Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
	AESTHETICS			
Because the siting and construction of Reservoir E-2 and associated pump station would be visible from public roadways, there would be potential for impacts to aesthetics.	#1 Mitigation to reduce visual impacts associated with Reservoir E-2 and pump station shall include covering these structures with neutral, non-reflective coatings that blend with surrounding uses and color schemes.	During construction	Yucaipa Valley Water District	
Night lighting for security and maintenance/ operations purposes would adversely affect nighttime views and therefore is considered a significant impact.	#2 Mitigation to reduce substantial light and/or glare on adjacent land uses shall include directing lighting towards the property and facilities, except for street lighting that may be installed in accordance with the City of Yucaipa and City of Calimesa design elements. No glare shall be allowed from lighting for the reservoir and pump station facilities to impact adjacent property or land.	Post construction	Yucaipa Valley Water District	
	AIR QUALITY			
Fugitive dust levels during construction are above the state standards and would be considered a significant impact.	 #3 The following Best Management Practices (BMPs) shall be employed during all earthwork phases of the project: The construction disturbance "footprint" shall be kept as small as possible; 	During construction	Yucaipa Valley Water District	
	Adequate water and/or other dust palliatives shall be used on all disturbed areas in order to avoid particle blow-off;			
	Streets from which site access is taken shall be washed down or swept to remove dirt carried from the site to the street to keep vehicles from pulverizing the dirt into fine particles;			
	 Street sweepers would be utilized periodically to aid in the removal of dirt carried from the site to the street; 			

Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
	Soil excavation, clearing or grading shall be terminated when wind speeds exceed 25 mph for an hourly average; and			
	 All vehicles hauling dirt or spoils on public roadways shall be covered/tarped unless additional moisture is added to prevent material blow-off during transport. 			
Record searches for cultural sites located	CULTURAL RESOURCES #4 The study of the sites within one-half mile had concluded		Yucaipa Valley Water	
Record searches for cultural sites located within one-half mile indicate that resources may exist. For the project area, less than 20% has been previously surveyed suggesting that unidentified cultural resources may occur within the project site, especially in those areas adjacent to streams and other sources of water. Impacts to these sites would be considered	#4 The study of the sites within one-half thile had concluded that no significant elements of any of the archaeological sites are present within the pipeline alignment. However, less than 20% of the project area has been surveyed and there is a potential for subsurface resources to occur in the undeveloped areas in the vicinity of Reservoir E-2. In order to address impacts to unidentified cultural resources, measures to mitigate such impacts shall include:		District and Project Archaeologist	
significant impact.	A field survey prior to excavation or grading of undisturbed portions of the project site shall be adequately surveyed by a qualified archaeologist to identify areas that may contain potential resources.	Prior to grading or excavating		
	In the event cultural resources are encountered during construction of the proposed facilities, construction activities shall be halted and an onsite inspection shall be performed by a qualified archaeologist. The archaeologist will be able to assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of CEQA. An inventory of all historical resources discovered shall be documented in accordance with guidelines established by the California Office of Historic Preservation.	During construction		

Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
Due to the potential for subsurface resources, potential impacts to paleontological resources would be considered significant.	 #5 Mitigation to reduce the impacts to paleontological resources during construction shall include: A field survey prior to excavation or grading of undisturbed portions of the project site shall be adequately surveyed by a qualified paleontologist to identify areas that may contain potential resources. 	Prior to grading or excavating	Yucaipa Valley Water District and Project Paleontologist	
	 If potential paleontological resources are identified, construction activities shall be monitored by a qualified paleontologist. GEOLOGY AND SOILS 	During construction		
Due to the proximity of active known faults, the siting of pipelines, reservoirs and pump stations may result in a public safety hazard to surrounding people and structures.	 #6 Mitigation to reduce the risk of exposure of people and structures from surface fault ruptures shall include earthquake resistant design features for all structures. The structural engineer shall utilize mean peak ground acceleration, duration of shaking, and site amplification projects when designing the project. 	During project design	Yucaipa Valley Water District and Project Structural Engineer	
Exposure of people and structures from seismic ground shaking may occur due to the proximity of active faults, including the	#7 Mitigation to reduce the risk of exposure of people and structures from seismic ground shaking shall include:		Yucaipa Valley Water District and Project Soils Engineer	
San Andreas Fault located to the northwest of the project. Impacts resulting from seismic ground shaking would be	 The latest seismic standards in pipeline and reservoir construction shall be included in the design of these facilities; 	During project design		
considered significant.	Compliance with the requirements of the governing jurisdictions and standard practices of the Structural Engineers Association of California; and	During project design		
	YVWD shall retain a qualified soils engineer to perform soil analysis and prepare compaction recommendations for the proposed reservoir and pump station sites, as well as the pipelines. These recommendations shall identify the design measures that must be incorporated in the facility to ensure safety during maximum ground shaking events.	During project design		

Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
Soil erosion ranging from slight to moderate may occur and would be considered significant.	 #8 Mitigation to reduce soil erosion during construction shall include: Soil stockpiles and exposed (graded) slopes will be covered with plastic sheeting where feasible during inclement weather conditions. 	During construction	Yucaipa Valley Water District	
	Drainage control devices will be constructed to direct surface water runoff away from slopes and other graded areas; hay bale barriers or sandbags will be placed along the toes of graded slopes to help control and reduce sedimentation during grading operations.	During construction		
	Temporary sedimentation/desilting basins will be constructed where necessary between graded areas and natural runoff courses to minimize downstream sediment influx during grading.	During construction		
	Disturbed slopes will be minimized to reduce disturbance to existing vegetation and slopes.	During construction		
	A silt curtain will be placed around construction areas to protect natural drainage channels from sedimentation.	Prior to construction		
	Construction and grading during periods of inclement weather will be avoided.	During construction		
	A light spray of water will be applied to graded areas and temporary (haul) roads during construction to control fugitive dust.	During construction		
	Post-construction measures to reduce erosion and loss of topsoil to below a level of significance include the following mitigation measure:			
	Disturbed slopes shall be revegetated with an appropriate seed mix.	Post construction		

Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
Alteration of the existing structure of potentially unstable soils may result in a public safety hazard to surrounding people and structures.	#9 The District shall ensure that all soil disturbed by construction activities or used to support structures associated with implementation of this project shall be properly compacted to meet the recommendations of the project's soil engineer. This shall include the proper backfilling and compaction of trenches and, where feasible or possible, the return of the ground surface to its pre-project condition.	During construction	Yucaipa Valley Water District and Project Soils Engineer	
The siting of the project would occur on moderately expansive soil and may result in a public safety hazard.	#10 Mitigation to reduce the risk to life or property from construction on expansive soils shall include:		Yucaipa Valley Water District	
	Highly expansive soils will be placed within deeper fills away from slopes.	During construction		
	 Expansive soils will be replaced with granular non-expansive soils, or treated with lime to reduce expansivity. 	During construction		
	HAZARDS AND HAZARDOUS WAS	STE		
A number of sites along County Line Road, Calimesa Boulevard, Yucaipa Boulevard, 7th Street, 5th Street, Bryant Street, Oak	#11 Mitigation to reduce the risk of exposure to contaminated soils shall include:		Yucaipa Valley Water District	
Glen Road and 6th Street are included on the State's Leaking Underground Storage Tanks (LUST), State index of properties with hazardous waste (Cortese), US Environmental Protection Agency (USEPA) registered small or large generators of hazardous waste (GNRTR) and USEPA list of emergency response notification system of spills (ERNS). There is a potential for contaminated soil to be encountered during construction. Impacts resulting from exposure to contaminated soils would be considered significant.	As part of the final pipeline design, a file review shall be performed at the Riverside County and San Bernardino County Department of Environmental Health for areas where hazardous materials or wastes may be encountered. The file review shall identify the current extent of contamination at the location, if known. If YVWD chooses to proceed with construction in areas of known contamination, mitigation measures for contaminated soil shall be coordinated with Riverside and/or San Bernardino County Department of Environmental Health and/or California Regional Water Quality Control Board.	During final pipeline design		

Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
	In the event that grading, construction or operation of proposed facilities will encounter hazardous waste, the YVWD shall ensure compliance with the State of California CCR Title 23 Health and Safety Regulations as managed by Riverside County and/or San Bernardino County Department of Environmental Health. Excavated soils impacted by hazardous waste or materials shall be characterized and disposed of in accordance with CCR Title 14 and Title 22. The California Regional Water Quality Control Board shall be contacted regarding provisions for possible reuse as backfill of soils impacted by hydrocarbons. Excavated soils shall be lined and covered with an impermeable material to prevent spread of contaminated materials.	During construction and operation of facilities		
	The YVWD shall have a qualified hazardous waste professional on site while working in areas where contamination may be encountered. The responsibility of this professional would be to monitor the work site for contamination and to implement mitigation measures as needed to prevent exposure to workers or the public. These measures may include signage and dust control.	During construction	Yucaipa Valley Water District, Project Industrial Hygienist	
The project is located adjacent to potentially flammable materials such as brush, grass or trees. Potential fire hazards are considered significant.	#12 A brush management plan shall be incorporated during project construction. Construction within areas of dense foliage during dry conditions will be avoided, when feasible. In cases where avoidance is not feasible, necessary brush fire prevention and management practices shall be incorporated. Specifics of the brush management program will be determined as site plans for the project are finalized.	The brush management plan shall be prepared pre-construction and implemented during construction	Yucaipa Valley Water District	

Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
	HYDROLOGY AND WATER QUALI	TY		
Grading, cutting and filling associated with construction of the water storage facilities and the pump stations are anticipated to	#13 Mitigation to reduce impacts to local water quality shall include:		Yucaipa Valley Water District/State Regional Water Quality Control Board	
impact water quality through increased sediment load within the flood plain and adjacent waterways. Increased sediment	Erosion control measures will be installed such as hay bales, sand bags, and silt curtains.	During construction		
load into nearby waterways would be considered significant.	Buffer zones will be established at the down gradient boundaries of disturbed areas to prevent wash-off into channels. Buffer zones will be vegetated (grass) or hay baled. Buffer zones serve to reduce overland flow velocities and trap eroded sediment that would otherwise migrate toward drainage channels.	During construction		
	Siltation basins (where necessary) will be constructed in drainage channels to capture sediment.	During construction		
	Stormwater management plans, as required by state and local regulation for construction sites will be prepared.	Prior to construction		
	Should groundwater be encountered during construction, an National Pollution Discharge Elimination System (NPDES) permit for dewatering the area will be obtained as required.	During construction		
	Drainage swales will be implemented during construction prior to discharge from the storm drain system. These swales will be fitted with oil/water separators in order to trap pollutants prior to discharge from the system.	During construction		

Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
During grading phases of the project, potential erosion could take place due to the lack of vegetation and presence of open soils.	#14 To reduce potential erosion during construction of the proposed project, Best Management Practices for erosion and water quality would be implemented. These practices would include gravel bagging or silt fencing near sensitive areas. In addition, prior to commencement of construction, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared.	BMPS would be implemented during construction and the SWPP would be prepared prior to construction.	Yucaipa Valley Water District/State Regional Water Quality Control Board	
	NOISE			
The proposed project would involve the use of construction equipment for approximately 12 to 16 months. Areas adjacent to construction activities associated with implementation of the proposed project would experience short-term increases in noise levels.	 #15 Although construction noise is exempt from the noise ordinance, the mitigation below will further reduce the community noise impacts below a level of significance The District shall ensure that all construction equipment be operated with mandated noise control equipment (mufflers or silencers). 	During construction	Yucaipa Valley Water District	
The operation of mechanical equipment at the three pump stations would introduce a source of long-term noise. Noise impacts to sensitive receptors are considered significant.	#16 The District shall ensure that noise from the pump motors be reduced to a less than significant level by housing all mechanical equipment in structures which adequately attenuate noise levels to not greater than 55 dB(A) measured at the nearest sensitive receptor. The required noise attenuation can be implemented using standard construction and management techniques (structural walls, brick walls, berms, or landscape buffers).	Additional noise attenuation techniques, if necessary, will be implemented upon construction of the pump stations.	Yucaipa Valley Water District	
Short-term traffic impacts may occur due to construction. Traffic delays and congestion resulting from the construction of the project is considered significant.	 #17 Mitigation to reduce traffic delays and congestion shall include: A traffic control plan will be developed by the District to ensure continuous, unobstructed, safe and adequate pedestrian and vehicular access to and from public facilities such as schools, parks, post offices and fire 	Prior to construction	Yucaipa Valley Water District	

Potential Significant Impact	Mitigation Measure	Time Frame of Mitigation	Monitoring Reporting Agency	Date of Completion
	 stations, as well as commercial/industrial establishments during regular business hours. The traffic control plan will be prepared in accordance with each jurisdiction for which the project is proposed to be located. The traffic control plan will ensure that congestion and delay of traffic resulting from project construction are not substantially increased and will be of a short-term nature. During construction within the existing roadway, alternate 	During construction		
	routes of travel or guided passage through construction zones will occur. The traffic control plan will show all signage, striping, delineated detours, flagging operations, and any other devices which will be used during construction to guide motorists safely through the construction zone and allow for a minimum of one lane of travel. The plan will also designate acceptable parking areas for construction crews and equipment, and transportation methods from the parking area to the construction site.			
	Flagmen will be used to control traffic when street width will only allow one- way travel. Length of street closure would be restricted to a single block at a time in most cases and alternate routes (detours) would be indicated clearly with signs and personnel when required.	During construction		