

## CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT  
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 VOICE AND TDD (415) 904-5260  
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# W6a



November 12, 2008

TO: Commissioners and Interested Parties

FROM: Peter Douglas, Executive Director  
 Charles Lester, Deputy Director  
 Ruby Pap, North Central Coast District Supervisor

SUBJECT: **Addendum to Staff Report for Montara Water and Sanitary District Public Works Plan Phase I (Application No. 2-06-006)**

Based on discussions with the Montara Water and Sanitary District, staff recommends that the staff report be revised as described below.

I. Change Suggested Modifications as follows (text to be added by this addendum shown in **bold underline and italics**. Text to be deleted by this addendum shown in **~~bold strikethrough and italics~~**):

1) The District shall make the following changes to the text of the Public Works Plan Phase I document:

- a) The District shall update all the Public Works Plan Phase I project description(s) to reflect the new proposed Alta Vista Tank location and specifications as shown in CDM Alta Vista Tank Figure 2, dated August 13, 2008, SRT Consultants Plan View of Proposed 1 MG Steel Water Tank Site and Cross Sections of Proposed Alta Vista Tank dated 9/26/2008 and the Terrasearch Geotechnical Investigation Report dated August 14, 2008 (Exhibit 5). **The updated project descriptions may reflect that other materials besides steel may be used, but poured in place or cast in place concrete will not be used.**

...

- c) The District shall replace Table 4-1 (Storage Capacity) of the Public Works Plan Phase I with the following table:

Existing (gallons):	Storage	Proposed Storage(gallons):	Comment:
Portola Estate 100,000		Portola Estate 100,000	No Change
Schoolhouse 100,000		Schoolhouse 0	Demolished <b><u>or Repaired</u></b>

Alta Vista 462,000	Alta Vista 462,000	No Change
	New Schoolhouse 200,000	New
	New Alta Vista 1,000,000	New
<b>Total: 662,000</b>	<b>Total: 1,762,000</b>	

...

g) In addition, in the Project Components table, in the parameters for the Alta Vista Water Storage Tank, the District Shall change the height to **not exceed** 18 feet **above the ridgeline** and the elevation to 518 feet above sea level.

h) The District shall amend the language of Section 4 “Project Description” of the Public Works Plan Phase I Document as follows:

- Construction of a one or two new water storage tank(s) (Schoolhouse Tank(s)) adjacent to and in place of (if two are built) the existing Schoolhouse water storage tank. **If a two-tank option is chosen, the existing Schoolhouse Tank may be repaired for use as one of the two tanks, if an inspection report signed by a licensed structural engineer that is reviewed and approved by the Executive Director shows that the repaired tank would be seismically sound.**

i) The District shall add the following to the project elements for the Schoolhouse Water Tank in the “Project Components” table in the Public Works Plan Data section of the Public Works Plan Phase I Document:

- i) Construction of a steel water storage tank with a capacity of 200,000 gallons OR construction of two steel water storage tanks, each with a capacity of 100,000 gallons. If a two-tank option is chosen, the existing Schoolhouse Tank may be repaired for use as one of the two tanks, if an inspection report signed by a licensed structural engineer that is reviewed and approved by the Executive Director shows that the repaired tank would be seismically sound.

...

2) The District shall add the following development standards to the Public Works Plan Phase I document:

- c) Construction of the Schoolhouse Tank(s) shall conform to the specifications and recommendations contained in the Geotechnical Investigation Report for

Proposed Schoolhouse and Alta Vista Tank Sites, Montara, California prepared by Terrasearch, Inc. dated August 4, 2005. ***If a two-tank option is chosen, the existing Schoolhouse Tank may be repaired for use as one of the two tanks, if an inspection report signed by a licensed structural engineer that is reviewed and approved by the Executive Director shows that the repaired tank would be seismically sound.***

...

- f) Mitigation Measure No. 3.3-1 shall be modified as follows:  
Tree removal ***and all other activities associated with tank construction*** shall be performed between September 1 and January 30 to prevent disturbance to bird nests. If tree clearing ***and all other activities associated with tank construction*** is desired outside of this period, a pre-construction survey for nesting birds shall be conducted prior to clearing of trees ***and all other activities associated with tank construction***. The survey will be conducted by a qualified biologist no more than 30 days prior to initiation of clearing ***or construction***. The survey shall include any areas proposed for any activities such as earthmoving. If occupied migratory bird nests are found within 250 feet of the construction zone, clearing shall not begin until after the nests are protected by an adequate setback (in general, 50 feet for passerines and 250 feet for raptors) defined by a qualified biologist.

...

- n) New water supply, storage, and transmission ***capacity facilities*** authorized by and pursuant to PWP 2-06-006 is limited to ***the MWSD service area those areas served by the District as of 11/12/08*** and shall not be used for any new water connections, or for the extension of water mains into rural areas, including rural areas ***designated Open Space or Agriculture*** within the urban/rural boundary, for any purpose, including for the purpose of ***personal private*** fire protection ***(e.g. fire hydrants)***. Proposals for any future water facility development connected to or using water system components or infrastructure authorized pursuant to PWP 2-06-006 shall require an amendment of the PWP as described in (p) ***except for repair and maintenance activities as defined by Coastal Act Section 30610(d), which shall require coastal authorization from San Mateo County, either in the form of a coastal development permit or a coastal development permit exemption as determined by Section 6328.5(d) of the certified San Mateo County zoning regulations.***
- o) Pumping of the Alta Vista Well No. 1 shall not exceed 150 gallons per minute ***averaged over a 24-hour period***. Any future proposals to increase the pumping rate shall require an amendment to this public works plan, and ***the District shall comply with any informational requests, including pumping tests, to demonstrate with shall include*** sufficient evidence that the increased pumping rate will not impact nearby wetlands, riparian areas, and sensitive habitats. ***The District may not initiate any pumping tests for increased pumping rates without***

**authorization from Commission staff after the PWP amendment application has been submitted.**

**The District shall submit annual water production reports for review and approval by the Executive Director by December 1<sup>st</sup> of each year the Alta Vista Well No. 1 is in production. These reports shall demonstrate that the pumping rate of the well does not exceed 150 gallons per minute averaged over any 24-hour period.**

...

**r) The District shall assure that safe and reliable access for construction vehicles that does not hinder or jeopardize the safety of regular traffic circulation is provided to each construction site.**

II. Add the following section to the "Staff Notes" section of the staff report in response to correspondence from the public:

**Deadline for Public Hearing**

**Title 14 CCR Section 13357(a)(3) requires that a public hearing on a Public Works Plan occur no later than the 60<sup>th</sup> day following the date on which the application was filed. The subject application was filed on September 15, 2008. Therefore the public hearing must be held at the Commission's November 2008 hearing in Long Beach.**

## CALIFORNIA COASTAL COMMISSION

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45 FREMONT, SUITE 2000  
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# W6a



October 30, 2008

TO: Commissioners and Interested Parties

FROM: Peter Douglas, Executive Director  
Charles Lester, Deputy Director  
Ruby Pap, North Central Coast District Supervisor

SUBJECT: Montara Water and Sanitary District (MWSD) Public Works Plan Phase I to improve portions of District's water system, including water storage and transmission facilities, water well production, and water treatment at the Alta Vista Site, Schoolhouse site, and Cabrillo Highway at Half Moon Bay Airport, in San Mateo County.

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## EXECUTIVE SUMMARY

Coastal Act section 30605 provides for the submittal of Public Works Plans (PWP) to the Coastal Commission as an alternative to project-by-project coastal development permit review. Once the Public Works Plan is certified by the Commission, subsequent review by the Commission of any project contained in the PWP is limited to imposing conditions to ensure consistency of the project with the PWP.

The Montara Water and Sanitary District has submitted a proposed PWP to improve portions of the District's water system for the communities of Montara and Moss Beach in the urban midcoast of unincorporated San Mateo County. Since San Mateo County has a certified local coastal program (LCP), the standard of review for the subject PWP is the San Mateo County certified LCP.

The objective of the District's Public Works Plan Phase I (PWP) is to improve specific portions of the District's water system to ensure an adequate and reliable water supply for *existing* domestic and fire protection uses. The District proposes the following developments within the PWP:

- ♦ **Water Storage Facilities:** Construction of a new water storage tank at the end of Alta Vista Road, and demolition and reconstruction of a water storage tank at the Schoolhouse site located at the West end of Buena Vista Street, to address inadequate flows for emergencies including fire protection.
- ♦ **New Water Well Production:** Initiation of water production (150 gallons per minute) from the Alta Vista Well No.1 and construction of a new

- pipeline and electrical conduit, extending from the production well and adjacent monitoring well to the existing Alta Vista water storage tank, to address inadequate water supplies for existing customers.
- ◆ **Water Treatment Facility:** Construction of a water treatment facility to address water quality issues at the existing airport wells, located on the West side of State Highway 1 at the Half Moon Bay Airport.

The proposed improvements are not intended to, nor would they accommodate, expanded existing connections or new connections to the system.

Expansion of Public Works in the County must not induce growth inconsistent with the LCP and must not accommodate growth beyond the capacity of other public works facilities, such as roads and transit. In addition, the LCP does not allow expansion of urban services, such as water mains and connections, beyond the urban/rural boundary.

As proposed by the District, the PWP would only bring the District's water supply up to fire suppression standards and provide an adequate supply for its existing customers. It would not provide a new or expanded supply for new customers, and hence would not accommodate new development. As stated in the PWP text (Exhibit 2), the improvements would not enable the District to ease or lift the existing moratorium on new water service connections.

While the proposed PWP does contain the statements described above in its project description, it does not contain clear enforceable development standards that prohibit the use of this additional supply and storage for new or expanded connections, or go beyond what is required to serve buildout, or to ensure that the use of the new supply and storage would be in phase with other public works facilities, such as roads and transit, inconsistent with LCP public works policies.

Therefore staff recommends that the Commission adopt suggested modifications that require that the new water supply and storage is limited to the MWSD service area, not used for any new water connections, and not available for the extension of water mains into rural areas. The standards also require that any future increase in supply or distribution capacity or proposal to provide additional service connections in excess of the current PWP limitations require an amendment to the PWP. In addition, the standards require that the information provided in any amendment application evaluate whether the proposed increase in water supply and/or distribution capacity is in phase with the existing or probable future capacity of other area infrastructure, including but not limited to the need for an adequate level of service for Highways 1 and 92 as required by the local coastal program. In addition, staff recommends that the Commission adopt a suggested modification setting the maximum pumping rate of the Alta

Vista Well at 150 gallons per minute, and require an amendment to the Plan to increase the production rate. These suggested modifications (numbers 2(n), (o), and (p), can be found on page 9 of this staff report. Only as modified can the Commission find that the PWP is consistent with LUP Policies 2.6, 2.7, 2.12, and 2.27.

Staff also recommends that the Commission adopt various suggested modifications specific to each project contained in the PWP as described below. These modifications would to bring the projects into conformance with sensitive habitats, hazards, and visual resources policies of the San Mateo County certified LCP.

The location of the proposed Alta Vista Tank as proposed in the PWP text would be dug into the hillside northeast of the ridge. The EIR documents several potential geologic issues and sensitive habitat impacts associated with this site, including impacts to a wetland and spring in the valley below as a result of erosion and sedimentation. The EIR requires as mitigation relocation of the tank onto the ridge to avoid these impacts.

The ridge contains sensitive habitat for the San Francisco Dusky Footed Woodrat, a California Species of Concern, and potential habitat for nesting raptors in the trees that would need to be removed for the tank construction. The District has demonstrated that the ridge tank location would maintain 25-foot buffers from SFDFW nests and has committed to conducting nesting bird surveys prior to construction as mitigation in the EIR. Staff of the California Department of Fish and Game has confirmed that a 25-foot buffer is adequate to protect SFDFW sensitive habitat. The tank would be dug into the ridge and would not exceed 18-feet above ground, consistent with LCP visual policies for ridgeline development. In addition, the tank would not be visible from Highway One.

Therefore, Staff recommends that the Commission adopt suggested modifications that relocate the Alta Vista tank to the ridge (#s 1a, 1d, 1e-g, 2b), that require 25-foot buffers to be maintained between the tank construction activities and SFDFW nests (#2g), and that require pre-construction surveys for nesting raptors and appropriate avoidance measures as necessary (2f). As modified, the Alta Vista Tank would be consistent with LUP sensitive habitat policies 7.3, 7.5, 7.35, hazards policies 9.3 and certified zoning regulation section 6324.6, and visual resources policies 8.5, 8.7 and section 6324.3 of the certified zoning regulations.

As described above, the District is also proposing to bring the Alta Vista Well #1 into production at 150 gallons per minute (gpm). LUP Policy 2.32 requires that if new or increased groundwater pumping is proposed to increase supply, the

amount pumped be limited to a safe yield factor which will not impact water dependent sensitive habitats, riparian habitats and marshes. The District has conducted pump tests to evaluate the potential impact of Alta Vista Well on water dependent sensitive habitats as well as neighboring household wells. During this test, streamflows and groundwater levels adjacent to the wetlands on Montara Creek were monitored and found to be unaffected by pumping of the Alta Vista Well. The vegetation in the areas with the highest potential to be affected by shallow groundwater drawdown was also monitored. There were no obvious effects on the potentially affected vegetation based on observations of survivorship, health and vigor, canopy cover, vegetative cover of shrubs and herbs, and species composition. The pumping tests also provide several lines of evidence suggesting that pumping of the Alta Vista well will have no impacts on nearby domestic wells.

Therefore, staff recommends that the Commission find that the proposed 150 gpm pumping of the Alta Vista Well is a safe yield factor which will not impact water dependent sensitive habitats, riparian habitats and marshes, consistent with LUP Policy 2.32(c). However, due to a certain level of uncertainty in scientific data, limitations surrounding short monitoring periods (e.g. 72 hours and 60 days), changed circumstances such as drought and seasonal fluctuations, staff recommends that the Commission adopt suggested modifications requiring the District not to exceed the 150 gpm pumping rate without an amendment to the PWP (Suggested Modification 2o), and to continue monitoring well pumping activities for potential impacts to nearby streams, wetlands, and other sensitive habitats (Suggested Modification #s 2h and i). Continued collection of data will be especially useful to the District and the Commission when evaluating potential future phases of the Public Works Plan (i.e. PWP amendments) to draw on additional water supplies to serve new customers as well as priority uses.

With respect to the Schoolhouse Tank and the Airport Wells Treatment Plant, staff recommends that the Commission find that as modified as described in this report, these developments are consistent with LCP hazards, visual resources, sensitive habitats, and water quality policies.

Lastly, Staff recommends that the Commission adopt other suggested modifications, including that the District incorporate all EIR mitigation measures into the PWP as development standards (#2e) (See Exhibit 4) and that the District incorporate a processing procedures section (see Exhibit 3) into the document that outlines the approval process for individual projects once this Plan is certified (#1j). Section 4.3.8 of this report summarizes this process and Exhibit 3 includes the procedures section in its entirety.



In conclusion, staff recommends that the Commission deny the PWP as submitted and certify it if modified as suggested in this staff report. This recommendation is the least environmentally damaging alternative as required by the California Environmental Quality Act. Only as modified can the Commission find that the PWP is consistent with all applicable policies of the LCP.

**Motions and Resolutions for the Public Works Plan commence on page 8.**

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**1. STAFF PROCEDURAL NOTES**

Standard of Review

Section 30605 of the Coastal Act states in relevant part:

*If any...plan for public works is submitted after the certification of local coastal programs, any such plan shall be approved by the Commission only if it finds, after full consultation with the affected local governments, that the proposed plan for public works is in conformity with certified local coastal programs in jurisdictions affected by the proposed public works...*

Public Participation

Section 30503 of the Coastal Act requires public input in preparation, approval, certification and amendment of any Public Works Plan. The MWSD held a public hearing and approved the proposed PWP on April 6, 2006 and certified the Final Environmental Impact Report. The hearing was noticed to the public.

Local Government Consultation

Section 13357 of the California Code of Regulations requires that review of public works plan after certification of LCPs must be undertaken after consultation with affected local governments. The entire public works plan application along with the included environmental documents was sent to San Mateo County prior for staff review of the proposed public works plan on July 3, 2007 and September 11, 2008. These documents were also placed on the Commission's FTP site for easy access. San Mateo County staff responded in a letter dated August 9, 2007 that their comments were addressed in the Final EIR. In addition, throughout the months of September and October 2008, Commission staff has coordinated with and sought the assistance of County staff through phone calls and e-mails regarding interpretation of the certified LCP as it pertains to various PWP components.

Availability of Environmental Documents

All environmental information relied on by the Commission and its staff, including the proposed Phase I PWP, the Environmental Impact Report, biological reports, hydrological reports, geotechnical reports, and applicant and public

correspondence is available for review at the below-referenced San Francisco Office of the California Coastal Commission and on the Public FTP site.

### Additional Information

For further information about this report, please contact Ruby Pap, District Supervisor, at the North Central Coast District Office of the Coastal Commission, North Central Coast District, 45 Fremont St., Ste. 2000, San Francisco, CA 94105; telephone number (415) 904-5260.

### Exhibits

1. Map of MWSD Service Area
2. MWSD Public Works Plan Phase I
3. Suggested Modification No. 1(j) "Public Works Plan Procedures"
4. Final EIR Mitigations
5. Alternative Alta Vista Tank location, plans, and cross-sections
6. Pictures of Alta Vista Ridge
7. Wildland Areas
8. Table 5.2-1 Storage Tank Alternatives
9. Hydrology map and monitoring well locations
10. Map of upstream watershed
11. Picture of existing Schoolhouse Tank
12. Public correspondence

Click on the link  
at left to go  
to the exhibits.

### Substantive File Documents

January 2004. Montara Water and Sanitary District Water System Master Plan. Prepared by Olivia Chen Consultants, Inc.

October 2005. Montara Water and Sanitary District Public Works Plan Phase I Draft Environmental Impact Report. SCH# 2004112107. Prepared by MHA Environmental Consulting Inc.

March 2006. Montara Water and Sanitary District Public Works Plan Phase I Final Environmental Impact Report. SCH# 2004112107. Prepared by MHA Environmental Consulting, Inc.

July 2005. Balance Hydrologics, Inc. (Mark Woyshner, Jason Parke, Barry Hecht, Gustavo Porras) Drilling and Testing of Montara Water and Sanitary District's Well 2004-4 APN 036-180-030, San Mateo County, California, Well Completion Report. Prepared for MWSD by

August 4, 2005. Terrasearch Inc. Geotechnical Investigation Report for Proposed Schoolhouse and Alta Vista Tank Sites, Montara, CA, for Montara Water and Sanitary District

October 2005. Balance Hydrologics, Inc. and MHA Environmental Consulting, Inc. Draft Alta Vista Well #1 Hydrological Monitoring and Mitigation Program. Prepared for MWSD by

July 7, 2006. Live Oak Associates Inc. Avian Survey Results for the Montara EIR Project, San Mateo County, CA.

January 2008. May and Associates, Inc. Alta Vista Test Well Project Baseline Vegetation Monitoring Report. Prepared for Montara Water and Sanitation District.

February 11, 2008. Flett, Mary Ann Surveys for American Badger and Dusky Footed Woodrat. Montara Water and Sanitary District Public Works Plan Phase I.

February 21, 2008. Balance Hydrologics, Inc. (Mark Woysner and Jason Parke). Alta Vista Water Supply Well Pumping Test.

August 18, 2008. Terrasearch Inc. Geotechnical Investigation Report for Proposed Alta Vista Tank Site. Prepared for CDM.

September 5, 2008. Hydrologic and Vegetation Monitoring Schedule and Monitoring Plan. Alta Vista Well. MWSD PWP Phase I

## **2. STAFF RECOMMENDATION**

### **DENIAL OF PUBLIC WORKS PLAN AS SUBMITTED**

MOTION: I move that the Commission certify the Montara Water and Sanitary District Public Works Plan Phase I 2-06-006 as submitted.

STAFF RECOMMENDATION FOR DENIAL OF PUBLIC WORKS PLAN: Staff recommends a NO vote. Failure of this motion will result in denial of the Public Works Plan as submitted and the adoption of the following resolution and findings. The motion to certify passes only by an affirmative vote of a majority of the appointed Commissioners.

RESOLUTION I:

The Commission hereby denies certification of the Montara Water and Sanitary District Public Works Plan Phase I and adopts the findings stated below on the grounds that the Plan does not conform with the San Mateo County local coastal program. Certification of the Plan would not comply with the California Environmental Quality Act because there are feasible alternatives or feasible mitigation measures that would substantially lessen the significant adverse effects that the approval of the Plan would have on the environment.

### **CERTIFICATION OF PUBLIC WORKS PLAN WITH MODIFICATIONS**

MOTION: I move that the Commission certify the Montara Water and Sanitary District Public Works Plan Phase I 2-06-006 if modified as suggested in the staff report.

#### STAFF RECOMMENDATION FOR CERTIFICATION OF PUBLIC WORKS PLAN WITH MODIFICATIONS:

Staff recommends a YES vote. Passage of this motion will result in certification of the Public Works Plan as modified. The motion to certify passes only by affirmative vote of a majority of the appointed Commissioners.

#### RESOLUTION II:

The Commission hereby certifies the Montara Water and Sanitary District Public Works Plan Phase I as modified and adopts the findings stated below on the grounds that the Plan as modified conforms with the San Mateo County certified local coastal program. Certification of the Plan as modified complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the Plan on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the Plan on the environment.

### **3. SUGGESTED MODIFICATIONS**

- 1) The District shall make the following changes to the text of the Public Works Plan Phase I document:
  - a) The District shall update all the Public Works Plan Phase I project description(s) to reflect the new proposed Alta Vista Tank location and specifications as shown

in CDM Alta Vista Tank Figure 2, dated August 13, 2008, SRT Consultants Plan View of Proposed 1 MG Steel Water Tank Site and Cross Sections of Proposed Alta Vista Tank dated 9/26/2008 and the Terrasearch Geotechnical Investigation Report dated August 14, 2008 (Exhibit 5).

- b) The District shall add the following to Section 4 “Project Description” of the Public Works Plan Phase I and the “Project Components” table in the Public Works Plan Data: Repair and Maintenance of Alta Vista Road that does not result in an addition to, or enlargement or expansion of the road.
  
- c) The District shall replace Table 4-1 (Storage Capacity) of the Public Works Plan Phase I with the following table:

<b>Existing Storage (gallons):</b>	<b>Proposed Storage(gallons):</b>	<b>Comment:</b>
Portola Estate 100,000	Portola Estate 100,000	No Change
Schoolhouse 100,000	Schoolhouse 0	Demolished
Alta Vista 462,000	Alta Vista 462,000	No Change
	New Schoolhouse 200,000	New
	New Alta Vista 1,000,000	New
<b>Total: 662,000</b>	<b>Total: 1,762,000</b>	

- d) The District shall replace Figures 4-1 (Alta Vista Tank site plan) with SRT Consultants Plan View of Proposed 1 MG Steel Water Tank Site dated 9/26/08 and SRT Consultants Cross Sections of Proposed Alta Vista Tank dated 9/26/2008 (Exhibit 5).
  
- e) The District shall replace Figure 4-2 (Aerial Depiction of Proposed Alta Vista Tank, Wells, and Security Fence) with CDM Alta Vista Tank Figure 2, dated

August 13, 2008 or SRT Consultants Aerial View of Proposed 1 MG Steel Water Tank Site dated 9/28/08 (Exhibit 5).

- f) The District shall delete the following from the project elements of the Alta Vista Water Storage Tank in the "Project Components" table in the Public Works Plan Data section of the Public Works Plan Phase I document:  
~~"Construction of a retaining wall of up to 37 feet in height located at 15 feet from the tank to retain the adjacent landform."~~
- g) In addition, in the Project Components table, in the parameters for the Alta Vista Water Storage Tank, the District Shall change the height to 18 feet and the elevation to 518 feet above sea level.
- h) The District shall amend the language of Section 4 "Project Description" of the Public Works Plan Phase I Document as follows:
- Construction of a one or two new water storage tank(s) (Schoolhouse Tank(s)) adjacent to and in place of (if two are built) the existing Schoolhouse water storage tank.
- i) The District shall add the following to the project elements for the Schoolhouse Water Tank in the "Project Components" table in the Public Works Plan Data section of the Public Works Plan Phase I Document:
- i) Construction of a steel water storage tank with a capacity of 200,000 gallons OR construction of two steel water storage tanks, each with a capacity of 100,000 gallons.
- ii) In the Parameters column next to diameter, the district shall add or 33 feet
- j) The District shall incorporate "Section 5.1 Public Works Plan Project Procedures" in Exhibit 3 into the Public Works Plan Phase I document.
- 2) The District shall add the following development standards to the Public Works Plan Phase I document:
- a) All development subject to PWP-2-06-006 shall adhere to the project procedures outlined in Section 5.1.
- b) Construction of the Alta Vista Tank shall conform to the specifications and recommendations contained in the Geotechnical Investigation Report for

Proposed Alta Vista Tank Site, Montara, California for CDM by Terrasearch Inc. dated August 14, 2008.

- c) Construction of the Schoolhouse Tank(s) shall conform to the specifications and recommendations contained in the Geotechnical Investigation Report for Proposed Schoolhouse and Alta Vista Tank Sites, Montara, California prepared by Terrasearch, Inc. dated August 4, 2005.
- d) Prior to commencement of construction, all development subject to PWP-2-06-006 shall obtain all other agency approvals and property owner approvals, as necessary. This includes certification by the San Mateo County engineer that that direct damage or indirect threats to public health and safety as a result of construction of the Alta Vista and Schoolhouse Tanks would be unlikely in the event of a fire or geologic hazard.
- e) Except as modified by all other suggested modifications identified herein, below, all development subject to PWP 2-06-006 shall be undertaken in accordance with Mitigation Measure Nos. 3.1-1 through 3.10-3 listed in the MWSD Public Works Plan Phase I Final Environmental Impact Report SCH# 2004112107
- f) Mitigation Measure No. 3.3-1 shall be modified as follows:  
**Tree removal and all other activities associated with tank construction shall be performed between September 1 and January 30 to prevent disturbance to bird nests. If tree clearing is desired outside of this period, a pre-construction survey for nesting birds shall be conducted prior to clearing of trees and all other activities associated with tank construction.** The survey will be conducted by a qualified biologist no more than 30 days prior to initiation of clearing or construction. The survey shall include any areas proposed for any activities such as earthmoving. If occupied migratory bird nests are found within 250 feet of the construction zone, clearing shall not begin until after the nests are protected by an adequate setback (in general, 50 feet for passerines and 250 feet for raptors) defined by a qualified biologist.
- g) All development subject to PWP-2-06-006 shall avoid impacts to the San Francisco dusky-footed woodrat and American badger. Prior to commencement of construction of the Alta Vista water tank, including grading or placement of equipment, a minimum 25-foot buffer shall be established around the active stick nests or burrows adjacent to the project site. A qualified biological monitor shall be present at the site during all grading and construction activities to ensure that the San Francisco dusky-footed woodrat and American Badger are not harmed. Deconstruction of the DFWR nests or relocating American Badgers or Dusky Footed Woodrats is prohibited.



- h) Hydrologic Monitoring shall continue for a period of three years according to the “Hydrologic and Vegetation Monitoring Schedule Alta Vista Well” and “Hydrologic and Vegetation Monitoring Plan Alta Vista Well,” dated September 5, 2008. Annual and final monitoring reports shall be submitted to the Executive Director. The vegetation monitoring portion of this plan shall be superseded and replaced by the plan described in Modification No. 2(i).
- i) Concurrent with the submittal of the Notice of Impending Development (NOID) for conversion of the Alta Vista Well No.1 from a test well to production well, a qualified biologist or biometrician shall prepare a revised Vegetation Monitoring Plan for review and approval by the Executive Director, and shall at a minimum include the following:
  - i) A baseline assessment, including photographs, of the current physical and ecological condition of the potential impact site and appropriate control sites that are unlikely to be affected by the pumping. All sites shall be sampled using the same methods.
  - ii) A description of the goals of the vegetation monitoring plan, including a description of how the potential impact site will be compared to the control sites and how significant effects will be demonstrated. If statistical tests are to be employed there must be a statistical power analysis before sampling begins to insure that there is sufficient replication to detect biologically meaningful differences between the potential impact area and the control areas.
  - iii) A formal monitoring plan
  - iv) A schedule
  - v) Description of sampling units
  - vi) Sampling design, e.g. how will the sampling units be placed in the field, including description of the random component in the spatial distribution of samples and sample size for the various variables.
  - vii) Detailed description of the variables to be measured and the field methods used in their estimation. For continuous variables, estimates of the actual value should be made. Continuous variables should not be converted to categorical variables through the use of thresholds or lumping data into broad categories. Estimates of changes in survivorship, tree height, and condition should be based on repeated observations of at least 30 randomly selected and marked individuals of each species of interest in each sample area.

- viii) A monitoring period of at least three years, beginning with the first sample taken based on the revised sampling plan.
- ix) Provision for submission of annual reports of monitoring results to the Executive Director for the duration of the required monitoring period for purposes of review for a future Phase II Public Works Plan application. Each report shall be cumulative and shall summarize all previous results. Each report shall document the condition of the sample sites with photographs taken from the same fixed points in the same directions. Each report shall also include an "Impact Evaluation" section where information and results from the monitoring program are used to evaluate whether there is evidence of an effect of the pumping.
- x) Provision for submission of a final monitoring report to the Executive Director at the end of the final monitoring period for purposes of review for a future Phase II Public Works Plan application. The report must evaluate whether the vegetation near the wells has been negatively affected by the pumping.
- xi) Provision for possible further action. If the final report indicates that there have been negative impacts, the applicant shall submit within 90 days a mitigation plan to compensate for those impacts. The revised restoration program shall be processed as an amendment to the coastal development permit unless the Executive Director determines that no permit amendment is required.
- j) Concurrent with the submittal of the Notice of Impending Development (NOID) for the Alta Vista Tank, Schoolhouse Tank, and the Airport Wells Water Treatment Facility, the District shall submit a detailed erosion control plan to the Executive Director for review and approval, in accordance with Mitigation Measure No. 3.1-4 of the FEIR.
- k) Concurrent with the submittal of the Notice of Impending Development (NOID) for the Alta Vista Tank, the District shall submit to the Executive Director for review and approval a landscape plan to revegetate the area around the Alta Vista Tank to control erosion and screen views, in accordance with Mitigation Measure 3.1-6 of the FEIR.
- l) Concurrent with the submittal of the NOID for construction of the Airport Wells Water Treatment facility, the District shall submit to the Executive Director for review and approval, a drainage plan in accordance with Mitigation Measure 3.2-2 of the FEIR.
- m) Concurrent with the submittal of the NOID for the construction of the Alta Vista production well and water tank, the District shall submit to the Executive Director

for review and approval, a Spill Prevention and Containment Plan in accordance with Mitigation Measure 3.5-1 of the FEIR.

- n) New water supply, storage, and transmission capacity authorized by and pursuant to PWP 2-06-006 is limited to the MWSD service area and shall not be used for any new water connections, or for the extension of water mains into rural areas, including rural areas within the urban/rural boundary, for any purpose, including for the purpose of personal fire protection (e.g. fire hydrants),. Proposals for any future water facility development connected to or using water system components or infrastructure authorized pursuant to PWP 2-06-006 shall require an amendment of the PWP as described in (p).
  
- o) Pumping of the Alta Vista Well No. 1 shall not exceed 150 gallons per minute. Any future proposals to increase the pumping rate shall require an amendment to this public works plan, and shall include sufficient evidence that the increased pumping rate will not impact nearby wetlands, riparian areas, and sensitive habitats.
  
- p) Any increase in water supply or distribution capacity, to provide additional service connections in excess of the limitations of this Public Works Plan Phase I, including any increase in the Alta Vista well pumping rate, any augmentation or reallocation of existing water supplies, or changes to the District service area shall require an amendment to this PWP. The application for such amendment shall include information concerning phasing of infrastructure capacity in conformity with the requirements of the San Mateo County LCP. The information provided shall be sufficiently detailed and complete to enable the Commission to evaluate whether the proposed increase in water supply and/or distribution capacity is in phase with the existing or probable future capacity of other area infrastructure, including but not limited to the need for an adequate level of service for Highways 1 and 92 as required by the local coastal program.
  
- q) Concurrent with the submittal of the NOID for the Airport Wells Treatment Facility, the District shall submit a landscape plan to generally screen the Treatment Facility equipment and solar panel array from views from Highway 1. in accordance with Mitigation Measure 3.9-3 of the FEIR.

#### **4. FINDINGS AND DECLARATIONS**

The Commission hereby finds and declares as follows:

#### **4.1. Plan Background and Site Description**

The Montara Water and Sanitary District (District) provides water, sanitary sewer, and solid waste disposal services to the coastal communities of Montara, Moss Beach, and adjacent areas located north of Half Moon Bay and south of Pacifica, in San Mateo County (Exhibit 1). The District provides water to approximately 1,650 connections, about 90% of which are single family and multi-family residential users. The system includes a surface water source (Montara Creek), a water treatment plant, ten groundwater wells that withdraw water from the Montara and Denniston Creek groundwater basins (eight active and two standbys), three potable water storage tanks, and over 150,000 feet of distribution pipelines.

The objective of the District's Public Works Plan Phase I (PWP) is to improve specific portions of the District's water system to ensure an adequate and reliable water supply for *existing* domestic and fire protection uses. The proposed improvements are not intended to, nor would they accommodate, expanded existing connections or new connections to the system. In addition, according to the District, the improvements would not enable it to ease or lift the existing moratorium on new water service connections in Montara.

The 2004 District Master Plan identified several areas of the District's water system that require immediate improvement to address the lack of adequate fire suppression capabilities and the lack of adequate supply to serve existing customers during times of drought: (1) Additional storage facilities; (2) New sources of supply; and (3) New treatment system for the Airport Wells Facility, which has documented high levels of nitrates, 1,2,3-trichloropropane (TCP), corrosivity, and manganese

The PWP addresses several components recommended in the 2004 Master Plan, including the following:

- ◆ **Water Storage Facilities:** Construction of a new water storage tank at the Alta Vista site, located at the Northeast end of Alta Vista Road, and construction of a new water storage tank at the Schoolhouse site and demolition of the old tank at the Schoolhouse site, located at the West end of Buena Vista Street.
- ◆ **New Water Well Production:** Initiation of water production (150 gallons per minute) from the Alta Vista Well No.1 and construction of a new pipeline and electrical conduit, located extending from the production well and monitoring well, respectively, to the existing Alta Vista water storage tank.
- ◆ **Water Treatment Facility:** Construction of a water treatment facility to address water quality issues at the airport wells, located on the West side of Cabrillo Highway (State Highway 1) at the Half Moon Bay Airport.

The proposed improvement locations are depicted on Figure 3-1 (page 6 of Exhibit 2).

**4.2. PWP Specific Project Description**

The proposed developments contained in the PWP are:

1. Construction of a new water storage tank (Alta Vista Tank) northeast of the existing Alta Vista water storage tank
2. Conversion of an existing test well to a production well (Alta Vista Well No.1) northeast of the existing Alta Vista water storage tank
3. Conversion of an existing test well to a monitoring well (Alta Vista Well No.2) northeast of the existing Alta Vista water storage tank
4. Installation of an underground water conveyance pipeline and electrical conduit extending from the production well and monitoring well, respectively, to the existing Alta Vista water storage tank
5. Placement of a security fence on Alta Vista Road, northeast of the existing Alta Vista water treatment facility
6. Construction of a new water storage tank (Schoolhouse Tank) adjacent to the existing Schoolhouse water storage tank
7. Demolition of the existing Schoolhouse water storage tank
8. Installation of a water treatment facility (Airport Wells Water Treatment Facility) at the Half Moon Bay Airport to treat groundwater pumped from three existing water production wells for nitrates, 1,2,3-trichloropropane (TCP), corrosivity, and manganese
9. Installation of an underground water conveyance pipeline to convey pumped groundwater from the existing Airport wells to the Airport Wells Water Treatment Facility
10. Construction of a road leading to the southernmost Airport well
11. Potential installation of solar panels at the Half Moon Bay Airport and on the roofs of the existing and proposed Alta Vista water tanks

**4.2.1. Storage Tanks**

The proposed project includes the construction of new water storage tanks in the vicinity of the District’s existing Alta Vista and Schoolhouse water storage tanks. The District’s entire storage budget, including existing and proposed upgrades is as follows:

<b>Existing (gallons):</b>	<b>Storage</b>	<b>Proposed (gallons):</b>	<b>Storage</b>	<b>Comment:</b>
Portola Estate 100,000		Portola Estate 100,000		No Change
Schoolhouse		Schoolhouse	0	Demolished

100,000		
Alta Vista 462,000	Alta Vista 462,000	No Change
	New 200,000 Schoolhouse	New
	New Alta Vista 1,000,000	New
<b>Total: 662,000</b>	<b>Total: 1,762,000</b>	

4.2.1.1. Alta Vista Tank

The existing 462,000-gallon Alta Vista Tank is located along an unpaved extension of Alta Vista Road. The existing tank is constructed of steel and is approximately 52 feet in diameter and 28 feet tall. A 100,000-gallon settling tank and associated water treatment facility are located directly north of the existing Alta Vista Tank. The settling tank and adjacent facility store and treat water diverted from Montara Creek before it is introduced into the District’s storage and distribution system.

The proposed new 1,000,000-gallon Alta Vista Tank would be constructed of steel with an overall diameter of 80 feet and height of 30 feet. As originally proposed in the Plan text, the tank would be situated on a steep hillside ranging in elevation from 475 to 510 feet asl and would be “dug” into the site, essentially placing a majority of it below the existing ground surface (see Figure 4-1 [page 9] of exhibit 2). This would require cutting a portion of the hillside and the final tank bottom would be at 470 feet asl. A retaining wall up to 37 feet in height would be constructed 15 feet from the tank in order to retain the adjacent landform. Based on the results of a geotechnical investigation (Terrasearch 2005), an additional area southeast and immediately downslope of the tank would also need to be excavated and reconstructed to reduce landslide hazards and provide geologic stability for the tank.

Since the original PWP Phase I proposal was submitted, the District has submitted a preferred alternative tank configuration in response to geotechnical and sensitive habitat issues identified in the EIR and by Commission staff. The alternative proposal would still be a 1,000,000-gallon Alta Vista Tank constructed of steel with an overall diameter of about 80 feet and height of about 30 feet (Exhibit 5). However, it would be situated on the center of the ridge line at an elevation of 502 feet asl instead of the hillside and would be dug into the ground approximately 12 feet. The elevation of the tank’s floor would be set at 488 feet above sea level (asl) allowing 12 feet of the tank’s side to be concealed below grade, with 18 feet above grade. The existing 462,000-gallon Alta

Vista Tank is located at 470 feet asl. Pumps and pressure vessels may be required to maintain adequate levels in both the existing and new tank. Because the tank will be dug into the ground, installation would require construction of retaining walls of up to 12 feet in height on either side of the ridge line. The retaining walls would be constructed 10 to 12 feet from the tank to maintain space for an access road.

The installation of the preferred tank alternative would require movement of approximately 7,000 cubic yards of soil and weathered granitics. The cut and fill would be as balanced as possible at the site but approximately 6,000 cubic yards would be taken off site. The excavated material would likely be hauled to Ox Mountain Sanitary Landfill just east of Half Moon Bay. The tank would be constructed in its entirety on the property owned by the District.

Other improvements for the Alta Vista Tank include an underground pipeline and power, a tank access road, solar panels, and a security fence. These details can be found in the PWP (Exhibit 2).

#### 4.2.1.2. Schoolhouse Tank

The existing 100,000-gallon Schoolhouse Tank is located along an unpaved roadway at the end of Buena Vista Street, a developed residential street in Moss Beach, east of Highway 1. The tank is constructed of concrete and is 34 feet in diameter and 16 feet tall. This tank would be demolished and removed following construction of the new storage tank. The District is proposing to replace this tank with a new tank with a total capacity of 200,000 gallons. This tank would stand at 16-feet-high, with a diameter of 48 feet. The elevation of the proposed tank floor and water level would be identical to that of the existing tank to allow for balancing the tanks and maintaining consistent pressure throughout the District's system. Further information on tank construction can be found in the Public Works Plan Phase I document (exhibit 2) along with information on the proposed pipeline and power and solar panels.

Since the original PWP Phase I proposal was submitted, the District has requested that an alternative of constructing two smaller tanks instead of one be considered and included in the Phase I PWP. This alternative would place two new 100,000 gallon tanks at the Schoolhouse Tank site. One tank would replace the existing tank, while the other would be placed adjacent to the existing pump station on its southeast side (Figure 4-3 of Exhibit 2). Both tanks would be constructed of steel each with a diameter of 34 feet and a height of 16 feet. The new tanks would both sit at the existing tank's current elevation.

#### 4.2.2. Production and Monitoring Wells

A test well, referred to as Alta Vista Well No.1 (also known as BH-9b or 2004-4 during hydrological investigations), was installed in 2004 to assess the potential for increasing the District's available domestic water supply through additional groundwater extraction to address its lack of adequate supply for fire suppression and demand from its existing customers during times of drought. A second well, referred to as Alta Vista Well No.2 (also known as BH-9 or 2004-3), was installed concurrently for monitoring purposes. Both wells were installed in accordance with a Coastal Development Permit (CDP) issued by the San Mateo County on May 19, 2004.

Following a series of tests, the District determined that the test well Alta Vista No.1 has the capability of producing a sustainable volume of water suitable for the District's existing needs. The well draws water from open joints in the granitic formations located approximately 780 feet below the ground surface. Initial tests of the well's production capabilities suggest that it can produce up to 300 gallons of water per minute over a 120-hour duration. The PWP proposes to pump the well at 150 gallons per minute continuously with a provision to increase the pumping rate to compensate the system should any of the District's other supply sources need to be taken offline. As proposed, an increased pumping rate would never exceed the District's "current demand". The District has stated that it would only increase the well's pumping rate if it could be conclusively determined that there would be no adverse biological or hydrological impacts associated with the increased rate. The Alta Vista Wells No.1 and No.2 (proposed to be a monitoring well) are located approximately 840 feet and 1,250 feet, respectively, northeast (upslope) of the District's existing 462,000-gallon Alta Vista water storage tank, and approximately 590 feet and 1,000 feet respectively from the proposed new Alta Vista water storage tank. Both wells are located along the unpaved extension of Alta Vista Road on District property (see Figure 4-2 of Exhibit 2).

Water quality testing indicates that groundwater extracted from Alta Vista Well No.1 currently meets drinking water standards. If water quality changes in the future, the District would treat the water with sodium hypochlorite (liquid chlorine) prior to conveyance to District customers. The chlorine would be stored at the wellhead.

Further information on well construction, specifications, and associated improvements including power supply and conduits can be found in the Public Works Plan Phase I document (exhibit 2).

#### 4.2.3. Airport Wells Water Treatment Facility

The District currently operates three production wells at the Half Moon Bay Airport, each of which includes wellhead water treatment facilities. Based on elevated levels of nitrates, 1,2,3-trichloropropane (TCP), corrosion, and manganese in the water extracted from these wells, the District has determined that an additional treatment system is required prior to the well water's introduction into the District's distribution system. The proposed new treatment system would be centrally located and serve all three wells



(See Figure 4-7 of Exhibit 2). Water extracted from the three wells would first be blended to treat for manganese and then conveyed through the Airport Wells Water Treatment Facility's following components:

- ◆ Two granulated activated carbon (GAC) tanks for TCP removal
- ◆ Four ion exchange vessels for nitrate removal
- ◆ Two air stripping towers for pH adjustment to treat for corrosion potential

Air stripping would also potentially be accomplished by:

- ◆ Diffused aeration; or
- ◆ Utilization of a spray nozzle and tray aerator; or
- ◆ Aeration by piping a diffuser down the wells and adding air directly into the groundwater.

A flow diagram of the treatment process is depicted in Figure 4-8 of the proposed PWP (Exhibit 2).

The facility would be sited at the east side of the Half Moon Bay Airport in unincorporated San Mateo County, just northwest of the fence line surrounding the existing Half Moon Bay Airport Administration Building, and southwest of the Airport's frontage road. A new access road would be constructed off the Airport's frontage road (Figure 4-8 of Exhibit 2).

The centralized treatment facility would be connected with the three existing wells and the District's distribution system via existing and new buried pipelines. Electrical power supply to the Facility would be through buried electrical conduits or solar panels. Solar panels would be placed on an undeveloped area directly northwest of the proposed Airport Wells Water Treatment Facility (Figure 4-7 of Exhibit 2).

Further information on this public works component, including project power, solar panels, and decommissioning of the existing treatment facility can be found in the PWP document (exhibit 2).

### **4.3. LCP Consistency Analysis**

#### **4.3.1. Public Works and Urban/Rural Boundary**

The San Mateo County LCP regulates public works facilities to ensure that expanded facilities are designed and limited to accommodate needs generated by development or uses permitted consistent with the certified LCP and Coastal Act Policy 30254. To this end, Chapter 2 of the certified LUP contains several policies requiring that public works facilities be developed in phase with each other (e.g. water supply, sewage disposal, and roads and transit), that facilities not expand in capacity beyond the permitted build-out in the certified LCP, and that adequate capacities be reserved for priority uses. These policies are designed to ensure that the expansion of public works facilities do

not induce growth beyond what is permissible in the LCP, and beyond that which can be handled by other public works facilities such as roads and transit. In order to approve the Phase I Public Works Plan, the Commission must find that the Plan is consistent with the following applicable LCP Policies:

### LCP Policies

#### 1.3 Definition of Urban Areas

*a. Define urban areas as those lands suitable for urban development because the area is either: (1) developed, (2) subdivided and zoned for development at densities greater than one dwelling unit/5 acres, (3) served by sewer and water utilities, and/or (4) designated as an affordable housing site in the Housing Component.*

*b. Recognize, however, that in order to make a logical urban/rural boundary, some land has been included within the urban boundary which should be restricted to open space uses and not developed at relatively high densities (e.g., prime agricultural soils, and sensitive habitats).*

#### 1.6 Definition of Rural Areas

*Define rural areas as those lands suitable for a variety of residential, commercial, agricultural and recreational land uses which are consistent with maintaining open space (as defined in Section 65560 of the Government Code (as of January 1, 1970)) in order to: (1) preserve natural resources, (2) manage the production of resources, (3) provide outdoor recreation, and (4) protect public health and safety.*

#### \*1.7 Designation of Rural Areas

*Designate as rural those lands shown outside the urban/rural boundary on the Local Coastal Program Land Use Maps, in effect on March 25, 1986 that were designated Agriculture, General Open Space, Timber Preserve, or Public Recreation on that date.*

#### \*2.6 Capacity Limits

*Limit development or expansion of public works facilities to a capacity which does not exceed that needed to serve buildout of the Local Coastal Program.*

#### 2.7 Phased Development of Public Works Facilities

*Require the phased development of public works facilities in order to insure that permitted public works capacities are limited to serving needs generated by development which is consistent with the Local Coastal Program policies.*

#### 2.9 Phase 1 Capacity Limits

*Based [sic] the first phase capacity of public works facilities on documentable and short-term need (approximately 20 years or less) consistent with the Local Coastal Program. Monitor the needs of existing land uses and use these results and the existing and probable future capacity of related public works and services to document the need.*

#### 2.11 Monitoring of Phase I

- a. Require that public agencies, utilities or special districts monitor the needs of land uses for public works capacity during Phase I.*
- b. Notify affected public agencies, utilities and special districts of the requirements for monitoring included in this plan.*

#### 2.12 Timing and Capacity of Later Phases

- a. Use the results of Phase I monitoring to determine the timing and capacity of later phase(s).*
- b. Guide timing by allowing later phase(s) to begin when Phase I capacity has been or will be consumed within the time period required to construct additional capacity.*
- c. Establish the capacity by: (1) estimating the capacity needed to serve the land use plan at buildout, (2) considering the availability of related public works to establish whether capacity increases would overburden the existing and probable future capacity of other public works and (3) considering the availability of funds.*
- d. Require every phase to go through the development review process.*

#### 2.14 Establishing Service Area Boundaries

*\*a. Confine urban level services provided by governmental agencies, special districts and public utilities to urban areas, rural service centers and rural residential areas as designated by the Local Coastal Program on March 25, 1986...*

#### 2.25 Phase I Capacity Limits

*Require that Phase I capacity not exceed the water supply which: (1) serves the development which can be sewerred by the Phase I 2.0 mgd adwf sewer capacity allocated for Mid-Coast areas within the urban boundary and (2) meets the documented needs of floriculturalists within the existing Coastside County Water District Service Area. Use recent data on the amount of water consumed by land use to determine the actual water supply capacity allowed.*

#### 2.26 Monitoring of Phase I

*Require that the water service providers, presently Coastside County Water District (CCWD) and the Citizens Utilities Company (CUC), monitor: (1) the actual amount of water consumption by land use, and (2) the rate of growth of*

*new development. Require them to submit an annual data report to the County summarizing the results of this monitoring.*

#### 2.27 Timing and Capacity of Later Phases

*a. Use the results of Phase I monitoring to determine the timing and capacity of later phase(s). b. Guide timing by allowing later phase(s) to begin when Phase I capacity has been consumed or will be consumed within the time required to construct additional water supply capacity.*

*c. Establish the capacity by: (1) estimating the water supply capacity needed to serve the land use plan at buildout, (2) considering the availability of related public works and whether expansion of the water supply would overburden the existing and probable future capacity of other public works and (3) considering the availability of funds.*

#### 2.28 Phase I Capacity Allocations

*Require, as a condition of permit approval, that the Phase I capacity to a particular area does not exceed the proportion of buildout that Phase I sewage treatment allocations permit.*

#### 2.36 Findings

*Require, as a condition of permit approval for any facilities to increase water supply, that the following findings are made: (1) the addition of this water supply facility is consistent with the Capacity Limits and Allocations of this Component, (2) storage is adequate to insure that sufficient emergency supply is available and any additional development allowed because of this increase in water supply will be served during dry summer months, (3) the development of this facility minimizes energy consumption and (4) the siting of this facility is consistent with LCP policies.*

#### 2.49 Desired Level of Service

*In assessing the need for road expansion, consider Service Level D acceptable during commuter peak periods and Service Level E acceptable during recreation peak periods.*

### Discussion of Applicable Policies to the PWP

New Public Works in the County must not induce growth inconsistent with the LCP and their development must be phased and in phase with each other. Generally, LUP Policies 2.6 and 2.7 limit the development of public works facilities, in this case, water supply, to a water capacity limit that does not exceed the amount needed to serve buildout of the LCP, only serves the needs generated by development which is consistent with other LCP policies, including that this development be “in phase” with other public works facilities (e.g. sewage disposal and roads), consistent with the LCP.

In addition, Policy 2.12(c)(2) and 2.27(c)(2) require that future expansions be determined in part by the availability of other public works.

LUP Policies 2.9, 2.25 and 2.28 provide more specificity on the *amount* of public works expansion allowed for what is termed “Phase I.” Phase I development of water supply must not exceed both the total amount of development which would be served by the Phase I sewer capacity allocated to the Midcoast (2.0 million gallons per day) and the proportion of buildout allowed by the Phase I sewage treatment allocations permit for specific areas of the County (Montara, El Granada, HMB). LUP Policies 2.9, 2.25, and 2.28 reflect the situation in 1985 when the original LCP was certified, that sewage disposal and treatment on the Midcoast was lacking, and therefore phasing policies were instituted to ensure that development of other public works facilities not outpace that which the sewage disposal system could handle (i.e. the Phase I sewage treatment allocations permit). At the time the LCP was certified, the Midcoast was in Phase I with respect to sewer capacity, reflecting the limited capacity of the sewer capacity of 2.0 mgd. Since the LUP was certified, however, the Commission approved a coastal development permit (#1-94-111) to expand the existing wastewater treatment plant (Sewer Authority Mid-Coastside [SAM]) from 2 million gallons per day (mgd) to 4 mgd. The Commission found that the existing plant was undersized to accommodate peak flows, and had been in violation of Regional Water Quality Control Board standards for releasing untreated wastewater. The Commission found that a larger plant was most protective of coastal resources, while not exceeding build-out levels allowable under the San Mateo County and Half Moon Bay LCPs. Therefore, since the sewer capacity was expanded, the Midcoast area is no longer in Phase I, as defined specifically by LUP Policies 2.9, 2.25, and 2.28. Therefore, the Commission finds that the Midcoast is no longer in “Phase I” in terms of sewer capacity and the LUP Policies referring to Phase I facility expansion do not apply to the subject PWP.

As described above, the PWP would allow for bringing the District’s water supply up to fire suppression standards and provide an adequate supply for its *existing* customers. It would not provide a new or expanded supply for new customers, and would not accommodate new development. Therefore, other LUP policies that apply to expanded facilities do not apply, although they would apply to any future expansions (e.g. Policy 2.8 [Reservation of Capacity for Priority Land Uses], and Policy 2.29).

Analysis of PWP’s Consistency with Applicable LUP Policies (2.6, 2.7, 2.12, 2.27, 2.36, 2.49, 1.3, 1.6, 1.7, and 2.14)

LUP Policies 2.6 and 2.7 do apply to the subject PWP, which require that expansion be limited to that which can serve buildout and that development be “in phase” with what other public works can handle. Policies 2.12(c)(2) and 2.27(c)(2) require that future expansions be determined in part by the availability of other public works. In addition, LUP Policy 2.36 requires that for any facility that increases water supply, specific findings be made that the project is consistent with other policies of the LCP, provides

adequate water storage for the summer dry months, and minimizes energy consumption.

As evidenced below, the proposed Phase I PWP would only bring the District's water supply up to fire suppression standards and provide an adequate supply for its existing customers. It would not provide a new or expanded supply for new customers, and hence would not accommodate new development. As stated in the proposed Phase I PWP text, the objective of the District's Public Works Plan Phase I (the proposed project) is to improve specific portions of the District's water system to ensure an adequate and reliable supply of water for its existing customers for domestic and fire protection uses. To achieve the project objective, the District has proposed adding water supply and storage capacity, as well as improving treatment of groundwater. The proposed improvements are not intended to, nor would they accommodate, expanded existing connections or new connections to the system. The improvements would not enable the District to ease or lift the existing moratorium on new water service connections.

SRT Consultants prepared a Fire Flow Deficiencies Project Draft Alternatives Analysis Technical Memorandum in January 2005. The Technical Memorandum provides background information on the District's immediate needs and the supply and storage deficits.

#### Water Supply

The District currently has a water supply production deficit of 182 gallons per minute, meaning the supply is inadequate to meet average daily demand (see Table 2-4).

The District currently withdraws water from one surface source and several groundwater wells. The District's surface water source is Montara Creek and the maximum diversion is limited to 70 gpm by the operating capacity of the Alta Vista Treatment Plant capacity. Groundwater is currently extracted at the following locations:

- The Airport Well Facility, including the North Airport Well, South Airport Well, and Airport Well 3 (wells are located within 800 feet of each other on the Half Moon Bay Airport property)
- Drake Well, Portola Estates Wells I, III, and IV, and Wagner Well

Park and Portola Estates II wells are also existing groundwater wells, but have been out-of-service due to higher-than-acceptable iron and manganese levels and have not contributed to system production in the last six years. The Park and Portola Estates II wells are permitted as standby by California DHS.

Table 2-3 presents a summary of the existing District water supply capacity and presents a calculation of the reliable capacity.

<b>Table 2-3: Current Supply Capacity</b>	
<b>Supply Source</b>	<b>Capacity (gpm)</b>
Montara Creek	70
Airport Wells Water Treatment Facility	225
Five other groundwater wells	171
<b>Total Production Capacity<sup>1</sup></b>	<b>466</b>
<b>Total Reliable Capacity with the Largest Single Source Out of Service<sup>2</sup></b>	<b>241</b>
<sup>1</sup> With all sources at maximum production capacity <sup>2</sup> In accordance with the California DHS guidelines, the reliable capacity of a water system is calculated based on the largest source out of service. This calculation is based on the three existing Airport wells (collectively considered one single water supply source) being offline.	

SOURCE: SRT Consultants 2005b

Water from the three Airport Wells has demonstrated elevated levels of nitrate, corrosivity, manganese, and 1,2,3-trichloropropane (TCP). Currently, the District utilizes a water blending operation to ensure that the water delivered to customers complies with safe drinking water standards. However, due to rising levels of nitrate in the last two years and promulgation of more stringent drinking water regulations, it has become apparent that blending may soon prove inadequate. The increased likelihood of the shutdown of all Airport Wells for water quality reasons requires development of immediate alternate solutions, including but not limited to developing new water sources to replace the 225 gpm production of the Airport Wells or installation of a treatment facility to address all water quality issues and to ensure water supply reliability for the District.

The California Code of Regulations Title 22, Chapter 16, Article 2 outlines water supply requirements for the state and specifies that the District must deliver sufficient quantities of water to satisfy maximum day demand. Table 2-4 presents a summary of the District's water demand and production deficit.<sup>1</sup>

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<sup>1</sup> During periods of water supply shortages, various water use restrictions have been instituted in the District. The District has employed some form of a progressively tiered program since 1985 to manage customer water demand in response to water supply availability. The levels progress from basic public education on water conserving practices to mandatory measures. The specific demand management level is triggered by the availability of water supply and the ability to maintain fire fighting and emergency reserves in distribution system storage tanks. For example, Stage 1 of the program requests customers to voluntarily water early in the day or late in the evening; Stage 5 prohibits irrigation at any time.

<b>Table 2-4: Current Production Demand<sup>1</sup></b>	
<b>Demand by Category</b>	<b>Water Use (gpm)</b>
Average Daily (2000 - 2004)	271
Maximum Daily	423
Maximum Hourly	700
Maximum Fire Flow (2 hours)	2,000
<b>Total Reliable Capacity with the Largest Single Source Out of Service</b>	<b>241</b>
Production Deficit (Existing Reliable Supply - Maximum Daily Demand)	182
<sup>1</sup> Based on daily production data presented in the Montara Water and Sanitary District 2004 Water System Master Plan.	

SOURCE: SRT CONSULTANTS 2005B

Storage Deficit

The District also has a water storage deficit of **1,108,000 gallons**.. The District maintains three treated water storage tanks with a combined capacity of 662,000 gallons (Table 2-1).

<b>Table 2-1: Existing Treated Water Storage Tanks</b>			
<b>Storage Tank Location</b>	<b>Tank Material</b>	<b>Storage Capacity (Gallons)</b>	<b>Year Built</b>
Portola Estates	Wood	100,000	1981
Alta Vista	Steel	462,000	1976
Schoolhouse	Concrete	100,000	1959

SOURCE: SRT Consultants 2005a

The three existing treated water storage tanks have been evaluated in the past for compliance with current codes, including the 2000 Uniform Building Code (UBC), their physical condition, and their remaining service life. All three tanks require various improvements to extend their service life and to ensure operational and seismic reliability. This includes replacement of the Schoolhouse Tank because it has reached the end of its service life.



Currently, the District has no ability to take any of the storage tanks out of service for any period of time for maintenance and/or repair due to the absence of any system-wide storage redundancy. Removing a tank from service would not allow the District to meet its current water demands. In addition, the District cannot satisfy its operational and emergency response needs without additional storage.

The District's current storage requirements are comprised of three elements:

- Operations
- Emergencies
- Fire suppression

*Operational Storage.* Customer water demands vary over the 24-hour period, with higher demands occurring in the morning and evening hours, and decline to a nominal baseline during the day. Operational storage is the storage volume required to meet the daily demand variations. It is typical in the water industry that water supply sources such as treatment plants and groundwater wells operate at a constant rate during the 24-hour period. The constant water production rate is augmented by flow from storage tanks during peak demand periods, lowering the storage volume. The storage tanks are then refilled when the demand drops below the constant production rate. In the United States, storage tanks are customarily designed to hold a reserve of about 50 percent of the water used during maximum day demand for equalization purposes. With the District's current demand of 423 gallons per minute (gpm), this amounts to an Operational Storage requirement of 306,000 gallons.

*Emergency Storage.* A reserve of potable water is required to meet demands during emergency outage periods when normal supply may be interrupted due to a natural disaster (e.g., seismic event, flood), power failure, loss of supply, loss of treatment, or a scheduled outage for repair and maintenance. The industry standard recommended by the American Water Works Association (AWWA) and other leading authorities in disaster preparedness and readiness is the storage volume equivalent to a two maximum day demand. This storage volume amounts to 1,224,000 gallons.

*Fire Storage.* Fire fighting storage requirements are identified by the National Fire Code (NFC), the Insurance Service Office guidelines, and by the local Fire Department. The fire storage requirements are based on the fire flow requirements and the anticipated fire duration. The fire requirement for the District's service area includes fire flows of 2,000 gpm for a two-hour duration, equating to a storage volume requirement of 240,000 gallons.

The District's total storage requirement under three these criteria amounts to 1,770,000. With the existing storage of 662,000 gallons, the District has a storage deficit of **1,108,000 gallons**. An additional volume of 1,108,000 gallons is required just to bring

the District’s storage volume up to appropriate standard to meet existing operational and safety needs.

<b>Table 2-2: Current Storage Requirements</b>	
<b>Category</b>	<b>Storage Volume (Gallons)</b>
Required Equalization (Operational) Storage	306,000
Required Emergency Storage	1,224,000
Required Fire Storage	240,000
Required Total Storage	1,770,000
Existing Storage	662,000
<b>Storage Deficit</b>	<b>1,108,000</b>

SOURCE: SRT Consultants 2005a

As summarized above, the proposed PWP would not expand water service capacity for new development. Rather, the proposed improvements are necessary to rectify both an existing production and storage deficit and would serve existing customers only. The PWP text states explicitly that it would not accommodate new connections nor would it allow for the lifting of the current moratorium on water connections in the MWSD service area. However since these statements are located in the PWP project description, and there are no clear enforceable “development standards” strictly prohibiting the use of this additional supply and storage for new or expanded connections, the PWP as proposed does not ensure that the new supply and storage would not go beyond what is required for buildout nor ensure that the use of the new supply and storage would support uses consistent with the LCP or be in phase with other public works facilities, inconsistent with LUP Policies 2.6, 2.7, 2.12, and 2.27. Therefore the PWP must be denied as submitted. However, if modified to incorporate these statements into a new PWP “development standards” section, ensuring that the new supply and storage associated with the PWP is not used for any new water connections, and if modified to set the maximum pumping rate of the Alta Vista Well to 150 gallons per minute, requiring an amendment to the Plan to increase the production rate, and if modified to require that any future increase in supply or distribution capacity or to provide additional service connections in excess of the current Phase I PWP limitations to require an amendment to the PWP, the PWP would be consistent with LUP 2.6, 2.7, 2.12, and 2.27. Therefore, the Commission imposes Suggested Modification Nos. 2(n), (o), and (p). As modified, the PWP would not provide water supply and storage amounts that

would go beyond what is required to serve build out or engender additional development inconsistent with the LCP or that would tax other public works facilities, such as highways, roads, and sewer, and it is in “phase” with these other public works facilities, consistent with LUP Policies 2.6 and 2.7.

### Extension of Water Mains into Rural Areas

The San Mateo County LCP incorporates an urban/rural boundary for the Midcoast area, including the lands in the MWSD District. LUP policies 1.3, 1.6, and 1.7 define urban areas as those lands within the urban/rural boundary that are served by sewer and water utilities and it defines rural as those lands outside the urban/rural boundary. LUP Policy 2.14 restricts urban level services to those lands within the urban/rural boundary. Extension of municipal water mains beyond the urban/rural boundary would be inconsistent with these policies. The District has identified some cases where they have extended water mains across the urban/rural boundary for purposes of providing personal fire protection (e.g. fire hydrants) to new homes. These new homes received CDPs and other necessary approvals from the County, and these approvals contain requirements from the fire department that they install personal fire protection. While the requirement for personal fire protection could come in the form of a water tank for fire purposes, and it does not necessarily mean that extension of water mains for fire hydrants. Apparently such extensions have been occurring under the auspices of the CDP for the home in some cases. The Commission finds that extension of water mains across the urban/rural boundary for any means is prohibited by the LCP, and without strict requirements contained in the subject PWP, to control the use of this new water supply in conformance with the LCP, the PWP must be denied. However, if modified to include a clear development standard stating that the new water supply and storage capacity associated with the PWP shall not be used for extending water mains into the rural areas, including for the purpose of providing personal fire protection in rural areas, the PWP would be consistent with the LCP. Therefore, the Commission imposes Suggested Modification No. 2(n), which requires this development standard to be added to the PWP. Only as modified can the Commission find that the PWP is consistent with LUP Policies 1.3, 1.6, 1.7, and 2.13.

### Energy Consumption

System-Wide. The Montara Water and Sanitary District (MWSD) will realize increased energy efficiency due to less pumping and a more reliable gravity feed system due to the implementation of the Public Works Plan (PWP) Phase I. Currently, the MWSD system produces and stores water in the following order: (1) the Alta Vista Water Treatment Plant (AVWTP) treats water from Montara Creek and delivers it to the existing Alta Vista tank for distribution<sup>2</sup>, (2) the Wagner and Drake wells are put on line,

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<sup>2</sup> The operation of AVWTP is seasonally dependent due to water quality in Montara Creek; this source is taken off line at times.

and pump into the Alta Vista Tank for gravity feed distribution, (3) the Airport Wells are put on line and pump to the existing Schoolhouse tank for gravity feed distribution, and (4) water is pumped from the existing Schoolhouse tank to the existing Alta Vista tank for gravity feed distribution. Presently, on a daily basis it is necessary to pump from an elevation of approximately 180 ft at the Schoolhouse Tank to an elevation of approximately 500 ft at the Alta Vista Tank in order to distribute water within the Alta Vista pressure zone.

With the proposed improvements made at the Alta Vista site, which include the Alta Vista Well No. 1 and a new 1,000,000-gallon Alta Vista tank, the amount of pumping required for daily operations would decrease greatly, and the energy efficiency of the system would significantly improve. The Alta Vista Well No. 1, which will become one of the highest producing wells in the system, will be put on line after the AVWTP, and deliver water to the new Alta Vista tank. This added production will greatly decrease the amount of pumping within the system by allowing the reduction of pumping from the Schoolhouse tank to the Alta Vista tank most of the time. Thus, the Alta Vista tanks will distribute water by gravity, increasing the energy efficiency of the entire system.

The new Alta Vista tank will increase the storage capacity of the system allowing for increased flexibility in using well pumps most efficiently. Presently, there is no flexibility within the storage system, as there is a storage deficit of 1,108,000-gallons. Therefore, the most efficient way of filling the existing Alta Vista tank is not a current consideration, as it mainly depends on availability of water and customer demand. With added storage, the system will be more reliable and allow for pumping efficiency to be built into distribution system operations. Increased storage at the Alta Vista site will also enable the AVWTP, the most energy efficient of all the MWSD sources, to operate all day. Typically, the AVWTP, which runs on gravity, produces enough water, however, it must be shut down once the existing tank is full. With increased storage at the Alta Vista site, the AVWTP could produce treated water 24 hours a day with reduced energy consumption.

In addition, the improvements in the PWP could potentially improve the overall efficiency of the system by only using the pumps during off-peak hours. With the added storage and added source of water, there is the opportunity to only use pumps at night, which is more efficient because less energy is being transmitted over Pacific Gas & Electric (PG&E) electric lines during that time period. PG&E encourages the usage of energy during off-peak hours and offers energy efficiency credits to customers willing to convert to off-peak usage.

The demolition of the existing Schoolhouse tank and construction of the proposed new Schoolhouse tank (or tanks) will also secure an added efficiency to the MWSD distribution system. The existing concrete Schoolhouse tank, built in 1959, has reached the end of its service life. By replacing the tank, any potential unforeseen problems of having a tank in service which had exceeded its design life will be eliminated.

Constructing a new tank(s) in its place will improve the overall efficiency of the MWSD distribution system.

Lastly, including solar panels as an alternate power source for the proposed improvements to the MWSD system promotes clean energy and minimizes consumption of fuel based energy. Solar panels would provide a portion of the required energy for the proposed Schoolhouse tank, the Airport Wells Water Treatment Facility, and the Alta Vista Well No. 1. The solar panels would distribute the electrical power to the equipment, as well as deliver excess electrical power into the PG&E power grid. This sustainable energy option would decrease the energy consumption required to power the equipment located at each of the proposed sites.

Construction Related Energy Efficiency. The construction stages of the proposed improvements also include elements of energy conservation and efficiency. The proposed new Alta Vista and Schoolhouse tanks will be constructed of steel, which is a more energy efficient option than concrete tanks. Concrete tanks would require substantial amounts of material, construction equipment, and fuel, while the steel tank design minimizes materials, equipment, and construction time. Steel tanks only require the transport of the steel plates and could be constructed on site, minimizing the consumption of energy. As modified by suggested modification no. 1(a), the proposed design of the Alta Vista tank also eliminates excavation of the hillside and the inclusion of a retaining wall. By limiting materials, equipment, and fuel consumption, the proposed steel tanks provide a significant reduction in required energy and the overall carbon footprint.

The two necessary access roads, a 16-ft tank access road at the Alta Vista site and the Airport Treatment Facility access road, will be constructed as unpaved dirt roads. This design approach will save on any excessive materials and fuel required to construct asphalt or a concrete access roads.

### Conclusion

Based on all of the above, the Commission finds that (1) the addition of the Phase I PWP water supply facility is consistent with the Capacity Limits and Allocations of Chapter 2 of the LUP, (2) storage is adequate to insure that sufficient emergency supply is available, and no additional development will be allowed because of this increase in water supply and (3) the development of this facility minimizes energy consumption, consistent with LUP Policy 2.36 (1-3). As evidenced in all the other sections of this report, the Commission finds that the siting of all the Plan facilities is consistent with all other applicable LCP Policies as required by LUP POLICY 2.36(4).

#### 4.3.2. Allowable Use

The Alta Vista site is zoned Resource Management, the Schoolhouse Site is zoned Planned Unit Development (PUD-124), and the Airport Wells Treatment Facility site is zoned Light Industrial (M-1) in the certified zoning regulations.

Public utility or public services uses are allowed as conditional uses requiring a use permit in all these zoning Districts when found to be necessary for public health, safety, convenience or welfare.

The Commission finds that water production and storage deficits within the MWSD district pose public health and safety issues for the community and the proposed PWP would bring the water system up to standard levels in order to adequately fight fires and serve existing customers in times of drought. Therefore, the PWP is necessary for public health, safety, convenience, and welfare.

Suggested Modification #2(d) requires that prior to construction, the District obtain all other agency approvals, which would include a use permit from the County.

#### 4.3.3. Alta Vista Tank

The following section analyzes the proposed Alta Vista Tank for consistency with hazards, sensitive habitats, and visual resources policies.

##### 4.3.3.1. Sensitive Habitats

#### Applicable LCP Policies

##### \*7.1 Definition of Sensitive Habitats

*Define sensitive habitats as any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting rare and endangered species as defined by the State Fish and Game Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.*

*Sensitive habitat areas include, but are not limited to, riparian corridors, wetlands, marine habitats, sand dunes, sea cliffs, and habitats supporting rare, endangered, and unique species.*

##### \*7.3 Protection of Sensitive Habitats

*a. Prohibit any land use or development which would have significant adverse impact on sensitive habitat areas.*

*b. Development in areas adjacent to sensitive habitats shall be sited and designed to prevent impacts that could significantly degrade the sensitive habitats. All uses shall be compatible with the maintenance of biologic productivity of the habitats.*

The location of the Alta Vista Tank as proposed in the PWP text would be dug into the hillside northeast of the ridge. The EIR documents several potential geologic issues and environmental impacts associated with this site. The geotechnical report (Terrasearch 2005) indicates that the most prominent geotechnical features of the Alta Vista site are the presence of earthflow (also referred to as a debris flow or a shallow landslide) and historical landslides in the area. The earthflow potential is reportedly limited to the upper few feet of soil profile. The report states that the earthflow hazard could be adequately controlled with appropriate design of foundations and civil design, and with construction of a keyway immediately down slope (east) of the proposed Alta Vista Tank. The report also recommends repair of the earthflow either at the top or toe of the slope and would be necessary to support the proposed access ramp from the ridge down to the finished grade at the bottom of the tank (up to 37 feet below the existing ridgeline grade). However, a wetland and Montara Creek are situated below, about 290 feet and 540 feet east, respectively, from the proposed tank site. A spring feeding the wetland is present at the toe of the slope where the potential earthflow repair may occur and where drilling was recommended. Repair of a landslide from the toe of the slope would have the potential to affect the spring flow, and the area at the toe of the slope includes wetlands and uplands that may provide habitat for sensitive species, such as the California red legged frog. Further, construction of the Alta Vista Tank at the proposed location would require the removal of up to 15,000 square feet of coastal sage scrub and 11 Monterey cypress trees. The area of vegetation removal would increase if additional construction is required to address landslide stabilization southeast of the tank. Exploratory drilling, landslide repair, or earthflow repair at the toe of the slope could also result in significant impacts to sensitive biological resources through the removal of vegetative habitat, direct harm to protected species, or diversion of the spring feeding the wetland. Due to the impacts of the proposed A/V Tank location on sensitive habitats the Commission finds that the proposed A/V Tank is inconsistent with LUP Policies 7.1 and 7.3 and the PWP must be denied. However, if modified to move the tank away from the hillside where neither repairs to the earthflow nor removal of sensitive vegetation would be required, the A/V Tank would be consistent with LUP Policies 7.1 and 7.3.

Further, as a result of the needed hazard repairs and the potential impacts to sensitive habitats, the EIR proposed that an alternative site be explored and evaluated, that would shift the tank and all elements of its construction and operation southwest of the proposed site to a location on the centerline of the ridgeline, and set within an excavated depression. The EIR states that this alternative site would alleviate the need

for any further landslide investigation or slide repair on the east side of the ridgeline. EIR Mitigation Measure 3.1-1 requires the use of the alternative site to avoid potential impacts to biological or hydrological resources at the toe of the slope associated with the supplementary geotechnical investigation or possible landslide or earthflow repair. Therefore, due to the impacts of the proposed A/V Site on sensitive habitats, described above, the Commission imposes Suggested Modification No. 1(a) and (b), which requires the District to modify the PWP project description for the A/V Tank to reflect the new ridgeline location. As discussed further below, the new location and design avoids impacts to sensitive habitats, is geotechnically and seismically stable (see Section 4.3.3.2), and does not impact visual resources (see Section 4.3.3.3).

At this modified location, however, according to the EIR, it is possible that four California species of special concern use habitat on or immediately adjacent to the site as modified. These include nesting habitat for white-tailed kite, loggerhead shrike, San Francisco dusky-footed woodrat, and American badger. Construction activities at the site could cause the species to avoid the site or affect nesting activities.

In addition, potential sensitive habitat used by white-tailed kite, loggerhead shrike, and other non-special status species birds could be disrupted by tree removal for tank installation.

Additionally, any tree within approximately 250 feet of ground disturbance should be considered inside the construction envelope and could affect nesting birds. Disruption or harming of nesting birds would be a significant impact. Due to the above, Commission staff requested that the District conduct raptor nesting surveys to determine whether sensitive habitats for these species exist on the site and in order to evaluate the proposed development's consistency with LCP Policy 7.3, Policy 7.5, which requires applicants to demonstrate that there will be no significant impact on sensitive habitats, and Policy 7.35 which requires the preservation of all habitats of rare and endangered species.

In July 2006, the District submitted the results of Avian surveys, conducted by Live Oak Associates, Inc. Nineteen avian species were observed in the vicinity of the proposed tank site, but there were no active nests of any songbird or raptor species in the trees within 250 feet of proposed ground disturbance. The report concluded that at that time, there were no sensitive avian species nesting in the trees or on the ground of the Alta Vista site or within 250 feet of proposed ground disturbance. It also determined that the site was not currently utilized regularly for foraging, roosting, or perching by locally occurring raptor species. These surveys provided valuable data to determine that it is unlikely that the three trees that would be removed for construction of the tank as modified in the PWP, as well as the surrounding trees, provide habitat for sensitive raptor species. However, the potential still exists for sensitive avian species to move in and use the area for habitat, and therefore be impacted by the proposed PWP, inconsistent with LUP Policies 7.3, 7.5, and 7.35. EIR Mitigation Measure 3.3-1



anticipates this potential by requiring tree removal to occur only between September 1 and January 30 to prevent disturbance to nesting birds. If construction must occur outside this time period, a pre-construction survey for nesting birds is required, and the survey must include any areas proposed for any activities, such as earthmoving. If occupied migratory bird nests are found within 250 feet of the construction zone, clearing shall not begin until after the nests are protected by an adequate setback of 50 feet for passerines and 250 feet for raptors. While this mitigation measure regulates the timing of tree removal to a non-bird nesting window, it does not restrict the rest of tank building activities to this time window. This means grading and tank construction could impact sensitive raptor habitats without proper surveys, inconsistent with Policies 7.3, 7.5, and 7.35. Suggested Modification 2(e) requires the District to incorporate all EIR mitigation measures into the PWP unless the measures were modified by the Commission in its action on the PWP. Suggested Modification 2(f) changes mitigation measure 3.3-1 to restrict the timing of all activities associated with tank construction. As modified, the Commission finds that the Alternative Alta Vista Tank is consistent with LUP Policies 7.3, 7.5, and 7.35.

#### San Francisco Dusky Footed Woodrat and American Badger

San Francisco Dusky Footed woodrats, a California Species of Concern, are nocturnal rodents usually associated with coastal scrub, woodlands, and riparian habitats. The presence of woodrats are easily detected by their nests that are constructed of twigs and branches that are located either on the ground or in trees. Habitat and nests are present at the Alta Vista site.

The American Badger, another California Species of Concern, is found in a variety of open habitats with friable soils and sufficient food. They feed on gophers, ground squirrels, and kangaroo rats, and potential habitat exists in the vicinity of the Alta Vista site within the surrounding scrub habitat.

The project EIR, certified in March 2006, found that potential habitat for the Dusky-Footed Woodrat and American Badger is present at the Alta Vista Site , and could potentially utilize the tank location. Shrubs with stick nests for the Dusky-Footed Woodrat and Burrows for the American Badger are defined "sensitive habitat" pursuant to LUP Policy 7.1. EIR Mitigation Measure 3.3-2 requires a pre-construction survey for the San Francisco Dusky-Footed woodrat and American Badger. If nests and burrows are found in areas proposed for clearing, the mitigation measure stipulates that the biologist manually deconstruct the woodrat nests or passively relocate badgers at a time when young are not present, prior to construction.

There are two reasons why the above mitigation approach is inconsistent with LUP sensitive habitat policies. First, the proposed PWP and its associated EIR did not conclusively determine where these sensitive habitats were located; hence it becomes very difficult to site and design development to prevent impacts that could significantly

degrade them, inconsistent with LUP Policy 7.3. Second, the type of mitigation proposed, i.e. relocating the sensitive species habitat is not allowable under the LCP or the Coastal Act as affirmed by the *Bolsa Chica Land Trust v. Superior Court* (1999) 83 Cal.Rptr. 85, which found that Coastal Act Section 30240 does not permit a process by which the habitat values of an environmentally sensitive habitat area can be isolated and recreated in another location. Therefore, as proposed the PWP is inconsistent with the LUP and must be denied. However, if modified to provide that sensitive habitats for the Dusky-Footed Woodrat and American Badger are avoided, the PWP would be consistent with LUP sensitive habitat policies, with respect to this issue.

As part of filing review for the PWP, Commission staff requested that the district conduct higher level surveys for Dusky-Footed Woodrats and American Badgers and to propose alternative mitigation measures designed to avoid impacts to the species their sensitive habitats. In March 2008, the District submitted the results of these surveys (Flett 2008). All woodrat stick house locations were recorded on a map of the project area showing the alternative tank site on the ridge (Page 2 of Exhibit 5).

No American badgers and no burrows or other evidence indicating presence of badgers were observed in or near the project area. Nine SFDFWR stick houses were observed, all constructed at the base of coyote brush. Houses 1 and 2 appeared inactive because they were compacted and compressed and it did not appear that new material had been added to either of them recently, and no tracks or trails were noted around them. The remainder of the houses appeared active. The report recommends that the Alta Vista Water tank be situated where there will be minimal or no impact to existing woodrat nests, and mitigation measures designed to be in accord with CDFG recommendations. The report recommends the establishment of a 25-foot buffer between all construction and the woodrat nests. Commission staff consulted with staff from the California Department of Fish and Game (CDFG) who concurred that a 25-foot buffer from woodrat nests is adequate. This is because woodrats usually utilize many nests in the vicinity, so there are many others available for use if one needs to be abandoned temporarily. Woodrats will often return to an abandoned nest rather quickly, and therefore are not sensitive to disturbance in any large way, because they adapt and go to other nests. Staff of CDFG also concurred with Commission staff that the nests should not be dismantled because the woodrats will return to them.

The Alta Vista Tank, as modified by Suggested Modification 1(a) and (b) would maintain a 25-foot buffer to all active DFWR nests. Suggested Modification No. 2 (g) requires that the District incorporate a specific development standard into the PWP requiring all development subject to PWP-2-06-006 to avoid impacts to the San Francisco dusky-footed woodrat and American Badger, and to establish 25-foot buffers around all SFDFWR nests. As modified, the Commission finds that the PWP is consistent with LUP Policies 7.3, 7.5, and 7.35.

#### 4.3.3.2. Hazards

## Applicable LCP Policies

### 9.1 Definition of Hazard Areas

*Define hazardous areas as fault zones and land subject to dangers from liquefaction and other severe seismic impacts, unstable slopes, landslides, coastal cliff instability, flooding, tsunamis, fire, and steep slopes (over 30%).*

### 9.2 Designation of Hazard Areas

*Designate hazardous areas in the Coastal Zone as those delineated on the Geotechnical Hazards Synthesis Map, the Floodway Boundary and Floodway Maps and Flood Insurance Rate Maps adopted under Chapter 35.5 of the San Mateo County Zoning Regulations, and the Natural Hazards Map in the Natural Hazards Chapter of the General Plan.*

### 9.3 Regulation of Geologic Hazard Areas

*Apply the following regulations of the Resource Management (RM) Zoning Ordinance to designated geologic hazard areas:*

- a. Section 6324.6 - Hazards to Public Safety Criteria.*
- b. Section 6326.2 - Tsunami Inundation Area Criteria.*
- c. Section 6326.3 - Seismic Fault/Fracture Area Criteria. Require geologic reports prepared by a certified engineering geologist consistent with Guidelines for Geologic/Seismic Reports (CDMG Notes #37) for all proposed development.*
- d. Section 6326.4 - Slope Instability Area Criteria. (emphasis added)*

### 9.10 Geological Investigation of Building Sites

*Require the County Geologist or an independent consulting certified engineering geologist to review all building and grading permits in designated hazardous areas for evaluation of potential geotechnical problems and to review and approve all required investigations for adequacy. As appropriate and where not already specifically required, require site specific geotechnical investigations to determine mitigation measures for the remedy of such hazards as may exist for structures of human occupancy and/or employment other than those considered accessory to agriculture as defined in Policy 5.6. "Hazards areas" and "hazards" are defined as those geotechnical hazards shown on the current Geotechnical Hazards Synthesis Maps of the General Plan and the LCP Hazards Maps. A copy of the report of all geologic investigations required by the California Division of Mines and Geology shall be forwarded to that agency.*

### Zoning Section 6324.6. Hazards to Public Safety Criteria

*(a) Reasonable and appropriate setbacks from hazardous areas shall be provided within hazardous areas defined within the Conservation, Open Space, Safety, and Seismic Safety Elements of the San Mateo County General Plan...*

*(c) Notwithstanding the permitted development density under this Ordinance, areas shall not be used for placement of structures: 1) which are severely hazardous to life and property due to soils, geological, seismic, hydrological, or fire factors; 2) whose development would pose a severe hazard to persons or property outside the proposed development; or 3) for which elimination of such hazards would require major modification of existing land forms, significant removal or potential damage to established trees or exposure of slopes which cannot be suitably revegetated...*

*(e) No electric substations, domestic water pumping facilities, sewage treatment, pumping, or disposal facilities shall be located in any hazards areas indicated in Section 6326 unless the County Engineer certifies that direct damage or indirect threat to public health and safety would be unlikely in the event of occurrence of the designated hazard(s).*

*(f) No land shall be developed which is held unsuitable by the Planning Commission for its proposed use for reason of exposure to fire, flooding, inadequate drainage, soil and rock formations with severe limitations for development, susceptibility to mudslides or earthslides, severe erosion potential, steep slopes, inadequate water supply or sewage disposal capabilities, or any other feature harmful to the health, safety or welfare of the future residents or property owners of the proposed development or the community-at-large. To determine the appropriateness of development the following shall be considered:*

- 1. The danger to life and property due to the designated hazards caused by excavation, fill, roads, and intended uses.*
- 2. The danger that structures or other improvements may slide or be swept onto other lands or downstream to the injury of others.*
- 3. The adequacy of proposed water supply and sanitation systems, and the ability of those systems to prevent disease, contamination and unsanitary conditions during or following a hazardous event or condition.*
- 4. The susceptibility of the proposed facility and its contents to potential damage, and the effect of such damage to the property.*
- 5. The importance of the services provided by the proposed facility to the community.*
- 6. The availability of a sufficient amount of water, as defined by the fire protection agency, for fire suppression purposes.*
- 7. The availability of alternative locations, not subject to hazards.*
- 8. The relationship of the proposed development to the Safety, Seismic Safety, and Open Space and Conservation Elements of the San Mateo County General Plan.*

The Alta Vista Tank alternative site (as modified by Suggested Modification No. 1(a) and (b) (Exhibit 5) is not located within an Alquist-Priolo (AP) Earthquake Fault zone, but it is located within a Seismic Hazard Zone according to the California Division of Mines and Geology (DMG, now California Geological Survey), 1997, Guidelines for Evaluating And Mitigating Hazards in California, Special Publication 117. It does not lie within an area designated on the County of San Mateo Fault and Associated Fracture Zones Map, nor does it lie within an area defined as highly unstable on the County of San Mateo Landslide Susceptibility Areas Map. Nevertheless, because it lies adjacent to an area of steep slopes, in an area mapped as susceptible to earthquake-induced landslides by the California Geological Survey Seismic Hazard Mapping Project, and because the vegetation mantling these slopes is subject to fire, the area can be defined as a Hazard Area under LCP section 9.1. Therefore, the certified zoning Hazards to Public Safety Criteria apply to the site, but not the Seismic Fault/Fracture Area Criteria or the Section 6326.4 - Slope Instability Area Criteria.

#### Landsliding

Although the alternative tank location (as modified by suggested modification #1a) is not located within an area defined as highly unstable, it is located adjacent to an area with highest susceptibility to landsliding. The Terrasearch (2008) geotechnical report indicates that several shallow landslides are located on the slopes to the east and west of the proposed tank location, but these surficial failures are confined to the slopes and, due to their limited size, do not threaten development on the ridge crest. Further, appropriate mitigations and precautions are recommended in the report, especially that the slopes be protected from water flowing freely down the slopes. These recommendations are discussed in the analysis below.

Section 6324.6(a) of the certified zoning code requires reasonable and appropriate setbacks from hazardous areas. Consistent with this policy, the location of the tank as modified by suggested modification no. 1(a), is at the crest of the ridge, as far removed from the surficial instabilities as is possible. As such, its location is consistent with section 6324.6(a).

Section 6324.6(c) requires structures not to be placed in severely hazardous areas due to soils, geologic, seismic, hydrological, or fire factors, in areas that would be hazardous to persons or property, or where major modification of existing landforms would be required. While the Tank(s) are located in a Seismic Hazard Zone, they would be located in an area rated least susceptible to deep seated landslides with very low risk of liquefaction potential. Trenching of the site identified no faults crossing the site. Compressible soils or differential movement across a clay-filled joint that does cross the site can be mitigated by designing the foundation of the tank to tolerate up to one inch of differential movement, as recommended in the geotechnical report.

Approximately 7,000 cubic yards of grading is planned at the Alta Vista tank site. Although this amount of grading may constitute significant landform alteration, it is not

required to mitigate any hazard at the site, such as would be inconsistent with section 6324 (c). Rather, this grading is necessary to reduce the height of the tank roof to no more than 18 feet above the ridgeline, as required by LCP visual resources policies (discussed below in Section 4.3.3.3).

Terrasearch, Inc. conducted a geotechnical investigation of the site in 2008 and recommended several measures to ensure structural integrity. These include recommendations for site preparation, grading, appropriate foundations, construction considerations, retaining walls, pavement design, utility trenches, and onsite monitoring during construction by a geotechnical engineer. Terrasearch concluded that construction of the proposed tank(s) is feasible based on these recommended parameters. Suggested Modification No. 2(b) requires the District to incorporate as a development standard into the PWP that construction of the A/V tank conform to the recommendations in the Terrasearch report. Therefore, in terms of soil, geologic, and seismic factors, as modified, the alternative A/V Tank as modified by SM #1(a) would be consistent with Section 6324 (c).

#### Fire

The project EIR evaluated fire hazards associated with the Alta Vista Site. The California Department of Forestry and Fire Protection (CDF) assesses areas within the state for fire hazard risk by assessing the history and intensity of wildfires in the area, size, and type of vegetation in the area, and proximity to fire extinguishing resources. The CDF identifies and ranks areas based on levels of severity of risk. Fire hazard rankings affect the fire suppression/prevention measures dictated by the state and local government that must be carried out by developers in the designated areas (CDF and State Board of Forestry and Fire Protection 2000).

Natural Hazard Disclosure maps identify two types of fire hazard areas within San Mateo County: (1) Very High Fire Hazard Severity Zones and (2) Wildland Areas. While lands surrounding the Alta Vista site are not designated as Very High Fire Hazard Severity Zones, and hence the site is not considered "severely hazardous" pursuant to Section 6324.6(c), the site is adjacent to lands designated Wildland Areas. Wildland Areas are defined as areas that may contain substantial forest fire risks and hazards, and are also referred to as State Responsibility Areas (SRAs). Exhibit 7 provides a map showing the Wildland Areas. The Alta Vista site is located adjacent to the San Mateo/Santa Cruz Unit (Unit) of the northern California region. This Unit has not had a long-standing significant fire history.

As modified by suggested modification no. 1(a), the Alta Vista Tank and Wells site is located on a ridge and primarily consists of open space surrounded by dense coastal scrub vegetation with intermittent Monterey cypress trees. This A/V Tank alternative location would be on an already cleared dirt road on the top of the ridge, and three trees would be removed to accommodate the tank. As shown on Exhibit 7, the tank and

production well are located just outside the designated Unit 1 Wildlands Area, while the monitoring well no. 2 is located just inside Unit 1.

While the site of the A/V Tank and Wells is not located in a severely hazardous area due to fire consistent with Section 6324.6(C), these facilities would still be located adjacent to a Wildlands Area, and Section 6324.6(C) also requires that development not pose a severe hazard to persons or property outside the development. Therefore appropriate mitigation is necessary to ensure that the development of these structures and facilities do not pose a hazard.

According to the project EIR, construction and maintenance workers using flammable materials or sparking (i.e. welding) or fueled equipment would be at risk of fire hazards. Implementation of Mitigation Measure No. 3.5-11 would ensure that appropriate measures are implemented to avoid exposing people and structures to a significant fire risk at the Alta Vista Site. The measure requires that specific fire prevention measures be incorporated into the Health and Safety Plan, including that vehicles be equipped with fire combatant equipment at all times, that smoking not be allowed outside designated areas at any time, including anywhere with dry grass underfoot, that no equipment be fueled or maintained or left to idle within 50 feet of dry grass or other flammable areas, and that separate personnel equipped with fire combatant equipment shall oversee spark producing operations at all times. Implementation of this mitigation measure(s) would ensure that development of the A/V Tank and Wells would not pose a severe hazard to persons and property outside the development, consistent with Section 6324.6(c).

In addition, the project EIR finds that the proposed portable diesel tank proposed to be stored adjacent to the AV Well #1 would present a significant fire risk if stored at the site permanently because diesel is highly flammable. If it were to be stored at the site permanently, the fire department indicated that a 30-foot vegetation clear zone would be required around the tank, which could impact sensitive habitat for the San Francisco Dusky Footed Woodrat or nesting birds. However, if stored only temporarily during electrical power outages only, vegetation clearing would not be required by the fire department. Therefore, mitigation number 3.5-12 states that the diesel tank and backup generator not be stored permanently at the site, mitigating the risks to fire and sensitive habitats (from associated vegetation clearing). This mitigation measure(s) would ensure that development of the A/V Tank and Wells would not pose a severe hazard to persons and property outside the development, consistent with Section 6324.6(c).

Further, the project EIR states that the AV Well #1 may require treatment of water using chlorine. Chlorine is a noncombustible gas. The National Fire Protection Association has assigned a flammability rating of 0 (no fire hazard) to chlorine. However, most combustible materials will burn in chlorine and contact between chlorine and many combustible substances (such as diesel) may cause fires and explosions. During the times that the diesel tank is stored on site temporarily, the diesel tank would be stored

within a double-walled tank to capture and contain vapor emissions. Implementation of Mitigation Measure 3.5-1 described above would further ensure appropriate storage of containers and prevent potential risks of exposing chlorine to diesel. Therefore, as mitigated by measure 3.5-1, the use of chlorine to treat water at the A/V tank would not pose a severe hazard to persons and property outside the development, consistent with Section 6324.6(c).

Lastly, the addition of a water tank is not itself expected to impact the risk of wildland fire to people or structures after construction, based on the tanks' steel material. Mitigation Measure 3.2-3 in Section 3.2 Hydrology and Water Quality in the project EIR ensures that the Point Montara Fire Protection District will review and approve a landscape plan to ensure that no fire hazards are associated with the revegetation efforts around the Alta Vista Tank. District employees that conduct maintenance operations near the Wildland Areas would follow fire reduction protocols outlined in Mitigation Measures 3.5-12. Suggested modification #2(e) requires the District to incorporate all project mitigation measures into the PWP project description unless the measures were modified by the Commission in its action on the PWP. As modified, the Alta Vista water tank would not pose a severe hazard to persons and property outside the development, consistent with Section 6324.6(c).

Section 6324.6(e) requires that domestic water pumping facilities shall not be located in any hazards areas unless the County Engineer certifies that direct damage or indirect threats to public health and safety would be unlikely in the event of occurrence of the designated hazard(s). As described above, The Alta Vista Tank as modified is located in a defined "hazards" area, but is not in a "severely hazardous area." "Domestic water pumping facilities" are not defined in the LCP. This report takes a conservative approach, and assumes a large 1,000,000 gallon water storage tank qualifies as a domestic water pumping facility. Certainly the Alta Vista Well (discussed in Section 4.3.4) is a pumping facility. Therefore, as required by the LCP, the County Engineer has to certify that the project would not cause damage to public health and safety, as described above. The Commission finds that the Alta Vista Tank and Well would not cause direct or indirect threats to public health and safety in the event of an earthquake because Suggested Modification 2(b) requires adherence to the recommendations put forth in Terrasearch geotechnical reports dated 2008, and adherence to the recommendations will mitigate any direct or indirect threats to public health and safety. However, 6324.6(e) still requires the County Engineer to certify the project under the above criteria. Therefore, Suggested Modification No. 2(d) requires the District to obtain the County Engineer's certification prior to construction.

Section 6324(f) states that land that is "unsuitable" for its proposed use for reasons of exposure to fire, flooding, inadequate drainage, soil and rock formations, susceptibility to mudslides or earthslides, severe erosion potential or steep slopes shall not be developed. The section sets up 8 criteria to determine the "appropriateness of development" for a given site:



1. The danger to life and property due to designated hazards caused by excavation fill, roads, and intended uses:
2. The danger that structures or other improvements may slide or be swept onto other lands or downstream to the injury of others:
3. The adequacy of proposed water supply and sanitation systems, and the ability of those systems to prevent disease, contamination, and unsanitary conditions during or following a hazardous event or condition.
4. The susceptibility of the proposed facility and its contents to potential damage, and the effect of such damage to the property:
5. The importance of the services provided by the proposed facility to the community.
6. The availability of a sufficient amount of water, as defined by fire protection agency, for fire suppression purposes.
7. The availability of alternative locations, not subject to hazards:
8. The relationship of the proposed development to the safety, seismic safety, and open space and conservation elements of the SMCO general plan.

As described above, criteria 1, 2, and 4 are met by mitigation measures recommended in the 2008 Terrasearch geotechnical report. As described above and in Section 4.3.10 (Alternatives), the modified site (as modified by suggested modification #1a) is the least subject to natural hazards compared to the original hillside alternative that had landslide susceptibility, consistent with criterion 7. As discussed in Section 4.3.1, the proposed water supply and storage is adequate to prevent disease, contamination and unsanitary conditions following a hazardous event, consistent with criteria 3. As discussed in Section 4.3.1, the services provided by the PWP are important and integral to the community an integral to having an adequate supply to meet the needs of existing customers and to have an adequate supply for fire suppression needs, consistent with criteria 5 and 6. Therefore, the PWP as modified is consistent with Section 6324(f) of the certified zoning regulations.

#### Alta Vista Road Impacts

Residents and neighbors living along Alta Vista Road, neighboring the Alta Vista site have expressed concerns about the current and future conditions of the road. This includes allegations that construction and maintenance vehicles (past, present, and future) damage the road, and cause erosion and drainage problems, affecting their ability to utilize the road, and damaging property (from inadequate drainage controls) at times. Because Alta Vista Road is private, it is not maintained by the County of San Mateo. While it is still an open question as to who is responsible for current and past problems on Alta Vista Road, the District has stated in its EIR and correspondence with Commission staff that it is prepared to take responsibility for any potential construction related impacts on Alta Vista Road, resulting from the passage of vehicles on the road.

The EIR requires the District to mitigate impacts of construction vehicles using Alta

Vista Road to reach the Alta Vista Tank and Wells site. As modified by the Commission in Suggested Modification No. 2(e), these EIR mitigation measures are incorporated into the PWP unless the measures were modified by the Commission in its action on the PWP. Mitigation Measure 3.7-2 requires the District to remediate (e.g. fill in ruts) areas of Alta Vista Road to ensure safe passage of construction vehicles and equipment. Mitigation Measure 3.7-3 requires the District to install as part of the road improvement, a drainage system to address runoff and alterations in stormwater drainage patterns along and adjacent to the roadway resulting from the road improvements outlined in Mitigation Measure 3.7-2. The system shall be designed to encourage stormwater infiltration into soils, to avoid erosion of receiving areas, and to avoid sedimentation and/or pollutant (hydrocarbon residual) migration to nearby creeks or waterways.

Mitigation Measure 3.7-5 requires that Alta Vista Road be maintained as a passable and usable road during all phases of construction. Flag persons shall direct traffic onto Alta Vista Road (at the Drake Street intersection) and along Alta Vista Road to ensure that construction vehicles do not inhibit the movement of residents, residential service vehicles, or emergency access vehicles along any of the area's road system.

Mitigation Measure 3.7-6 requires the District to maintain Alta Vista Road for one year after project completion of the Alta Vista site projects.

Suggested Modification No. 2(e) requires the District to formally incorporate these specific EIR mitigations into the Plan. As modified, the PWP addresses the neighbor's concerns consistent with the requirements of the LCP.

#### 4.3.3.3. Visual Resources

##### Applicable LCP Policies

###### 8.5 Location of Development

*a. Require that new development be located on a portion of a parcel where the development (1) is least visible from State and County Scenic Roads, (2) is least likely to significantly impact views from public viewpoints, and (3) is consistent with all other LCP requirements, best preserves the visual and open space qualities of the parcel overall. Where conflicts in complying with this requirement occur, resolve them in a manner which on balance most protects significant coastal resources on the parcel, consistent with Coastal Act Section 30007.5.*

*Public viewpoints include, but are not limited to, coastal roads, roadside rests and vista points, recreation areas, trails, coastal accessways, and beaches.*

###### \*8.7 Development on Skylines and Ridgelines

*a. Prohibit the location of development, in whole or in part, on a skyline or ridgeline, or where it will project above a skyline or ridgeline, unless there is no other developable building site on the parcel.*

*Consistent with Policy 9.18, a site of greater than 30% slope may be deemed developable if it is the only other building site on the parcel and can be developed consistent with all other applicable LCP policies.*

*Prohibit the location of development, in whole or in part, on a skyline, or where it will project above a skyline, when a developable building site exists on a ridgeline.*

*A skyline is the line where sky and land masses meet, and ridgelines are the tops of hills or hillocks normally viewed against a background of other hills (General Plan Policy 4.7).*

*b. Where no other developable building site exists on a parcel, limit development on a skyline or ridgeline to 18 feet in height from the natural or finished grade, whichever is lower.*

*c. Prohibit the creation of new parcels which have no developable building site other than on a skyline or ridgeline.*

Section 6324.3 (a) of the certified zoning regulations:

*Public utility structures, including building signs, overhead wires and utility poles, shall be of minimum bulk and height and designed to have an uncluttered appearance and remain subordinate to the setting.*

As described above in the hazards and sensitive habitats section, the Commission imposes Modification No. 1(a), which would formally incorporate into the PWP a re-located tank location from one that would be cut into the hillside, to an alternative location located on the northeast-southwest trending ridge, centered and dug into the existing private unpaved Alta Vista Road (the unpaved section of Alta Vista road is used by the fire department and MWSD). At this location the ridge is wide enough to construct the new tank. The site would be excavated approximately 12 feet below existing grade placing the finished floor at an elevation of 488 feet asl, and extend 18-feet above ground. This alternative would avoid impacts to sensitive habitats and reduce geologic hazards (see above).

LUP Policy 8.7 allows development on ridgelines only if there is no other developable site on the parcel, and limits such development on ridgelines to 18-feet. As described above in the Hazards and Sensitive Habitats sections (Sections 4.3.3.2 and 4.3.3.1) and in the Alternatives Section (Section 4.3.10), several alternative building sites were

evaluated for the Alta Vista Tank. Due to potential for landslides and impacts to sensitive wetland habitats and sensitive wildlife habitat, the originally proposed location on the hillside on the steep slope, and the other alternative of constructing multiple smaller tanks along the ridge are not feasible. The only feasible alternative to avoid landslide hazards and impacts to sensitive habitats was to place one large tank on the ridge, in the middle of the private Alta Vista Rd. This site is geotechnically stable, as described in Section 4.3.3.2, and avoids impacts sensitive habitat for the San Francisco Dusky Footed Woodrat and sensitive riparian habitats as described in Section 4.3.3.1. Since there is no other feasible “non-ridge” developable building site for the tank, the LUP allows development on the ridgeline if it is limited to 18-feet in height and does not have significant visual impacts from public vantage points. The District’s alternative tank configuration would be buried into the ridge, such that the tank’s height would not exceed 18 feet. Further, a visual line-of site analysis was conducted by the District, which examined a tank design alternative of 35 feet. This analysis showed that a tank of this height, which is much higher than what would actually be constructed, would not be visible from Highway 1. Although the tank would be visible from public trails in the Montara mountains above, the existing water tank is already visible, and the new tank would be appropriately clustered next to this tank. In addition, to help screen the Tank from neighboring homes on Alta Vista Road and Rivera Street, a landscape plan will be prepared in accordance with Mitigation Measure 3.1-6. Suggested Modification No. 2(e) requires the District to formally incorporate all mitigation measures into the Plan as development standards unless the measures were modified by the Commission in its action on the PWP. Suggested Modification No. 2(k) requires the District to submit the landscape plan concurrent with the submittal of the NOID for review and approval by the E.D. In addition, Mitigation Measure 3.9-1 requires the Tank to be painted green to blend with its surroundings.

Therefore, the Commission finds that the Alta Vista Tank as modified is consistent with LUP Policies 8.5 and 8.7 and certified zoning regulations section 6324.3(a).

### Conclusion

The Commission finds that the Alta Vista Tank element of the PWP as modified as suggested is consistent with Sensitive Habitat, Hazards, and Visual Resources protection policies of the LCP.

#### 4.3.4. Alta Vista Well

##### 4.3.4.1. Sensitive Habitats

### Relevant LCP Policies

#### LUP Policy 2.32 Groundwater Proposal

*Require, if new or increased well production is proposed to increase supply, that:*

...

*c. The amount pumped be limited to a safe yield factor which will not impact water dependent sensitive habitats, riparian habitats and marshes.*

*d. Base the safe yield and pumping restriction on studies conducted by a person agreed upon by the County and the applicant which shall: (1) prior to the granting of the permit, examine the geologic and hydrologic conditions of the site to determine a preliminary safe yield which will not adversely affect a water dependent sensitive habitat; and (2) during the first year, monitor the impact of the well on groundwater and surface water levels and quality and plant species and animals of water dependent sensitive habitats to determine if the preliminary safe yield adequately protects the sensitive habitats and what measures should be taken if and when adverse effects occur.*

As described in Section 4.2.2, two test wells, one for purposes of increasing supply (AV well #1) and one for purposes of monitoring (AV well #2) were installed on the Alta Vista ridge in 2004.

The District's project EIR evaluated hydrologic conditions at and surrounding the proposed Alta Vista Well site: The Alta Vista site ridgeline is located on a divide separating the watersheds of the north fork of Montara Creek and Daffodil Canyon. The tank would be dug into the ridgeline at 488 feet asl. The wells are present along the top of the ridgeline at approximately 530 feet asl. No surface water features are present at the tank or well locations.

The District completed and tested five alternative wells in 2004, including Alta Vista Wells #1 and #2, to evaluate potential new sources of drinking water supply. Alta Vista Well #1 proved to be highest yielding and suitable for production. Alta Vista Well #1's steel casing extends to 370 feet below ground surface (bgs) (160 feet asl). The well is bored through uncased granitic rock below 370 feet. Final placement and testing of the casing and pouring of the seal was observed and approved by San Mateo County Environmental Health personnel. The well is completed at a depth of 780 feet bgs and about 500 feet below sea level. Two large open joints were found at 724 and 727 feet bgs, which were interpreted as a primary source of the high groundwater yields at Alta Vista Well #1 (Balance 2005).

There are several surface water features in the vicinity of Alta Vista Well #1. All of the features are on the valley floor below the ridge where Alta Vista #1 is located and away from any proposed project facilities. The nearby features that may be in the sphere of influence of Alta Vista #1 include:

- ◆ Montara Creek
- ◆ North Fork Montara Creek Headwater Springs (above the District's raw-water diversion)

- ◆ North Fork Montara Creek Wetland
- ◆ Wetland Spring
- ◆ Daffodil Canyon
- ◆ Kanoff Creek

These features are identified on Exhibits 9 and 10. Exhibit 9 shows monitoring well locations and other features discussed in this Hydrology section. Exhibit 10 shows the watershed upstream of Montara Creek.

### Montara Creek

The upper portion of Montara Creek has two branches. The north fork has a watershed area of 290 acres and consists of a small stream located about 540 feet east-southeast of the proposed Alta Vista Tank location and 600 feet southeast of Alta Vista #1, at closest proximity.

### North Fork Montara Creek Headwater Springs

Montara Creek is fed by several springs at its headwaters with a flow of about 70 gpm. The headwater springs are approximately 1,400 feet northeast and downslope from Alta Vista Well #1 in a steep and rugged portion of the canyon, only accessible by trail to the District's diversion downstream. It is estimated that these springs are at an elevation of about 800 feet asl, which is 1,300 feet higher in elevation than the groundwater source feeding Alta Vista Well #1.

### North Fork Montara Creek Wetland

A wetland of about 1 acre in size and at an approximate elevation of 350 feet asl is present on the valley floor of the north fork of Montara Creek. The wetland is directly west of Montara Creek. The wetland is situated about 290 feet east of the proposed Alta Vista Tank location, 400 feet southeast of Alta Vista Well #1, and 180 feet downslope of the wellhead.

### Wetland Spring

The wetland is fed by the spring at the toe of a landslide downslope and southeast of Alta Vista Well #1. The spring drains shallow groundwater to the canyon floor where clayey soils and slow percolation support saturated soils and spots of standing water in the wetland.

### Daffodil Canyon Springs and Creek

Daffodil Canyon is vegetated with a dense mosaic of coastal scrub with riparian vegetation along the stream channel. The stream in Daffodil Canyon flows year-round and is fed by springs situated approximately 500 feet northwest of and lower in elevation than Alta Vista Well #1. The precise locations of the source springs are unknown.

### Kanoff Creek

Kanoff Creek begins at a small stock pond about 2,200 feet downslope and southwest of Alta Vista #1. The Kanoff Creek watershed is partially urbanized and seems to be also supported by nuisance flows (out-of-season household runoff). This creek is beyond the capture zone of Alta Vista Well #1.

LUP Policy 2.32 requires that if new or increased groundwater pumping is proposed to increase supply, the amount pumped be limited to a safe yield factor which will not impact water dependent sensitive habitats, riparian habitats and marshes. During operation of Alta Vista Well #1, the District would extract groundwater from the well at depths mostly below 700 feet bgs. The District's proposed pumping rate is 150 gpm, which is equivalent to slightly more than 240 acre-feet per year if pumped continuously. Yields tests were performed to assess different pumping rates in order to evaluate water availability for the wells. A Well Completion Report was completed by Balance Hydrologics, Inc. in July 2005 (Balance 2005) as well as a supplemental water supply pumping test, dated February 21, 2008 (Balance 2008).

Water levels were monitored during the yield tests at various locations to determine the flow gradient of the water supplying the wells. These evaluations were useful for determining the potential impacts on groundwater availability to supply the well, and also to determine if and where surface water and groundwater level effects may occur as a result of pumping.

Several yield tests were conducted shortly after completion of the well in 2004. The most extensive of these was a five-day constant-rate (300 gpm) pumping and recovery test, during which several monitoring wells were monitored. The water level in the Alta Vista well did not reach equilibrium during this test, so the total amount of drawdown possible in nearby wells, and potential impacts to springs and streams, could not be unequivocally established. Accordingly, a 60-day pumping test was undertaken from November 11 2007 to January 11 2008. During this test, streamflows and groundwater levels adjacent to the wetlands on Montara Creek were monitored and found to be unaffected by pumping of the Alta Vista Well.

The 2005 well tests showed that under static conditions, wells located northeast (Alta Vista Well monitoring well #2) and southeast (Well 2004-5) are upgradient of the production well, and the others are downgradient. The hydrologist concluded (Balance 2005) that most recharge to Alta Vista Well #1 comes from areas north and east of the well, and especially from areas nearest the well. The report concluded that the Alta Vista well appeared to be supplied by a deep groundwater zone that acts independently from shallower groundwater zones that supply shallow wells, the wetland, springs, and surface water. Even so, there was some uncertainty associated with this test because the water level in the well did not reach equilibrium (additional drawdown was possible), and the EIR concluded that the pumping could potentially have an impact on local groundwater levels, potentially affecting sensitive habitats.

Nevertheless, drawdown was observed only in monitoring wells drawing on the deep, fractured bedrock aquifer and an upgradient wells drawing on the shallow alluvial aquifer. Noteworthy was the lack of drawdown on the downgradient alluvial and shallow bedrock walls, such as the domestic well at 770 Alta Vista Road. However, this test did not adequately evaluate the effects of pumping on streamflow in Daffodil Canyon, Kanoff Creek, and Montara Creek and its associated wetlands.

Based on the above, the District proposes a conservative groundwater-pumping program to be protective of sensitive resources. Although Alta Vista #1 has a demonstrated capacity of 300 gpm, the District proposes to pump the well at 150 gpm as the expected safe yield. The project EIR concluded that when the well is pumped long term, some potential may exist that the groundwater pumping could affect springs, surface water, or the groundwater source upgradient of the well (to the north and east) by varied degrees. Further, the EIR concluded that effects on groundwater and surface water have the potential to cause related effects on vegetation and wildlife and that groundwater drawdown levels should be kept below thresholds at which the biological resources experience stress. As a result, Mitigation Measures were proposed to continue hydrological and commence biological monitoring to monitor pumping effects on groundwater, verify the predicted drawdown effects, and to specify mitigation measures to be implemented if specified thresholds are met. The mitigation measures require that the District stop or reduce pumping if the protective thresholds are met.

Because the Balance 2005 pump test and results did not provide sufficient evidence to say that the pumping of the Alta Vista well would not effect nearby ESHA and wetlands, the Commission staff requested further testing of the Alta Vista Well and monitoring of hydrological and biological conditions. Accordingly, the District undertook a 60-day continuous pump test, during which approximate equilibrium was achieved. Monitoring of wells upgradient and downgradient of the wetlands on Montara Creek, as well as the streamflows of Montara, Kanoff, and Daffodil Creeks demonstrated that pumping of the Alta Vista well does not affect discharge to these habitats.

#### Vegetation monitoring

The vegetation in the areas with the highest potential to be affected by shallow groundwater drawdown was monitored in August 2007 before test well pumping began and again in January 2008 after completion of the test well pumping.

There were no obvious effects on the potentially affected vegetation based on observations of survivorship, health and vigor, canopy cover, vegetative cover of shrubs and herbs, and species composition. There was some reduction in canopy cover, however the reduction was within the expected norm for riparian species during the winter dormancy period.



Therefore, the Commission finds that the proposed 150 gallon per minute pumping of the Alta Vista Well is a safe yield factor which will not impact water dependent sensitive habitats, riparian habitats and marshes, consistent with LUP Policy 2.32(c).

Nonetheless, due to a certain level of uncertainty in scientific data, limitations surrounding short monitoring periods (e.g. 72 hours and 60 days), changed circumstances such as drought and seasonal fluctuations, it is always prudent to continue monitoring well pumping activities for potential impacts to nearby streams, wetlands, and other sensitive habitats. Continued collection of data will also be useful to the District and the Commission when evaluating potential future phases of the Public Works Plan (i.e. PWP amendments) to draw on additional water supplies to serve new customers as well as priority uses. Monitoring is also supported by LCP Policy 2.32(d), which requires on-going monitoring of the impact of the well on groundwater and surface water levels and quality and plant species and animals of water dependent sensitive habitats, after development authorization, to determine if the preliminary safe yield adequately protects the sensitive habitats and what measures should be taken if and when adverse effects occur.

The District has proposed hydrological and vegetation monitoring plans to ensure compliance with this policy. The hydrologic monitoring plan will ensure that pumping of the Alta Vista well does not affect discharge to springs and streams even during periods drier than those for which test data are available. The Commission finds that the hydrological monitoring plan is adequate to assess any impacts of pumping on nearby streams and springs, which would allow for changes in pumping rate if impacts were noted, consistent with Policy 2.32(d). The hydrological monitoring plan proposes to monitor for three years, and submit a 3-year monitoring report, but it does not specify that this report be submitted to the Commission, and the monitoring plan has not been formally incorporated into the Public Works Plan Document. Without a modification to formally incorporate the hydrological monitoring plan into the PWP document, including a requirement to submit the 3-year monitoring plan to the Commission, the Public Works Plan is inconsistent with the LCP and must be denied as submitted. Therefore, the Commission imposes Modification No. 2(i). As modified, the Commission finds the proposed PWP with respect to the hydrological monitoring plan, consistent with LCP Policy 2.32(d).

The District has also submitted a proposed vegetation monitoring plan to monitor the future health of nearby wetland and riparian vegetation once the production well goes online. However, the proposed vegetation monitoring plan is inadequate to assess the impact of the well on nearby riparian and wetland vegetation because the monitoring plan does not include control areas that are assessed in the same manner as the potential impact area and the proposed field methods will not produce data that are sufficiently accurate and precise to detect impacts if they exist. Therefore, the proposed vegetation monitoring plan is inconsistent with LUP Policy 2.32(d) and the PWP must be denied. However, if modified to require the submittal of a revised vegetation monitoring

plan that corrects these deficiencies for the review and approval of the executive director, the PWP would be consistent with the LCP. Therefore, the Commission imposes Modification No. 2(j). Modification No. 2(j) requires that concurrent with the submittal of the NOID for the A/V well, the District submit a new vegetation monitoring plan that includes a baseline assessment, a description of goals, a formal monitoring plan, a schedule, a description of sampling units, the sampling design, a detailed description of variables to be measured and the field methods used in their estimation, a monitoring period of at least three years, provision for submission to the Commission of annual reports, and provisions for possible future action if there are negative impacts. As modified, the Commission finds that the proposed Alta Vista Well #1 is consistent with LUP Policy 2.32.

#### 4.3.4.2. Impacts to Nearby Domestic Wells

The pumping tests provide several lines of evidence suggesting that pumping of the Alta Vista well will have no impacts on nearby domestic wells. First, the well at 770 Alta Vista road was monitored during the 5-day pump test and no drawdown was detected. Second, the Alta Vista Well lies upgradient of all of the domestic wells. A disproportionate amount of the water pumped by the Alta Vista Well will come from the upgradient side of the well (northeast) rather than from the downgradient side (southwest), in the area of the domestic wells. Third, the domestic wells draw from the weathered bedrock aquifer rather than from the fractured bedrock aquifer. Although there is apparently some leakage of the upper aquifer into the lower aquifer, the bulk of the water in the Alta Vista well appears to be derived from open fractures at depth. Finally, there are modest differences between the chemistry of waters pumped from the Alta Vista Well as compared to water in the surface streams and in the domestic well sampled. This further suggests a separation of the aquifer tapped by the Alta Vista well from those supplying the domestic wells and surface streams.

#### 4.3.4.3. Drinking Water Quality

##### Applicable LCP Policies

##### 2.30 Quality of Water Supply

*Require that the water quality of new supplies for domestic use meet potable water standards and provide the highest practicable quality for floriculturalists.*

##### 2.32 Groundwater Proposal

*Require, if new or increased well production is proposed to increase supply, that:*

- a. Water quality be adequate, using blending if required, to meet the water standards of Policy 2.30.*

- b. Wells are installed under inspection according to the requirements of the State and County Department of Public Health...*

The installation of Well No.1 was under inspection of San Mateo County Department of Environmental Health (DEH), consistent with LUP Policy 2.32(b). The final placement and testing of the well casing was witnessed by DEH, and San Mateo County inspector Panaka Chea was on site to observe and approve the pouring of the seal.

According to the EIR, water extracted from the Alta Vista Well #1 was sampled and analyzed on two occasions (Balance 2005):

- 1) September 22, 2004 after 8 hours of pumping at 300 gpm
- 2) November 7, 2004 after 5 days of pumping at 300 gpm

The samples were analyzed for general mineral composition and Title 22 inorganic constituents by Soil Control Laboratories in Watsonville.

Both samples collected satisfy Title 22 drinking water standards for the constituents tested, and meet source-water concentration requirements for connection to a municipal water supply. Based on the sample results, the overall quality of water from Alta Vista Well #1 is considered to be some of the freshest and seemingly most healthful reported from San Mateo County (Balance 2005).

A groundwater contamination site is present approximately 2,000 feet southeast of the Alta Vista Well #1. Sampling results dated November 26, 2003 indicated that groundwater at this offsite property contains 6,050 micrograms per liter of total petroleum hydrocarbon, 135 micrograms per liter of benzene, and 529 micrograms per liter of methyl tertiary butyl ether (MTBE). The groundwater at the release site is currently undergoing pump and treat remediation to prevent the contamination plume from migrating.

The hydrological assessment of Alta Vista Well #1 shows that most recharge to pumping Alta Vista Well #1 comes from areas to the north and east of the well, and especially from areas nearest to the well. Offsite groundwater contamination is located southeast of Alta Vista #1, but is not considered a significant threat to water quality at the well based on (Balance 2005):

- 1) The distance from the release to the production well (2,000 feet southeast)
- 2) The MTBE contaminated groundwater site is not located upgradient of Alta Vista Well #1 (the groundwater flow direction is not toward Alta Vista Well #1)
- 3) The contamination is reportedly contained by a pump-and-treat system
- 4) Mitigating for potential drawdown responses and monitoring for effects to wetland and riparian vegetation near the well (Suggested Modification No. 2(h) and (i)) would further reduce any potential to draw groundwater upgradient from the contaminated area.

Well production is not expected to affect water quality in the local surface water or wetlands. The groundwater contamination plume will continue to be contained by the pump and treat system.

The well operations would not violate any water quality standards or result in waste discharge. The Alta Vista Tank would store water extracted from Alta Vista Well #1. Current water quality sampling indicates that water pumped from Alta Vista Well #1 meets drinking water quality standards and does not require treatment. Should treatment be required in the future, production well water would undergo chlorine treatment at the wellhead prior to storage in the new tank. Consistent with regional practice, the well would be tested for bacteria once it is formally disinfected and flushed, which is usually undertaken just prior to bringing the well into service.

Water stored in the new Alta Vista Tank would meet drinking water quality standards prior to conveyance to District customers or fire response. No waste discharge would result from operations or maintenance of the wells or water tanks.

Therefore, based on all of the above, putting the Alta Vista Well into production at 150 gpm as proposed and storing water in the Alta Vista Tank, is consistent with LUP Policies 2.30 and 2.32.

#### 4.3.5. Schoolhouse Tank

The District is proposing to replace the tank at the Schoolhouse site with a steel tank with a total capacity of 200,000 gallons. This tank would stand at 16-feet-high, with a diameter of 48 feet (if one tank). Located at the west end of Buena Vista Street in Montara, the Schoolhouse Tank site is at an elevation ranging from 175 to 178 asl.

##### 4.3.5.1. Hazards

###### Applicable LCP Policies

LUP Policies 9.1, 9.2, 9.3, 9.10 and certified zoning section 6324.6 (See Section 4.3.3.2 for full text of these policies).

The proposed Schoolhouse Tank site is located within an LCP-defined Hazards Area because it is located within a Seismic Hazard Zone (as defined by the California Geological Survey Seismic Hazard Maps), an area prone to earthquake induced landslides. However, the area is located in an area rated least susceptible to deep-seated landslides with very low risk of liquefaction potential (Brabb et al 2000; Knudsen et al 2000). It is not located within an area defined as highly unstable on the LCP Landslide Susceptibility Areas Map and it is not designated on the Fault and Associated Fracture Zones Areas Map. Therefore, the certified zoning Hazards to Public Safety Criteria apply to the site, but not the Seismic/Fault/Fracture Area Criteria or the Section 6326.4 - Slope Instability Area Criteria.

Section 6324.6(a) of the certified zoning code requires reasonable and appropriate setbacks from hazardous areas. Consistent with this policy, the tank would be located approximately 500 feet northeast from the nearest identified fault (Brabb et al 2000 and Terrasearch 2005) and 1,800 feet northeast of the San Gregorio Fault Zone as mapped by the Association of Bay Area Governments.

Section 6324.6(c) requires structures not to be placed in severely hazardous areas due to soils, geologic, seismic, hydrological, or fire factors, in areas that would be hazardous to persons or property, or where major modification of existing landforms would be required. While the Tank(s) are located in a Seismic Hazard Zone, they would be located in an area rated least susceptible to deep seated landslides with very low to low risk of liquefaction potential. As described above, the nearest fault is 500 feet away. A geotechnical investigation (Terrasearch 2005) conducted at the site encountered stiff medium plasticity sandy clay to 4 feet below ground surface underlain by highly weathered and highly fractured Montara Granite. The Montara Granite consists of very dense gravelly silt and sand with minor clay, extending to at least 41.5 feet. The tank(s) would be located on a 6% slope, which is not considered hazardous in the LCP. Therefore, the tank(s) would not be located in a severely hazardous area.

Development of the tank(s) would not pose a severe hazard to persons or property outside the development. The tank(s) would be designed to meet current seismic standards to ensure structural integrity. Terrasearch, Inc. conducted a geotechnical investigation of the site in 2005 and recommended several measures to ensure structural integrity. These include recommendations for site preparation, grading, appropriate foundations, construction considerations, retaining walls, pavement design, utility trenches, and onsite monitoring during construction by a geotechnical engineer. Terrasearch concluded that construction of the proposed tank(s) is feasible based on these recommended parameters. Suggested Modification 2(c) requires the District to incorporate into a "development standards" section, a requirement to abide by the recommendations of this report when constructing the tank(s).

Further, consistent with Section 6324.6(c) The Schoolhouse Tank construction also would not require major modification of existing landforms to eliminate hazards. Its construction would require cut into the existing hillside in order for the tank bottom to be at the same elevation as the existing tank to allow for balancing the tanks and maintaining constant pressure throughout the District's system, but this minor landform alteration would not be for the purposes of eliminating a hazard. A retaining wall would be constructed on the northeast side of the tank(s) to support surrounding soils.

### Fire Hazards

The California Department of Forestry and Fire Protection (CDF) assesses areas within the state for fire hazard risk by assessing the history and intensity of wildfires in the

area, size, and type of vegetation in the area, and proximity to fire extinguishing resources. The CDF identifies and ranks areas based on levels of severity of risk. Fire hazard rankings affect the fire suppression/prevention measures dictated by the state and local government that must be carried out by developers in the designated areas (CDF and State Board of Forestry and Fire Protection 2000).

The PWP Environmental Impact Report evaluated the potential fire hazards for the Schoolhouse Tank site. The Schoolhouse tank site is a fenced area that includes the existing Schoolhouse Tank and a partially paved section used by the District as a maintenance yard. Much of the soils adjacent to the pavement are bare and vegetation in the proposed tank vicinity consists primarily of small weedy plants. The Schoolhouse Tank site is under the jurisdiction of the Point Montara Fire Protection District (PMFPD). The Schoolhouse Tank would not be located in a high-risk fire area as designated by the CDF as either Wildland Areas or Very High Fire Hazard Severity Zones. Therefore, the project would also not be located in a hazardous area due to fire, consistent with Section 6324.6(a) and (c).

Section 6324.6(e) requires that domestic water pumping facilities shall not be located in any hazards areas unless the County Engineer certifies that direct damage or indirect threats to public health and safety would be unlikely in the event of occurrence of the designated hazard(s). As described above, The Schoolhouse Tank is located in a defined "hazards" area, but is not in a "severely hazardous area." "Domestic water pumping facilities" are not defined in the LCP. This report takes a conservative approach, and assumes a large 1,000,000 gallon water storage tank (or two tanks that equal that capacity) qualifies as a domestic water pumping facility. Therefore, the County Engineer has to certify that the project would not cause damage to public health and safety, as described above. The Commission finds that the Schoolhouse Tank would not cause direct or indirect threats to public health and safety in the event of an earthquake because Suggested Modification #2(c) require adherence to the recommendations put further in the 2005 Terrasearch geotechnical reports and adherence to the recommendations will mitigate any direct or indirect threats to public health and safety. However, 6324.6(e) still requires the County Engineer to certify the project under the above criteria. Therefore, Suggested Modification No. 2(d) requires the District to obtain the County Engineer's certification concurrent with submission of the NOID. As modified, the PWP with respect to the Schoolhouse Tank is consistent with certified zoning section 6324.6(e).

Section 6324(f) states that land that is "unsuitable" for its proposed use for reasons of exposure to fire, flooding, inadequate drainage, soil and rock formations, susceptibility to mudslides or earthslides, severe erosion potential or steep slopes shall not be developed. The section sets up 8 criteria to determine the "appropriateness of development" for a given site:

1. The danger to life and property due to designated hazards caused by excavation fill, roads, and intended uses:
2. The danger that structures or other improvements may slide or be swept onto other lands or downstream to the injury of others:
3. The adequacy of proposed water supply and sanitation systems, and the ability of those systems to prevent disease, contamination, and unsanitary conditions during or following a hazardous event or condition.
4. The susceptibility of the proposed facility and its contents to potential damage, and the effect of such damage to the property:
5. The importance of the services provided by the proposed facility to the community.
6. The availability of a sufficient amount of water, as defined by fire protection agency, for fire suppression purposes.
7. The availability of alternative locations, not subject to hazards:
8. The relationship of the proposed development to the safety, seismic safety, and open space and conservation elements of the SMCO general plan.

As described above, criteria 1, 2, and 4 are met by mitigation measures recommended in the 2005 Terrasearch geotechnical reports. As described in Section 4.3.10, "Alternatives" the proposed sites are the least subject to natural hazards of the available alternatives, and is the only feasible alternative, consistent with criterion 7. As discussed in Section 4.3.1, the proposed water supply and storage is adequate to prevent disease, contamination and unsanitary conditions following a hazardous event, consistent with criteria 3. As discussed in Section 4.3.1, the services provided by the PWP are important to the community and integral to having an adequate supply to meet the needs of existing customers and to have an adequate supply for fire suppression needs, consistent with criteria 5 and 6. Therefore, the PWP as modified is consistent with Section 6324(f) of the certified zoning regulations.

#### Two-Tank Alternative

Since the original PWP Phase I proposal was submitted, the District has requested that an alternative of constructing two smaller tanks instead of one be considered and included in the Phase I PWP. This alternative would place two new 100,000 gallon tanks at the Schoolhouse Tank site. One tank would replace the existing tank, while the other would be placed adjacent to the existing pump station on its southeast side (Figure 4-3 of Exhibit 2). Both tanks would be constructed of steel each with a diameter of 34 feet and a height of 16 feet. The new tanks would both sit at the existing tank's current elevation.

The Commission finds that the geologic conditions at the second tank site, which is located approximately fifty feet from the first tank site described above, are equivalent, and development of the two-tank alternative would have the same geotechnical design constraints evaluated in the 2005 Terrasearch Report. Therefore, construction of the

two-tank alternative is consistent with Section 6324 of the certified zoning regulations and the findings outlined above are hereby incorporated by reference. Suggested Modification #s 1(i) and 1(j) requires the District to update the PWP project description to provide the option of having two water tanks instead of one, with a total storage capacity remaining 200,000 gallons.

#### 4.3.5.2. Visual Resources

LUP Policy 8.5 a requires development to be located where it is least visible from scenic roads and public viewpoints, and certified zoning regulations section 6324.3 requires public utility structures to be designed to have an uncluttered appearance and remain subordinate to the setting.

The Schoolhouse Tank site is currently used as a corporation yard by the District, and shares a fenced enclosure with the existing Schoolhouse Tank (Figure 3.9-1 of Exhibit 2). The site is situated well east of Highway 1 at the northern end of Buena Vista Street in a residential neighborhood. The proposed tank site would be visible when looking north along Buena Vista Street, but the site is not visible from Highway 1 due to intervening topographic features and urban development.

The proposed tank would replace the existing tank with a new, larger capacity tank, resulting in a relatively minor visual change in the site's overall built appearance. Construction of the proposed tank would not require the removal of any existing visual resources such as mature trees or rock outcroppings.

Therefore, the Commission finds that in terms of visual resource protection, the Schoolhouse Tank element of the proposed PWP is consistent with LUP Policies 8.5 and certified zoning regulation section 6324.3 (a).

#### 4.3.6. Airport Wells Treatment Facility

##### 4.3.6.1. Drinking Water Quality

#### Applicable LCP Policies

##### 2.30 Quality of Water Supply

*Require that the water quality of new supplies for domestic use meet potable water standards and provide the highest practicable quality for floriculturalists.*

##### 2.32 Groundwater Proposal

*Require, if new or increased well production is proposed to increase supply, that:*  
*a. Water quality be adequate, using blending if required, to meet the water standards of Policy 2.30.*



*b. Wells are installed under inspection according to the requirements of the State and County Department of Public Health...*

The District extracts approximately 60 percent of its water from three wells located in the “Airport Aquifer.” Northeast of the three Airport production wells and Highway 1, the sub-basin is farmed for brussel sprouts, requiring the use of fertilizer and pesticides, and west of the wells is the Airport facility’s septic leach field. Water from the airport wells contains four water quality constituents of concern:

- Corrosion potential
- Nitrates
- Manganese
- 1,2,3-trichloropropane (TCP)

The northernmost well has levels of nitrate that periodically exceed the maximum contaminant level (MCL) of 45 mg/L, measured as nitrate. The District blends water extracted from the well with water pumped from the other two wells at the Airport, and is in the process of installing a nitrate treatment system. The source of the constituents has not been conclusively determined.

The proposed Airport Wells Water Treatment Facility would be installed to address these water quality concerns. The treatment system would be centrally located and serve all three wells. Water extracted from the three wells would first be blended to treat for manganese and then conveyed through the Airport Wells Water Treatment Facility. Table 3.2-2 lists the operational measures and available technologies to treat each constituent of concern.

<b>Table 3.2-2: Summary of Treatment Components for Airport Wells Water Treatment Facility</b>	
<b>Water Treatment Component</b>	<b>Water Quality Concern Addressed</b>
Granulated Activated Carbon	Trichloropropane
Ion Exchange	Nitrate
Air Stripping	Corrosion, pH adjustment
Chlorination	General Disinfection

SOURCE: SRT Consultants 2005b

Air stripping would also potentially be accomplished by (1) diffused aeration, (2) utilization of a spray nozzle and tray aerator, or (3) aeration by piping a diffuser down the wells and adding air directly into the groundwater.

According to the certified EIR, the water treatment operations included as part of the Airport Wells Water Treatment Facility would ensure that water meets drinking water standards prior to conveyance to District customers. Water treated at the Facility would be used for the District’s supply system and no waste discharge would be generated.

Based on the above, as a result of the proposed water treatment facility, water supplies at the Airport wells site would meet potable water standards, consistent with LUP Policies 2.30 and 2.32.

#### 4.3.6.2. Visual Resources

LUP Policy 8.5 (a) requires that development be located where it is least visible from public viewpoints. Certified zoning regulations section 6324.3 requires public utilities to be of minimum bulk and height and designed to have an uncluttered appearance and remain subordinate to the setting.

The Airport Wells Water Treatment Facility, including a non-reflective solar panel array (mounted on the ground), would be sited along the western eastern edge of the Half Moon Bay Airport just north of the Airport's administration building and café. The Facility site as proposed is oriented in a north-south direction, with the long side parallel to Highway 1. The general visual setting of the Airport is a mix of stucco and metal clad buildings that present a sparsely developed industrial setting similar to other general aviation airports.

Highway 1 is not designated as a State Scenic Highway along the Montara/Moss Beach segment through San Mateo County. The Half Moon Bay Airport is not defined as a scenic vista or resource, although it is part of the overall westerly view from the adjacent Highway 1.

When completed, the proposed Facility would appear similar to the existing Airport wells and other industrial appearing buildings and improvements at the Airport. Generally its relatively small size (approximately 20 feet x 50 feet enclosed with a 7-foot tall chain link fence) compared to other structures at the Airport would make its contribution to the overall visual setting of the Airport minimal. The proposed Water Treatment Facility equipment would be as tall as 9 feet, 2 feet taller than the enclosing chain link fence. Existing development and physical improvements at the Airport can be characterized as industrial in appearance, including a mixture of stucco and metal buildings and structures and a variety of smaller ancillary facilities associated with the day to day operation of the Airport. The proposed Facility would appear from Highway 1 as a slightly larger version of the District's three existing wells (which are also enclosed by 7-foot tall chain link fences). The proposed Facility, including the solar panel array, would visually blend with the balance of the Airport's improvements, particularly to the casual observer, and will not degrade the existing visual character or quality of the site or its surroundings.

The proposed solar panel array, which would be installed outside of the Treatment Facility's fence, would be mounted low to the ground atop a framework to lift the array off of the ground surface. It is estimated that the array would be between 2 and 3 feet

above the ground surface, and extend to a maximum height of approximately 6 feet above the ground surface.

As proposed, the Facility and solar panel array would not significantly impact public views and would be visually compatible with the character of the site. Further, EIR Mitigation Measures 3.9-2 and 3.9-3 would further minimize the facilities' introduction into the view shed. 3.9-2 requires the facility to be rotated 90 degrees from its proposed orientation to an east-west orientation. 3.9-3 requires that a landscape plan be prepared by a landscape architect to generally screen the Treatment Facility equipment and solar panel array from views from Highway 1. The landscape plan shall use native plants and include a mixture of low-lying vegetation, and species that substantially screen the facility and solar panel array from views from Highway 1 within 3 years of installation. Suggested Modification No. 2(e) requires the District to formally incorporate all mitigation measures into the Plan as development standards unless the measures were modified by the Commission in its action on the PWP. Suggested Modification No. 2(q) requires the District to submit the landscape plan stipulated in Mitigation Measure 3.9-3 with the NOID, for review and approval of the E.D.

As modified, the Commission finds that the proposed Airport Wells Treatment Facility is consistent with LUP Policy 8.5 and certified zoning regulation section 6324.3(a).

#### 4.3.6.3. Airport Wells Ownership

The proposed Airport Wells Treatment Facility is located on lands owned by the San Mateo County (San Mateo County Public Works/Airports Division). The Airports Division has objected to the proposed facility. Both Citizens' Utilities Company of California ("CUCC") and California American Water Co. ("CalAm") operated the airport wells under a revocable permit from the County. MWSD acquired the revocable permit from CalAm as one of the assets of the water system. That permit allowed the County to terminate use of the wells on six months' notice. MWSD owns the pumps and related facilities located on the sites and for its operation and improvement of the water system, MWSD also requires ownership of the land.

MWSD filed an eminent domain action against the County to obtain ownership when a purchase agreement could not be reached with the County. MWSD continues to use the well sites under an Order of Possession granted by the Court."

The Airports Division has expressed that the District will need to obtain approval from them as the property owner, and sited several requirements they would have to comply with. Airport staff has also objected to the location of the facility, based on the fact that the area has been identified as an area for an "alternate airport use." The Airport also expressed concern about potential noise and hazardous waste, and emissions impacts associated with the facility, but did not identify any specific impacts, other than that they

would have to be evaluated thoroughly before the Division gives its approval of the facility. The Airports Division also objected to the proposed access road, expressed concern about not knowing where the pipelines would be placed and rehabilitated, and whether the District would comply with their National Pollutant Discharge Elimination System requirements.

To the extent that the concerns summarized above affect coastal resources, they are evaluated below. In addition, the Commission has imposed Suggested Modification No. 2(d), which clarifies that all elements of the Plan must obtain all necessary local agency approvals and property owner permissions prior to construction.

In terms of the potential environmental impacts alluded to in the Airport letter, (e.g. hazardous materials and emissions), the final design and selection of specific equipment for the proposed water treatment system at the Half Moon Bay Airport has not been completed. The analyses related to the Airport Wells Water Treatment Facility presented in the Draft EIR is based on typical equipment appropriate to address the types of water quality issues the District currently faces with water produced from those wells. The Draft EIR discusses the types and levels of noise, air borne emissions, use and generation of hazardous materials or emissions, and other relevant potential effects that could be expected from typical equipment and processes. Mitigation measures throughout the EIR and incorporated into the Plan as modified by the Commission establish performance and permitting requirements prior to installation of the additional water treatment facilities, which are adequate to mitigate any potentially significant impacts of the proposed equipment installation and operation. If the types of equipment or overall system design evolves differently than what is specified in the Plan project description, the District would need to amend the Plan, which would require approval by the Commission and as well as additional environmental review by the District.

#### 4.3.7. Water Quality Impacts from all PWP Elements

##### Applicable LCP Policies

###### Certified Zoning Section 6912.4. Water Resources Criteria (for the Resource Management District [Alta Vista Site])

*(a) Solid and liquid waste discharge and disposal shall not be permitted to contaminate water resources or otherwise adversely affect a marine, aquatic or riparian environment. All discharges which might effect a water body shall comply with discharge requirements as established by the Regional Water Quality Control Board.*

*(b) Discharge of water containing organic nutrients shall be shifted from the aquatic environment to land environments whenever possible when such shift will produce less detrimental effects.*

*(c) To ensure minimal impact on hydrologic processes, grading and other landscape alteration shall be kept to a minimum and the present configuration of*

*landforms shall be maintained to the maximum extent practicable.*

*(d) Site preparation procedures and construction phasing shall be carefully controlled to reduce erosion and exposure of soils to the maximum extent possible.*

*(e) Projects shall utilize methods to maintain surface water runoff at or near existing levels.*

...

*(h) Projects shall clearly demonstrate methods to be employed for management of vegetative cover, surface water runoff, ground water recharge, and erosion and sedimentation processes to assure stability of downstream aquatic environments.*

There are no LCP policies specifically protecting water quality, besides the certified zoning section above for the Resource Management District. However, as part of its responsibility as a lead agency for CEQA review, the District has evaluated the water quality, erosion, and sedimentation issues associated with each project in the proposed Plan, and has crafted mitigation measures to ensure that water quality is protected. Suggested Modification No. 2(e) requires the District to incorporate all the EIR mitigation measures into the Plan unless the measures were modified by the Commission in its action on the PWP. Descriptions of water quality issues and mitigation measures are outlined below.

### Erosion and Sedimentation

Soil particles could be dislodged by the impact of water or wind and then be transported over a broad area, particularly in areas where vegetative cover is removed. If erosion occurs at the project sites, the concentration of sediments and other suspended solids may increase in runoff and receiving waters, leading to a reduction in water quality. Sediments could also accumulate at the entrance of downstream storm drain system inlets and reduce capacity. Implementation of EIR Mitigation Measures 3.1-4, 3.1-5, and 3.1-6 (Geology, Soils, and Seismicity) would reduce construction-related erosion impacts to less than significant levels at all three project sites. Mitigation Measure 3.1-4 requires the District to prepare an Erosion Control Plan (ECP) in accordance with the San Mateo County Watershed Program, to mitigate for erosion and sedimentation impacts during construction at all three sites. This would include a schedule for grading, monitoring, and infrastructure milestones, identification of high erodability areas and unstable slopes, contour and spot elevations indicating runoff patterns before and after grading, and identification of specific erosion control measures, consistent with the requirements of the San Francisco Bay Regional Water Quality Control Board. Mitigation Measure 3.1-5 requires hydroseeding at all three sites with a native seed mix to minimize erosion. Mitigation Measure 3.1-6 requires that a landscape plan be prepared to revegetate the area around the Alta Vista Tank to control erosion (and screen views of the tank from neighboring homes). The landscaping plan would use native species, and include a mixture of trees, low-lying vegetation, and will be implemented one-month after construction is complete. Suggested Modification No. 2(k)

requires that this plan be submitted to the Commission with the NOID for review and approval by the ED.

### NPDES Requirements

Construction activities must also comply with the NPDES Stormwater Program administered by the California Regional Water Quality Control Boards. Dischargers whose projects disturb 1 or more acres of soil or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity (*Construction General Permit, 99-08-DWQ*).

A total of about 2 acres would be disturbed at the Alta Vista site, and therefore, construction activities would require coverage under the NPDES General Permit. Installation of the Schoolhouse Tank and removal of the existing tank would not involve soil disturbance of 1 or more acres, nor does this site qualify as “part of a larger common plan of development” because the site is not contiguous to the Alta Vista or Airport Wells sites. If the District chooses to install solar panels at the Half Moon Bay Airport, there is a potential that construction activities would also require coverage under the General Permit. The District would obtain coverage under the NPDES General Permit for the project components at the Airport if soil disturbance equals or exceeds 1 acre, and any other construction work would comply with the existing SWPPP for the airport.

### Impervious Surface and Drainage

As proposed by the District, the Alta Vista Tank would be located on the east side of the ridgeline where drainage currently flows east-southeast toward Montara Creek. Suggested Modification No. 1(a) and Mitigation Measure 3.1-1 would relocate the tank to the center of the ridgeline, whereby drainage would flow both to the west and east side of the ridge. Alta Vista Wells #1 and #2 are located on the ridgeline where drainage flows southwest and eventually to Daffodil Canyon. The water tank would consist of a steel reservoir placed on a concrete foundation and surrounded by a retaining wall. Project improvements at the wells include installation of concrete pads around the wellheads. Less than 1 acre of impervious surface area would be added to the Alta Vista site.

Although the tank and well improvements would add less than 1 acre of impervious surface area to the Alta Vista site and this net increase of water runoff would not typically be considered substantial, the site is on a very steep slope whereby any increase in runoff could produce significant erosion effects. The runoff can be managed properly, however, to avoid significant impacts from soil erosion or loss of topsoil to the downslope areas through adequate design features. Mitigation Measure 3.1-7 (Section 3.1 Geology, Soils and Seismicity), which is formally incorporated into the Plan as a development standard by Suggested Modification 2(e) ensures that stormwater runoff at

the Alta Vista Tank site is discharged at a rate and volume that reduces the potential for erosion and loss of topsoil to less than significant levels. Mitigation Measure 3.1-7 requires that the drainage of the A/V Tank site be designed to avoid erosion siltation, and loss of topsoil to receiving areas. This may include the addition of an energy dissipater or rip rap at the outlet point to reduce runoff velocity and increase infiltration into the soils. As modified, the Commission finds that the Alta Vista Site is consistent with certified zoning regulation Section 6912.4.

The Airport Wells Water Treatment Facility would potentially add about 5,160 square feet of additional impervious surface area without the addition of solar panels. If solar panels were installed for electricity generation at the Airport, the impermeable surface area would further increase. The current drainage system at the site may not be sufficient to address the net increase of surface runoff from these newly developed areas. Mitigation Measure 3.2-2, which is incorporated into the Plan as a development standard through Suggested Modification 2(l), provides for the development of a drainage plan to ensure that drainage patterns at the site are not significantly impacted. The Plan shall incorporate measures that address runoff from the Water Treatment Facility, the new road to the southernmost Airport well, and solar panels.

#### Nonpoint Source Pollution

The proposed Alta Vista tank and wells would not introduce non-point source pollutants such as automobiles (rubber residue from tires, gasoline, oil, and other automotive fuels), herbicides, pesticides, or fertilizers. Additional chlorine potentially stored at Alta Vista Well #1 would be stored on a concrete pad within secondary containment to avoid discharge off the site.

The installation of the Schoolhouse tank would not cover previously permeable surfaces and would not increase runoff volumes beyond existing conditions. Tank operations would not introduce non-point source pollutants into water runoff.

The proposed Airport Wells Treatment Facility would not introduce nonpoint source pollutants into water runoff, either. Chlorine that is relocated from the existing Airport wells to the Airport Wells Water Treatment Facility would be stored on a concrete pad within secondary containment to avoid discharge off the site.

#### 4.3.8. Procedures

Coastal Act section 30605 provides for public works plans (PWP) to be submitted for approval by the Coastal Commission as a means to facilitate review of individual public works projects:

***Section 30605.*** *To promote greater efficiency for the planning of any public works . . . and as an alternative to project-by-project review, plans for public*

*works . . . may be submitted to the commission for review in the same manner prescribed for the review of local coastal programs as set forth in Chapter 6 commencing with Section 30500). . . .*

Pursuant to this section, the standard of review for plans in areas with certified LCPs is conformity with the LCP. In addition, after approval of a PWP, any subsequent review by the commission of a “specific project contained in the certified plan” shall be limited to imposing reasonable conditions (PRC 30605, 30607). Coastal Act section 30606 requires that the public agency proposing a public works project contained in the PWP notify the Commission and other interested persons, organizations, and governmental agencies of the impending development and provide data to show that it is consistent with the certified public works plan at least 30 working days before the development commences.

The Commission’s regulations provide further detail on the review of PWPs and subsequent development reviews pursuant to an approved PWP (CCR division 5.5, sections 13350-13371). In particular, section 13357(a)(1) establishes that the purpose of the Commission review of a PWP is to “define the scope of review of any subsequent project contained in the plan.” Section 13377(a)(5) states that subsequent Commission review of specific projects contained in the PWP shall be to “determine the conformity of the project with the certified public works plan....” Under CCR section 13359(b), the Commission may require development conditions to “bring the project into conformance with the approved plan.”

The only development that may be approved pursuant to a certified PWP is that which is specifically contained in the PWP. Therefore, it is critical that the PWP clearly specifies what development is contained in the PWP. Any development not contained in the PWP must be authorized either through the regular coastal development permit review process (in this case by San Mateo County pursuant to its LCP); or through a PWP amendment approved by the Coastal Commission and subsequent approval through the PWP project review process.

In this case the MWSD PWP proposes a specific list of 11 water system improvement projects that may be pursued in the future under the PWP (see Project Description above and Exhibit 2). In order to clearly state the scope of development authorized by the PWP, modifications are needed to assure that the PWP only authorizes these 11 projects. Other than the modifications discussed previously that are necessary to bring the PWP into conformance with the County’s LCP, the PWP contains sufficient detail on the type, location, and intensity of development that would be authorized by the PWP. A Modification is also required to add processing procedures to the PWP text, because the PWP as proposed does not contain these procedures. These procedures must spell out Coastal Act and regulatory requirements including the procedural requirement that developments not contained in the PWP must be authorized either by the Commission’s coastal development permit review process in its retained jurisdiction, or by County of



San Mateo pursuant to its certified LCP. Because the PWP as proposed does not contain these procedures, it must be denied. However, if modified to include procedures that spell out the Coastal Act and regulatory requirements described above, the PWP would implement the LCP consistent with the Coastal Act. Therefore the Commission imposes Suggested Modification No. 2(a).

Suggested Modification 2(a) outlines processing procedures, consistent with the Coastal Act, that say that only developments contained in the PWP may be authorized by the Board. Once authorized, the Board must notify the Commission, including providing the Commission with a Project Report that summarizes the approved project as well as all relevant environmental information and an evaluation of project consistency with the PWP. Once the Commission receives this notice, it must review the notice to determine whether more information is needed to determine consistency with the PWP. If no information is needed, or once additional information is received that the Executive Director deems adequate for review, the notice is filed. This date triggers a 30 working day period before which the Commission must have a hearing on the proposed development. At its hearing, the Commission may determine that the proposed development is either consistent with the certified PWP, or that conditions are needed to bring the project into conformance with the PWP. Finally, the procedures section required by Suggested Modification No. 2(a) includes requirements for the extension, expiration, monitoring, and enforcement of PWP project authorizations.

As modified by adding the procedures contained in Exhibit 3, the Commission finds that the PWP would implement the LCP consistent with the Coastal Act.

#### 4.3.9. Cumulative Impacts

The District's project EIR evaluates the Plan's cumulative impacts based on the following resource areas that have the potential to be affected by the Plan: Geology, soils, seismicity, hydrology, water quality, biological resources, hazards and hazardous materials, air quality, transportation, traffic, noise, aesthetics, and cultural resources.

##### Geology, Soils, and Seismicity

The Alta Vista Tank as modified and mitigated would avoid geologic stability issues by relocating the tank to an excavated site along the centerline of the ridge. The geotechnical investigation report (Terrasearch 2005 and Terrasearch 2008) includes measures to implement prior to and during construction for both of the Alta Vista and Schoolhouse Tank sites, which together with additional mitigation measures outlined in Section 3.1 Geology, Soils, and Seismicity of the project EIR and incorporated into the PWP as modified by the Commission, adequately mitigates these potential effects. The impacts of the project would not combine spatially or temporally with other projects to cause cumulative effects because no other projects are proposed in the immediate vicinity, and the proposed Alta Vista Tank would not cause stability effects to other projects. Other elements of the project would not contribute to cumulative geologic,

soils, or seismic effects. Construction or occupation of new or remodeled residential units, while possibly requiring their own individual soils analyses, would not be expected to be affected by or to affect the underlying geology of either the tank sites or other project element sites. All construction projects would require erosion control measures to avoid significant cumulative effects from erosion. There would be no cumulatively considerable geology, soil, or seismic impacts.

### Hydrology and Water Quality

Principal hydrology and water quality impacts from the proposed Plan could include siltation, excess runoff, effects to surface water flows, and groundwater drawdown. These potential impacts could be caused by other development within the community, although to significantly lesser degrees due largely to the Plan's scale when compared to those other types of potential projects. The individual project sites are small in size (typically less than an acre or two) and are located over 280 feet from local waterways. Mitigation measures and Plan suggested modifications specify measures to avoid and control erosion and siltation. Therefore, the Plan would not cause a cumulatively significant adverse effect from erosion or siltation.

The location of Alta Vista #1 Well is remote and draws from a deep reservoir. The remote location away from most wells and well depth are expected to minimize the potential for effects to other wells and cumulative effects on groundwater (Balance 2005). Several measures, including those included in the "Hydrologic and Vegetation Monitoring Schedule Alta Vista Well" and "Hydrologic and Vegetation Monitoring Plan Alta Vista Well," dated September 5, 2008 have been specified to ensure that significant hydrology and water quality impacts do not result from the proposed project. These measures would similarly ensure that there would be no cumulatively significant adverse hydrology or water quality impacts.

The District relies on the collection of local groundwater for municipal supply to its community, and is currently operating under a supply deficit with no backup water source if a pump or well malfunctions, or existing nitrate, TCP or MTBE contamination worsens. Alta Vista Well #1 provides a new source of water drawn from the deep bedrock aquifer with very good water quality. Alta Vista Well #1 is positioned at the watershed divide, broadly distributing drawdown effects, and is as far removed from stream habitat and wetlands as possible, particularly from anadromous habitat below the dam upstream of George Street.

In 1989, the San Mateo County Environmental Health Division led an assessment of whether well drilling by individual homeowners would have negative environmental effects. These homes, chosen by lottery, were effectively randomly distributed throughout the District's present service area. The County assessment (Hecht and others, 1989) presented conclusions that the well drilling by homeowners could potentially have adverse effects on lower Montara and Kanoff Creeks, and on wetland

and riparian zones along Dean Creek in Moss Beach. Thus, other local water supply alternatives considered to date, such as pumping from alluvial wells or additional pumping from existing wells, would have greater effects to stream habitats than the proposed Plan. The proposed Public Works Plan Phase I as modified includes measures to avoid adverse effects to surface water and sensitive stream habitats and would, therefore, avoid causing cumulatively significant adverse hydrologic effects.

### Biological Resources

The proposed water production from the Alta Vista Well #1 has the potential to cause a significant impact on nearby biological resources, as described in Sections 4.3.4.1, Sensitive Habitats and Water Quality. Suggested modifications to the Plan have required mitigation measures and development standards to be incorporated into the Plan that are designed to ensure that no significant impacts to water quantity, quality, or sensitive biological resources would result from the proposed production of Alta Vista Well #1 and the construction of Alta Vista Tank. No other elements of the proposed project would be expected to cause significant impacts to biological resources. The mitigation measures and development standards define monitoring and mitigation to ensure proposed production from the Alta Vista well would be within rates that would not cause significant effects to water levels or quality, or to surface biological resources. New, private water wells intended to serve individual home sites could cause localized impacts on surface biological resources if they were drilled in the project area (depending on location and the specific groundwater source they tapped). However, the measures incorporated into the Plan, as modified by the Commission, would ensure that there would be no cumulatively significant adverse biological impacts attributable to the proposed Plan.

### Hazards and Hazardous Materials

Construction activities for the proposed Plan specific projects or for unrelated new residential or commercial development typically involve the use of limited quantities of hazardous materials such as paints, solvents, and mastics. It is expected that these commercially available materials would be used in accordance with container labels and applicable regulations. Therefore, there would be no cumulatively considerable hazard or hazardous material impacts from construction.

Post construction, the proposed Plan would include the transport and use of limited quantities of hazardous materials (such as chlorine) employed in water filtration systems. Mitigation from the EIR has been incorporated into the Plan through Commission suggested modification to ensure that adequate precautions are taken in the transport of hazardous materials and that the storage and use of such materials is conducted according to manufacturer recommendations and applicable regulations. Residential uses are not typically associated with the post construction use of large quantities of hazardous materials. Some commercial enterprises could employ hazardous materials as an integral component of their business. If a business did utilize

significant quantities of hazardous materials in their day-to-day business operation, it would be required to adhere to strict procedures for the transport, storage, and handling of such materials. Therefore, there would be no cumulatively significant adverse post construction hazard or hazardous material impacts.

### Transportation and Traffic

The proposed Plan would cause additional vehicular trips in the area from construction vehicles during construction. This additional traffic would be short term, but could result in localized congestion at the tank sites and could also temporarily limit emergency access. Mitigation identified in this EIR and incorporated into the Plan as modified would reduce any potential short-term impacts to less than significant levels. Since the Plan would not accommodate new development by providing new water connections, the Plan would not cause additional vehicle trips associated with residential development in the community. Construction of other development within the community unrelated to the Plan would also be expected to generate short-term construction traffic, although not likely to the same level as the proposed project elements. The principal concern at the cumulative level would be the concurrent construction of one of the proposed water tanks near a development site of a new residential unit. If that were to occur, it would require coordination between the two construction efforts to ensure that no traffic impacts would occur. There are no known pending applications for development of more than one or two new single family homes in the vicinity of the Alta Vista or Schoolhouse Tanks. This is not expected to be a significant issue and it is reasonable to expect open cooperation between construction efforts. Therefore, there would be no cumulatively significant adverse construction traffic impacts.

Operation of any of the proposed project's elements would not be expected to generate significant numbers of new trips over that which is currently generated at the various project sites. Other new development within the community is generally limited to a few new residential units due to the moratorium on new water connections to the District's system. Thus, 10 trips per new single family detached home may be added at most. That traffic generation rate per new single family home multiplied 3 or 4 times throughout the community and in combination with the relatively minor potential increase in traffic associated with the proposed project elements would not result in the collective generation of traffic impacts. Therefore, there would be no cumulatively considerable post-construction traffic impacts.

### Aesthetics

The most visually prominent elements of the Plan are the Alta Vista and Schoolhouse water tanks. Both tanks would result in the addition of large, built structures to the local community, although the Schoolhouse Tank would serve as a replacement for the existing Schoolhouse Tank. The Alta Vista Tank is consistent with the LCP 18-foot-high requirement for ridgelines, and would not be visible from Highway 1.

Mitigation measures have been identified in the EIR and incorporated into the Plan as modified to reduce any potential visual and aesthetic impacts associated with development of the two water storage tanks.

New residential and commercial development within the community would similarly add built structures to the visual environment. The County has an established design review process for new structures such as those for residential and commercial use to ensure conformance with the natural setting of the area.

The proposed Plan as modified includes mitigation measures to avoid significant visual effects. This project would not combine with other known or planned projects that add built structures to the local community, whether water tanks or traditional residential and commercial structures, to cause cumulatively considerable aesthetic and visual resource impacts. The mitigation measures to address potential impacts of the tanks, in combination with the County's design review process that is intended to ensure compatibility of design, would avoid significant adverse cumulative effects.

#### Cultural Resources

The potential for encountering cultural resources during construction of the proposed Plan is considered minimal. Mitigation has been identified in the EIR and incorporated into the Plan as modified that outline procedures to employ should resources be discovered during ground disturbing activities. The construction of limited unrelated new residential or commercial development would be expected to adhere to similar conditions and direction imposed by the County during its development review process. Therefore, there would be no cumulatively significant adverse cultural resource impacts.

#### 4.3.10. Alternatives to Phase 1 PWP

The District's EIR for the Phase I PWP identified and evaluated several alternatives to the proposed PWP. Section 15126.6 of the CEQA Guidelines requires that a range of reasonable alternatives to the project that would feasibly attain the basic project objectives and avoid or substantially lessen any significant effects of the project be evaluated. Alternatives may be eliminated from detailed analysis if they fail to meet the most basic of project objectives, are determined to be infeasible, or cannot be demonstrated to avoid or lessen significant environmental impacts.

There is currently a water supply and storage deficit in the District's water system. The primary objective of the District's Public Works Plan Phase I is to improve specific portions of the District's water system to ensure an adequate and reliable supply of water for its existing customers for domestic and fire protection uses. The proposed improvements are not intended to, nor would they accommodate, expanded existing

connections or new connections to the system, nor would the improvements enable the District to ease or lift an existing moratorium on new water service connections.

To achieve the project objective, the District has proposed adding supply and storage capacity, as well as improving treatment of existing groundwater wells. The critical attribute in the District's objective is one of time. The added water supply and storage, as well as improved treatment of groundwater, are immediate needs. This limits the range of viable alternatives.

### Supply

The alternatives considered for additional water supply include:

- ◆ Additional Groundwater Extraction
- ◆ New Surface Water Diversion
- ◆ Desalination
- ◆ Water Purchase and Wheeling

### Additional Groundwater Extraction

The District drilled several test wells on properties throughout its service area in an effort to locate viable, high quality sources of groundwater for use within the District. Among the wells that encountered groundwater, the proposed Alta Vista Well #1 was found to have the largest production potential at 300 gpm or more. The other wells drilled by the District that intersected viable water sources have estimated production rates of 10-20 gpm. That could translate into a need for 10 or more smaller production wells to equal the potential of the Alta Vista Well #1 and to fulfill the District's existing water supply deficit.

While multiple wells could be drilled, the District's lack of property ownership for that number of potential well sites, the costs associated with completion and operation of that number of smaller wells, possible costs and environmental impacts associated with the infrastructure required to connect that many wells to treatment systems, and the significantly greater capital expense to bring that number of wells on line makes this alternative infeasible.

### New Surface Water Diversion

An alternative or supplement to groundwater extraction is diversion of existing surface flows, such as the diversion the District currently employs for a portion of the Montara Creek flow. In addition to Montara Creek, the Martini, San Vicente, and Denniston Creeks flow through the Montara area.

The District has extraction rights on Montara Creek for up to 200 gallons per minute (gpm), although the District currently diverts only about 70 gpm at peak flows. Increasing diversion along Montara Creek may be possible, although the downstream

effect of higher diversion rates are unknown, and could significantly impact downstream sensitive resources, including the wetland located east of the Alta Vista site.

Denniston and San Vicente Creeks supply water to the Coastside County Water District (CCWD); the District does not hold diversion rights along either of these creeks. Similarly, the District has no water rights on Martini Creek; diversion rights are currently held by private landowners along the creek and by the California Department of Parks and Recreation.

Diverting from Martini Creek or increasing diversion from Montara Creek is only practical if the creeks flow year round. Construction of dams to capture and store winter stream flows for future release in the summer time is at this time considered impractical due to the physical characteristics of the streams' settings, and the range of potential impacts associated with dam construction.

The District diverts and treats water from Montara Creek year round. In winter months, when flows in the creek are more plentiful, diversions from the creek decrease due to high turbidity that the Alta Vista Water Treatment Plant is unable to adequately treat. Diversion of wintertime flows, therefore, would require changes and/or additions to the treatment plant.

Diversion of Martini Creek water would most likely require the construction of treatment facilities.

Although limited water quality data are available, it is reasonable to anticipate water quality similar to that of the raw water from Montara Creek.

Alternatives including new or enhanced diversions are not feasible because of their potential to cause significant environmental impacts and due to the anticipated implementation schedule of over 10 years, which is well beyond the District's immediate needs.

#### Desalination

Desalination is a process that removes dissolved minerals from seawater, brackish water, or treated wastewater. Brackish and seawater desalination may be considered a long-term option, particularly if the opportunity arises to develop this resource on a regional basis. Technological advancements may make this option significantly more attractive in the near future. While the District is beginning investigation of this option, this alternative is not feasible due to its potential environmental impacts and the long time frame required to conduct a feasibility study, design a system, conduct environmental review, secure permits, and construct a system, all of which would extend well beyond meeting the District's immediate needs.

#### Water Purchase and Wheeling

One option on the water supply side of the District's objective is the possible purchase of water from neighboring water agencies and "wheeling" it through adjacent infrastructure to the District's distribution system. While this is an attractive option due to its relatively minimal infrastructure construction requirements, none of the adjacent agencies have water available for sale due largely to the current over-subscription of water from the Hetch Hetchy system, which is one of the principal sources for the San Francisco Bay Area.

#### Water Conservation and Repair of Substandard Leaky Pipes

Commission staff requested that the District evaluate this alternative in addition to the above alternatives already evaluated in the EIR because according to the 2004 Water System Master Plan, unaccounted water increased significantly from 2000 to 2003. Commission staff requested an analysis of whether repair of leaky pipes and other substandard facilities that contribute to "unaccounted water" would make up the water supply deficit as an alternative to developing a new supply. However, the water supply and storage deficits necessitated by the Phase I PWP still remain despite the strides in water conservation and system repairs that the District has already undertaken. Since 2003, the District has replaced seven water mains with the greatest leakage history in the system. Other measures are also being implemented, including replacing customers' water meters and monitoring for individual water losses. The new meters, in particular, more accurately measure consumption. The District is a strong proponent of efficient water usage and is in compliance with the Best Management Practices (BMPs) established by the California Utilities Water Conservation Task Force. Additional measures to address remaining unaccounted-for water loss (if any), e.g., replacing all water mains not already replaced, are not justified under industry standards and would be cost-prohibitive. In view of the foregoing, unaccounted water loss is not a factor regarding water storage and demand requirements.

#### Alternative to Airport Wells Treatment Facility

The alternative to the Airport Wells Water Treatment Facility would be to treat the groundwater at each individual well. This would involve installing individual treatment systems at each of the three wellheads. The District has discounted this option based on the higher costs associated with operating and maintaining three different treatment systems. This alternative would not reduce any significant effects.

#### Water Storage Alternatives

The Phase I PWP EIR summarizes several alternatives to achieve the needed water storage needs as articulated in the project purpose. These alternatives include different size storage tanks at various sites owned by the District. They are summarized in Table 5.2-1 of the EIR (Exhibit 8). Constructing a one million-gallon tank at the Alta Vista site and a 200,000-gallon tank at the Schoolhouse site offers the District a better balance in storage in those two key locations and provides for sufficient tank turnover to prevent



water quality issues. The other alternatives either don't provide enough storage to achieve the deficit, or rely on infeasible locations to put additional storage tanks (The District does not own sufficient land to add a second tank at the Portola Hills site. Further, the well capacities that supply the existing Portola Hills tank are insufficient to supply a larger tank).

The District proposed a specific project for several sites for storage currently under District control (via ownership or lease). The District does not currently own or control other properties that would be of a size or location to provide viable storage at this time. The storage of water requires consideration of the proximity to existing infrastructure and needed water pressure (typically addressed via a tank's elevation to allow gravity flow of water throughout the distribution system).

### Alternatives to the Alta Vista Tank

#### Alternative 1

As currently proposed in the Phase I PWP document, the Alta Vista Tank would be dug into the hillside of Alta Vista ridge. Due to the potential geologic hazards associated with landslides, water quality and habitat impacts associated with erosion, and the sensitive habitat impacts associated with vegetation clearing, the EIR imposes as mitigation relocation of the tank to an alternative site on top of the ridge (Alternative 1). Commission staff required the District to provide further analysis of this alternative to ensure geologic stability, visual compatibility, and avoidance of sensitive habitats for sensitive raptor species, Dusky Footed Woodrat, and the American Badger. The reasons and feasibility for Alternative 1 are described below.

According to the EIR, the proposed siting of the Alta Vista tank would result in a portion of the tank's profile extending beyond the easterly Alta Vista slope face. The tank would be visible from homes along the east side of Alta Vista road as well as homes and travelers along Riviera Street.

The original geotechnical investigation report (Terrasearch 2005) recommends supplemental investigation downslope of the proposed tank site, consisting of drilling one or two borings at the toe of the slope to evaluate deep-seated slope stability. These activities at the toe of the slope could result in significant impacts to sensitive biological resources through the removal of vegetation, habitat, potential direct harm to protected species, or diversion of the spring feeding the wetland.

To avoid these impacts, the preferred alternative would be the same as the proposed project with a revised location for the Alta Vista water storage tank. The tank and its associated improvements would be sited on the ridgeline's centerline (exhibit 5). The tank site would be excavated 12 feet and the tank placed in the excavated area to reduce to be consistent with LUP 18-foot height requirement on ridgelines. A retaining wall would be installed around and within the excavation to retain the embankment. A

recent geotechnical investigation (Terrasearch 2008) concludes that the site is stable for the proposed tank (see Hazards section 4.3.3.2). The tank location would also maintain a buffer of 25-feet from Dusky-Footed Woodrat habitat, and would maintain the fire access road around the tank.

The construction methods would be similar to those described for the proposed project, with the exception that there would be no need for repair of earthflows and/or landslides on the easterly face of the Alta Vista ridge.

The hydrology and water quality effects of Alternative 1 would be essentially the same as the proposed project. The alternative location would avoid the potential to affect the wetland spring at the toe of the slope. All hydrology and water quality mitigation measures identified for the proposed project would apply to Alternative 1. The effects would be less than significant with implementation of the mitigation measures.

Vegetation removal for the alternative tank location would be less than that required for the proposed tank. The alternative site would also eliminate the need to remove portions of the coastal scrub community along the east slope of the ridge. Although the alternative siting would require the removal of a few scattered trees present along the existing unpaved road, it would eliminate the need to remove the planted cluster of Monterey cypress trees on the east side of the ridgeline. Mitigation for conducting a tree survey prior to tree removal would apply to the alternative tank location.

The alternative tank location would avoid the possibility of surface disturbance at the toe of the slope in areas that may support sensitive species (e.g., California red-legged frog).

The unpaved extension of Alta Vista Road would be realigned to the west side of the tank to continue to provide access north of the tank for maintenance of the Alta Vista wells and also for allow access to that area by fire fighting equipment. The realigned road could be designed to continue to provide access for emergency vehicles to the area north of the tank as well as for those vehicles associated with operation of the tank and Alta Vista Wells #1 and #2. The mitigation measures for the proposed project would apply to this alternative. The effects would be less than significant with implementation of the mitigation measures.

The tank would not likely be visible from Highway 1 for a number of reasons:

- 1) The tank site is approximately 4,000 feet from Highway 1
- 2) The relatively short viewing period along the Highway (approximately 5 seconds)
- 3) The ridgeline is not clearly discernable as an individually prominent feature when viewed from Highway 1
- 4) The tank will be painted green to blend with the landscape
- 5) Screening vegetation (including native species typical to the area) will be planted

around the tank

These factors, along with implementation of the mitigation measures for the proposed project also applied to this alternative, would result in a finding that the effects would be less than significant with implementation of the mitigation measures.

The alternate tank location would reduce the potential for effects to undiscovered cultural resources by avoiding the surface disturbance for geotechnical investigations at the toe of the slope. The mitigation measures for the proposed project would apply to this alternative. The effects would be less than significant with implementation of the mitigation measures.

### Alternative 2

Another potential alternative for water storage at the Alta Vista site could be the construction of multiple smaller tanks on the ridge. For example, Alternative 2 could consist of two 500,000 gallon tanks or four 250,000 gallon tanks. It has been put forth by members of the community that the construction of smaller tanks would be less visually intrusive and safer for the community in the case of tank rupture. However several constraints already discussed in this report make Alternative infeasible and inconsistent with visual resource and sensitive habitat policies of the certified LCP.

Smaller structures may be inherently stronger, and perhaps less susceptible to harmonic resonance during an earthquake, all else being equal. The consequences of failure could be less with a smaller tank (e.g. release of 500,000 gallons at a time versus 1,000,000 gallons all at once). However, The potential for catastrophic failure at the ridge site has already been evaluated by Terrasearch (2008), and the site is stable and safe for a 1,000,000 gallon tank. Further, the construction of two or more tanks, albeit smaller, would take up a much larger footprint than one tank, as each would require excavation and its own access road. This would spread out the visual impacts across the ridge top, instead of clustering and concentrating the single tank next to the existing tank. The visual impacts from the trails above would be significantly worse than the single tank clustered next to the existing tank. Moreover, certified zoning regulation section 6324.6 requires public utility structures designed to have an uncluttered appearance and remain subordinate to the setting.

In addition, the increased footprint that would be required for multiple tanks would encroach into sensitive habitat for the Dusky Footed Woodrat, inconsistent with LCP sensitive habitat policies, as described in Section 4.3.3.1. The ridge top location for Alternative 1 was carefully delineated by the District to avoid sensitive habitats, geologic hazards, and visual resource impacts.

### No Project Alternative

Section 15126.6(e) of the CEQA Guidelines requires consideration of the environmental

consequences if the project is not constructed. The No Project alternative would maintain the District's existing facilities and existing water production/diversion, storage, and treatment levels.

The No Project alternative avoids any direct impacts associated with the proposed project.

The No Project alternative avoids potentially significant and mitigable environmental impacts however, it would perpetuate the District's current water supply and storage shortages that prevent the District from fully serving its existing customers. This condition is at best undesirable for the District's existing customers due to lack of water availability for domestic and fire protection uses, and with unsuitable water quality from several of the existing wells. The No Project alternative would continue a condition that is regarded as unsafe.

#### Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines stipulates that "If the environmentally superior alternative is the No Project alternative, the EIR shall also identify an environmentally superior alternative among the alternatives."

The EIR states that No Project alternative would maintain the District's current condition with regard to inadequate supply, storage, and treatment to meet current customer demands. The No Project alternative would avoid all of the potentially significant and mitigable environmental effects of the proposed project; however, the significant effects of inadequate water supply and inadequate fire protection water storage would result from the No Project alternative.

The proposed project, without mitigation, would result in several potentially significant impacts. All potentially significant impacts could be mitigated to less-than-significant levels with implementation of mitigation measures outlined in this report and incorporated into the Phase I PWP as modified. This includes Suggested Modification Nos. 1(a), 1(d), 2(b) (EIR mitigation # 3.1-1) which requires siting the Alta Vista Tank as depicted in Exhibit 5 (Alternative 1). Alternative 1 would be the environmentally superior alternative.

#### **4.4. California Environmental Quality Act (CEQA)**

Pursuant to Public Resources Code Section 21067 and Sections 15050 and 15051 of Title 14 of the California Code of Regulations, the Montara Water and Sanitary District is the lead agency for CEQA purposes as it is the public agency with principal responsibility for carrying out the project. As the lead agency under CEQA, the Montara Water and Sanitary District (MWSD) certified an EIR for this Plan in March 2006.

As an agency with a certified regulatory program under CEQA section 21080.5, the Commission must consider alternatives and mitigation measures that would lessen any significant environmental impacts that the proposal would otherwise have on the environment. Sections 13371 and 13356(b)(2) of Title 14 of the California Code of Regulations require that the Commission not approve or adopt a PWP unless it can find that, "...there are no feasible alternatives, or feasible mitigation measures,...available which would substantially lessen any significant adverse impact that the development...may have on the environment."

The Commission incorporates its findings on LCP consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report.

As discussed in the findings above, the MWSD Phase I PWP (2-06-006), as modified herein, is consistent with the applicable policies of the San Mateo County Local Coastal Program. The findings, which are hereby incorporated into this section by reference, also demonstrate that alternatives and mitigation measures that would lessen any significant environmental effects have been considered. All feasible alternatives and mitigation measures that would substantially lessen any significant adverse effect have been incorporated through modifications to the MWSD Phase I PWP. There are no other feasible alternatives or mitigation measures that would substantially lessen any significant adverse impact that the approval would have on the environment. As modified, the PWP will have no significant adverse impacts on the environment.