# WASTEWATER ADDENDUM Tribal Environmental Evaluation

Jamul Indian Village Gaming Development Project





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# WASTEWATER ADDENDUM JAMUL TRIBAL ENVIRONMENTAL EVALUATION

# **1.0 INTRODUCTION**

The Jamul Indian Village (hereafter, "Tribe") has prepared this Wastewater Addendum to its Final Tribal Environmental Evaluation (January 2013) to address modifications made to its previously-approved Jamul Gaming Facility, located in unincorporated San Diego County. (References in this Addendum to the "Final Tribal Environmental EE" are intended to mean the Final Tribal Environmental Evaluation, together with a February and June 2014 Addendums.). This modifications proposed herein reflect changes made to the JIV Gaming Facility wastewater generation estimates, recycled water balance estimates, treated water storage tank location and capacity, and treated water disposal methods. Under this plan revision, the storage tank and disposal fields would be located on the west side of the Jamul Reservation as shown in **Figure 1**. No increase in operational use would result from the changes proposed. The square footages, building heights and other design features previously analyzed in the Final Tribal EE would not be modified by these proposed changes. The proposed modification would not affect the current access and intersection improvements currently being considered by Caltrans under a separate process.

The attached Environmental Checklist concludes that no new significant environmental impacts would result from the proposed modifications. All previously adopted mitigation measures for the gaming project are not altered and would continue to apply. The analysis in this Addendum assumes full implementation of the previously imposed mitigation measures.

It is not uncommon for refinements to be made to planning level estimates used for environmental documents as engineering teams change from planning to design/construction, plans mature and construction progresses. The refinements made to the JIV Gaming Facility wastewater plan result from reduced occupancy estimates, refinements made to reuse assumptions, conversion to an above-ground storage tank from previously planned below-ground, and elimination of the mechanical vapor compression (MVC) disposal assumption in favor of the use of disposal fields and limited water trucking.

# 2.0 ADDENDUM FEATURE DESCRIPTION

The wastewater disposal plan described in the Final EE assumed the use of a mechanical vapor compression (MVC) evaporator near the wastewater treatment plant to reduce the volume of treated effluent. The MVC system was to be sized for an evaporation rate that allowed for the elimination of 40,000 gallons per day (gpd) of treated wastewater, which would have provided sufficient evaporation capacity in excess of the then estimated 25,000 gallon maximum unused treated wastewater generated during January. Since completion of the Final EE and refinement of the construction plans, the treated water generation estimates and water balance estimates originally used for the Final EE have been

revised. In addition the capacity and location of the treated water storage tank has been modified, and disposal method for treated wastewater has been changed.

Physical changes to the Reservation would result from the modified size and location proposed for the treated water tank, as well as the construction of the treated water disposal field on the west side of the Reservation. With regards to the treated water disposal field, several letter reports have been prepared which document the geology/soil conditions and percolation test methodology/results for land on the west side of the Reservation where the disposal fields would be located. The reports are listed below and are hereby incorporated by reference into this Addendum and are included in **Appendix A**.

- Proposed IMP Catch Basin Evaluation of Percolation Rates (June 3, 2014): Evaluated the percolation rates in 5 test pits (PT 1-5) located on the west side of the Reservation;
- Proposed West Stormchamber Evaluation of Percolation Rates (February 4, 2015): Evaluated the percolation rates in 4 test pits (SCP 1-4) located on the west side of the Reservation;
- Proposed East Stormchamber Evaluation of Percolation Rates (February 18, 2015): Evaluated the percolation rates in 3 test pits (SCP 5-7);
- Summary of Percolation Rates and Rock Characterization for Proposed Stormchamber Infiltration Design (February 23, 2015): Provided a summary of the percolation tests that were completed on the west side of the Reservation for the proposed Stormchamber infiltration areas and storm water IMP basins; and
- Stormchamber Review and Consolidation Test Results (February 27, 2015): Provided summary for the percolation tests that have been completed west of Willow Creek for the proposed Stormchamber infiltration areas and storm water IMP basins.

The locations of the percolation test pits referenced above are shown in Figure 2.

# 2.1 Revised Wastewater Generation Estimates and Recycled Water Balance

For wastewater generation, a comparison of the 2013 Tribal EE estimates with current 2015 calculations is presented in **Table 1**.

The revised figures above, which resulted from reduced occupancy assumptions, show a reduction of approximately 29% for average daily, maximum daily and peak daily flows when compared with the original 2013 Final Tribal EE estimates.

In addition to the revised generation numbers shown above, the design/construction engineering team for the JIV Gaming Facility has also refined the yearly and monthly recycled water balance. The comparison

between the 2013 Final Tribal EE estimates for recycled water balance (yearly millions of gallons (MG)) and the current estimates is provided in Table 2.

Item	2013 Final Tribal EE	Current 2015 Calculations	gpd Change
Gaming Facility Avg Daily Flow (gpd <sup>1</sup> )	82,600	58,100	(24,500)
Gaming Facility Max Daily Flow (gpd)	123,900	88,350	(35,550)
Gaming Facility Peak Daily Flow (gpd)	165,200	118,600	(46,600)
1/11			

TABLE 1 WASTEWATER FLOW ESTIMATES 2013 vs 2015

<sup>1</sup>/ gallons per day

SOURCE: Final Tribal EE, 2013; Marnell Companies, 2015

	2013 Final Tribal EE	Current 2015 Estimates	
1. Total Yearly Sewage (MG)	30.15	21.21	
2. Total Yearly Brine Stream Discharge (MG)	1.81	1.84	
3. Total Yearly WAS Discharge (MG)	-0-	0.17	
4. Total Yearly Recycled Water Produced (MG)	28.34	19.20	
5. Total Yearly Gaming Facility Reuse (MG)	18.09	3.47	
6. Total Yearly Irrigation Demand (MG)	1.75	5.86	
7. Total Yearly Cooling Tower Evaporation (MG)	7.30	9.13	
8. Total Yearly Excess Recycled Water (MG)	3.31	4.47	
SOURCE: Final Tribal EE, 2013; Marnell Companies, 2015			

TABLE 2 YEARLY TREATED WATER BALANCE

The revised yearly excess recycled water translates to an average daily excess of 12,246 gpd (4.47 MG/365). The amount of excess recycled water is not consistent day-to-day; rather, the amount of daily excess recycled water is dependent on the amount of reuse, which varies depending on the time of year. On-site landscaping irrigation reuse, for example, is the most seasonably variable reuse factor with the maximum irrigation reuse occurring during the June to September period, and the minimum amount during the December to March period.

Breaking down the yearly amount to account for month to month variability, **Table 3** below provides the comparison of excess recycled water estimated in the 2013 Final Tribal EE with the Current 2015 Estimate. As can be seen from **Table 3**, the maximum daily surplus of treated water would occur in

January with an estimate of 37,419 gpd. The June through October period would result in no excess treated water, which is due to the high level of irrigation water needed during this period.

MONTHET TREATED WATER SORT LOS				
Month	Daily Surplus: 2013 Final Tribal EE Estimate (gpd)	Daily Surplus: Current 2015 Estimate (gpd)		
January	24,645	37,419		
February	19,750	27,143		
March	11,194	16,452		
April	7,533	10,333		
May	645	323		
June	0	0		
July	0	0		
August	0	0		
September	0	0		
October	4,808	0		
November	17,267	23,000		
December	23,516	33,548		
SOURCE: Final Tribal EE,	2013; Marnell Companies, 2015	5		

TABLE 3MONTHLY TREATED WATER SURPLUS

# 2.2 Revised Treated Water Storage Tank

The size and location of the treated water storage tank has been modified from assumptions made in the 2013 Final Tribal EE. The 2013 Final Tribal EE assumed that treated water would be temporarily stored in a 200,000 gallon capacity below-ground, bolted steel tank. Storage tanks are sized to accommodate a maximum of two to three days of average flow. The 24 foot high, 38 foot diameter tank was to be built into the subterranean JIV Gaming Facility parking structure under the 2013 plan. The 2015 revision is for this bolted steel tank to be located above-ground within the wastewater treatment plant (WWTP) complex on the west side of the JIV Reservation (**Figure 1**). The tank has been downsized to a 130,000 gallon capacity represents a 2.23 day capacity (130,000/58,100) of the revised average water generation estimate.

# 2.3 Revised Treated Water Disposal Method

The 2013 Final Tribal EE assumed use of a MVC evaporator near the wastewater treatment plant to reduce the volume of treated water. According to the Final EE, the MVC system was to be sized for an evaporation rate allowing for the elimination of up to 40,000 gpd of treated water, which would have

provided sufficient evaporation capacity to address the 25,000 gallon maximum excess wastewater generated during January<sup>1</sup>. The current proposal is to use a combination of on-site disposal and water trucking to San Diego Metro Pump Station No. 1 Receiving Station located on East Harbor Drive in the City of San Diego. The MVC has been eliminated from consideration by the Tribe due to financial considerations.

A portion of the treated water would now be disposed within on-Reservation disposal fields located in two locations on the west side of the JIV Reservation (**Figure 1**). Site 1 is located east of the existing Tribal Community Center, while Site 2 is located immediately west of the proposed WWTP. Combined, these two sites are capable of accommodating the worst case amount of excess water generated during the month of January (37,419 gpd). However, in order to provide 100% redundancy for the on-site disposal system, half of the available disposal area would be used at any one time. The redundancy allows for set aside land usable for disposal purposes in the event that maintenance issues arise with the site being used. This also allows for the rotational use of disposal sites. Providing the on-site disposal system with 100% redundancy would result in the need to truck water off site during select months of the year. **Table 4** below shows the amount of treated water to be disposed via water trucking following use of on-site disposal (broken down by month).

TABLE 4		
MONTHLY TREATED WATER SURPLUS		
LESS ON-SITE DISPOSAL		

Month	Daily Surplus Disposed after On-Site Disposal	# Trucks Required Daily for Net Surplus <sup>1</sup>
January	18,719	4
February	8,443	2
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
October	0	0
November	4,300	1
December	14,848	3

<sup>1</sup>/ Based on 5,000 gal maximum capacity

SOURCE: Final Tribal EE, 2013; Marnell Companies, 2015

<sup>&</sup>lt;sup>1</sup> 2013 Final Tribal EE January estimate

Treated water from the WWTP would gravity flow to the constructed water chambers via pipe connection. Water would fill the chambers infiltrating an installed aggregate base underlain by a filter fabric, which filters water prior to it percolating to the native soil/rock below. The excavation depth for the water chambers would range from a minimum of 4.5 feet to a maximum of 11 feet below ground surface (bgs). Approximately 6 inches of aggregate (crushed rock foundation stone material), which serves as the water distribution base under the water chambers, would be placed on top of the excavated surface. A filter fabric (geotextile) would then be placed on top of the aggregate. The domed water chambers (2.5 feet tall by 4.25 feet wide) would then be placed 6 inches apart on top of the filter fabric. The site would then be backfilled with soil. A 6-inch polyvinyl chloride (PVC) pipe, which would be extended underground from the WWTP to the chamber, would connect to the chambers via pipe manifolds.

Site 1 would contain a total of 30 recycled water chamber segments distributed in six rows of five connected segments. Each chamber row would be lined parallel to each other six inches apart. Site 2 would contain a total of 37 recycled water chamber segments distributed in four rows of eight connected segments plus a fifth chamber row that would contain five connected segments.

Either an impermeable layer or low level cut-off wall would be used along the southern perimeter of the infiltration area east of the Tribal Community Center (Site 1) and the east and south perimeters of the infiltration area west of the WWTP (Site 2). This impermeable layer would be used to ensure vertical infiltration of the wastewater into the subgrade material and to limit the potential infiltration into the overlying and adjacent engineered fill material. The barrier would extend to depths that penetrate the subgrade soils consisting of weathered granitic rock at the base of the engineered fill.

The remaining treated water shown in **Table 4** would be disposed via water trucking to the San Diego Metro Pump Station No. 1 Receiving Station, which is approximately 23 miles from the Reservation. As shown in **Table 4**, off-site trucking would only be needed four months out of the year. Assuming trucks capable of transporting 5,000 gallons of treated water, the worst case per day transport would result in the need for approximately 4 trucks per day during the month of January.



Figure 1



Treated water disposal chambers

Road system

Proposed Treated Water Disposal System and Storage Tank



Excerpt of Drawing Produced by Construction Testing & Engineering, Inc.

Percolation Test Location

## 3.0 ENVIRONMENTAL CHECKLIST

#### I. Aesthetics

Would the project	Potentially Significant Impact	Less than Significant	No Impact
a.) Have a substantial adverse effect on a scenic vista?			
b.) Substantially damage off-reservation scenic resources, including, but not limited to, tress, rock outcroppings, and historic buildings within a state scenic highway?		$\checkmark$	
c.) Substantially degrade the existing visual character or quality of the site and its surroundings?			
d.) Create a new source of substantial light or glare, which would adversely affect day or nighttime views of historic buildings or views in the area?		$\checkmark$	
Discussion			

#### **Discussion:**

The aesthetics setting for the site is fully described in Section 4.3 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description of the Final Tribal EE includes a discussion of the area viewshed and regulatory setting. The aesthetics setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

The one new visible feature addressed within this Addendum is the above-ground treated water storage tank, which would measure 24 feet high and 38 feet in diameter. This tank would be located on the southwestern side of the Reservation within the WWTP footprint. The storage tank located on the west side of the Reservation would not be noticeable from any of the key views presented in Final Tribal EE (Marnell, pers. comm.). The height of the tank from the north would be screened in part by the WWTP and Tribal Community Center, which are both located north of the storage tank. The view of the tank for the few houses located over 1,600 feet to the west would be screened by the existing Tribal offices located on the extreme western boundary of the Reservation. The view of the tank from the east would be screened by the 45-foot (apparent height) gaming facility and vegetated Riparian corridor. The above-ground tank would be seen from the south (Rancho Jamul Ecological Reserve).

As previously stated in the Final Tribal EE (page 4.3-9), the Jamul Gaming facilities would be visible to a few residents in a manner that is subordinate to the distant landscape and does not occlude the skyline. As such, the one additional above ground features of the Addendum (the water tank) is not expected to substantially degrade the existing visual character or quality of the site and its surroundings. The feature of the Addendum would not adversely affect a recognized scenic vista, nor would it damage recognized off-Reservation scenic resources, including trees, rock outcroppings, and historic buildings within a state scenic highway.

The Tribe's restriction of providing lighting consistent with local County codes and ordinances would ensure that the features of the Addendum would not create a new source of substantial light or glare. Therefore, lighting associated with the features of the Addendum would not adversely affect day or nighttime views of listed historic buildings or recognized views in the area. Given the distance to the Palomar and Mount Laguna observatories and the commitment by the Tribe to use downcast lighting, the impact to the observatories from the features of the Addendum is considered less than significant. The Tribe's restriction of outdoor light and glare via use of downcast lighting consistent with County regulations would also ensure that the impact to local

# night skies would be less than significant.

# II. Agriculture and Forest Resources

Would the project	Potentially Significant	Less than	No Impact	
	Impact	Significant	_	
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance				
(Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring				
Program of the California Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			$\checkmark$	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public				
Resources Code section 12220(g)), timberland (as defined by Public Resources Code section				
4526), or timberland zoned Timberland Production (as defined by Government Code section				
51104(g))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?			$\checkmark$	
e) Involve other changes in the existing environment which, due to their location or				
nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest				
land to non-forest use?				
Discussion:				
The features of the Addendum would not result in the conversion of off-Reservation lands from farmland to non-agricultural uses. All changes would occur				
on-Reservation. No temporary or permanent impact to prime farmland, unique farmland, or farmland of statewide importance would occur from the features				
of the Addendum. The features of the Addendum would not result in the loss of forest land or convert forest land to non-forest use. The features of the				
Addendum would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland				
(as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).				
Lastly, the Addendum would not conflict with existing zoning for agricultural use or Williamson	n Act contract lands.			

## III. Air Quality

Would the project	Potentially Significant Impact	Less than Significant	No Impact
a.) Conflict with or obstruct implementation of the applicable air quality plan?			
b.) Violate any air quality standard or contribute to an existing or projected air quality violation?			

c.) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors?)	√	
d.) Expose off-reservation sensitive receptors to substantial pollutant concentrations?		
e.) Create objectionable odors affecting a substantial number of people off-reservation?	$\checkmark$	

The air quality setting for the area is fully described in Section 4.11 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description of the Final Tribal EE includes a discussion of the existing air quality setting, air pollutants and regulatory setting. The air quality setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

The additional truck trips associated with the hauling of treated water would result in a slight increase in long-term emissions from operations over what was assessed in the Final Tribal EE, with Addendums. As indicated in the Addendum Feature Description, the revised features would generate an additional trips during four months of each year. Based on the maximum daily trips shown in **Appendix 2**, **Table 3** and a round trip distance of 46 miles, the truck trips would generate a maximum of 368 vehicle miles traveled daily in January.

The use of on-site wastewater water disposal system would reduce emissions from the emissions associated with the mechanical vapor compression system described in the Final EE. All water disposed in the on-site disposal fields would have first been processed through the on-site wastewater treatment plant as detailed in the Final EE. **Appendix 2, Table 5** summarizes the total operational emissions of the features combined with the emissions from the additional hauling. As shown in **Appendix 2, Table 5**, even with the emissions associated with the additional hauling, the features would not exceed the identified thresholds. Thus, the air quality impacts identified in the Final EE would remain the same.

## **IV. Biological Resources**

Would the project	Potentially Significant Impact	Less than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			V
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through			

direct removal, filling, hydrological interruption, or other means?	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	$\checkmark$
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	$\checkmark$
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	$\checkmark$

The biological resources setting for the area is fully described in Section 4.7 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description of the Final Tribal EE includes a discussion of the regional setting, vegetation communities and wildlife habitat types, protected water resources, special status species and regulatory setting. The biological resources setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

The treated water disposal fields would be located at two locations on the west side of the Reservation: Site 1 is located east of the existing Tribal Community Center, while Site 2 is located immediately west of the WWTP. The above ground water storage tank would be located on the west side of the Reservation within the area already designated for WWTP construction. All sites are devoid of any vegetation due to ongoing gaming facility construction. There are no sensitive habitats, plant species or animal species within the site for the Addendum - no significant impacts to riparian habitat would occur. Impacts to sensitive habitats and special-status species would be less than significant.

The Reservation was formally assessed for wetlands and other jurisdictional water resources during a comprehensive delineation in 2007 and 2011, which was verified by USACE. Work related to the features of the Addendum on the Reservation would not impact federal or state waters. Additionally, no impacts to wetlands would occur.

Within the vicinity of the Addendum site, several wildlife corridors exist: the Willow Creek riparian corridor; the Jamul Creek riparian corridor; and the CDFW preserve areas (RJER and Hollenbeck Canyon Wildlife Area). Given that the site is located on elevated lands outside of the Willow Creek Corridor, no fishery resources exist on the Addendum site. The features of the Addendum would not significantly interfere with wildlife movement because the wildlife corridor is located east of the Addendum site within the Willow Creek Corridor, which would not be impacted by this modification.

The features of the Addendum would not conflict with provisions of the MSCP or other approved local, regional, or state habitat conservation plans because all features would be located on the JIV Reservation, which is not subject to these plans. The proposed modifications, including water disposal fields, above-ground water tank and water trucking would not impact adjacent MSCP or Reserve/Preserve lands. All activity would occur on existing JIV Reservation, paved roadway, and City Pump Station Lands.

#### **V. Cultural Resources**

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The cultural resources setting for the area is fully described in Section 4.8 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description of the Final Tribal EE includes a discussion of cultural history, cultural/paleontological resources and regulatory framework. The cultural/paleontological setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

No built resources have been recorded within the area and no cultural resources were identified within the Reservation during the pedestrian surveys in 2010 and 2011. Six archaeological sites (CA-SDI-7683, CA-SDI-7684, CA-SDI-7685, CA-SDI-7686, CA-SDI-7687, and CA-SDI -7688) previously recorded within the Reservation are not considered eligible for National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR) inclusion and have no potential to be impacted by the features since each has been disturbed, removed or destroyed by natural or human agencies during the three decades since initial recordation in 1979. The features analyzed in this Addendum would be subject to Final Tribal EE Mitigation Measures (Attachment 1), which include a worker education course, construction monitoring by a qualified archaeologist, and procedures to be followed in case of discovery of artifacts. A less than significant impact would occur.

## VI. Geology and Soils

Would the project	Potentially Significant	Less than	No Impact
	Impact	Significant	
a) Expose off-reservation people or structures to potential substantial adverse effe	ects, including the risk of los	s, injury or death in	volving:
i) Rupture of a known earthquake fault, as delineated on the most			
recent Alquist-Priolo Earthquake Fault Zoning Map issued by t	ne		
State Geologist for the area or based on other substantial			
evidence of a known fault? Refer to Division of Mines and			
Geology Special Publication 42.			
ii) Strong seismic ground shaking?			
iii) Seismic-related ground failure, including			
liquefaction?			

iv) Landslides?	$\checkmark$
b) Result in substantial soil erosion or the loss of topsoil?	$\checkmark$
c) Be located on a geologic unit or soil that is unstable, or that would become	
unstable as a result of the project, and potentially result in on or off-site landslide,	
lateral spreading, subsidence, liquefaction or collapse?	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform	$\checkmark$
Building Code (1994), creating substantial risks to life or property?	
e) Have soils incapable of adequately supporting the use of septic tanks or	$\checkmark$
alternative waste water disposal systems where sewers are not available for the	
disposal of waste water?	

The geology and soils setting for the area is fully described in Section 4.4 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description in the Final Tribal EE includes a discussion of regional and local geologic setting, topography and soils, mineral resources, fault rupture and earthquake hazards, and regulatory setting. The geology and soils setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference. Additional characterization of the Reservation soil/geology has been undertaken during construction of the various features of the JIV Gaming Facility. A Geological Characterization for Proposed Soil Nail Walls was prepared in May 2014. The results of this report indicated that surficial geologic map units identified at the site include artificial fill material, alluvium/colluvium, residual soils that have developed upon the alluvium/colluvium and residual soil developed upon the underlying granitic rock. A description of the existing map units found on the Reservation, as described in the May 2014 document, are presented in **Appendix 3**.

The area west of Willow Creek, including the building pad for the WWTP and associated structures, and the proposed treated water infiltration areas are underlain with documented fill over granitic rock. The documented fill generally consists of a heterogeneous mixture of onsite soils that primarily consists of silty sand with clay and fine gravel. The granitic rock is of varying mineral compositions consisting of an intermixture of diorite, tonalite, and granodiorite. The granitic rock was divided into four map units based on the degree of weathering, rock strength, and rock hardness as part of the Rock Characterization study for the entire Hollywood Casino site. The four map units are identified by the symbols of GRw, GRt, GRm, and GR. With GRw consisting of extremely too highly weathered, very weak to weak granitic rock; GRm consisting primarily of moderately weathered, moderately strong granitic rock; GRt is the transitional zone between GRw and GRm and contains rock qualities of both map units. GR is primarily moderately to slightly weathered strong granitic rock. Detailed descriptions of the granitic rock can be found within the Rock Mass Characterization report, dated May 20, 2014 (**Appendix 3**).

The granitic rock encountered within the WWTP explorations during grading operations west of Willow Creek was mapped as the GRw map unit that consisted of extremely to highly weathered granitic rock that is very weak to weak, with low hardness, locally friable, and locally grades upward into residual (saprolite) soil. The GRw granitic rock was observed from approximate elevations of 900 feet above mean sea level (msl) to depths of approximately 20 feet in the WWTP borings, or to equivalent elevations of approximately 875 feet above msl. A general observation from the Rock Characterization study was that extensive weathering and clay infilled fractures were associated with the map units GRw and GRt, and only a few fractures with clay were observed in the underlying map units, particularly map unit GR.

Based upon field observations, limited fracture flow is anticipated within the GRw map unit due to the extreme weathering and clay infilling of the closely spaced tight to healed fractures. The rock groundmass is so weathered and locally friable that rock properties are more like a soil than a hard rock. This zone of extremely weathered granitic rock extends to depths of approximately 14 to 20 feet below the proposed Stormchamber invert elevations, which is coincident with the observed range in groundwater elevations.

As noted above, the primary fractures are oriented perpendicular to oblique to Willow Creek and any fracture flow at depth along the fractures is also anticipated to intersect groundwater elevations and daylight along Willow Creek to the east and southeast of the infiltration areas. Although detailed studies of rock permeability, fracture flow, and storage capacity have not been performed, the proposed infiltrating waters are not generally anticipated to generate springs or raise extended groundwater levels above historic high levels.

Percolation testing on the west side of the Reservation has been completed for 12 test pits whose locations are shown in **Figure 2**. The results of percolation testing for these pits have been documented in the following reports:

- Proposed IMP Catch Basin Evaluation of Percolation Rates (June 3, 2014): Evaluated the percolation rates in 5 test pits (PT 1-5) located on the west side of the Reservation.
- Proposed Stormchamber Evaluation of Percolation Rates (February 4, 2015): Evaluated the percolation rates in 4 test pits (SCP 1-4) located on the west side of the Reservation.
- Proposed East Stormchamber Evaluation of Percolation Rates (February 18, 2015): Evaluated the percolation rates in 3 test pits (SCP 5-7).
- Summary of Percolation Rates and Rock Characterization for Proposed Stormchamber Infiltration Design (February 23, 2015): Provided a summary of the percolation tests that were completed on the west side of Willow Creek for the proposed Stormchamber infiltration areas and storm water IMP basins.
- Stormchamber Review and Consolidation Test Results (February 27, 2015).

The percolation tests were conducted in general accordance with the County of San Diego guidelines. The percolation rates account for both lateral and vertical flow through the tested section. The percolation rates from the percolation tests SCP-6 and SCP-7 (as presented in the Summary of Percolation Rates and Rock Mass Characterization letter, dated February 23, 2015) are considered the most representative based on the location of the current chamber layout. The percolation rates for SCP-6 were calculated to be 0.5 feet per day, and the calculated results for SCP-7 were 1.2 feet per day. The average of these rates is 0.85 feet per day and is the recommended percolation rate for the chamber design. Using the 0.85 feet per day rate for the proposed chambers would ensure that the soils would be capable of adequately supporting the use of the treated water disposal system.

The Final EE incorporation of appropriate seismic design and construction measures, as well as the adherence to the California Building Code (CBC), ensures that risks to the health or safety of workers or members of the public would be less than significant. Use of these standards would ensure that seismic hazard risks are less than significant. Given that the site is underlain by bedrock, liquefaction is not an issue for the site. The affected area does not contain any rare, high quality, or scientifically significant geologic or topographic resources, and does not encompass any areas designated as National Natural Landmarks. The features of the Addendum would not adversely affect any known or recorded mineral resources. Construction of these features would not result in a loss of economically viable aggregate rock or diminish the extraction of important ores or minerals. Because there are no known or mapped mineral resources within the area, development and use of the land would not be affected by such resources. Thus, implementation of the features described in the Addendum would have no significant adverse effect upon mineral resources.

The area on the Reservation affected by features of this addendum are located west of Willow Creek on and near the WWTP site, which has been extensively graded as part of the Gaming Facility construction. Excavation for the construction of the disposal fields would be noticeable during construction; however, this cut would be filled and compacted to original grade once construction of the facilities is complete. Construction of the storage tank would include minor additional on-site grading needed to bring the site to final grade. Impacts to topographical features of the site are considered minimal and would not be significantly impacted by the features described in the Addendum.

Under Clean Water Act Section 402, any construction that disturbs at least one acre of land requires enrollment in the construction general permitting program under the National Pollutant Discharge Elimination System (NPDES). For construction on Indian reservations and federal lands, the landowner and contractor must enroll for coverage under USEPA's General Storm Water Discharge Permit for Construction Activities (NPDES No. CAR10000IF). For construction on non-federal lands in California, the landowner and contractor must enroll for coverage under the State Water Resources Control Board's General Storm Water Discharge Permit for Construction Activities (Order No. 2009-0009, NPDES No. CAS000002) prior to the initiation of construction. Coverage under either permit requires creation and implementation of an effective storm water pollution prevention plan, erosion control plan, hazardous materials management and spill response plan, and construction best management practices, all of which are designed to minimize or eliminate erosion issues and eliminate sediment discharges. With proper implementation, these plans reduce or eliminate the potential for accidental release of sediment and other pollutants during construction, as well as reduce the potential for erosion. The erosion control plan would be prepared before construction may include but are not limited to silt fences, fiber rolls, and gravel bag check dams. The location of permanent erosion control features such as drop inlet sediment traps, vegetated drainage swales, and energy dissipaters would also be identified. Furthermore, as stated in the Final EE, the grading plan would meet or exceed standards established by Sections 87.101 through 87.717 of San Diego County Code of Regulatory Ordinances (Grading, Clearing, and Watercourses Ordinance), which requires effective erosion control and compensatory mitigation for natural habitat loss, if applicable. As a result, erosion impacts would be less than significant.

#### VII. Greenhouse Gas Emissions

Would the project	Potentially Significant Impact	Less than Significant	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		$\checkmark$	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			

#### **Discussion:**

The greenhouse gas emissions setting for the area is described in Section 4.11 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The greenhouse gas setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

The Addendum features would require more hauling of treated waste water than assessed in the Final EE. These additional truck trips would result in a slight increase in GHG emissions from operations over what was assessed in the Final EE. The revised features would generate an additional 303 trips annually, resulting in 26,496 annual vehicle miles traveled. A revised operation emissions estimate is provided in **Appendix 2, Table 6** and compared to the original emissions. As shown, total operational GHG emissions resulting from the Final EE Gaming Facility Project were estimated to be approximately 10,407 metric tons of carbon monoxide equivalent (MTCO2e) per year. The additional hauling emissions associated with the modified features would increase total Gaming Facility emissions to 10,443 MTCO2e, an approximate one percent increase.

To reduce GHG emissions, the Tribe previously adopted several mitigation measures, including a reduction of GHG emissions by approximately 30 percent from Business as Usual (BAU) conditions, which combine regulatory measures such as Pavley, Low Carbon Fuel Standards, utility reduction goals required by the State and recycling requirements under AB 341. Additionally, the following previously adopted mitigation measures, would reduce GHGs from the BAU levels, and represents the Gaming Facility Project's effort to meet it fair share of the goals under AB 32.

- The project is installing green roof technologies and will capture treated water for use in the landscaped areas and on the roof.
- The project will provide solar panels on the roof, where possible, in areas not being utilized for the green roof technologies.
- The project will provide shuttle and bus services to and from the project to reduce vehicle trips and miles traveled.
- The project will flare off and burn CH4 produced at the wastewater treatment plant to reduce CH4 emissions up to 95%.
- The project will utilize low flow water devices High Efficiency Toilets (HET) and with specifications meeting or exceeding standards set forth by the EPA
- The project will include the installation of low energy utilities (i.e., lighting and appliances) to increase building efficiency and reduce power consumption.
- The project will promote employee and patron ridesharing to help reduce vehicle trips traveled.
- The project will install dedicated parking stalls and charging stations for electric vehicles.

The Gaming Facility Project may also incorporate other emission reduction strategies that are available at the time the facilities are being built that may also achieve additional reductions in greenhouse gases. In light of the fact that, the additional hauling trips would not change the findings of the Final EE.

# VIII. Hazards and Hazardous Materials

Would the project	Potentially Significant Impact	Less than Significant	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			V
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			$\checkmark$
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where			

residences are intermixed with wildlands?		

The hazards and hazardous materials setting for the area are fully described in Section 4.6 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description within the Final Tribal EE includes a discussion of current conditions and land use, previous environmental assessments, environmental database queries, site reconnaissance and regulatory setting. The hazardous and hazardous materials setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

The issue of accidental release of hazardous materials during construction was addressed within Impact 4.6(1) of the Final Tribal EE. As stated in that discussion, various petroleum products and hazardous materials would be stored and used; however the NPDES requirements reduce the potential impacts of accidental release of hazardous materials during construction to a less-than-significant level. No evidence of buried storage tanks or soil or groundwater contamination or other recognized environmental conditions were found during environmental site assessments performed in the last decade. However, construction of certain features of the Addendum (e.g., treated water disposal fields) would involve excavation, trenching and grading, and such earthmoving activities may uncover a previously unknown underground fuel storage tank, contaminated soil, or other hazardous material issue. This issue is considered less than significant with implementation of the Health and Safety Plan required in Mitigation 4.6(2) of the Final EE and incorporated into the Gaming Facility Project – including features of this Addendum.

Accidental release of hazardous materials during operation of the facilities is less than significant because of existing regulatory and monitoring mechanisms in place as noted in the Final Tribal EE Impact 4.6(3) discussion. The same regulatory and monitoring mechanisms apply to the features of this Addendum. Therefore, potential hazards are less than significant.

The area is located within an area of moderate to high fire hazard. However, potential impacts related to wildfires during construction of the features of the Addendum are considered less than significant with implementation of Final Tribal EE Mitigation 4.6(4), which have been incorporated into the Addendum description (**Appendix 4**).

#### IX. Hydrology and Water Quality

Would the project	Potentially Significant Impact	Less than Significant	No Impact
a.) Violate any water quality standards or waste discharge requirements?			ν
b.) Substantially deplete off-reservation groundwater supplies or interfere substantially with groundwater recharge such that there should be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			
c.) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion of siltation off-site?			

d.) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding off-site?	V	
e.) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted run off-reservation		
f) Otherwise substantially degrade water quality?		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?		
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?		V
j) Inundation by seiche, tsunami, or mudflow?		

The hydrology and water quality setting for the area are fully described in Section 4.5 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description within the Final Tribal EE includes a discussion of current conditions related to surface water, drainage and flooding, ground water, water quality and the regulatory setting related to these topics. The hydrology and water quality setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

Groundwater was not encountered in the borings advanced for the WWTP geotechnical investigation. The borings were advanced to a maximum explored depth of approximately 20.5 feet below ground surface (bgs). This equates to approximate elevations ranging between 881 to 876 feet above mean sea level (msl). Based on review of previous on-site investigations, groundwater elevations in the vicinity of the proposed WWTP and associated improvements are expected to range between approximate elevations of 880 to 868 feet above msl. Observations from temporary monitoring test holes that were excavated to the east of the subject site and Willow Creek indicated that groundwater was at approximate elevations of 870 to 872 feet above msl. Invert elevations of the proposed chamber infiltration areas range between approximately 894 to 900 feet above msl. Assuming historic high groundwater elevations of 880 feet above msl, the proposed infiltration areas will be approximately 14 to 20 feet above historic high groundwater elevations.

As mentioned above, and as reported in the Summary of Percolation Rates and Rock Characterization for Proposed Stormchamber Infiltration Design (February 23, 2015), the proposed infiltrating waters are not generally anticipated to generate springs or raise extended groundwater levels above historic high levels.

Construction of the Addendum features would result in the disturbance of soils that could be subject to erosion and transported to area waterways. However, as noted in the Final Tribal EE, an erosion control plan would be created and implemented for the construction phase to address this issue. Clean Water Act Section 402 requirements would ensure a less than significant operational impact concerning petroleum hydrocarbons, heavy metals, and other pollutants

#### generated by vehicles.

Design considerations from the County of San Diego Standard Urban Stormwater Mitigation Plan for storm water treatment and Low Impact Development will control storm water pollution and protect water quality. The Jamul Gaming Facility would utilize a combination of site planning, structural treatment devices, and best management practices.

Runoff from impervious areas analyzed in this Addendum would be conveyed through a series of gutters, drop inlets, and subterranean storm drain system, into a gravel detention facility identified for the gaming facility.

In addition to the structural controls designed into the Gaming Facility Project, reduction of stormwater pollutant levels would be ensured through the use of source controls described in the San Diego County Stormwater Standards Manual. The Standards Manual requires commercial facilities to implement best management practices in the following areas: employee training; stormwater pollution prevention plans; storm drain tileage and signing; annual review of facilities and activities; pollution prevention; materials and waste management; vehicles and equipment; and outdoor areas. The combination of structural devices and best management practices would reduce pollutants in stormwater to the maximum extent practicable. The residual pollutant concentration of the stormwater runoff would not significantly affect water quality downstream. To verify control and appropriate reduction of contaminants in surface runoff, the Tribe would implement a water quality monitoring program that would include testing for contaminants of concern. The combination of structural devices, best management practices, and monitoring would ensure that water quality is not degraded by Gaming Facility Project implementation. Therefore, a less than significant impact would result from implementation of the features analyzed in the Addendum.

As described in the Final Tribal EE, the Gaming Facility Project has engineered a stormwater detention facility to detain stormwater collected from the impervious surfaces and discharge it at a rate that matches pre-project flow conditions. The permanent features analyzed in the Addendum are not expected to significantly increase impervious surfaces given that they are being developed within areas currently assumed to contain impervious surfaces. The storage tank would be constructed on a site that is planned for pavement; therefore, increased flows post-project from this site are expected to be minimal. The disposal fields are not expected to create additional impervious surfaces beyond what is already planned for the site. On-site detention facilities are sized to accommodate any minimal additional flows that may result. Therefore, no significant flooding impacts would result from the features of the Addendum.

# X. Land Use and Planning

Would the project	Potentially Significant	Less than	No Impact
	Impact	Significant	
a) Physically divide an established community?			
b) Conflict with any applicable land use plan, policy, or regulation of an agency			
with jurisdiction over the project (including, but not limited to the general plan,			
specific plan, local coastal program, or zoning ordinance) adopted for the purpose			
of avoiding or mitigating an environmental effect?			
c) Conflict with any applicable habitat conservation plan or natural community			
conservation plan?			

The land use and planning setting for the area are fully described in Section 4.2 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description within the Final Tribal EE includes a discussion of the regional setting, Jamul/Dulzura Subregion setting, area setting, site setting and a discussion of the land use guidance documents applicable to the site. The land use setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference. The features analyzed in this Addendum are focused on land within the Reservation and, as such, County land use regulations (including the MSCP) would not apply. None of the proposed features would physically divide an established community.

## **XI. Mineral Resources**

Would the project	Potentially Significant	Less than	No Impact
	Impact	Significant	
a) Result in the loss of availability of a known mineral resource that would be of			
value to the region and the residents of the state?			
b) Result in the loss of availability of a locally important mineral resource recovery			
site delineated on a local general plan, specific plan or other land use plan?			
Discussion:			
The California Geological Survey classifies land in western San Diego County according to the presence or absence of construction aggregate resources.			
However, the area itself does not offer a suitable combination of soils and minerals t	types to warrant extraction	of aggregates. The	ere are no known mapped
mines within the area or visual evidence of any mining activity. The field survey did	l not indicate past or prese	nt mines or quarrie	s. The proposed grading and
landform alteration associated with the site would not adversely affect known or recorded mineral resources. Alteration in the land use will not result in a loss			
of economically viable aggregate rock or diminish the extraction of important ores or minerals. Because there are no known or mapped mineral resources			
within the area, development and use of the land will not be affected by such resource	ces. There are no abandone	ed mines, shafts or	tailings that would affect
development. Therefore impacts associated with mineral resources would be less that	an significant.		

# XII. Noise

Would the project	Potentially Significant Impact	Less than Significant	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	$\checkmark$	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?		
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?		$\checkmark$

The noise setting for the area is fully described in Section 4.10 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description within the Final Tribal EE includes a discussion of sensitive noise receptors in the area and existing noise levels. The noise setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

Based on engineering estimates, the features would generate as much as an additional 8 round truck-trips per day during the winter months. Assuming an 8 hour day of hauling, this would result in a maximum pass by of 2 trucks in any given hour. The increase in traffic volumes and shift in vehicle classification, i.e. the increased ratio of heavy trucks relative to other vehicles, along this segment of SR-94 would result in a maximum increase in noise levels along SR-94 between the site and SR-54 of less than 1 dBA. While noise levels would increase slightly, these increases would not represent a substantial permanent increase in noise levels along assessment, the proposed changes in Gaming Facility Project would not result in a substantial increase in noise levels along SR-94 more than predicted in the Final Tribal EE. Therefore, the increase would not result in new impacts or require new mitigation. Therefore, the noise impacts identified in the Final Tribal EE would remain the same.

# XIII. Population and Housing

Would the project	Potentially Significant Impact	Less than Significant	No Impact
a) Induce substantial population growth in an area, either directly (for example, by			
extension of roads or other infrastructure)?			
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			$\checkmark$
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			
Discussion:			
The population and housing setting for the area is fully described in Section 4.16 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description within the Final Tribal EE includes a discussion of population and housing within San Diego County and Jamul. The population and housing setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by			

reference. The features analyzed in this Addendum would not result in new or substantially more severe population and/or housing impacts.

#### **XIV.** Public Services

	Potentially Significant	Less than	No Impact
	Impact	Significant	
a) Would the project result in substantial adverse physical impacts associated with			
the provision of new or physically altered governmental facilities, need for new or			
physically altered governmental facilities, the construction of which could cause			
significant environmental impacts, in order to maintain acceptable service ratios,			
response times or other performance objectives for any of the public services:			
Fire Protection?			
Police Protection?			
Schools?			
Parks?			
Other public facilities?			
Discussion	•		•

#### **Discussion:**

The public services setting for the area is fully described in Section 4.12 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description within the Final Tribal EE includes a discussion of water supply, wastewater service, solid waste service, electricity, natural gas and telecommunications, law enforcement, and fire protection and emergency services. The setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

The features would not result in any new or substantially more severe impacts related to fire protection or law enforcement issues beyond those identified in the Final Tribal EE. The site was originally planned for Gaming Facility development. The use of an above-ground storage tank and treated water disposal fields would not increase impacts on fire/police protection, schools, or parks. The use of water trucking would put additional disposal demands on the City's Pump Station, however, City representatives have stated that the City has adequate capacity to accommodate the increased water (**Appendix 5**). A less than significant impact to Public Services would result from the Addendum features.

## **XV. Recreation**

	Potentially Significant Impact	Less than Significant	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			1
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			1

The area surrounding the Reservation is home to a unique mix of preserves and reserves, which afford limited recreational opportunities. The Hollenbeck Canyon Wildlife Area offers hiking opportunities and is located approximately 4 miles south of the Reservation. The area is also home to a number of reserves, preserves and reservoirs, which provide recreational opportunities to area residents and visitors - Rancho Jamul Ecological Reserve, Otay Mountain Ecological Reserve, Sycuan Peak Ecological Reserve, McGintry Mountain Ecological Reserve, Otay Reservoir, Sweetwater Reservoir, as well as others. Other recreational opportunities identified by the public include school fields and stables/equestrian training centers. The storage tank and treated water disposal features analyzed in this Addendum would not result in any significant impacts related to recreational resources.

## XVI. Transportation and Traffic

Would the project	Potentially Significant	Less than Significant	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Impact	Significant	√
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			1
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?			$\checkmark$
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			V
e) Result in inadequate emergency access?			$\checkmark$
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			$\checkmark$
Discussion:			

The transportation/circulation setting for the area is fully described in Section 4.9 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description within the Final Tribal EE includes a discussion of the road network, roadway segments, existing conditions, near term conditions, and horizon year conditions. The transportation/circulation setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

During the peak month, approximately 4 trucks per day will be required for transporting waste water from the site to the San Diego Metro Pump Station No1. The trucks will access the site from State Route 94 (SR-94). Once loaded, the trucks will exit the Reservation and travel northbound along SR-94 toward the

west and connect to the State Route 15 (SR-15) traveling south to then connect to the Interstate 5 (I-5) prior to entering the San Diego Metro Pump Station No.1 along East Harbor Drive. SR-94 from the Casino site to the State Route 125 (SR-125) connection, which is approximately 8 miles west of the site, is classified as a Terminal Access route under the Surface Transportation Assistance Act (STAA). SR-15 and I-5 are classified as part of the National Network for the STAA.

The anticipated trucks would be distributed throughout the day and it is expected that no more than one truck per day would travel during the peak-hour operations of SR-94, SR-15 or the I-5. Assuming a Passenger Car Equivalent (PCE) for each truck of 2.5, the resulting truck trips during the peak-hour period would represent 2.5 vehicles in each direction of traffic (5 total vehicle trips per truck). During the entire day, the additional traffic would be equal to approximately 20 vehicular trips (4 trucks x 5 trips/truck = 20 trips) The additional vehicle trips would be negligible to the existing traffic conditions of the anticipated truck route. Therefore, the additional vehicular traffic generated by the waste water trucking would be considered to have a less than significant impact.

#### XVII. Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			V
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?			$\checkmark$
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?			
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			
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?			
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			
g) Comply with federal, state, and local statutes and regulations related to solid waste?			
Discussion			

The utilities and service system setting for the area is fully described in Public Works Section 4.12 of the Final Tribal EE (January 2013), as amended by the February and June 2014 Addendums. The setting description within the Final Tribal EE includes a discussion of water supply, wastewater service, solid waste service, electricity, natural gas and telecommunications, law enforcement, and fire protection and emergency services. The Public Works setting description within the Final Tribal EE, and Addendums, is hereby incorporated into this Addendum checklist by reference.

The revised wastewater numbers presented in the Addendum Feature Description would result in a reduced generation of wastewater to be treated by the onsite WWTP, which reduces the demand on the existing planned facility. The on-site treated water disposal fields would result in the geographic expansion of the on-site treatment/disposal facilities; however, the features would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Water trucking to City of San Diego Pump Station 21 is regulated under the City's Trucked Waste Requirements and Procedures, which would be followed by the waste hauler from the Reservation.

The WWTP site had originally been identified as being developed with the Gaming Facility complex, which included storm water drainage facilities. The storage tank and treated water disposal fields would not 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. The existing planned facilities would be reconfigured to accommodate the proposed features analyzed in this Addendum.

The features analyzed in this Addendum would not impact existing water supplies available to serve the Gaming Facility Project, nor would new or expanded entitlements be needed; therefore, a less than significant impact would result.

Solid waste generation assumed in the Final Tribal EE would not be significantly impacted by the features, of the Addendum. Construction of the on-site treated water disposal fields would necessitate removal and disposal of minor amounts of soil to provide space for the chambers. This additional concrete disposal requirement is not considered a significant contribution to the waste stream. As stated in the Final EE, construction waste would be recycled to the fullest extent practicable by diverting green waste and recyclable building materials from the solid waste stream. Waste that cannot be recycled would be disposed of at the Otay Landfill, which accepts construction/demolition materials, and has sufficient excess capacity to handle this small, temporary, additional waste stream. Construction impacts upon solid waste service are less than significant. No increase in operational solid waste would result from the Addendum.

The Stormwater Pollution Prevention Plan (SWPPP) has been revised to account for the proposed features and best management practices (BMP) would be implemented to ensure that such features result in no adverse impacts. All of the features associated with BMP would be removed once construction is complete. Runoff from the site would be conveyed through a series of piping and sheet flow via inlets, spillways, back bone storm drain systems, and curbs and gutter into the underground Stormtech<sup>TM</sup> detention facility underneath the paved roads and cantilevered ramps to detain the increase in runoff. Treatment for runoff shall flow via curb and gutter inlets to a back bone storm drain line to another Stormtech<sup>TM</sup> detention facilities work by percolating runoff through the soil which removes most pollutants before the runoff is allowed to seep into native soils below or a sub drain that carries treated runoff to a detention device or storm water conveyance system. The construction of these facilities therefore would not cause new significant impacts.

# XVIII. Mandatory Findings of Significance

Would the project	Potentially Significant	Less than	No Impact
	Impact	Significant	
a) Does the project have the potential to degrade the quality of the environment,			
substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife			
population to drop below self-sustaining levels, threaten to eliminate a plant or			
animal community, reduce the number or restrict the range of a rare or endangered			
plant or animal or eliminate important examples of the major periods of California			

history or prehistory?		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	V	
c) Does the project have effects which will cause substantial adverse effects on human beings, either directly or indirectly?		

The features analyzed by this Addendum *would not have* the potential to: (1) degrade the quality of the environment – all impacts evaluated are less than significant, (2) substantially reduce the habitat of a fish or wildlife species – no fisheries exist and wildlife corridors would be maintained, (3) cause a fish or wildlife population to drop below self-sustaining levels – see #2 above, (4) threaten to eliminate a plant or animal community – no threatened or endangered plant or animal community would be impacted by the features of the Addendum, (5) reduce the number or restrict the range of a rare or endangered plant or animal – see #4 above, or (6) eliminate important examples of the major periods of California history or prehistory – activity on the Reservation would not result in significant impacts to cultural/historical resources. Additionally, the Addendum features *do not have impacts* that are individually limited, but cumulatively considerable – the analysis concluded that there were no significant impacts. The features of the Addendum would not result in the additional permanent loss of sensitive habitat/plants/animals and the air and noise emissions and traffic associated with features of the Addendum would not substantially exceed that previously evaluated in the Final Tribal EE. Lastly, the Addendum features *would not* cause a substantial adverse effect on human beings, either directly or indirectly. The facilities would be constructed and operated to meet applicable standards.