

(This is NRWMAC's draft input to Resolution 16-R03, coordinated with land owners and lake community representatives, as requested of NRWMAC by Dave Chardavoine at the Heritage Ranch meeting on September 15, 2017.)

*Before the Board of Directors of the Monterey County Water Resources Agency
County of Monterey, State of California*

RESOLUTION Number 16-R03 (AMENDED)

RESOLUTION OF THE MONTEREY COUNTY WATER RESOURCES)
AGENCY IDENTIFYING MITIGATION MEASURES FOR ADVERSE)
IMPACTS TO LAND, MINERAL RIGHTS AND PRIVATE WELLS)
CAUSED BY CONSTRUCTION OF THE INTERLAKE TUNNEL OR BY)
MODIFICATION OF THE SAN ANTONIO DAM SPILLWAY OR BY)
ANY FORM OF GEOTECHNICAL AND/OR SOILS TESTING ASSOCIATED)
WITH OR NECESSARY FOR THIS CONSTRUCTION AND/OR MODIFICATION)

WHEREAS, the Monterey County Water Resources Agency (Agency) is actively considering the Interlake Tunnel and Spillway Modification Project, which entails the construction of a tunnel conveying water from the Nacimiento Reservoir to the San Antonio Reservoir for the purposes of groundwater recharge, flood management and prevention of sea water intrusion in the Salinas Valley, and the preservation of recreation in San Luis Obispo County.

WHEREAS, in advance of the commencement of construction of the tunnel, the Agency needs to perform geotechnical and soils testing on parcels of property in the vicinity of the proposed tunnel alignment.

WHEREAS, in order to transport equipment and personnel to perform the necessary geotechnical and soils testing, the Agency must gain access to properties which are contiguous with the parcel(s) on which the testing is to be performed.

WHEREAS, during the preliminary design and initial phases of the environmental work for the environmental impact report (EIR) for the Tunnel Project, the Agency has received concerns regarding the potential for the proposed tunnel construction and/or the geotechnical and soils testing to interfere with the land, the structures on the land, mineral rights and operation of private water wells in the vicinity of the tunnel, or in the vicinity of the geotechnical and soils testing. The Agency is actively soliciting information on land, the structures on the land, and private wells from property owners whose land is within an area encompassing at least 3000 ft. of either side of the proposed tunnel alignment and/or whose property is involved with the geotechnical and soils testing. The Agency is further actively soliciting information on mineral rights from any and all mineral rights holders whose rights may extend below the properties which are within an area encompassing at least 3000 ft. of either side of the proposed tunnel alignment and/or which properties are involved with the geotechnical and soils testing.

WHEREAS, the Agency desires to prevent any adverse impacts to land, any structures on the land, mineral rights and water supply from wells or ground water resulting from the construction of the tunnel or the geotechnical and soils testing. The Agency directs Staff and Agency consultants to incorporate safeguards to prevent adverse impacts to land, structures on the land, mineral rights, ground water and water wells. Maximum attention will be given to eliminate any interference with land, structures on the land, mineral rights and/or the operation of private water wells during tunnel construction and/or geotechnical and soils testing. The Agency further directs that measures be taken to address the potential for adverse impacts to land, structures on the land, mineral rights and/or groundwater supply resultant from any infiltration of any substance other than uncontaminated water into the tunnel or wells or subsurface minerals after construction and/or geotechnical and soils testing.

WHEREAS, the Agency identifies “adverse impacts,” as used in this Resolution, to include, but not be limited to, the following: contamination of wells and/or ground water and/or land and/or mineral estates by the intrusion, extrusion or any other form of introduction of hazardous materials such as oil, gas, sulfur, mercury, asbestos, etc., caused by any aspect of the tunnel project; failure by the agency, and at agency’s sole expense, to remove, clean up and/or properly dispose of such hazardous materials from land caused by any aspect of the tunnel project; any structural or geological damage to land or structures on the land such as soil erosion, instability, fissures, slippage, cave-ins, subsidence, foundation cracks, etc., caused by any aspect of the tunnel project.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE MONTEREY COUNTY WATER RESOURCES AGENCY:

1. The Agency is committed to preventing adverse impacts to land, structures on the land, mineral rights and water supply from wells or ground water as a result of the construction and operation of the tunnel and/or geotechnical and soils testing. The prevention measures will include the use of construction techniques to eliminate adverse impacts to land, structures on the land, subsurface minerals, ground water and wells during construction and operation of the tunnel or geotechnical and soils testing.
2. The anticipated tunnel construction techniques will include the following:
 - a. Excavation will be performed by either tunnel boring machine or road header with the requirement to probe ahead of the excavation to investigate for ground water and also to drill grout holes and inject grout ahead of and above the tunnel to “cutoff” or block the water from flowing through the formation into the tunnel.
 - b. In either excavation case, the excavation will be supported by a lining system, pre-cast concrete segments or a reinforced shotcrete lining respectively. Both of these lining techniques will include water barriers

and performance specification requirements to prevent water from entering the tunnel at no more than 1 GPM per 1000' of tunnel or less which is essentially a dry condition.

- c. The combination of grouting (pre- and post-excavation) and water proof performance specifications for the tunnel lining will prevent any long term impacts to groundwater.
 - d. A final tunnel lining will be added for further protection. A one-pass, pre-cast segmental lining system may be constructed as the final lining system consisting of bolted and gasketed segments to provide a water and gas proof final lining. In the case of road header excavation and shotcrete lining, a permanent final lining will be installed consisting of either a welded steel pipe grouted in place or a cast in place concrete final lining with a waterproof membrane.
3. The anticipated geotechnical and soils testing techniques will include the following:
- ***THE AGENCY WILL LIST THOSE TECHNIQUES HERE***
4. To ensure that all project-related adverse impacts, including but not limited to, those resulting from tunnel construction and geotechnical and soils testing, are prevented, the EIR will identify adverse impacts and appropriate mitigation. This will include preparation and implementation of a groundwater and land structure management plan, including:
- a. A baseline inventory of land structures in their existing condition;
 - b. A baseline inventory of wells in their existing condition;
 - c. Preconstruction of monitoring of wells;
 - d. Groundwater modeling to evaluate potential groundwater inflows into the tunnel and probable effects on wells;
 - e. Placement of supplemental storage tanks on property where it is determined that wells may be impacted to make up for potential shortfalls during construction;
 - f. Development of a notification system for property owners to report any changes in well conditions during and after construction and/or geotechnical and soils testing;
 - g. A contingency plan for the provision of supplemental water for wells that are adversely impacted by any aspect of the project. The contingency plan

will be initiated immediately upon notification to the Agency from an owner of an impacted well via the notification system in “e.” above. The contingency plan will consist of the following:

- i. Water will be provided by the Agency and will be of like quality and quantity as lost, or better;
- ii. The Agency will replace water by making immediate contractual agreement with certified health department approved delivery vehicles in quantities sufficient to maintain storage tanks including domestic as well as fire fighting and livestock levels;
- iii. The Agency will provide fully compensated, contracted, on site drilling rig(s) for properties losing groundwater, and drill up to three test holes, of 9” diameter, one of which shall be cased and equipped with a pump string sufficient to operate from landowner(s)’ electrical panel and lift water to existing storage, and providing replacement quantities of potable water to the affected propert(ies);
- iv. Properties with multiple wells shall receive equal multiple groups of said three test holes;
- v. The affected landowner will control the drilling location. The permitting will be funded by Agency;
- vi. If the initial two test bores specified in iii, above, shall fail to offer a developable well, the Agency will pay for a single visit of a geologist or credentialed hydrologist to consult with the landowner for the location of a third test bore. In the event a third hole and others shall produce an insufficient result, the Agency will provide on site storage tanks, and shall pay for replacement water from a certified water treatment plant operated by a Grade IV operator, such as Heritage Ranch or Oak Shores, or by it’s own plant, which will provide replacement water via a pipeline route consistent with owner(s)’ ingress easements.
- vii. The Agency responsibility for such equal replacement water as specified above shall continue for a period of five years, during which time, if water becomes unavailable, the Agency will pay landowner liquidated damages in an amount to be determined by a certified arbitrator.
- viii. Nothing in this resolution shall prevent Agency from proposing alternatives, at complete and sole option of landowner, including recharge by spreading or monitored injection, creation and

operation of a certified community water system at Agency expense, or permanent water provision from proven wells outside the project zone of Project groundwater influence.

5. The measures identified in this resolution will be reviewed during preliminary design, and in the EIR, to ensure their effectiveness and to comply with the California Environmental Quality Act.

Upon motion of Director _____, and seconded by Director _____, and carried by those members present, the Board of Directors hereby resolves:

PASSED AND ADOPTED on this _____ day of _____, 2017, by the following vote, to-wit:

AYES:

NOES:

ABSENT:

BY:

ATTEST: