APPENDIX H

WATER SUPPLY ASSESSMENT
December 19, 2011

Scott Harriman, Principal Planner
Planning and Zoning Division
City of Walnut Creek
1666 North Main Street
Walnut Creek, CA 94596

Re: Re-Confirmation of Water Supply Assessment for Walnut Creek BART Transit Village Project

Dear Mr. Harriman:

This letter is in response to your environmental consultant's (The Planning Center) request of November 29, 2011 for water agency consultation concerning the Re-Confirmation of the Water Supply Assessment (WSA) for the Walnut Creek BART Transit Village Project. East Bay Municipal Utility District (EBMUD) appreciates the opportunity to provide this response.

In November 2009, EBMUD received a request from the City of Walnut Creek for a WSA for the Walnut Creek BART Transit Village Project. Pursuant to Sections 10910-10915 (SB-610) of the California Water Code, EBMUD approved the WSA and provided the City of Walnut Creek a written response to the WSA in January 2010 (Enclosure 1). Per The Planning Center, the project elements changed and the retail/commercial space and office space will be reduced by approximately 30,000 square feet. EBMUD concludes that the change will reduce the overall project demand and would not result in changes in the conclusions of the WSA. The WSA approved by EBMUD in January 2010 is still valid and a second WSA is not required. Please note that EBMUD approved a new 2010 Urban Water Management Plan in July 2011 (Enclosure 2) and the City should be using this updated document in their environmental analysis.
If you have any questions concerning this response, please contact David J. Rehnstrom, Senior Civil Engineer, at (510) 287-1365.

Sincerely,

[Signature]

William R. Kirkpatrick
Manager of Water Distribution Planning Division

WRK:DJR:sb
sb11_236.doc

Enclosures

cc (w/o enclosures): Andrew Hill, Project Planner
The Planning Center
1625 Shattuck Avenue, Suite 300
Berkeley, CA 94709
January 12, 2010

Mr. Scott Harriman
Interim Assistant Planning Manager
Planning and Zoning Division
City of Walnut Creek
1666 North Main Street
Walnut Creek, CA 94596

Re: Water Supply Assessment – Walnut Creek BART Transit Village Project

Dear Mr. Harriman:

This letter responds to the City of Walnut Creek’s (City) request of November 2, 2009, for water agency consultation concerning the Walnut Creek BART Transit Village (Enclosure 1) located in Walnut Creek. The East Bay Municipal Utility District (EBMUD) appreciates the opportunity to provide this response.

Pursuant to Sections 10910-10915 (SB-610) of the California Water Code, the project meets the threshold requirement for an assessment of water supply availability based on the amount of water this project would require, a mixed-use project that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project.

Please note that this assessment addresses the issue of water supply only and is not a guarantee of service, and future water service is subject to rates and regulations in effect at the time.

Project Demand

The water demands for the Walnut Creek BART Transit Village area are accounted for in EBMUD’s water demand projections as published in EBMUD’s 2005 Urban Water Management Plan (UWMP/Enclosure 2). EBMUD’s water demand projections account for anticipated future water demands within EBMUD’s service boundaries and for variations in demand-attributed changes in development patterns. Current water demand for the project site is approximately 8,200 gallons per day (gpd). The estimated water demand for the proposed development that consists of residential, commercial and office area is estimated to be about 130,000 gpd and is consistent with EBMUD’s demand projections that indicate both densification and land use class changes in some areas with these types of land uses.
Mr. Scott Harriman  
January 12, 2010  
Page 2

This is about half of the City’s estimate; your letter notes that the daily unit use of 250 gallons per capita seems high.

EBMUD’s demand projections indicate both densification and land use changes in all existing land use classifications, including commercial and industrial land use areas, thus increasing EBMUD’s overall demand. EBMUD’s 2005 UWMP projects water demands over time, accounting for estimated variations in demand usage less conservation and recycled supply sources as noted in Table 4.1 of the UWMP. For planning purposes, the demands are estimated in five-year increments, but it is recognized that actual incremental amounts may occur stepwise in shorter time increments. An increase in usage by one customer in a particular customer class does not require a strict gallon-for-gallon increase in conservation by other customers in that class as, in actuality, the amount of potable demand, conservation and recycled water use EBMUD-wide will vary somewhat. Periodically, EBMUD updates the demand projections to reconcile these variations, and the UWMP is updated as appropriate at each five-year cycle.

Project Area

The Walnut Creek BART Transit Village is bounded by Ygnacio Valley Road to the south, Pringle Avenue to the north, North California Boulevard to the east, and Interstate 680 to the west. As described in the City’s request for Water Supply Assessment (WSA), the total development of the project is approximately 12 acres consisting of 596 multi-family housing units in four buildings, 36,950 square feet of retail/commercial area, 18,500 square feet of office area, and 16,700 square feet of adaptable flex space.

EBMUD Water Demand Projections

Water consumption within the EBMUD service area has remained relatively level in recent years in spite of population and account growth. Since the 1970s, water demand has ranged from 200 to 220 million gallons per day (mgd) in non-drought years. The 2030 water demand forecast of 281 mgd for the EBMUD service area can be reduced to 232 mgd with the successful implementation of water recycling and conservation programs, as outlined in the UWMP. The Walnut Creek BART Transit Village will not change the EBMUD 2030 demand projection.

EBMUD Water Supply and Water Rights

EBMUD has water rights permits and licenses that allow for delivery of up to a maximum of 325 mgd from the Mokelumne River, subject to the availability of Mokelumne River runoff and the senior water rights of other users. EBMUD’s position in the hierarchy of Mokelumne River water users is determined by a variety of agreements between Mokelumne River water right holders, the appropriative water rights permits and licenses, which have been issued by the State,
pre-1914 rights and riparian rights. Conditions that could, depending on hydrology, restrict EBMUD’s ability to receive its full entitlement include:

- Upstream water use by prior right holders.
- Downstream water use by riparian and senior appropriators and other downstream obligations, including protection of public trust resources.
- Variability in rainfall and runoff.

During drought periods, the Mokelumne River can no longer meet EBMUD’s projected customer demands. To address this, EBMUD has obtained and continues to seek supplemental supplies. EBMUD has a contract for water from the Central Valley Project (CVP), which is discussed below in the Supplemental Water Supply and Demand Management section of this assessment. EBMUD studies indicate that by 2030, even with the additional dry-year water supply provided through the Freeport Regional Water Project (FRWP), deficiencies in supply of up to 37 percent could occur during multi-year drought periods.

EBMUD UWMP

The UWMP, adopted on November 22, 2005 by the EBMUD Board of Directors by Resolution No. 33508-05, is a long-range planning document that reports on EBMUD’s current and projected water usage; water supply programs; and conservation and recycling programs. A summary of EBMUD’s demand and supply projections, in 5-year increments for a 25-year planning horizon is provided in a table (Enclosure 3) from the UWMP. The data reflects the latest actual and forecast values.

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The available supply shown in the attached table (Enclosure 3) was derived from EBMUD’s hydrologic model with the following assumptions:

- Total system storage is depleted by the end of the third year of the drought.
- EBMUD will implement its Drought Management Program when necessary.
- The diversions by Amador and Calaveras Counties upstream of Pardee Reservoir increase over time.
- Releases are made to meet the requirements of senior downstream water right holders and 
  fishery releases are made according to the JSA.
- Dry-year supply of CVP water, through the FRWP, is available beginning in 2010.

As discussed under the Drought Management Program section in Chapter 3 of the UWMP, 
EBMUD’s system storage generally allows it to continue serving its customers during dry-year 
events. EBMUD imposes rationing based on the projected storage available at the end of 
September. By imposing rationing in the first dry year of potential drought periods, EBMUD 
tries to minimize rationing in subsequent years if a drought persists while continuing to meet 
its current and subsequent-year fishery flow release requirements and obligations to downstream 
agencies. Table 3-1 in the UWMP summarizes the Drought Management Program guidelines for 
consumer water reduction goals based on projected system storage.

In the table (Enclosure 3), "Single Dry Water Year" (or Year 1 of "Multiple Dry Water Years") is 
determined to be a year that EBMUD would implement Drought Management Program elements 
at the "moderate" stage with the goal of achieving a reduction between 0 to 15 percent in 
customer demand. Through the FRWP, the supplemental dry-year supply of CVP water will be 
used to reduce the rationing goal to 5 percent during the first year of a drought. Year 2 of 
Multiple Dry Years is determined to be a year that EBMUD would implement Drought 
Management Program elements at the "severe" stage with the goal of achieving between 15 to 
25 percent reduction in customer demand. In Year 3 of the multiple-year drought, under current 
conditions (2005) and prior to the completion of the FRWP, EBMUD customers could 
experience deficiencies of up to 56 percent. After the completion of the FRWP, water supply 
deficiencies could range from about 26 percent in year 2010 to about 37 percent in year 2030. 
Therefore, a supplemental supply is needed, which is defined by EBMUD as the additional 
amount of water necessary to limit customer deficiency to 25 percent in a multiple-year drought 
while continuing to meet the requirements of senior downstream water right holders and the 
provisions of the 1998 JSA.

Supplemental Water Supply and Demand Management

The goals of meeting projected water needs and increased water reliability rely on three 
components: supplemental supply, water conservation and recycled water.

Chapter 2 of the UWMP describes EBMUD’s supplemental water supply project alternatives to 
meet its long-term water demand. To address the need for a supplemental water supply during 
droughts, EBMUD signed a contract in 1970 with the Federal government for a supplemental 
supply from the CVP. In 2001, EBMUD certified the environmental documentation amending 
its CVP contract 14-06-200-5183A, reducing EBMUD’s contract from 150,000 acre-feet/year to 
an entitlement not to exceed 133,000 acre-feet in any one year or 165,000 acre-feet over any 
three consecutive years. In 2001, EBMUD signed a Memorandum of Agreement with the City of
Sacramento, the County of Sacramento and the U.S. Bureau of Reclamation to study a joint regional water project on the Sacramento River near Freeport.

The Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) of the FRWP identifies several regulatory permits and approvals required for the implementation of the project alternatives. These are listed in Table 2-6 of the FRWP Draft EIR/EIS, July 2003, and incorporated in the Final EIR/EIS for the project, which was certified in April 2004. The approvals for FRWP have been obtained. EBMUD will still face water supply shortages even with the additional dry-year supply provided by the FRWP; however, the frequency and severity of customer rationing during drought periods will be reduced.

Chapter 2 of the UWMP also describes other supplemental water projects, including the development of groundwater storage within EBMUD’s service area. EBMUD is studying the environmental impacts of these proposed projects. Specific capital outlay and financing information for these projects are included in EBMUD’s FY06-07 Capital Improvement Program and Five-Year Plan. The FRWP would also allow for a future groundwater conjunctive use component and, along with the proposed local groundwater projects, emergency interties and planned water recycling and conservation efforts, would ensure a reliable water supply to meet projected demands for current and future EBMUD customers within the current service area. Without a supplemental water supply source, beyond the FRWP, and despite continued conservation efforts and further use of recycled water, deficiencies in supply are projected as noted above.

The Walnut Creek BART Transit Village presents an opportunity to incorporate water conservation measures. Conditions of approval for the implementation of the Walnut Creek BART Transit Village should require that the project comply with Assembly Bill 325, Model Water Efficient Landscape Ordinance (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). EBMUD staff would appreciate the opportunity to meet with project sponsors to discuss water conservation programs and best management practices applicable to such projects. A key objective of these discussions will be to explore timely opportunities to expand water conservation via early consideration of EBMUD’s conservation programs and best management practices applicable to the project.

The Walnut Creek BART Transit Village is not a likely candidate for recycled water due to minimal irrigation demands and the cost to provide recycled water to the project site may be cost prohibitive due to the long length of pipeline required to get to the site. However, the District requests that the project applicant contact and coordinate with the District during the planning of the project to confirm the feasibility of using recycled water at the project site.
The project sponsor should contact David J. Rehnstrom, Senior Civil Engineer, at (510) 287-1365 for further information.

Sincerely,

[Signature]

William R. Kirkpatrick
Manager of Water Distribution Planning Division

WRK:AMW:sb
sb09_355a.doc

Enclosures: 1. Letter of Request for Water Supply Assessment dated November 2, 2009
2. EBMUD’s 2005 Urban Water Management Plan
3. EBMUD’s Demand and Supply Projections Table

cc: Board of Directors w/o Enclosure 2
November 2, 2009

East Bay Municipal Utility District
375 11th Street, MS 701
Oakland, CA 94607

Re: Request for Water Supply Assessment for Proposed Walnut Creek BART Transit Village Project

Dear Mr. Rehnstrom:

Per amendments to Section 10912 of the Water Code implemented by Senate Bill 610, the City of Walnut Creek is submitting this request to the East Bay Municipal Utility District (EBMUD) to prepare a water supply assessment for the Walnut Creek BART Station Transit Village. A Notice of Preparation for an Environmental Impact Report (EIR) for the current project was distributed on January 20, 2009.

The project is proposed at 200 Ygnacio Valley Road, which is at the Walnut Creek Station of the San Francisco Bay Area Rapid Transit District (BART). The site is bounded by Ygnacio Valley Road, North California Boulevard, Pringle Avenue, and I-680. The total developable acreage is approximately 12 acres. The proposed project includes a phased master plan with a total of 596 residential units in four buildings; 36,950 square feet of retail/commercial area; 18,500 square feet of office area; and 18,700 square feet of adaptable flex space. Please note, because the flex space would originally consist of 13 residential units, the residential demand factor has been applied to this use.
The EIR consultant for the project, Design, Community & Environment, Inc, has estimated the average water use of the project at approximately 267,763 gallons per day. A table providing a breakdown of this estimated use is attached. Please note, that the usage (demand) factors used are based on those used in the December 2008 WSA request for the 1938 Broadway Mixed Use Project in the City of Oakland. This seems appropriate given that both projects would be mixed use and that the WSA request for the Oakland project was made within the last year. However, if you determine that other demand factors should be applied to this WSA request, please advise and we'll resubmit this request.

The City respectfully requests that EBMUD immediately prepare a water supply assessment for the proposed project. The City acknowledges that this request for an assessment is a required part of the environmental documentation for the project. We appreciate your prompt response to this request.

Please contact us if you need additional information.

Sincerely,

Victoria

Steve Buckley

Cc: Scott Harriman, Interim Assistant Planning Manager
ESTIMATE OF AVERAGE DAILY WATER USE FOR THE WALNUT CREEK TRANSIT VILLAGE PROJECT

<table>
<thead>
<tr>
<th>USAGE</th>
<th>SQUARE FOOTAGE</th>
<th>POPULATION</th>
<th>POTABLE WATER USAGE (GALLONS PER DAY PER PERSON)</th>
<th>DAILY WATER DEMAND</th>
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<tbody>
<tr>
<td>Residential</td>
<td>486,996</td>
<td>958(^a)</td>
<td>250(^b)</td>
<td>242,000</td>
</tr>
<tr>
<td>Office</td>
<td>18,500</td>
<td>61(^c)</td>
<td>20</td>
<td>1,220</td>
</tr>
<tr>
<td>Retail</td>
<td>36,950</td>
<td>62(^d)</td>
<td>8</td>
<td>655</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10 %</td>
<td></td>
<td></td>
<td>23,887</td>
</tr>
<tr>
<td>Total</td>
<td>542,446</td>
<td>1,091</td>
<td></td>
<td>267,763 gallons</td>
</tr>
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</table>

\(^a\) Assumes 1.59 persons per household based on City of Walnut Creek General Plan assumption for multi-family housing. The 13 units within the flex space use have been counted toward the total of residential dwelling units.

\(^b\) 250 gallons per person per day seems high as a universal demand factor, but the City defers to EBMUD on whether this is a reasonable number.

\(^c\) Assumes one employee per 300 sf of retail.

\(^d\) Assumes one employee per 450 sf of office.
<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
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<tr>
<td><strong>PROJECTED DEMAND (MGD)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Customer Demand(1)</td>
<td>241</td>
<td>258</td>
<td>267</td>
<td>277</td>
<td>279</td>
<td>281</td>
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<tr>
<td>Adjusted for Conservation(2)</td>
<td>(13)</td>
<td>(21)</td>
<td>(27)</td>
<td>(35)</td>
<td>(35)</td>
<td>(35)</td>
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<tr>
<td>Adjusted for Recycled Water(2)</td>
<td>(6)</td>
<td>(12)</td>
<td>(14)</td>
<td>(14)</td>
<td>(14)</td>
<td>(14)</td>
</tr>
<tr>
<td>Planning Level of Demand</td>
<td><strong>222</strong></td>
<td><strong>225</strong></td>
<td><strong>226</strong></td>
<td><strong>228</strong></td>
<td><strong>230</strong></td>
<td><strong>232</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHEDULED AVAILABLE SUPPLY &amp; NEED FOR SUPPLEMENTAL SUPPLY (MGD)</th>
<th></th>
<th></th>
<th></th>
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<tr>
<td><strong>Normal Water Year</strong></td>
<td>&gt;222</td>
<td>&gt;225</td>
<td>&gt;226</td>
<td>&gt;228</td>
<td>&gt;230</td>
<td>&gt;232</td>
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<tr>
<td><strong>Supplemental Supply Need</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Single Dry Water Year (Multiple Dry Years - Year 1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Available Supply</td>
<td>211</td>
<td>213</td>
<td>215</td>
<td>217</td>
<td>219</td>
<td>220</td>
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<tr>
<td>Deficiency (Goal is 5% maximum(4))</td>
<td>5%(5)</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Supplemental Supply Need (6)</strong></td>
<td>69</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

| **Multiple Dry Water Years - Year 2**                            |      |      |      |      |      |      |
| Available Supply                                                 | 167  | 168  | 170  | 171  | 173  | 174  |
| Deficiency (Goal is 25% maximum(7))                              | 25%  | 25%  | 25%  | 25%  | 25%  | 25%  |
| **Supplemental Supply Need (6)**                                 | 40   | 0    | 0    | 0    | 0    | 0    |

| **Multiple Dry Water Years - Year 3**                            |      |      |      |      |      |      |
| Available Supply                                                 | 43   | 167  | 166  | 153  | 151  | 147  |
| Deficiency (Goal is 25% maximum(7))                              | 56%  | 26%  | 27%  | 33%  | 34%  | 37%  |
| **Supplemental Supply Need (To limit deficiency to 25%(6))**     | 15   | 1    | 4    | 18   | 22   | 27   |

| **Three-Year Drought**                                           |      |      |      |      |      |      |
| Total Supplemental Supply Need (To limit deficiency to 25%(6))   | **124 (8)** | 1 | 4 | 18 | 22 | 27 |

(1) Projected Demand derived from the 2000 Demand Study, which projects water demand based on land use in EBMUD's service area.
(2) Conservation and recycled water program savings reported are based on the 1993 Updated Water Supply Management Plan (WSMP). WSMP set a conservation program savings goal of 33 MGD and a recycled water program savings goal of 14 MGD for the year 2020. Since the adoption of the WSMP the conservation savings goal has increased to 35 MGD to offset demand from anticipated annexations to EBMUD's service area.
(3) Conservation and recycled water savings goals are to be upheld through 2030. Reference Chapter 5 and Chapter 6 for details.
(4) Projected Supply data includes dry-year supply deliveries from the Freeport Regional Water Project (FRWP) beginning in 2010. Without the FRWP supply 2020 deficiencies could be as high as 67%, as discussed in the UWMP 2000.
(5) Per 2003 FRWP EIR, rationing goal is set to 5% during the first year of all droughts.
(5) In 2005 and prior to the completion of the FRWP, EBMUD's water supply system is inadequate to supply 95% of demand, and may impose customer rationing up to 15% during the first year of a drought, resulting in a need for additional water.
(6) The supplemental supply need is based on EBMUDSIM model results. It is the amount of water needed to limit customer rationing to 5% during the first year of a three-year drought and 25% during the second year and third year of a three-year drought; to implement all provisions of the 1998 Joint Settlement Agreement, and to offset additional water supply system losses created by a supplemental supply. The actual need will be dependent on antecedent conditions, the severity of the actual drought, and on how much supplemental supply is obtained during the first two years of the drought and added to storage for use in subsequent years.
(7) Assumed drought conditions, per Table 3-1 (Chapter 3).
(8) An additional 15 MGD is needed in the third year if a supplemental supply is obtained in year 1 and year 2. If a supplemental supply is not available during years 1 and 2 of the drought, total system storage could be drawn down to meet 95% of demand in the first year and 75% in the second year, creating a greater storage deficit and a greater supplemental supply need in the third year.
January 12, 2010

Mr. Scott Harriman  
Interim Assistant Planning Manager  
Planning and Zoning Division  
City of Walnut Creek  
1666 North Main Street  
Walnut Creek, CA 94596  

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- The diversions by Amador and Calaveras Counties upstream of Pardee Reservoir increase over time.
Releases are made to meet the requirements of senior downstream water right holders and fishery releases are made according to the JSA.

Dry-year supply of CVP water, through the FRWP, is available beginning in 2010.

As discussed under the Drought Management Program section in Chapter 3 of the UWMP, EBMUD’s system storage generally allows it to continue serving its customers during dry-year events. EBMUD imposes rationing based on the projected storage available at the end of September. By imposing rationing in the first dry year of potential drought periods, EBMUD attempts to minimize rationing in subsequent years if a drought persists while continuing to meet its current and subsequent-year fishery flow release requirements and obligations to downstream agencies. Table 3-1 in the UWMP summarizes the Drought Management Program guidelines for consumer water reduction goals based on projected system storage.

In the table (Enclosure 3), "Single Dry Water Year" (or Year 1 of "Multiple Dry Water Years") is determined to be a year that EBMUD would implement Drought Management Program elements at the "moderate" stage with the goal of achieving a reduction between 0 to 15 percent in customer demand. Through the FRWP, the supplemental dry-year supply of CVP water will be used to reduce the rationing goal to 5 percent during the first year of a drought. Year 2 of Multiple Dry Years is determined to be a year that EBMUD would implement Drought Management Program elements at the "severe" stage with the goal of achieving between 15 to 25 percent reduction in customer demand. In Year 3 of the multiple-year drought, under current conditions (2005) and prior to the completion of the FRWP, EBMUD customers could experience deficiencies of up to 56 percent. After the completion of the FRWP, water supply deficiencies could range from about 26 percent in year 2010 to about 37 percent in year 2030. Therefore, a supplemental supply is needed, which is defined by EBMUD as the additional amount of water necessary to limit customer deficiency to 25 percent in a multiple-year drought while continuing to meet the requirements of senior downstream water right holders and the provisions of the 1998 JSA.

**Supplemental Water Supply and Demand Management**

The goals of meeting projected water needs and increased water reliability rely on three components: supplemental supply, water conservation and recycled water.

Chapter 2 of the UWMP describes EBMUD’s supplemental water supply project alternatives to meet its long-term water demand. To address the need for a supplemental water supply during droughts, EBMUD signed a contract in 1970 with the Federal government for a supplemental supply from the CVP. In 2001, EBMUD certified the environmental documentation amending its CVP contract 14-06-200-5183A, reducing EBMUD’s contract from 150,000 acre-feet /year to an entitlement not to exceed 133,000 acre-feet in any one year or 165,000 acre-feet over any three consecutive years. In 2001, EBMUD signed a Memorandum of Agreement with the City of
Sacramento, the County of Sacramento and the U.S. Bureau of Reclamation to study a joint regional water project on the Sacramento River near Freeport.

The Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) of the FRWP identifies several regulatory permits and approvals required for the implementation of the project alternatives. These are listed in Table 2-6 of the FRWP Draft EIR/EIS, July 2003, and incorporated in the Final EIR/EIS for the project, which was certified in April 2004. The approvals for FRWP have been obtained. EBMUD will still face water supply shortages even with the additional dry-year supply provided by the FRWP; however, the frequency and severity of customer rationing during drought periods will be reduced.

Chapter 2 of the UWMP also describes other supplemental water projects, including the development of groundwater storage within EBMUD’s service area. EBMUD is studying the environmental impacts of these proposed projects. Specific capital outlay and financing information for these projects are included in EBMUD’s FY06-07 Capital Improvement Program and Five-Year Plan. The FRWP would also allow for a future groundwater conjunctive use component and, along with the proposed local groundwater projects, emergency interties and planned water recycling and conservation efforts, would ensure a reliable water supply to meet projected demands for current and future EBMUD customers within the current service area. Without a supplemental water supply source, beyond the FRWP, and despite continued conservation efforts and further use of recycled water, deficiencies in supply are projected as noted above.

The Walnut Creek BART Transit Village presents an opportunity to incorporate water conservation measures. Conditions of approval for the implementation of the Walnut Creek BART Transit Village should require that the project comply with Assembly Bill 325, Model Water Efficient Landscape Ordinance (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). EBMUD staff would appreciate the opportunity to meet with project sponsors to discuss water conservation programs and best management practices applicable to such projects. A key objective of these discussions will be to explore timely opportunities to expand water conservation via early consideration of EBMUD’s conservation programs and best management practices applicable to the project.

The Walnut Creek BART Transit Village is not a likely candidate for recycled water due to minimal irrigation demands and the cost to provide recycled water to the project site may be cost prohibitive due to the long length of pipeline required to get to the site. However, the District requests that the project applicant contact and coordinate with the District during the planning of the project to confirm the feasibility of using recycled water at the project site.
The project sponsor should contact David J. Rehnstrom, Senior Civil Engineer, at (510) 287-1365 for further information.

Sincerely,

[Signature]

William R. Kirkpatrick
Manager of Water Distribution Planning Division

WRK:AMW:sb
sh09_265a.doc

Enclosures: 1. Letter of Request for Water Supply Assessment dated November 2, 2009
2. EBMUD's 2005 Urban Water Management Plan
3. EBMUD's Demand and Supply Projections Table

cc: Board of Directors w/o Enclosure 2
November 2, 2009

East Bay Municipal Utility District
375 11th Street, MS 701
Oakland, CA 94607

Re: Request for Water Supply Assessment for Proposed Walnut Creek BART Transit Village Project

Dear Mr. Rehnstrom:

Per amendments to Section 10912 of the Water Code implemented by Senate Bill 610, the City of Walnut Creek is submitting this request to the East Bay Municipal Utility District (EBMUD) to prepare a water supply assessment for the Walnut Creek BART Station Transit Village. A Notice of Preparation for an Environmental Impact Report (EIR) for the current project was distributed on January 20, 2009.

The project is proposed at 200 Ygnacio Valley Road, which is at the Walnut Creek Station of the San Francisco Bay Area Rapid Transit District (BART). The site is bounded by Ygnacio Valley Road, North California Boulevard, Pringle Avenue, and I-680. The total developable acreage is approximately 12 acres. The proposed project includes a phased master plan with a total of 596 residential units in four buildings; 36,950 square feet of retail/commercial area; 18,500 square feet of office area; and 18,700 square feet of adaptable flex space. Please note, because the flex space would originally consist of 13 residential units, the residential demand factor has been applied to this use.
The EIR consultant for the project, Design, Community & Environment, Inc, has estimated the average water use of the project at approximately 287,763 gallons per day. A table providing a breakdown of this estimated use is attached. Please note, that the usage (demand) factors used are based on those used in the December 2008 WSA request for the 1938 Broadway Mixed Use Project in the City of Oakland. This seems appropriate given that both projects would be mixed use and that the WSA request for the Oakland project was made within the last year. However, if you determine that other demand factors should be applied to this WSA request, please advise and we'll resubmit this request.

The City respectfully requests that EBMUD immediately prepare a water supply assessment for the proposed project. The City acknowledges that this request for an assessment is a required part of the environmental documentation for the project. We appreciate your prompt response to this request.

Please contact us if you need additional information.

Sincerely,

[Signature]

Steve Buckley

Cc: Scott Harriman, Interim Assistant Planning Manager
## Estimate of Average Daily Water Use for the Walnut Creek Transit Village Project

<table>
<thead>
<tr>
<th>Usage</th>
<th>Square Footage</th>
<th>Population</th>
<th>Potable Water Usage (Gallons Per Day Per Person)</th>
<th>Daily Water Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>486,996</td>
<td>968</td>
<td>250</td>
<td>242,000</td>
</tr>
<tr>
<td>Office</td>
<td>18,500</td>
<td>61</td>
<td>20</td>
<td>1,220</td>
</tr>
<tr>
<td>Retail</td>
<td>36,950</td>
<td>82</td>
<td>8</td>
<td>656</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10%</td>
<td></td>
<td></td>
<td>23,887</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>542,448</strong></td>
<td><strong>1,091</strong></td>
<td></td>
<td><strong>257,763 gallons</strong></td>
</tr>
</tbody>
</table>

* Assumes 1.60 persons per household based on City of Walnut Creek General Plan assumption for multi-family housing. The 13 units within the flex space use have been counted toward the total of residential dwelling units.

* Assumes one employee per 300 sf of retail.

* Assumes one employee per 450 sf of office.
Urban Water Management Plan 2005

East Bay Municipal Utility District
### EAST BAY MUNICIPAL UTILITY DISTRICT DEMAND AND SUPPLY PROJECTIONS
(Ref: Table 4-2, UWMP 2005 – EBMUD)

#### PROJECTED DEMAND (MGD)

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Demand(1)</td>
<td>241</td>
<td>258</td>
<td>267</td>
<td>277</td>
<td>279</td>
<td>281</td>
</tr>
<tr>
<td>Adjusted for Conservation(2)</td>
<td>(13)</td>
<td>(21)</td>
<td>(27)</td>
<td>(35)</td>
<td>(35)</td>
<td>(35)</td>
</tr>
<tr>
<td>Adjusted for Recycled Water(2)</td>
<td>(6)</td>
<td>(12)</td>
<td>(14)</td>
<td>(14)</td>
<td>(14)</td>
<td>(14)</td>
</tr>
<tr>
<td>Planning Level of Demand</td>
<td>222</td>
<td>225</td>
<td>226</td>
<td>228</td>
<td>230</td>
<td>232</td>
</tr>
</tbody>
</table>

#### PROJECTED AVAILABLE SUPPLY & NEED FOR SUPPLEMENTAL SUPPLY(3) (MGD)

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Water Year</td>
<td>&gt;222</td>
<td>&gt;225</td>
<td>&gt;226</td>
<td>&gt;228</td>
<td>&gt;230</td>
<td>&gt;232</td>
</tr>
<tr>
<td>Supplemental Supply Need</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Single Dry Water Year (Multiple Dry Years – Year 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Supply</td>
<td>211</td>
<td>213</td>
<td>215</td>
<td>217</td>
<td>219</td>
<td>220</td>
</tr>
<tr>
<td>Deficiency (Goal is 5% maximum(4))</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Supplemental Supply Need (6)</td>
<td>69</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Multiple Dry Water Years – Year 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Supply</td>
<td>167</td>
<td>168</td>
<td>170</td>
<td>171</td>
<td>173</td>
<td>174</td>
</tr>
<tr>
<td>Deficiency (Goal is 25% maximum(7))</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Supplemental Supply Need (6)</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Multiple Dry Water Years – Year 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Supply</td>
<td>43</td>
<td>167</td>
<td>166</td>
<td>153</td>
<td>151</td>
<td>147</td>
</tr>
<tr>
<td>Deficiency (Goal is 25% maximum(7))</td>
<td>56%</td>
<td>26%</td>
<td>27%</td>
<td>33%</td>
<td>34%</td>
<td>37%</td>
</tr>
<tr>
<td>Supplemental Supply Need (To limit deficiency to 25%(6))</td>
<td>15</td>
<td>1</td>
<td>4</td>
<td>18</td>
<td>22</td>
<td>27</td>
</tr>
</tbody>
</table>

#### Three-Year Drought

| Total Supplemental Supply Need (To limit deficiency to 25%(6)) | 124 (8) | 1 | 4 | 18 | 22 | 27 |

---

1. Projected Demand derived from the 2000 Demand Study, which projects water demand based on land use in EBMUD's service area.
2. Conservation and recycled water program savings reported are based on the 1993 Updated Water Supply Management Plan (WSMP). WSMP set a conservation program savings goal of 33 MGD and a recycled water program savings goal of 14 MGD for the year 2020. Since the adoption of the WSMP the conservation savings goal has increased to 35 MGD to offset demand from anticipated annexations to EBMUD's service area. Conservation and recycled water savings goals are to be upheld through 2030. Reference Chapter 4 and Chapter 5 for details.
3. Projected supply data includes dry-year supply deliveries from the Freeport Regional Water Project (FRWP) beginning in 2010. Without the FRWP supply 2020 deficiences could be as high as 67%, as discussed in the UWMP 2000.
4. Per 2003 FRWP EIR, rationing goal is set to 5% during the first year of all droughts.
5. In 2005 and prior to the completion of the FRWP, EBMUD's water supply system is inadequate to supply 95% of demand, and may impose customer rationing up to 15% during the first year of a drought, resulting in a need for additional water.
6. The supplemental supply need is based on EBMUDSIM model results. It is the amount of water needed to limit customer rationing to 5% during the first year of a three-year drought and 25% during the second and third year of a three-year drought, to implement all provisions of the 1998 Joint Settlement Agreement, and to offset additional water supply system losses created by a supplemental supply. The actual need will be dependent on antecedent conditions, the severity of the actual drought, and on how much supplemental supply is obtained during the first two years of the drought and added to storage for use in subsequent years.
7. Assumed drought conditions, per Table 3-1 (Chapter 3).
8. An additional 15 MGD is needed in the third year if a supplemental supply is obtained in year 1 and year 2. If a supplemental supply is not available during years 1 and 2 of the drought, total system storage could be drawn down to meet 95% of demand in the first year and 75% in the second year, creating a greater storage deficit and a greater supplemental supply need in the third year.