UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

March 28. 2011

Amy Dutschke
Regional Director, Pacific Region
Bureau of Indian Affairs
2800 Cottage Way
Sacramento, CA 95825

Subject: Draft Environmental Impact Statement (DEIS), Big Sandy Rancheria Band of Western Mono Indians Casino and Resort Project, Fresno County, California (CEQ # 20110008)

Dear Ms. Dutschke:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

The DEIS evaluates impacts from the Tribe's proposed lease agreement with an individual Indian trust land allotee and subsequent construction of a casino/resort project to be located near Friant, Fresno County, California. In addition to a casino, the project includes a hotel and conference center, a wastewater treatment plant, and a water supply system.

Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). We are concerned with impacts to air quality in an air basin that currently does not meet the health-based National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter (PM_{10} and $PM_{2.5}$). The project does not identify reasonable mitigation measures nor include energy efficiency features that would reduce project emissions. For new developments occurring in NAAQS nonattainment areas, and for the mitigation of greenhouse gases, all projects should include features that will create high performance "green" buildings. Additionally, it is unclear whether all construction emissions were identified and evaluated in the air quality analysis.

Mitigation for impacts related to stormwater, cultural resources, and public services are deferred to future mitigation plans and documents. The Final EIS should provide additional information regarding how mitigation would be implemented and how effective it would be in addressing impacts to these resources. The project would also result in significant impacts to traffic. Transportation measures to reduce traffic loads, such as provision of shuttles, should be included to mitigate impacts, in addition to the proposed funding of road improvements. We

also have mitigation recommendations for potential groundwater impacts and impacts from eliminating 28 acres of blue oak woodlands.

EPA appreciates the opportunity to review this DEIS. When the Final EIS is released for public review, please send one hard copy and one electronic copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

/s/

Kathleen M. Goforth, Manager
Environmental Review Office (CED-2)

Enclosure: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Elizabeth Kipp, Chairperson, Big Sandy Rancheria of Mono Indians of California
Helen Uyeda, Tribal Administrator, Big Sandy Rancheria of Mono Indians of California

Air Resources

Air Quality Impacts

The project location lies within an area that currently does not meet health-based national ambient air quality standards (NAAQS). As the DEIS notes, the area is in "serious nonattainment" for both the ozone NAAQS and the particulate matter less than 10 microns (PM_{10}) NAAQS, and in "nonattainment" for the particulate matter less than 2.5 microns ($PM_{2.5}$) NAAQS. The DEIS concludes that impacts from project emissions of these pollutants are not significant because the calculated emissions do not exceed the de minimis levels triggering a general conformity analysis. However, the significance criteria identified for air quality impacts (p. 4.3-3) include increasing the severity of an existing violation or standard, and delaying the timely attainment of a standard. EPA maintains that impacts from increases in criteria pollutants currently not in attainment are directly and cumulatively significant and warrant actions that would reduce project emissions to the maximum extent practicable.

The DEIS does not identify nor commit to reasonable mitigation measures to reduce construction-related emissions. Impacts from air toxics are not discussed, despite being identified in Chapter 3. The project description does not include energy efficiency features and does not discuss the energy conservation potential of the project as required under 40 CFR 1502.16(e). For all new developments that would occur in nonattainment areas, and for the mitigation of GHGs, projects should include features that will create high performance buildings.

Instead, the DEIS presents air quality mitigation measures as "options to be investigated and implemented as dictated by existing conditions, available technology, and economic feasibility" (p. 5.3-1). There is no indication that these measures will be implemented. Mitigation measure AIR-1c is provision of an onsite renewable energy system, and references Leadership in Energy and Environmental Design (LEED) green building certification as the mechanism of enforcement, but inclusion of on onsite renewable energy system is not part of the project description, nor does the DEIS indicate that LEED certification is being pursued. Mitigation measure AIR-1a specifies the use of ozone destruction catalysts on air conditioner systems (p. 5.3-1). According to the Sacramento Metropolitan Air Quality Management District's CEQA/Mitigation guidance[1], this technology is no longer commercially available.

> *Recommendations:* The FEIS should acknowledge significant impacts to air quality and include measures to mitigate such impacts during the construction and operation phases. Suggested measures to reduce construction-phase emissions are listed below and should be included as conditions for BIA's approvals and in all construction contracts. The FEIS should discuss potential impacts from air toxics, including diesel particulate matter[2].
>
> Incorporate energy efficiency features into the project design and project description to

[1] http://www.airquality.org/ceqa/GuidanceLUEmissionReductions.pdf
[2] See http://www.epa.gov/oms/toxics.htm.

mitigate significant air quality impacts, including the significant direct and cumulative impacts from greenhouse gases (GHGs) identified in the DEIS (p. 4.3-6). Discuss the energy conservation potential of the project per 40 CFR 1502.16(e). Alternative energy components should be explored, such as the addition of solar panels on rooftops, over the parking structure, and over walkways. Clarify whether an onsite renewable energy system, discussed as a mitigation option on p. 5.3-1 is part of the project.

The project proponents should consider the use of combined heat and power (CHP), also known as cogeneration, to meet project heating and energy loads. On average, CHP facilities improve energy efficiency by up to 80% when compared to separate heat and electricity generation. This dramatic energy savings potential would significantly reduce greenhouse gas emissions as well as decrease operating costs and improve economic viability. A market analysis of hotels and casinos developed by EPA's CHP Partnership[3] shows that that there is significant market potential for CHP in the hotel and casino market[4].

Air Quality Analysis

The basis for the assumptions used in the air quality impact model URBEMIS (Appendix D, phase assumptions) are unclear. The DEIS indicates that 18 acres would be paved (p. 4.3-2), which appears to correspond to the project footprint of 697 ft x 1199 ft (p. 1-1); however, the value used in the model for total acres disturbed is 13.06 acres. Also, the access road and water tower on fee land do not appear to be included in the land disturbance acreage. Regarding on-road truck travel, the model input does not appear to include the emissions from the export of 500,000 cubic yards of surplus rock, coarse aggregate and soil that would be removed from the project site and expected to be sold for commercial use in Fresno County (p. 2-12). The export of this material alone would require many thousands of truckloads; but the model input indicates 967 vehicle miles for all construction-phase on-road truck travel (Appendix D), which assumes 48 trucks traveling 20 miles each[5]. This figure could not account for the trucks needed to remove surplus rock and soil. Finally, the expected amount of fugitive dust utilized in the model is 12.22 lbs per acre-day, which assumes dust control mitigation will be utilized per the requirements of the local air district. Projects on tribal trust land are not subject to such local requirements.

Recommendation: Clarify the basis of the assumptions used to estimate construction emissions for the project. If the model assumptions are amended and the model is rerun, update the FEIS accordingly. If alternative plans for the disposal of surplus rock or gravel are contemplated, impacts to environmental resources in the disposal area and from transport should be discussed in the FEIS.

If the model will assume dust control measures will be implemented, the FEIS should identify them in the project description and/or commit to them as mitigation measures and ensure they are included as conditions in all construction contracts.

[3] See EPA's CHP Partnership website at: http://www.epa.gov/chp.
[4] See http://www.epa.gov/chp/documents/hotel_casino_analysis.pdf
[5] Personal conversation with ICF, 2/23/11

Construction Emissions Mitigation Measures

EPA recommends that the following mitigation measures be included in a Construction Emissions Mitigation Plan in order to reduce impacts associated with emissions of greenhouse gases, ozone precursors, particulate matter (PM) and other toxics from construction-related activities:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce use, trips, and unnecessary idling from heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies.
- Limit idling for all vehicles. The California Air Resources Board has a number of mobile source anti-idling requirements that could be consulted, see http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean (diesel or retrofitted diesel) equipment meeting the most stringent of applicable Federal[6] Standards. Tier 4 engines should be used for project construction equipment to the maximum extent feasible[7]. Lacking availability of non-road construction equipment that meets Tier 4 engine standards, commit to using the best available emissions control technologies on all equipment.
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

Administrative controls:

- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify sensitive receptors in the project area and specify the means to minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

[6] EPA's website for nonroad mobile sources is http://www.epa.gov/nonroad/.

[7] Diesel engines < 25 hp rated power started phasing in Tier 4 Model Years in 2008. Larger Tier 4 diesel engines will be phased in depending on the rated power (e.g., 25 hp - <75 hp: 2013; 75 hp - < 175 hp: 2012-2013; 175 hp - < 750 hp: 2011 - 2013; and ≥ 750 hp 2011- 2015).

Mitigation Measures

On January 14, 2011, the Council on Environmental Quality (CEQ) released guidance to federal departments and agencies on the appropriate use of mitigation and monitoring[8]. In this guidance, CEQ makes clear that agencies should not commit to mitigation measures considered in an EIS absent authority or expectation of resources to ensure that mitigation is performed (p. 3).

Most mitigation measures identified in the DEIS's mitigation chapter would be implemented by the Tribe, whether directly, via the Tribal contractor, or via Tribal negotiation with local agencies. While it is appropriate for the Tribe to implement mitigation measures for their projects, BIA should discuss whether this implementation and enforcement burden is supportable and whether the Tribe has sufficient authorities, staff, technical expertise and resources to ensure implemention of the mitigation measures.

> *Recommendation:* For mitigation measures that would be implemented by the Tribe, the FEIS should discuss whether the needed tribal ordinances are in place to provide the Tribe with the necessary legal authorities to enforce the mitigation commitments included in BIA's Record of Decision (ROD). This is consistent with the CEQ guidance which states that the authority for the mitigation may derive from legal requirements that are enforced by other entities (p. 5). BIA should also discuss whether the Tribe has sufficient capacity to enforce the mitigation measures. If capacity is lacking, we recommend that the necessary tribal environmental staff or environmental compliance contractors be funded as part of the project.
>
> A mechanism for monitoring mitigation implementation should be disclosed in the FEIS and ROD. The CEQ guidance states that when monitoring is included in mitigation measures, as it is in the DEIS in several instances[9], "monitoring plans and programs should be described or incorporated by reference in the agency's decision documents"[10] (p. 11). As much as is possible, EPA recommends that mitigation be incorporated into the project designs and described in the project description. In addition to appropriate Tribal ordinances, mitigation measures should be included in construction contracts.

Traffic Impacts

The DEIS includes extensive mitigation measures (widening and enhancement of several roads and intersections) for significant impacts to traffic. For some road/intersection improvements, the DEIS states that the Tribe will pay its fair share towards funding these improvements, however, Fresno County indicated in its scoping comments that the County would be unable to fund any improvements beyond the maintenance and operational activities that now occur. The Council on Environmental Quality (CEQ) has advised that, "to ensure that environmental effects of a proposed action are fairly assessed, the probability of the mitigation measures being implemented must also be discussed. Thus, the EIS and the Record of Decision should indicate

[8] http://ceq.hss.doe.gov/current_developments/docs/Mitigation_and_Monitoring_Guidance_14Jan2011.pdf

[9] Surface and groundwater quality monitoring (p. 5.4-4, 5.8-3), oak mitigation and monitoring (p. 5.4-1)

[10] It footnotes that "the mitigation plan and program should be described to the extent possible based on available and reasonably foreseeable information in cases where the NEPA analysis and documentation are completed prior to final design of a proposed project".

the likelihood that such measures will be adopted or enforced by the responsible agencies" (CEQ's 40 Most Asked Questions, # 19b).

> *Recommendation:* The FEIS should indicate the likelihood that mitigation measures outside the jurisdiction of the lead agency, including traffic mitigation measures, will be implemented. For mitigation measures that will not be completely funded by the Tribe, if the lack of funding by the County would render the measure unlikely to be implemented, the FEIS should clearly disclose the unmitigated impacts, including the related impacts to air quality.
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> We recommend that BIA and the Tribe ensure that sufficient funding is available to mitigate all significant impacts to traffic. Additionally, the project should include traffic reducing measures, including the use of shuttle buses from urban centers and other densely populated areas for both employees and customers. If funding to mitigate impacts is not available, consider a reduced project alternative to reduce traffic impacts.

Water Resources

Wastewater Treatment Plant

The project proposes an on-site wastewater treatment plant (WWTP) but the location of this facility is not included on the site plan (Fig. 2-2). The DEIS states only that wastewater would be treated at a new processing facility located on the ground floor level adjacent to the hotel (p. 4.6-4). Approximately 25% of the treated effluent would be reused for toilet flushing, and 50-75% of the effluent would be reused for landscape irrigation in the summer (50,000 - 75,000 gallons per day), with the remainder discharged to a blue-line creek under a National Pollutant Discharge Elimination System Permit (NPDES). The discharge location is not indicated. Since the project is on tribal land, EPA Region 9 would be responsible for issuing the NPDES permit.

The project site is located in blue oak woodlands and grasslands. Mitigation measures for impacts to these resources indicate that landscaping under and near oaks can be designed using native plants that do not require watering during summer months (p. 5.4-1). Depending on the extent of landscaping and its location, this could contradict the effluent disposal plans listed on p. 2-11. The DEIS indicates that direct irrigation under mature oak trees causes mortality (p. 5.4-1).

> *Recommendation:* Identify the location of the WWTP on the site plan. See additional comments regarding impacts to blue oaks below under Biological Resources. It appears that the effluent disposal plans may need to be revised to protect oaks.

Stormwater Management – construction phase

It is not clear that the proposed mitigation measures for reducing erosion and sediment discharges will be effective. The DEIS describes the project site terrain as hilly to very steep (p. 3.6-11), with soils ranging from moderate to very high erosion hazard (p. 3.6-5). Steep grading cuts would be needed for the project, some as deep as 61 feet (p. 3.5-2). The DEIS states that construction-related ground-disturbing activities could cause significant soil erosion and sediment discharge to local waterways (p. 4.8-5) but that the implementation of construction-

related Best Management Practices (BMPs) would reduce or eliminate water quality effects (p. 5.8-1) and a grading plan will be developed to reduce the amount of erosion during construction.

An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective[11]. The DEIS identifies some possible erosion control measures and states that sediment control will be used, but no discussion of effectiveness is included. A 2006 review of stormwater BMPs at large construction sites revealed that effectiveness of erosion control and sediment control varied by site, with failures of all BMP types observed[12]. The primary factor influencing effectiveness appeared to be regular inspections and maintenance, including reinstallation or application of the BMP if necessary. Many of the sediment control BMPs observed in the study were in disrepair and showed signs of recent failure from heavy rainfall. Maintenance problems included inadequate removal of sediment from behind the BMP and failure to replace the BMP when damaged. The DEIS indicates that the Tribe will be implementing and enforcing the construction BMPs (p. 5.8-1).

> *Recommendation:* The FEIS should have a more detailed discussion of the likely effectiveness of stormwater BMPS considering the specific project site conditions (soils, slopes, etc.). For stormwater BMP's, three factors must be considered to evaluate performance: pollutant concentration, volume and total load. Predictive models are available that can provide additional information for permanent controls[13]. EPA has created a web-based tool, the Urban BMP Performance Tool (available at www.epa.gov/npdes/urbanbmptool), to provide easy access to research studies on the performance of stormwater BMPs.
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> Additionally, due to the potentially significant impacts of construction stormwater on downstream endangered species (p. 4.4-3), especially during the breeding season, the FEIS should incorporate site planning BMPs, including construction sequencing and avoidance of extensive earth disturbance during the rainy season.
>
> Since the Tribe will be implementing and enforcing the BMPs, including during the construction phase, BIA should discuss whether the Tribe has the necessary staff as well as legal authorities in place prior to construction, such as an ordinance specifying erosion and sediment control BMPs required to be implemented and maintained, penalties for noncompliance, etc. Ordinances can set grading limits, design requirements, erosion control practices, sediment control practices, waterway crossing specifications, or other stormwater management BMPs. EPA has a model ordinance that may be useful[14]. In addition to an ordinance, we recommend that procedures for reviewing construction site plans and for inspections and enforcement of stormwater requirements at construction sites be developed.

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[11] Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1381 (9th Cir. 1998)
[12] U.S. Environmental Protection Agency, Region IX, California Regional Water Quality Control Board Los Angeles Region., Review of Stormwater Best Management Practices at Large Construction Sites, August 2006. Available: http://www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/bmp/largeconstreport-august-06.pdf
[13] See http://cfpub.epa.gov/npdes/greeninfrastructure/modelsandcalculators.cfm.
[14] http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=factsheet_results&view=specific&bmp=66

Permanent stormwater controls

In addition to construction-phase controls, the project should discuss design and effectiveness of permanent stormwater controls. The DEIS does not discuss how toxics and increased flows from new impervious surfaces will be mitigated. The DEIS identifies rain gardens to be utilized for stormwater management, (p. 2-12), but this infrastructure element does not appear to be designed into the site plan (Fig. 2-2). The project should be designed to maximize infiltration and minimize flow offsite. Bioretention, biofiltration, and bio-treatment features should not be an afterthought; they should be carefully integrated into the project design. The site plan identifies a nondisturbance zone that corresponds with the location of the intermittent creek. It is not clear if this area is intended to manage and treat stormwater flows. If fill will be deposited in the drainage, it could require a Clean Water Act Section 404 permit.

> *Recommendation:* Identify the low impact development/green infrastructure elements of the project on the site plan and provide more information as to how low impact development/green infrastructure has been integrated into the project design. The FEIS should commit to a design standard such that, at a minimum, all stormwater generated from the 2-year, 24-hour storm event will be treated on-site, through biofiltration, and percolated back into the soils. This is a typical design standard for California stormwater permits for new development.

Clean Water Act Section 404

The project access road will cross an intermittent stream on fee land but the DEIS does not indicate how this crossing will occur. EPA recommends clear span bridges instead of culverts, however, even with bridges, impacts from bridge abutments could still occur. The DEIS also does not indicate whether there will be fill deposited into the creek as part of installing the effluent outfall. If fill will be deposited into waters of the U.S. for either of the above, or other, purposes, then a Clean Water Act (CWA) section 404 permit[s] will be required, including compliance with the 404 (b)(1) Guidelines[15], and any associated direct or indirect impacts, including flow related impacts, will need to be addressed.

The road projects that are proposed as mitigation for traffic impacts (widening and enhancement of several roads and intersections), will impact sensitive areas including vernal pools (p. 3.4-17, 4.4-2) and these may also require CWA section 404 permits and compliance with the 404 (b)(1) Guidelines. The DEIS states that these impacts will be addressed in subsequent environmental documents for each specific road improvement project. These road actions appear to be reasonably foreseeable, as they are proposed to reduce significant traffic impacts. Therefore, more discussion of their impacts should be included in the FEIS, including an estimate of quantitative impacts to vernal pools and waters of the U.S. and what actions BIA and the Tribe could take to avoid, minimize, and mitigate these impacts.

> *Recommendation:* The FEIS should identify the mode of stream crossing so that impacts can be assessed in the document. Discuss the cumulative impacts to vernal pools and waters of the U.S. that would result from traffic mitigation improvements and how these impacts can be avoided. The project should ensure that all reasonable traffic reducing

[15] 33 U.S.C. 1344

measures are included in the project, including the provision of shuttles, a future transit stop, etc.

Drinking Water

Trucked water is not an ideal mode of providing drinking water for a project. In addition to its considerable expense, potential unreliability in the event of unforeseen road closures, and air quality impacts from 120 diesel truck trips per day, there are potential public health risks if the system is not operated properly, including the potential for contamination when water is transferred from tanker trucks to onsite storage facilities. The potential for contamination can be reduced by establishing protective trucking protocols; however, potential reliability concerns of using hauled water would remain.

While the project would be located on tribal land, the source of drinking water, the Flyin' J Ranch, is not. We are aware that the State of California adopted a policy in September 2002 that discourages construction of facilities that would be served by nonconforming water systems, which includes bulk hauled water. It is not clear whether the use of bulk hauled water at the Flyin' J Ranch would be regulated by the State.

The drinking water system proposed would be considered a public water system, defined under the Safe Drinking Water Act (SDWA) as any entity serving water for the purposes of human consumption to 15 or more active service connections or 25 or more people at least 60 days out of the year. The system would be provisionally classified as a Non-Transient/Non-Community (NTNC) public water system and would be subject to the requirements of the SDWA for NTNC systems. Please be aware that baseline monitoring must begin and be submitted to EPA before water may be legally used by the public.

> *Recommendation:* The Tribe should work with EPA Region 9's Drinking Water Office to develop a tribal ordinance and a protective water trucking protocol and to coordinate baseline monitoring pursuant to the SDWA. Please contact Helen McKinley of EPA's Region 9 office at (415) 972-3559. BIA and the Tribe should contact the State of California regarding any needed approvals for the use of bulk hauled water from a non-tribally-owned site.

Groundwater Resources

Drinking water for the project will be trucked by tanker trucks from private wells located on the Flyin' J Ranch 8 miles northeast of the property (p. 2-11). The hydrogeologic analysis in Appendix I indicates that there are substantial unknowns associated with the groundwater source, including its origin, due to the hydrologic complexities at the site. Additionally, because of the fractured bedrock geology, impacts from pumping can be more significant in neighboring wells located further from the source well than those closer to it (Appendix I, p. 19). Because of these uncertainties, provisions should be included in the project to address unanticipated impacts to neighboring wells.

> *Recommendation:* The DEIS includes groundwater monitoring for water quality from the use of recycled water, but no monitoring of groundwater quantity from project-related pumping is included. Because of the uncertain hydrology, groundwater level monitoring should also be included as mitigation in the FEIS. In fact, the recommendation in the

hydrogeologic analysis in Appendix I states that the offsite Milor Well should be carefully monitored once production begins and a way to compensate this party should be planned if induced drawdowns occur (App. I, p. 22). At a minimum, this recommendation from the project hydrogeologic analysis should be included in the FEIS. If other offsite wells could experience drawdown effects, they should also be eligible for compensation utilizing the compensation mechanism developed for the Milor well.

Water Conservation

Because of the potential impacts to neighboring wells mentioned above, and to reduce air emissions from trucked water tanks, every effort should be made to maximize water conservation and efficiency for the project. The project already plans to reuse treated effluent from the wastewater treatment plant for toilet flushing and fire suppression, and it is vital that these project elements be retained in the final designs. The project description should include water conservation and efficiency features in the project design.

> *Recommendation:* The project description should be modified to include the purchase, installation, and implementation of water-efficient products and practices. This includes purchase of WaterSense[16] labeled toilets and faucets, which use 20% and 30% less water respectively than conventional products. Implement the 14 federal water efficiency best management practices, including those for boiler/steam systems, single-pass cooling equipment, cooling tower management, commercial kitchen equipment, and alternate water sources including rain water harvesting for irrigation, toilet flushing and fire suppression. The federal water efficiency BMPs are available at: http://www1.eere.energy.gov/femp/program/waterefficiency_bmp.html.

Green Building

The project lacks green building and other environmental features that other casino projects are incorporating in their planning. For example, the Point Molate Destination Resort and Casino, Richmond, California, proposes to install a photovoltaic array atop two parking structures and along a covered walkway, water conserving low-flow bathroom fixtures, an on-site gray water recycling system, a vegetation covered "living roof" above the conference center, a composting program, and an aggressive recycling program. When implemented, these features reduce water and energy use and GHG emissions. In contrast, the proposed project offers no such features in its project description. Sustainable or green buildings include many environment-friendly features, which also result in cost savings over the long-term. Green building features provide health and safety benefits that enhance occupant comfort, attract and retain staff, improve worker productivity, and develop community goodwill.

One way to develop green features is to design and construct the facilities for Leadership in Energy and Environmental Design (LEED) certification by the U.S. Green Building Council. LEED emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection, and indoor air quality[17]. We understand that indoor smoking provides some limitations to LEED certification. To address this, smoking sections could be provided separately, which would allow the rest of the facilities to pursue LEED

[16] http://www.epa.gov/WaterSense/spaces/ci.html

[17] More information about the LEED green building rating system is available at http://www.usgbc.org.

certification. Surveys have shown that a large majority of customers prefer a smoke-free environment and environment-friendly facilities[18].

Another way to promote sustainable high performance buildings is through building codes. The DEIS states that the Gaming Compact requires the Tribe to adopt building and safety codes that meet the standards of either the building and safety codes of the county in which the facility is located or the Uniform Building Codes (p. 2-13). In 2010, the State of California adopted the 2010 California Green Building Standards Code to encourage sustainable construction practices in planning and design, energy efficiency and water and material conservation and efficiency.

> *Recommendation:* EPA recommends that BIA and the Tribe specify that project facilities would be constructed for certification by LEED. This specification would guide the building process and create a high-performance, sustainable building. LEED certification would enable the Tribe to establish themselves as leaders in the green building sector and offer them the opportunity to market their venue as an environment-friendly facility.
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> If LEED certification will not be pursued, various green features can still be incorporated into project planning. A GreenSpec Directory is available that provides product environmentally preferable building products and guideline specifications. See http://www.buildinggreen.com/menus. Listings include suggestions and sample language to incorporate into your project specifications.
>
> Additionally, the Tribe could adopt the 2010 California Green Building Standards Code and require the project to comply with this code. A link to the building code can be found at: http://www.bsc.ca.gov/default.htm.
>
> For other green building resources please visit Region 9's websites at:
> - EPA R9 Tribal Solid Waste: http://www.epa.gov/region9/waste/tribal/index.html
> - EPA R9 Green Building: http://www.epa.gov/region9/greenbuilding/index.html

Biological Resources

The project will eliminate 28 acres of blue oak woodland/annual grassland, and since oak woodlands are known to have some of the richest wildlife species abundance of any habitat in California, this is a significant impact (p. 4.4-3). Mitigation identified for this impact includes oak replacement at a 1:1 ratio planted on- or off-site, and incorporating oak-compatible landscaping into project designs. The project proposes to use treated effluent for landscape irrigation; however, since direct irrigation under mature oak trees causes mortality (p. 5.4-1), the oak mitigation and monitoring plan that "should be developed" should also include a prohibition on irrigating adjacent oak woodlands. The DEIS indicates that landscaping under and near oaks can be designed using native plants that do not require watering during summer months, but it is

[18] The 2007 J.D. Powers and Associates North America Hotel Guest Satisfaction Survey showed that the majority of hotel guests want a non-smoking environment in all common areas of the hotel, not just in the guest rooms. See See http://www.jdpower.com/travel/articles/2007-North-America-Hotel-Guest-Satisfaction. The 2009 survey reported that awareness of "green" programs has a strong impact on overall hotel guest satisfaction. On average, satisfaction is more than 160 points higher among guests who report being aware of their hotel's green programs, compared with guests who are unaware of them. See: http://www.jdpower.com/travel/articles/2009-North-America-Hotel-Guest-Satisfaction-Study

unclear if there is sufficient landscaping that is not in proximity to oaks to receive 50,000-75,000 gallons per day of irrigation from treated wastewater during the summer (p. 2-11). To avoid impacts to adjacent oak woodlands, additional planning should occur, including the development of a landscape plan, to ensure it is compatible with the oak mitigation plan.

The project will also eliminate 48 acres of suitable breeding and upland habitat for the federally threatened California tiger salamander and habitat for the federally endangered San Joaquin Kit Fox. The Fish and Wildlife Service has issued a Biological Opinion (BO) for the project. The BO includes conservation and protection measures, and the project description in the BO includes the installation of tunnels underneath the entrance road to provide safe passage for dispersing salamanders, as well as purchasing 136.48 mitigation credits for the benefit of the salamander and kit fox.

One of the significance criteria for biological impacts is whether the project would interfere with the movement of any native resident or migratory fish or wildlife species or with corridors used by these species (p. 4.4-2). With the exception of the BO's project description, which includes salamander tunnels beneath the entrance road, the DEIS does not address wildlife corridors, despite the shared 1-mile boundary with the McKenzie Table Mountain Preserve. The DEIS only states that no *special status species* would move between the project parcel and other populations. It does not appear that impacts to wildlife corridors were assessed.

EPA is concerned with the impacts from invasive species, especially since it appears that the project site is currently free from the noxious weed species common to annual grasslands in California (p. 3.4-7). The DEIS acknowledges potential invasion by noxious weeds as a significant impact and proposes mitigation measures; however, the mitigation is vague and it is unclear how it would be implemented and enforced.

Recommendations:

1) Clarify the oak woodland mitigation and monitoring commitments in the FEIS. Identify oak-compatible landscape species and provide commitments that only these species will be used. We recommend including a landscape plan. Modify the effluent disposal plans as needed, and ensure no irrigation occurs near adjacent oak woodlands. We recommend adoption of the County's oak woodlands development guidelines referenced on p. 3.1-3.

2) Amend the project description in the DEIS, Section 2.2 to be consistent with that in the BO, including the installation of salamander tunnels and purchase of mitigation credits. EPA recommends that all conservation and protection measures identified in the BO be included in either the project description or as enforceable mitigation measures.

3) Discuss impacts to wildlife corridors in the FEIS, and if impacts are expected, identify ways to avoid these impacts.

4) Clarify how the mitigation to prevent the spread of noxious weed species will be implemented and enforced. See mitigation measures comment above.

Cultural Resources

Impacts to cultural resources would be significant due to the destruction of a large prehistoric and historic archeological site (identified as CA-FRE-3423/8) from project construction (p. 5.5-1). The site qualifies for National Register of Historic Places (NRHP) listing under Criterion D (p. 3.5-15). One locus of the site contains midden, fire-affected rock, milling tools (artifacts used to grind plants, nuts, seeds, and other materials), dart- and arrow-point fragments, byproducts of stone tool manufacture (debitage or waste flakes), marine and freshwater shell, pottery, shell beads, burnt animal bones, clay daub (likely representing a former Indian building or structure), and fire-cracked rock (p. 3.5-14). Investigations so far have produced data that will clarify important research questions in Sierra Nevada prehistory and the site has yielded and is expected to possess additional information related to the nature of prehistoric occupation between ca. 1,100 and 2,500 B.P. (p. 3.5-15). Additionally, Table Mountain Rancheria has expressed concerns regarding impacts to this site, which they consider critical to their heritage (p. 3.5-13). The impact assessment assumes that construction areas are extensive enough and design flexibility so minimal that redesign of the proposed project is not feasible (p. 5.5-1).
The DEIS states that adverse impacts would be resolved by preparing a Memorandum of Agreement and implementing proposed measures, or entering into a Programmatic Agreement if the effects of the project cannot be fully determined prior to approval of the proposed action (p. 5.5-1). It is unclear how approval of the proposed action can occur if the Section 106 consultation under the National Historic Preservation Act process has not been completed (BIA NEPA Handbook, p. 37).

> *Recommendation:* The FEIS should provide additional information regarding impacts so that modifications to the project can be explored that would avoid, minimize, or mitigate the adverse effects on the archeological site. The mitigation discussion should provide some indication as to the likelihood that impacts to cultural resources can be mitigated and how this could occur. We recommend that BIA and the Tribe continue to work with all interested parties. The FEIS should also clarify the statement that approval of the project could occur before the NHPA Section 106 consultation is completed.

Public Services

The DEIS identifies significant impacts on the Fresno County Fire Protection District and CAL FIRE protection and response efforts (p. 4.12-2), the Fresno County's Sherriff's Department, the State and County justice system (p. 4.12-3), and the Fresno County Health and Human Services Department (p. 4.12-4). Mitigation for all these significant impacts is for the Tribe to negotiate in good faith with these agencies to fund mitigation measures (p. 5.12-1,2). The document does not provide any indication as to whether these agencies are willing to provide the services needed, such as including "will serve" letters. This is important because, if these agencies are not willing to provide the services, the project may need to include additional components, such as fire or law enforcement stations and personnel, first aid centers or clinics, etc.

> *Recommendation:* To ensure that the impact assessment includes all connected actions, the FEIS should include additional information regarding the likelihood that mitigation for public services will occur.

Noise Impacts
The DEIS identifies significant noise impacts from construction activities. One mitigation measure references submittal of engineering and acoustical specifications prior to obtaining a building permit (p. 5.10-2).

> *Recommendation:* The FEIS should clarify that the Tribe is not required to obtain a building permit. EPA does recommend that the Tribe adopt noise standards for the project, and Fresno County's standards should be considered. We also recommend that the Tribe engage the community by promoting communication with affected residents and providing a mechanism for receiving and responding to noise complaints.

NEPA Analysis
The FEIS should ensure that impacts from construction of the water tank and infrastructure at the Flyin' J Ranch are disclosed; they do not appear to be.