any kind should be located near the pipelines (Zandian pers. comm.). The following mitigation measures would reduce this impact to a minimal level.~~

Mitigation Measure UPS-1—Coordinate with the San Francisco Public Utilities Commission staff and ACWD staff. Impacts on the Hetch Hetchy water system and ACWD water system will be minimized by consulting with SFPUC the respective staff early in the engineering design process to coordinate key elements of the design, such as locations of structural columns, at-grade track ballast, subway structure, or similar structures, so as to maintain proper clearance and minimize potential effects on the pipelines.

BART will coordinate with the SFPUC and ACWD during project design to minimize constraints and operational impacts related to the pipelines. During construction, access would be provided for emergency purposes and maintenance repairs.

Mitigation Measure UPS-2—Provide protection from stray electrical currents. As a precautionary measure to safeguard against stray electrical currents related to BART operation, running rails will be insulated from ground. This insulation will prevent stray currents from leaving the running rail and returning to it, ensuring that BART operations do not interfere with the existing cathodic protection installed on the pipes. BART will also monitor the system for significant stray currents. BART will coordinate with potentially affected utility agencies to identify any additional measures that may be required to protect facilities from stray electrical current.

In lieu of a routine monitoring program for stray currents, BART employs a system of negative grounding devices (NGDs) at locations along the BART alignment that automatically detect voltage drop due to grounding. When a voltage drop is detected, BART investigates and repairs insulators or trackway as necessary.

- The first paragraph of Impact UPS-3 on page 4.16-8 has been amended as follows:

ACWD operates and maintains the local water network serving the project corridor. Water usage required by BART is limited to the station facilities (landscaping, bathroom facilities, and drinking water fountains) and the subway fire suppression system. Water consumption for the WSX Alternative is expected to be low, resulting in only a negligible impact on the local water supply.

- Pages 4.16-8 and 4.16-10 have been revised to show the revised name for Mitigation Measure UPS-1:

Coordination with the San Francisco Public Utilities Commission and ACWD staff.

- 8-12:** The last sentence of the impact discussion under “Water” on page 4.16-9 says “Any disturbance to the existing ACWD system would result in interruption of service.” The intent of this sentence is to acknowledge that disturbance of the ACWD system would lead to interruption of water service. No interruptions of service have been planned at this time.

Mitigation Measure UPS-5, which appears on page 4.16-10 of the DEIS, has been amended as follows.

Mitigation Measure UPS-5—Coordinate with affected utilities, companies, and agencies that own pipelines and underground conduits to arrange necessary relocation and protection of existing lines. Any interruption of underground utility service will be coordinated with the service provider(s) well in advance of the projected date of interruption. In particular, BART shall continue to coordinate with ACWD during design of modifications to the water distribution system to ensure that impacts to ACWD’s operations are minimized.

- 8-13:** The comment provides a more detailed description of the issues related to relocation of ACWD water lines. Mitigation Measure UPS-5 has been modified to ensure consultation between BART and local service providers, including ACWD (see response to comment 8.12).

BART expects to pursue federal and state funding for the WSX project, which would include funds for utility relocation. The costs of utility relocation will be determined consistent with respective property rights for the parties involved.

- 8-14:** Table 1-1 on page 1-9 of the DEIS has been revised as follows:

Alameda County Water ~~Department~~ District.

- 8-15:** Comment noted. BART will work with ACWD staff on all appropriate issues, including annexation.
- 8-16:** As stated in the comment, providing water service to the proposed station sites, as well as other facilities along the alignment, will require coordination with the ACWD Engineering Department. BART will pay any applicable development-related fees and comply with standard specifications.



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Patrick Keok
Julia Miller
- SOLANO COUNTY
John F. Silva
- SONOMA COUNTY
Tim Smith
Pamela Torlatt
- Jack P. Broadbent
EXECUTIVE OFFICER/AQPCO

Letter 9

April 25, 2005

Shari Adams
Warm Springs Group Manager
San Francisco Bay Area Rapid Transit District
300 Lakeside Drive
P.O. Box 12688
Oakland, CA 94604-2688

RECEIVED

APR 25 2005

Subject: BART Warm Springs Extension

Dear Ms. Adams:

Bay Area Air Quality Management District (District) staff have reviewed your agency's Draft Environmental Impact Statement (DEIS) for the BART Warm Springs Extension project. The proposed project would extend BART service approximately 5.4 miles from the Fremont BART Station to a new Warm Springs Station with an optional station at Irvington. On May 9, 2003, we submitted a comment letter in response to the Draft Supplemental Environmental Impact Report (DSEIR) for this project, and we have the following additional comments.

District staff commend BART for your efforts in promoting in-fill and transit-oriented development around existing and new BART stations. However, we continue to have concerns about the compatibility of proposed future development and existing land uses near the Warm Springs and Irvington stations. Air quality problems may arise when sources of air pollution and sensitive receptors are located near one another. In the case of these proposed new stations, air pollution from adjacent industrial and commercial uses could adversely impact newly introduced residents and other sensitive receptors. These new sensitive receptors may be affected by odors, dust, toxics, and diesel exhaust from a number of different industrial and commercial activities.

District staff understand that the City of Fremont will be responsible for the majority of land use planning and development of the areas surrounding the proposed new BART stations. District staff are currently working with City staff to understand the potential air quality impacts from siting sensitive receptors near existing sources of air pollution, and to avoid such land use incompatibilities if significant impacts may arise. The California Air Resource Board has recently released a draft "Air Quality and Land Use Handbook: A Community Health Perspective" to provide guidance to local land use agencies in dealing with the complexities of these land use siting decisions. We recommend that your agency review the draft Handbook and incorporate its recommendations into the Final EIS, as appropriate. If you do not already have a copy, the draft Handbook is available on-line at <http://www.arb.ca.gov/ch/landuse.htm>.

We urge BART to work with the City to carefully assess potential air quality impacts on new sensitive receptors near the proposed stations, and to take

9-1

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Ms. Shari Adams

-2-

April 25, 2005

advantage of these new transit nodes to intensify land uses near the Irvington and Warm Springs stations as long as those uses do not expose existing or new sensitive receptors to odors, dust or toxic air contaminants. We support infill and transit-oriented development that is of a moderate to high density, has a variety of compatible land uses and encourages alternative modes of transportation. These projects are generally much less automobile-dependent, especially if the mixture of uses includes needed services. Such projects generate less air pollution than conventional sprawl development.

9-1
cont.

If you have any questions regarding these comments, please contact Suzanne Bourguignon, Principal Environmental Planner, at (415) 749-5093.

Sincerely,

Jack P. Broadbent
Jack P. Broadbent
Executive Officer/APCO

JPB:SB

- cc: BAAQMD Director Roberta Cooper
- BAAQMD Director Scott Haggerty
- BAAQMD Director Nate Miley
- BAAQMD Director Shelia Young
- Jeff Schwob, City of Fremont Planning Director

RECEIVED

APR 25 2005

Response to Comment Letter 9

9-1: BART has reviewed the California Air Resources Board's (ARB) "Air Quality and Land Use Handbook: A Community Health Perspective." The proposed WSX Alternative consists of extending BART and adding a BART station at Warm Springs and an optional station at Irvington. BART notes that ARB's handbook strongly supports transit-oriented development (TOD) to provide infill development.

As the comment notes, the City of Fremont, not BART, would be responsible for siting decisions and environmental studies associated with infill development around BART's Warm Springs Station. The City of Fremont will address the potential air quality impacts to sensitive receptors when considering proposed development projects.

While BART understands the issue of infill development and potential exposure of infill residents to existing sources of air pollution, an evaluation of these potential impacts is inappropriate for this EIS, because the project does not specifically deal with infill development and any infill development is unknown at this time. The City will evaluate environmental effects of those decisions separate environmental documents focusing on proposed infill projects once such projects are proposed. Mitigation measures to reduce the exposure of infill residences to existing sources of air pollution would more appropriately be evaluated in those subsequent documents rather than in the Warm Springs Extension EIS.

BART will encourage developers to consider BAAQMD's comments and ARB's guidance during future development activities.