

Issue	Less Than Significant or No Impact	Potential Significant Impact Adequately Addressed in MEIR	MEIR Required Additional Review: No Significant Impact	Less Than Significant Impact Due to Mitigation Measures in Project Description	New Additional Significant Impact Not Addressed in MEIR	New Additional Mitigation Measures Required
<b>5.16 Utilities and Service Systems.</b>						
Would the project:						
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, State, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting**

Most utility services for the Mountain House community are provided by the Mountain House Community Services District (MHCS D) as required under the Master Plan. The utility infrastructure, consisting of a water distribution system, a sanitary sewer system, and a storm drain system, has been constructed for the development of Neighborhoods E, F, and G (all part of Specific Plan I). These utilities would be extended north to serve Neighborhoods I and J.

**Water**

Water Supply. The Byron Bethany Irrigation District (BBID), under contractual relations with the MHCS D, is providing raw water supply to the MHCS D. Historically, BBID has diverted water for agricultural irrigation in the area to be occupied by Mountain House south of Byron Road. Between 1976 and 1991, this supply averaged 9,413 acre-feet per year (afy). BBID has agreed to continue to divert that much water to supply the Mountain House development.

Historically, BBID diverted water only during the irrigation months of April through September, but BBID and the State Department of Water Resources (DWR) reached a trade agreement whereby BBID can divert the same quantity of water year-round to supply Mountain House. As a result, the MHCSD has a water services agreement with BBID for 9,413 afy of water to supply the Mountain House community. BBID has pre-1914 appropriative water rights based on historical use; thus, the MHCSD water supply is secure under California water law. Under the water services agreement, BBID can supply more than 9,413 afy if excess water is available.

Sometimes, during droughts, there is not enough water in the State's water supply system to satisfy all municipal, agricultural, and environmental demands throughout the State. During these situations, the DWR must allocate what water is available to the various demands, which sometimes means that municipalities do not receive the amount of water to which they are normally entitled. However, BBID is in a unique position to avoid supply curtailments during droughts. Section 9 of the 2003 agreement between DWR and BBID allows BBID to divert up to 50,000 afy from the Harvey O. Banks Pumping Plant intake channel (part of the California Aqueduct). Section 4 of the agreement "provides that regulatory restrictions imposed by State or federal agencies for environmental, drought or other purposes that affect the ability of DWR to make water diversions from the Delta shall only be applied to BBID if they are imposed directly upon BBID by law" (Gilmore, 2004). In addition, "as a holder of pre-1914 water rights, the District's (i.e., BBID) water supply from this source (the intake channel) is not affected by hydrologic conditions. The District has never experienced a reduction in water right due to a hydrologic condition" (CH2M Hill, 2004). Therefore, there appears to be very little chance that the MHCSD supply from BBID would ever be reduced in times of drought.

Water Facilities at Mountain House. Water facilities have been constructed to serve Mountain House as it is developed. These facilities include the following:

- A raw water intake pump station on the California Aqueduct with two 5-million-gallon-per-day (mgd) pumps and space for two more pumps in the future;
- A 30-inch diameter raw water pipeline from the intake to a water treatment plant (WTP) located on the north side of Byron Road in the southern part of Neighborhood I;
- A WTP with two redundant treatment units, each with a capacity of 2.5 mgd, a 4.4-million-gallon raw water storage tank, and a 5.5-million-gallon treated water storage tank, all located at the WTP site; and
- Treated water distribution systems consisting of pumps and pipelines to serve Neighborhoods E, F, and G.

A WTP should have enough capacity to supply its service area on the day of maximum demand for water, which usually occurs on a hot summer day. A 20-mgd WTP would be necessary to supply the maximum-day demand of the

Mountain House community at buildout. To comply with the California Environmental Quality Act (CEQA), an Initial Study was prepared for the 20-mgd WTP that addresses all potential environmental impacts associated with construction of the WTP to full capacity (SJCCDD, 1997). In 1997, San Joaquin County issued a Use Permit for the WTP. Expansion to 15 mgd started in mid-2006 and is expected to be completed by summer 2007 (Karam, 2006).

The WTP is operated under a license from the California Department of Health Services (DHS), and the treated water meets all the primary and secondary water quality requirements issued by DHS as well as the United States Environmental Protection Agency. The treated water consistently has turbidity less than maximum regulatory limit.

Any sludge generated from the WTP will be disposed at Forward, Inc., a Class II landfill within San Joaquin County, or transported outside the County for disposal (Karam, 2006).

Water Service in Project Area. The areas north of Byron Road were previously annexed into BBID and would be served by the MHCSD. Several farm irrigation facilities currently exist in the proposed project area and related Tentative Subdivision Map sites. They include irrigation distribution canals and drainage conveyance pipelines and ditches, and surface runoff tailwater ditches. These tailwater ditches temporarily collect irrigation water runoff and detain excess water prior to discharge into runoff conveyance lines. Water flows in these ditches temporarily during the irrigation season. Additional detailed information regarding farm irrigation is included in the Specific Plan II Farm Irrigation and Drainage Reports and is also addressed in Section 8, Hydrology and Water Quality.

### **Wastewater**

Wastewater collection, treatment, and disposal facilities have been constructed to serve Mountain House as it is developed. These facilities include the following:

- A 0.45-mgd wastewater treatment plant (WWTP) located near the northeast corner of Mountain House. The WWTP has recently been expanded and improved to provide treatment for 3.0-mgd average dry weather flow; this expansion is expected to begin operating in early 2007 (Karam, 2006).
- Two temporary 60-million-gallon treated effluent storage basins used primarily to hold effluent during wet weather.
- A 200-acre temporary effluent disposal area located north of Byron Road within the Mountain House community (east of Neighborhoods I and J) with piping to allow flooding of the area.
- Sanitary sewer systems to serve Neighborhoods E, F, and G.

A 5.4-mgd average annual flow WWTP would be necessary to treat the sewage generated by the Mountain House community at buildout. An Initial Study was

prepared for the 5.4-mgd WWTP to address all the potential environmental impacts associated with construction of the WWTP at full capacity (SJCCDD, 1998). In 1998, San Joaquin County issued a Use Permit for the WWTP.

The WWTP is currently operated under waste discharge requirements contained in Order No. 98-109 issued by the Central Valley Regional Water Quality Control Board (RWQCB). Treated effluent from the WWTP is currently disposed by means of flooding<sup>1</sup> on approximately 200 acres of land located north of Byron Road east of Neighborhoods I and J between the months of April and November. The land is owned by Shea Homes and the MHCSD has an easement to use this area for land disposal. Land disposal is prohibited during the rainy season from November to March; thus, two 60-million-gallon treated effluent storage ponds have been constructed between the WWTP and the land disposal area to hold the effluent until land disposal can recommence.

Any sludge generated from the WWTP will be disposed at Forward, Inc., a Class II landfill within San Joaquin County, or transported outside the county for disposal (Karam, 2006).

### ***Storm Drainage***

The sites for Neighborhoods I and J were formerly used almost entirely for agriculture and grazing pasture, so an urban storm drain system did not exist in these areas. Mountain House Creek traverses the boundary between Neighborhoods J, K, and L, while Dry Creek crosses through the middle of Neighborhood I. These two creeks flow in natural and man-made earthen channels. Existing drainage of lands on both sides of these two creeks consists of ditches and agricultural drains that discharge into the creeks. Refer to Section 8, Hydrology and Water Quality, for more discussion of drainage and water quality control features.

### ***Solid Waste***

Very little solid waste was generated at the Neighborhoods I and J sites, which were formerly agricultural lands. There was no urban solid waste (garbage) collection and disposal service in the area prior to development of the Mountain House community.

The MHCSD has issued a permit for the collection, transportation, and disposal of solid waste, including collection of recyclable materials as required by the Master Plan, from Neighborhoods E, F, and G (currently being developed under Specific Plan I) to Tracy Delta Solid Waste Management, Inc., which also does business as West Valley Disposal (MHCSD, 2002). Solid waste is placed in color-coded, curbside containers: green for non-recyclable garbage, brown for yard and garden clippings, and blue for recyclable materials such as

---

<sup>1</sup> Flooding refers to allowing treated effluent to flow out onto the surface of the ground through valves on pipelines as opposed to spraying the effluent into the air through turf spray or sprinkler systems.

newspapers, cardboard, glass bottles, plastic bottles and containers, and metal cans. This curbside program satisfies Master Plan Implementation Measure 6.7.f. The non-recyclable garbage is transferred by truck to the Foothill Landfill, a Class III landfill permitted to receive non-hazardous waste, located in eastern San Joaquin County about 50 miles from the Mountain House community.

The MHCSD posts information regarding household hazardous waste disposal on its web site in compliance with Master Plan Implementation Measure 6.7.h (Karam, 2004). Disposal of hazardous waste is managed by the San Joaquin County Solid Waste Division of the Public Works Department, which has a regional program in place. Household hazardous wastes from Mountain House can be dropped off at the Household Hazardous Waste Consolidation Facility in Stockton. In addition, used motor oil and oil filters can be dropped off at several automobile parts and service stores in Tracy as well as the Tracy Materials Recovery and Transfer Facility. Hazardous wastes generated in San Joaquin County are either disposed at Forward, Inc., a Class II landfill within the County, or are transported outside the county for disposal.

### **Significant Impacts Identified in 1994 MEIR**

The 1994 MEIR identified significant utility and service system impacts of the Master Plan related to the following:

#### ***Water***

- 1) Inadequate raw water storage in case of restrictions of water diversions imposed by State or federal agencies.
- 2) Adverse impacts on continuing agricultural operations in the area resulting from conversion from agricultural to municipal/industrial water use.
- 3) Inadequate water supply for Master Plan buildout.
- 4) Lack of sufficient water treatment capacity for initial or subsequent development within the Master Plan area.
- 6) Adverse water quality impacts and/or reduction of available landfill capacity due to production of water treatment sludge.
- 7) Uncontrolled release of hazardous materials associated with water treatment.

#### ***Wastewater***

- 1) Adverse water quality and public health impacts due to inadequate wastewater treatment or lack of enough reclamation sites.
- 2) Illegal waste discharges through agricultural drains if the drains are not abandoned.

- 3) Adverse water quality and public health impacts and/or reduction of available landfill capacity due to production, treatment and disposal of wastewater treatment sludge.
- 4) Uncontrolled release of hazardous materials associated with wastewater treatment.
- 5) Flooding resulting from failures of levees around wastewater treatment facilities and effluent holding ponds.

### ***Storm Drainage***

- 1) Nuisance conditions resulting from debris and petroleum residue in detention ponds.

### ***Solid Waste***

- 1) Reduction of available landfill capacity due to generation of solid and hazardous wastes.

## **Findings Related to Significant Impacts Identified in 1994 MEIR**

For all the above potential utility and service system impacts, the Master Plan was amended as recommended in the 1994 MEIR mitigation measures, except for the following:

- Policies and implementation measures to provide adequate raw water storage were not incorporated into the Master Plan. Instead, each specific plan is expected to reevaluate the adequacy of the confirmed water supply in case of restrictions of water diversions. If supply is inadequate, additional water conservation/reuse measures shall be implemented.
- Calculations to determine if sufficient land was available for water treatment and storage were not required for the water treatment plant development permit. The findings determined that the 18.5-acre site was adequate.
- Measures mandating construction of a reclaimed water distribution system were not incorporated.

## **Discussion Regarding Neighborhoods I and J**

Utility infrastructure for Neighborhoods I and J would be constructed by the developer prior to obtaining building permits for construction of houses and buildings in each neighborhood. After construction, these infrastructure capital improvements would be turned over to the MHCS D, which would operate and maintain the utility systems. The MHCS D would issue a letter prior to recording the Tentative Map for each neighborhood stating that the MHCS D would serve each neighborhood when the infrastructure is in place and operational.

a) *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

The currently proposed development within Neighborhoods I and J would not be substantially different from that evaluated in the 1994 MEIR or the Specific Plan II Initial Study. The currently proposed development does not include any significant changes in wastewater facilities serving Neighborhoods I or J.

The MHCSD would provide wastewater service to the project. To serve the proposed project area, additional pipeline extensions from the existing backbone line located north of Byron Road, including some lift stations, would be installed and extended. Smaller sewer lines would be constructed under roadways to serve individual homes and businesses.

A variety of wastewater disposal options are being considered for the project. These include the following:

- Year-round discharge to Old River for all of treated wastewater pursuant to the existing permit from the Central Valley Regional Water Quality Control Board (CVRWQCB);
- Year-round discharge to users outside the limits of the MHCSD as allowed by separate permit and environmental analysis, including discharge and conveyance to the East Altamont Energy Facility in Alameda County;<sup>2</sup>
- Land reclamation (spray irrigation with treated wastewater – see Figure 3-16 in Chapter 3, Project Description) consistent with CVRWQCB Order 98-109; and
- Potential land reclamation on MHCSD parks, open space, and the golf course area.

At this time, one or more of the above options may be implemented but no final decision has been made. The December 2004 Specific Plan II Initial Study evaluated off-site use of reclaimed wastewater as related to potential changes from what was evaluated in the 1994 MEIR.

The RWQCB is responsible for protection of the local water resources. The ability of the wastewater treatment plant (WWTP) to reliably produce effluent with the quality required for discharge to Old River must be successfully demonstrated to the RWQCB before discharge to Old River will be allowed to commence. The MHCSD anticipates that the RWQCB will issue a permit for discharge to the river in early 2007 (Karam, 2006).

---

<sup>2</sup> The East Altamont Energy Facility is proposed in Alameda County at the northwest edge of Mountain House. This power plant (to generate electricity) could use reclaimed wastewater from the MHCSD. The project was fully assessed in a document entitled "East Altamont Energy Center – Application for Certification (01-AFC-4), Alameda County, Final Commission Decision" by the California Energy Commission (August 2003). As of March 2007, the status of the project was unknown according to the California Energy Commission, but the project is considered still valid.

Regardless of which disposal option, or combination of options, the MHCSD is able to use, the MHCSD must operate its WWTP in compliance with the discharge requirements or the MHCSD will be in violation of its discharge permit. If violations were to occur, the RWQCB would take action to stop them, including issuing a Cease and Desist order, if necessary. The MHCSD has the necessary financial resources to improve, operate, and maintain its WWTP such that discharge permit violations are not expected to occur. Therefore, this impact is considered less than significant, and no mitigation measures are necessary.

- b) *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

The currently proposed development within Neighborhoods I and J would not be substantially different from that evaluated in the 1994 MEIR or the Specific Plan II Initial Study. The Initial Study found that construction of new facilities or expansion of existing water or wastewater facilities would not cause potentially significant impacts that were not adequately addressed in the 1994 MEIR or Specific Plan II. The currently proposed development does not include any significant changes in water or wastewater facilities serving Neighborhoods I or J. The proposed development would allow the same number of dwelling units as the existing Neighborhoods I and J Tentative Map and only about 60 more jobs than projected under Specific Plan II; therefore, the proposal would not create a need for new or expanded water or wastewater facilities beyond those previously evaluated.

### **Water Facilities**

The MHCSD would provide domestic water to Neighborhoods I and J. The applicant would construct all required water facilities. Facilities anticipated to be constructed by the applicant to provide water service to Specific Plan II include the balance of backbone water facilities on the applicant's lands, consistent with the MHCSD adopted Water Service Master Plan. However, specific requirements would be determined by the MHCSD as part of subsequent engineering design and approvals. The main water-related facilities include the following:

- Phased expansions of the existing water treatment plant,<sup>3</sup> including additional raw and treated water storage facilities, necessary to serve the balance of lands within Specific Plan I, II and III.

---

<sup>3</sup> The full buildout of the water treatment plant was evaluated in a separate environmental document and is not the subject of this Initial Study. The Specific Plan II Initial Study noted that 1) expansions of the WTP would be confined to the site of the existing plant, 2) construction impacts would include noise and dust from construction equipment and traffic impacts associated with truck traffic removing spoils and debris and delivering construction materials and equipment, and 3) these impacts would be temporary, extending only through the periods of construction. The Specific Plan II Initial Study further noted that construction impacts were discussed in the Initial Study/Mitigated Negative Declaration for the water treatment plant (SJCCDD, 1997), and concluded that no additional plant construction-related mitigation measures are necessary.



- Construction of additional off-site treated water storage facilities directly north of the community college in Neighborhood A/B and at the water treatment plant, per the MHCSD Water Master Plan; and
- Construction of treated water distribution lines and pump stations from the treatment plant.

Several farm irrigation facilities currently exist in the proposed project area and related Tentative Subdivision Map sites. They include irrigation distribution canals and drainage conveyance pipelines and ditches, and surface runoff tailwater ditches. These tailwater ditches temporarily collect irrigation water runoff and detain excess water prior to discharge into runoff conveyance lines. Water flows in these ditches temporarily during the irrigation season. Irrigation service to the subdivision sites would be terminated from its delivery points prior to site development, and any irrigation facilities would be removed. Improvement plans, which reflect termination of irrigation service, would be reviewed by the MHCSD.

Water distribution pipelines to serve the Neighborhoods I and J would be installed along the neighborhood streets and easements prior to building any houses. Neighborhoods I and J would be served by extending distribution pipelines from the existing treated water main on Byron Road. Locations and sizes of recommended water distribution pipelines are shown in Figure 5 of the Potable Water System Plan Update (West Yost, 2003). Water distribution system improvements would be constructed in conjunction with the grading for the street system and before streets are paved. Construction impacts would include noise and dust from construction equipment and traffic impacts associated with removal of spoils and delivery of pipe, valves, and fire hydrants. These impacts would be temporary, extending only through the period of construction. Construction impacts were discussed in the 1994 MEIR. No additional construction-related mitigation measures are necessary.

### ***Demand for Water Service***

As already noted, the currently proposed development would allow the same number of dwelling units as the existing Neighborhoods I and J Tentative Map and only about 60 more jobs than projected under Specific Plan II. The proposal would not create substantial new water demand beyond that evaluated in the Specific Plan II Initial Study. Under the existing Specific Plan II, planned land uses for Neighborhoods I and J would generate a demand for approximately 2,084 afy, while the currently proposed land uses would generate a demand for approximately 2,088 afy. The 4-afy (less-than-one-percent) increase in water demand created by the currently proposed land uses, compared to existing planned uses, would not be substantial enough to create a need for new or expanded water facilities beyond those previously evaluated.

An SB 610 CEQA analysis and an SB 221 Subdivision Analysis for Water Supply have both been completed and certified by the County's Board of Supervisors for

the entire Specific Plan II area. These analyses confirmed that an adequate water supply was available for all of Specific Plan II.

### ***Wastewater Facilities***

The MHCSD would provide wastewater service to the project. To serve the proposed project area, additional pipeline extensions from the existing backbone line located north of Byron Road, including some lift stations, would be installed and extended. Smaller sewer lines would be constructed under roadways to serve individual homes and businesses. A variety of wastewater disposal options are being considered for the project, as described under (a) above.

Local sanitary sewers to serve Neighborhoods I and J would be installed along the streets and easements prior to building any houses. Since much of the land in Neighborhoods I through L is below the elevations of the existing trunk sewer along Byron Road, local sewers would convey wastewater by gravity flow to a set of three pump stations. These stations would operate in series to lift or pump the wastewater through force mains to sewers at higher elevations. Eventually, the wastewater would be pumped up to the existing 30-inch main trunk sewer north of the WWTP.

Construction of the sewers would be done in conjunction with the grading for the street system and before the streets are paved. Construction impacts would include noise and dust from construction equipment and traffic impacts associated with removal of spoils and delivery of pipe and pre-cast concrete manholes. These impacts would be temporary, extending only through the period of construction. Construction impacts were discussed in the 1994 MEIR and the Specific Plan II Initial Study. No additional sewer construction-related mitigation measures are necessary.

As discussed in the Specific Plan II Initial Study, the wastewater treatment plant (WWTP) will need to be expanded before it can serve all of Specific Plan I and Specific Plan II. The Specific Plan II Initial Study noted, however, that a substantial portion of Specific Plan II development can proceed before the WWTP must be expanded. The WWTP must also be designed to accommodate peak wet-weather flows that include infiltration and inflow caused by rainfall. The MHCSD must issue a "will serve" letter indicating that sufficient capacity will be available for each neighborhood before each neighborhood Tentative Map is approved. The Neighborhoods I and J applicant, Shea Homes, would contribute its fair share of the cost to build additional WWTP capacity. Environmental impacts of full buildout of the WWTP, including construction impacts, were evaluated in a separate Initial Study (SJCCDD, 1998). As noted in the Setting section above, the WWTP has recently been expanded and improved to provide treatment for 3.0-mgd average dry weather flow, and this expansion is expected to begin operating in early 2007. The expansion is adequate to serve development proposed for Neighborhoods I and J (Karam, 2006).

### ***Demand for Wastewater Service***

As already noted, the currently proposed development would allow the same number of dwelling units as the existing Neighborhoods I and J Tentative Map and only about 60 more jobs than projected under Specific Plan II. The proposal would not create substantial new demand for wastewater service beyond that evaluated in the Specific Plan II Initial Study. Planned land uses for Neighborhoods I and J under the existing Specific Plan II would generate an estimated 432,285 gallons per day (gpd) of wastewater, while the currently proposed land uses would generate an estimated 409,053 gpd. The 23,232-gpd (5.4 percent) decrease in wastewater service demand created by the currently proposed land uses is primarily due to the fewer units proposed than originally allowed by Specific Plan II.

### ***Conclusion***

The above discussion reveals that construction of new water or wastewater treatment facilities or expansion of existing facilities would not cause potential significant impacts that were not adequately addressed in the 1994 MEIR or the Specific Plan II Initial Study.

- c) *Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

### ***Background***

Construction of new storm drains with catch basins (a.k.a. drop inlets) would be required for Neighborhoods I and J. The storm drain system would consist of gravity-flow pipelines, constructed under neighborhood streets and easements, with lateral pipes to catch basins installed along the curbs and gutters. These storm drains would collect surface runoff and ultimately convey it to either Mountain House Creek or Dry Creek. Local storm drains along most side streets would convey storm runoff to large storm drains (trunks) along major arterial streets.

The storm drain system would be designed to accommodate runoff flows from the 10-year storm event unless a 100-year storm event would cause excessive street flooding that could prevent access for emergency vehicles. If this situation would occur, that portion of the system would be designed to accommodate a 100-year storm event. Mountain House and Dry Creeks would be modified to be able to convey the 100-year storm flows. A 10-year storm has a 10-percent statistical chance of occurring every year, and a 100-year storm has a one-percent chance of occurring every year. Installation of these storm drain systems was subject to earlier environmental review in the 1994 MEIR. No additional mitigation measures are necessary.

Under the federal Clean Water Act, the U.S. Environmental Protection Agency requires that any water discharged from a construction site larger than five acres must be in compliance with the National Pollutant Discharge Elimination System

(NPDES). The California Water Resources Control Board, which is responsible for implementing and enforcing the NPDES, issued a statewide general permit for construction activities. Provisions of the general permit require that the following issues be addressed with respect to water quality: 1) erosion and sedimentation during clearing, grading, or excavation of a site; and 2) the discharge of storm water once construction is completed. The applicant would obtain coverage under this permit by 1) submitting a Notice of Intent to the Central Valley RWQCB that identifies the responsible party, location, and scope of construction; and 2) developing and implementing a Storm Water Pollution Prevention Plan.

A Storm Water Quality Management Program (West Yost, 2001) that contains descriptions of Best Management Practices (BMPs) that could be used to reduce pollution of Mountain House waterways due to storm runoff has been prepared for the MHCSD. Storm Water Pollution Prevention Plans (SWPPPs) are required for specific construction projects under the statewide general National Pollutant Discharge Elimination System (NPDES) construction permit. SWPPPs for construction at Mountain House are prepared for each public facility (e.g., the water and wastewater treatment plants) or neighborhood.

Large storm drains would be installed along Central Parkway to convey storm water to BMP facilities along Mountain House Creek before discharge to the creek. These BMP facilities could include bio-filtration swales, infiltration basins and trenches, extended wet/dry detention basins, and catch basin inserts (PACE, 2003). Similar facilities would be provided for watersheds that drain toward Dry Creek. The BMP facilities would treat the first flush from each significant storm. The first flush contains more pollutants than succeeding storm runoff because it contains the pollutants that have collected on the ground and streets since the preceding storm. For further discussions of these facilities, refer to Section 8, Hydrology and Water Quality.

Two large storm drain pipelines would be installed along Central Parkway, one for "clean" storm runoff and one for "urban" storm runoff. The "clean" storm drain would convey storm runoff from the undeveloped off-site properties to the southwest of the Mountain House community. Since this runoff would come from undeveloped property, it would not contain urban pollutants and would not have to be treated in the BMP facilities. The "urban" storm drain would convey storm runoff from within Mountain House community that is treated in the BMP facilities.

Construction of the storm drain systems would be done in conjunction with the grading for the street system and before the streets are paved. Construction impacts would include noise and dust from construction equipment and traffic impacts associated with removal of spoils and delivery of pipe and pre-cast concrete manholes and drop inlets. These impacts would be temporary, extending only through the period of construction. No additional construction-related mitigation measures are necessary.

### ***Currently Proposed Drainage-Related Changes to Mountain House Master Plan***

The currently proposed plans for Neighborhoods I and J would involve the following drainage-related changes to the Mountain House Master Plan:

- 1) The avoidance of the Dry Creek wetlands and a drainage facility that are within the jurisdiction of the U.S. Army Corps of Engineers. Prior to the adoption of Specific Plan II, the Master Plan called for the portion of Dry Creek jurisdictional areas west of existing Kelso Road to be avoided and those to the east to be relocated. Specific Plan II, as currently adopted, proposed that this policy be implemented through a restoration of Dry Creek in similar fashion to the Mountain House Creek restoration project. The revised Neighborhoods I and J Tentative Map is responsive to input from various resource protection agencies which hold that total avoidance is the least environmentally damaging alternative.

The jurisdictional watercourse would be designed to accommodate the 100-year event storm water flows from off-site sources. The existing pump that discharges the jurisdictional waterway over the levee into Old River would be rebuilt without increasing its pumping capacity.

- 2) Design of an integral storm water quality feature integrated into the golf course. All of the urbanized areas within Neighborhoods I and J would drain to wet and dry water quality ponds and swales within the golf course area for purposes of desilting and removing contaminants. After being collected at detention basins at the north end of Neighborhood I, the water would be pumped to lakes in Neighborhood K before being discharged through permitted outfalls into Mountain House Creek.

Chapter 3, Project Description, describes these changes in more detail, and Section 8, Hydrology and Water Quality, evaluates their environmental implications.

- d) *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

The currently proposed development within Neighborhoods I and J would not be substantially different from that evaluated in the 1994 MEIR or the Specific Plan II Initial Study. The proposed development would allow 2,406 dwelling units, the same number allowed by the existing Neighborhoods I and J Tentative Map. These dwelling units would house approximately 4,338 residents, or about 380 fewer residents than projected by Specific Plan II for the existing approved Tentative Map. The proposed development would create about 60 more jobs than projected for the area under Specific Plan II, but this increase would not cause any significant changes in water demand. Prior to approval of any Tentative Maps, the MHCS D must issue a "will-serve" letter to confirm that adequate water treatment plant capacity is or will be available.

For Specific Plan II (which includes Neighborhoods I and J), the MHCSD completed a Water Supply Assessment (WSA) as required by Senate Bill 610 and the California Water Code (West Yost, 2004). The MHCSD also completed a "Written Verification" of sufficient water supply in accordance with Senate Bill 221 (West Yost, 2006).<sup>4</sup> These water analyses are required for any residential development larger than 500 dwelling units. They include projections of water demand at five-year increments and assess the availability and reliability of the local water supply for the development in normal, single dry, and multiple dry years. Although the analyses were specifically written to address Specific Plan II, they also consider water demands for Specific Plan I and Specific Plan III to present a complete analysis for the entire Mountain House community. Their conclusions are generally as follows:

- 1) The MHCSD has a firm water supply of 9,413 afy from BBID to serve the Mountain House community.
- 2) The total average demand for all of the Mountain House community at buildout would be 9,867 afy assuming water conservation and no reclamation. This demand exceeds the contracted supply from BBID by 454 afy. However, water supplies for the year 2025 should be available to meet the demands of Specific Plan I and Specific Plan II. The 2006 Written Verification concludes that sufficient water supplies are available to meet Specific Plan II water demands in normal, single dry, and multiple dry years.
- 3) The agreement between the MHCSD and BBID allows BBID to supply more than 9,413 afy to the MHCSD if BBID has excess water available. Projections of all the future demands for BBID are presented in Table 1 of both the WSA and the Written Verification. The projections indicate that BBID would have 5,896 afy of excess water in the year 2025. Any additional long-term supplies that the MHCSD may require from BBID in excess of the contracted 9,413 afy would need to be secured under a separate or amended agreement with BBID.
- 4) In addition to BBID-supplied water, portions of the lands included in Specific Plan II have a riparian right to use water from Old River. (The Master Plan states that land between the El Pescado Grant Line and Old

---

<sup>4</sup> A water assessment was also recently prepared for Specific Plan III (SP III) and the Mountain House Business Park (MHBP) in accordance with Senate Bill 221 (West Yost & Associates, *Senate Bill 221 Written Verification for Mountain House Specific Plan III and Mountain House Business Park*, Draft, prepared for Mountain House Community Services District, September 29, 2006). This assessment (page 28) found that "water supplies for the year 2030 are not sufficient to meet the demands of SP III." The assessment contained information on Specific Plan II (SP II), but indicated that "this SB 221 Written Verification is only for SP III and the MHBP...A separate Written Verification was prepared for SP II... any specific water supply and demand information for SP II should be taken from the Written Verification for SP II." This Initial Study therefore relies on the 2004 Water Supply Assessment and 2006 Written Verification prepared for Specific Plan II, of which Neighborhoods I and J (the currently proposed project area) are a part.

River [i.e., generally north of Byron Road] has riparian water rights amounting to 2,600 afy that could be used on these lands.)

- 5) Chapter 2 of MHCSD Ordinance 4056 establishes five stages of water allocations (i.e., rationing) that could be enacted to reduce demand during water shortage emergencies.

If the actual water demand for Specific Plan II is greater than projected in the WSA or the Written Verification, BBID may not be able to provide enough water at buildout. If actual water consumption proves that this is the case, a supplemental source of supply could be developed. Shea Homes owns the land south of Old River where Neighborhoods I and J would be developed. Shea Homes also owns riparian water rights that are tied to the land based on its prior use for agriculture. One possibility that could increase the water supply for Mountain House would be for Shea Homes to transfer its riparian water rights to the MHCSD. The water that could be withdrawn from Old River under these rights would be allowed to flow downstream and join the waters in the greater San Joaquin Delta system. The same quantity of water could then be withdrawn by BBID from the California Aqueduct (which conveys water from the Delta) to supplement the Mountain House community supply by "wheeling" the water back to the MHCSD WTP. This plan could supplement the BBID supply by an estimated 2,600 afy. It should be noted that these riparian rights could be curtailed by DWR during a water shortage in dry years.

Master Plan Implementation Measure 12.3.2.a requires that each specific plan subsequent to Specific Plan I include a comparison of actual water demand for the community with projected water demand used in the Master Plan. Land uses, the number of dwelling units, and water demands have changed since the last publication of the Master Plan. Nevertheless, Specific Plan II does not include the water demand comparison required by the Master Plan because the MHCSD does not yet have sufficient data to make a valid comparison. At present, construction in Neighborhood F (the first neighborhood) has just been completed, and construction in Neighborhoods E and G is still ongoing. Construction contractors are using water for construction purposes, and landscaping has an abnormally high irrigation demand because it is not yet well established. The MHCSD will start monitoring water demand when Neighborhoods E and G are completed and occupied, which is estimated to occur in 2008. To be meaningful, the study sample must be large and the meter readings should cover at least one full year to reflect the effects of the different seasons on water consumption (Karam, 2006).

Specific Plan II Implementation Measure 12.2.2 states that if in the future there is insufficient water for buildout of the community, then measures shall be taken to obtain an additional water supply, to implement more extensive conservation measures, or to revise the Master Plan. Presumably, revising the Master Plan means reducing the mix or number of future dwelling units in order to reduce water demand. Combinations of these three corrective measures could be implemented.

- e) *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The MHCSD is the wastewater treatment provider for the Mountain House community and does not have a commitment to provide wastewater treatment for any other community or area. The MHCSD may provide wastewater treatment to existing houses on the south side of Grant Line Road and the south bank of Old River if those property owners choose to annex to the MHCSD, but the amount of wastewater generated by these houses would be small. Expansion of the WWTP is discussed in (b) above. Since this expansion must occur prior to occupancy of houses or buildings in Specific Plan I, Specific Plan II, or Specific Plan III that would increase wastewater generation to more than the capacity of the WWTP, the MHCSD would always have adequate wastewater treatment capacity. This potential significant impact was adequately addressed in the 1994 MEIR and no additional mitigation measures are required.

- f) *Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Section 6.7 of the Master Plan states that solid waste generated by the new community will be managed in accordance with the goals of the California Integrated Waste Management Act of 1989. The Act calls for a 50-percent reduction in the solid waste stream going to landfills by the year 2000. Conformance with the Act is the responsibility of the San Joaquin County Solid Waste Division. Since there was no solid waste going to a landfill from Mountain House in the year 2000, the Master Plan assumes that the amount of solid waste generated at buildout will be reduced by 50 percent from what would have been generated before initiation of State-mandated waste reduction management.

### ***Solid Waste Collection and Disposal***

Solid waste from Neighborhoods I and J would be collected by West Valley Disposal and brought to the Tracy Materials Recovery and Transfer Facility in a manner similar to solid waste from Neighborhoods E, F, and G. Non-recyclable garbage would then be trucked to the Foothill Landfill in eastern San Joaquin County. The Foothill Landfill has a total remaining disposal volume of 76 million cubic yards. The San Joaquin County Solid Waste Division estimates that Foothill Landfill will be able to provide solid waste disposal for all of San Joaquin County south of Stockton until the year 2044 (Johnson, 2006).

According to the 1994 MEIR, the Tracy Materials Recovery and Transfer facility is anticipated to reach full operating capacity around the year 2010, and an expansion of the facility and/or construction of additional transfer facilities will be needed. As shown on Figure 13.3 of the Master Plan, a 10-acre site in Old River Industrial Park of the Mountain House community will be reserved for a materials



recovery facility and solid waste transfer station in case the Tracy facility is not expanded. If the Tracy facility is expanded, the Mountain House site could be made available for other public uses.

Master Plan Implementation Measure 6.7.f requires that a 1-acre minimum area within the Mountain House Materials Recovery Facility site be set aside and made available for community recycling of green waste (yard and garden clippings). Part of this site could be used for on-site composting of green waste for re-use within the community. There are no plans for establishing a composting facility at the present time, and the MHCS D has not yet provided any equipment, such as a front-end loader and chipper, for composting.

San Joaquin County provides three types of recycling services for the southwestern portion of the County: curbside pickup, buy-back centers, and drop-off centers. Hazardous waste generated in San Joaquin County is either disposed of at Forward Inc., a Class II landfill within the county, or is transported outside the county for disposal. Disposal of household hazardous waste generated by the Mountain House community would be managed by the San Joaquin County Solid Waste Division, which has a regional program in place.

### ***Solid Waste Impacts of Currently Proposed Development***

The currently proposed development within Neighborhoods I and J would not be substantially different from that evaluated in the 1994 MEIR or the Specific Plan II Initial Study. The proposed development would allow 2,406 dwelling units, the same number allowed by the existing Neighborhoods I and J Tentative Map. These dwelling units would house approximately 4,338 residents, or about 380 fewer residents than projected by Specific Plan II for the existing approved Tentative Map. The proposed development would create about 60 more jobs than projected for the area under Specific Plan II, but this increase would not cause any changes in the impact on solid waste collection or disposal services.

According to the Specific Plan II Initial Study, development in the Specific Plan II area, which includes Neighborhoods I and J, would generate 80.5 tons of solid waste per day, or 29,400 tons per year. This waste would occupy approximately 551,300 cubic yards of compacted landfill over 50 years and represent about 0.7 percent of the remaining disposal capacity of the Foothill Landfill. The Specific Plan II Initial Study concluded that the impact on available landfill capacity would be less than significant. The currently proposed plans would not substantially change the amount of development allowed in Neighborhoods I and J and therefore would not alter this conclusion.

Also as described in the Specific Plan II Initial Study, construction of the neighborhoods would generate considerable amounts of waste wood, metal and other materials that could be recycled into useful products or help reduce the demand for new construction materials. Master Plan Implementation Measure 6.7d) states "recyclable construction waste shall be separated [from non-recyclable construction waste], and arrangement shall be made with the County,

or on-site recycling services, for collection. Recycling of construction wastes shall be made part of the construction specifications for contractors." Assuming this implementation measure is implemented, the volume of construction wastes would be reduced significantly, and the impacts of construction wastes would be less than significant.

- g) *Would the project comply with federal, State, and local statutes and regulations related to solid waste?*

Non-hazardous solid waste from Neighborhoods I and J would be collected and transported to the Foothill Landfill for disposal. Hazardous wastes would be transported to Class I or II landfills for disposal. These landfills are licensed and operated in compliance with applicable federal, State and local statutes and regulations. Therefore, there is no significant impact associated with the proposed project.

### **Sources of Information**

CH2M Hill, 2004. *Byron Bethany Irrigation District Water Supply*. Technical memorandum, January 6.

Johnson, Dan, Engineer II, San Joaquin County Solid Waste Division, 2006. Personal communication, November 28.

Karam, Gabriel, Mountain House Community Services District, 2004. E-mail message, May 3, and personal communication, October 18.

Karam, Gabriel, Mountain House Community Services District, 2006. Fax communication to Natalie Macris, November 22.

Mountain House Community Service District, 2002. *A Permit for the Collection, Transportation and Disposal of Solid Waste, Including the Collection of Recyclable Material, in the Mountain House Community Services District*. May.

Pacific Advanced Civil Engineering (PACE), Inc., *Mountain House Storm Water Master Plan Update*. April 26, 2002, revised April 22, 2003, updated May 27, 2004.

San Joaquin County, *Mountain House New Community Master Plan*. Adopted November 10, 1994, amended September 12, 2000.

San Joaquin County Community Development Department (SJCCDD), 1998. *Initial Study and Negative Declaration for Wastewater Treatment Plant at Mountain House*. January (Use Permit 98-16).

San Joaquin County Community Development Department (SJCCDD), 1997. Initial Study and Negative Declaration for Mountain House New Community Water Treatment Plant Use Permit. January 5 (Use Permit 97-13).

SWA Group, 2004. *Mountain House New Community Specific Plan II*, (Final Draft). November.

West Yost & Associates, 2001. *Technical Memorandum #2, Mountain House Storm Water Quality Management Plan*. April 6.

West Yost & Associates, 2003. Potable Water System Plan Update, Technical memorandum, August 20.

West Yost & Associates, 2004. *Senate Bill 610 Water Supply Assessment for Specific Plan II*. July 28.

West Yost & Associates, 2006. *Senate Bill 221 Written Verification for Mountain House Specific Plan II*. Prepared for Mountain House Community Services District, July 12.

Willett, Jeff, Condor Earth Technologies, Inc., 2004. Personal communication, August 9.

