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

October 20, 2010

Dale Morris
Regional Director, Pacific Region
Bureau of Indian Affairs
2800 Cottage Way
Sacramento, CA 95825

Subject: Draft Environmental Impact Statement (DEIS), Cloverdale Rancheria of Pomo Indians Fee-to-Trust and Resort Casino Project, Sonoma County, California (CEQ # 20100300)

Dear Mr. Morris:

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 proposed action would take 69 acres of land adjacent to the Russian River into federal trust for development of a destination resort casino and hotel. The project includes options for water and wastewater utilities which include developing an onsite drinking water system and wastewater treatment plant. As a cooperating agency for the project, EPA reviewed sections of the Administrative Draft EIS and submitted comments to the Bureau of Indian Affairs (BIA) on April 30, 2009. We commented on the onsite water and wastewater options, site drainage and hydrology, including wetlands, and impacts to threatened and endangered fish species. We appreciate the additional information in the DEIS that responds to some of our comments; however a number of our comments were not addressed and are repeated here.

Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). We have concerns regarding the possible development of components of the project in a 100-year floodplain with a history of flooding, and with existing drainage issues on the site. This is primarily true regarding the onsite options for water and wastewater utilities, however, site drainage concerns exist even if these options are not chosen. We recommend that a more detailed site drainage plan be developed before any federal decisions are made in order to better reveal potential impacts, to identify site constraints with regard to stormwater management options, and to inform project planning, especially since drainage limitations at the site may require changes to the project footprint and/or size.

In addition, the project lacks innovative "green building" and other environmental features that other casino projects are incorporating. We strongly recommend that the project be

reviewed for opportunities to incorporate more green building features, which, in addition to providing long-term cost savings, provide health and safety benefits that enhance occupant comfort, attract and retain staff, improve worker productivity, and develop community goodwill.

EPA appreciates the opportunity to review this DEIS. When the Final EIS is released for public review, please send one 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,

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

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

cc: Patricia Hermosillo, Chairperson, Cloverdale Rancheria of Pomo Indians
Mario Hermosillo, Environmental Planner, Cloverdale Rancheria of Pomo Indians
John McKeon, National Marine Fisheries Service

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

Category "1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category "2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category "3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Impacts to Floodplains

The project includes a "private option" for water and wastewater treatment that would develop an onsite wastewater treatment plant and treatment ponds, and a water treatment plant and water supply well, within a 100-year floodplain adjacent to the Russian River. This river has a history of flooding "relatively frequently" (p. 3.3-2). Additionally, the drainage situation at the site is problematic. The Russian River periodically floods the project site to the east and south, there is "substantial stormwater run-on" from Heron Creek and its 1,000 acre watershed along the northern end of the site (p. 3.3-9), and two 30-inch culverts draining U.S. 101 and 40 acres of foothills discharge water at the western boundary of the project site (p. 3.3-9). The project site is bisected by Porterfield Creek, and Coyote Creek runs along its southern boundary. The portion of Heron Creek that drains onto the site, identified as an agricultural ditch, is proposed to be redirected into a surface drainage channel that would be constructed to the east, along the northern boundary to the eastern boundary, and then to the south to Porterfield Creek (Appendix B, p. 2). The site also contains approximately 2.4 acres of wetlands and waters of the U.S.

Executive Order (EO) 11988 – "*Floodplain management*" directs each federal agency to provide leadership and to take action "*to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities. If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains" (EO 11988).* EO 11988 is mentioned under the Regulatory Setting section of the DEIS, but only to state that the Federal Emergency Management Agency (FEMA) is responsible for management of floodplain areas. The section includes no mention of the responsibility of federal agencies to comply with the EO, nor how the proposed project would comply. The wastewater treatment private option would reduce the floodplain capacity and result in potential increases in flood height as a result of installation of levees surrounding the wastewater treatment plant, water treatment plant, and wastewater storage pond. Alternatives to this floodplain development should be considered. The DEIS includes a "municipal option" of connecting to the City of Cloverdale's wastewater treatment plant, located directly to the north; however, contrary to the mandate of EO 11988, it does not provide an analysis of alternatives to floodplain development under the private option in the event the municipal option is not available . Because of the abundance of surface waters on the site and the history of flooding, EPA strongly encourages BIA and the Tribe to avoid floodplain development for the project. The potential impacts of climate change, in terms of expected increases in heavy rainfall events in many regions, and increased frequency and severity of floods as well as droughts[1], underscore this concern. We note that FEMA also recognizes the increased flood damages that are already occurring outside of the designated 100-year floodplain[2].

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[1] [1] International Panel on Climate Change, Climate Change 2007: Synthesis Report. Available: http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf

[2] Page 9, *Further Advice on Executive Order 11988 Floodplain Management,* Federal Emergency Management Agency (FEMA). Sept 2007.

Recommendations: More discussion on the project's compliance with EO 11988 is needed. The FEIS should evaluate alternatives to floodplain development for the private water and wastewater treatment options. If floodplain development for the private water and wastewater treatment is chosen, the NEPA document must demonstrate that the only practicable alternative includes development within the floodplain. Please note that, based on the close interaction with both surface and groundwater hydrology on the site within the floodplain of the Russian River, EPA believes an NPDES permit would likely be necessary for any on-site wastewater treatment and disposal options.

Other project sites that are not within the floodplain should also be evaluated. In addition to the requirements of EO 11988, this would be consistent with NEPA's requirement to evaluate all reasonable alternatives. The DEIS does not evaluate any alternative sites. The Council on Environmental Quality (CEQ) Regulations emphasize the importance of the alternatives analysis, stating that it is the heart of the EIS (40 CFR 1502.14).

Finally, while the westernmost parcel that would house the casino/hotel is not currently designated as a 100-year floodplain, due to the abundance of surface water features on the site, the acknowledgement by FEMA that increased flood damages are already occurring outside of the designated 100-year floodplain, and the imminent threat of more severe storms due to climate change, EPA recommends that the project follow the recommendation of EO 11988 that, for achieving food protection, agencies shall, wherever practicable, elevate structures above the base flood level rather than filling in land".

Drainage and Stormwater Management

Because of existing drainage issues on the site, plans to manage stormwater and floodwaters should be further developed in the FEIS so that their effectiveness can be better evaluated. Low Impact Development (LID) techniques should be explored to a greater extent for the project. LID refers to measures which infiltrate, evapotranspire, or reuse stormwater onsite. Although some LID measures are proposed (such as pervious concrete), the design seems to rely to a considerable degree on an underground stormwater detention system, which would only temporarily detain the stormwater and not offer the treatment and water quality benefits of LID approaches. The Preliminary Drainage Study indicates that there would be some pretreatment before detention, but the details and viability of this pretreatment is not discussed. The DEIS also states that the parking lot will be reconfigured to include an additional 135 spaces (p. ES-12), and this will affect the area available for stormwater management and treatment options. Because the underground detention system would only hold a 10-year storm flow, the release of stormwater beyond that amount to the upland drainage release system could cause additional inundation, increased stream or drainage flows, erosion, or flooding (p. 4.3-2). A more detailed analysis is warranted to determine the likelihood and severity of this predicted project-related flooding and erosion.

The DEIS concludes that these impacts would be mitigated to less than significant levels by the preparation of a comprehensive design-level drainage plan prior to construction, and this plan would include additional measures to retain or infiltrate stormwater flows (p. 5-2). It is not at all

clear that these goals can be accomplished on the site with its existing drainage and flooding concerns, including the continuing flooding impacts from previous Caltrans highway work[3]. Because of these existing drainage issues, we are concerned that deferring this assessment and project-level planning to a future date does not fulfill the purpose of NEPA to predict impacts and assess alternatives before federal decisions are made. Courts have also held that mitigation measures should be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated[4]. Indeed, further analysis may indicate that the site cannot support the needed stormwater retention and infiltration and that a reduced project footprint would be necessary.

Additionally, the mitigation measure for the construction phase (developing and implementing a stormwater pollution prevention plan) does not specifically address the risks associated with the project's location in the flood zone during the construction phase. While more information is contained in the Preliminary Drainage Study in the appendix, important measures that would mitigate impacts are not included in the mitigation measures chapter of the EIS.

> *Recommendations:* Because of the existing drainage issues on the site, the acknowledgement by FEMA that increased floodplain damages are already occurring outside of the designated 100-year floodplain, and the potential for increased flooding from more intense storms as a result of climate change, EPA recommends that additional investigation occur, prior to any federal decisions, towards the ability of the site to effectively manage stormwater and floodwaters. We recommend that the feasibility of onsite management of the 85%, 24-hour storm via LID measures be investigated. This would align the project more closely with the requirements for new development under the Santa Rosa Municipal Separate Storm Sewer Systems (MS4) permit and other efforts to reduce stormwater discharge impacts to the Russian River.
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> We recommend that the comprehensive design-level drainage plan, proposed as mitigation prior to development, be conducted as part of the NEPA analysis to better reveal potential impacts and to inform site planning. The limitations of the site may require changes to the project footprint and/or size. Any approvals made without the benefit of this information should be conditioned on the results of the detailed drainage study, including specific responses and changes to the project that would occur to address the drainage site constraints.
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> Finally, we recommend that all mitigation measures that are proposed in the appendices be included in the mitigation measures chapter of the FEIS, the Record of Decision, and as conditions for any federal approvals.

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[3] Appendix B, p. 2 identifies the existing drainage problems following highway construction and the Asti Road realignment that are the subject of litigation between local residents and the City, and between the City and Caltrans, and states that the project is awaiting the outcome of this litigation to determine the improvements to be made by the City necessary to address Heron Creek drainage problems. The City intends to explore solutions for mitigating the litigated drainage issues and it is presently unknown what impacts the City's ultimate drainage solution may have on the project.

[4] Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989); South Fork Band Council of Western Shoshone of Nevada vs. U.S. Department of the Interior, 588 F.3d 718 (9th Cir. 2009)

Impacts to Wetlands
A third of the seasonal wetlands on the development site (half an acre) would be filled, and the remaining wetlands would experience indirect impacts. The DEIS does not assess indirect impacts to wetlands, which is required under 40 CFR 1502.16 (b). The project will surround the larger of the remaining wetlands on 3 sides. Appendix O, Figure 4-3 shows that there is currently a connection between these wetlands and Porterfield Creek via a culvert, however the effects of the project on this hydrology is not discussed. It is not clear if the wetlands will be connected to the creek post-construction, if there will be pipe flow under the casino using storm drains, or if attempts to design the casino so that the hydrologic connection to the creek is maintained have occurred. Mitigation is discussed in relation to direct impacts, but no mitigation is discussed for indirect impacts. We note that the mitigation for direct loss or fill of wetlands must comply with the 2008 EPA/Corps of Engineers Mitigation Rule, and that that EPA, in addition to the Corps of Engineers, must approve the final compensatory mitigation plan per our authorities for the Clean Water Act (CWA) Section 401 water quality certification (Table ES-1, p. 5-6).

All CWA Section 404 permits require avoidance and minimization of impacts to waters of the U.S., including indirect impacts. An important measure to minimize indirect impacts to wetlands and surface waters is the designation of buffer zones between the water feature and development. The site plan for the preferred alternative indicates that paved roads will surround the main seasonal wetland feature (Figure 2-1). Stormwater management will, in part, determine whether the wetlands will be indirectly impacted by a reduction or increase of flows. The site plan also shows that landscaped areas will abut riparian areas of Coyote Creek. Landscape areas do not function as buffers unless they are natural riparian habitats. In addition, because of the presence of riparian vegetation on the site, it is important that only native vegetation be utilized in any landscaping, especially when landscaping abuts buffer zones, so that riparian habitat is not impacted by invasive species. Indirect impacts from invasive species were not assessed in the DEIS and there are no mitigation measures that require the use of native plants in landscaping.

> *Recommendations:* Consistent with 40 CFR 1502.16 (b), the FEIS should evaluate indirect impacts to the seasonal wetlands that will remain on site, and to surface waters, and discuss mitigation measures for these indirect impacts. The site plan should be modified as necessary to avoid and minimize indirect impacts to the wetlands that will remain on site. Care should be taken to ensure that the development does not deprive the remaining wetlands of flows and to retain any hydrological connections that exist between the wetlands and Porterfield and/or Coyote Creeks. The site plan in Figure 2-1 shows the seasonal wetlands SW-1 and SW-2 near Coyote Creek as part of the landscaped area. These wetlands should be avoided and protected with a 100' buffer from landscaped areas and other development. Landscaping should consist of native plants.
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> In summary, EPA recommends that additional enforceable mitigation measures be added to the project to 1) require 100-foot buffer zones around waterways and wetlands; and 2) require the use of native trees, shrubs, and ground covers in all project landscaping.

Wastewater Treatment
As mentioned above, we have concerns regarding the onsite wastewater treatment option. The construction of levees surrounding the wastewater treatment plant, water treatment plant, and wastewater storage pond would reduce the site's floodplain capacity. There is no discussion of the residual risks that would exist behind levees and other flood risk reduction structures. For the sprayfield, the Wastewater Treatment and Disposal Report (Appendix J) includes assessment of need for amount to spray, but does not address the ability of the local soils to absorb this amount. It states that there is a need for a percolation rate of 0.6 inches per hour in the sprayfield soil to accept the projected discharge. The wastewater storage pond will be constructed 26 feet below grade, and it is not clear if groundwater would be present at this elevation and how shallow groundwater might interfere with the design and operation of the pond, including during flooding events when groundwater levels could rise. This, coupled with the loss of floodplain capacity, the existing concerns with flooding and drainage from surface waters, including Heron Creek, and drainage alterations on the development parcel, should alert decision-makers to the need for alternatives to pursuing this option.

> *Recommendation*: The DEIS implies that the preferred option for wastewater treatment would be to enter into a service contract with the City of Cloverdale (p. 5-13) and that the private options for water and wastewater would be pursued if municipal services could not be provided. EPA strongly encourages the pursuit of the municipal option for wastewater treatment, and that water recycling opportunities be included in any arrangements since the wastewater treatment plant is located adjacent to the project site. If the private option is necessary, we believe further studies on alternatives to the proposed private option should be pursued.

Safe Drinking Water Act
We understand that the Tribe has begun discussions with City of Cloverdale for public water services, but that the project does not assume or rely upon this provision. If a private onsite water supply system is developed, it would provisionally be classified as a Non-Transient/Non-Community (NTNC) public water system[5] and would be subject to the requirements of the Safe Drinking Water Act (SDWA) for NTNC systems. The proximity of the well to the Russian River will require analysis and testing, such as microscopic particulate analysis on the well source, and turbidity and conductivity both on the well source and the Russian River, prior to utilizing the well. This is to verify it is not groundwater under the influence of surface water. If the well is found to be under the influence of surface water, then treatment will be required to meet surface water treatment requirements. EPA is the regulatory authority for the SDWA public water system for the project.

> *Recommendation:* The FEIS should identify the source of drinking water if it is known. If a private onsite drinking water system will be pursued, please be aware that baseline monitoring must begin and be submitted to EPA before water may be legally used by the public. Please contact Roger Yates of EPA's Region 9 office at 415-972-3549 with any questions regarding compliance with the Safe Drinking Water Act.

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[5] A public water system (PWS) is 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.

Impacts from Groundwater Pumping
The water demand calculated in the DEIS does not assume the use of recycled water. However, the analyses that predict impacts to Russian River flows and to neighboring groundwater wells, including the South Cloverdale Water District supply well, do assume the use of recycled water and use a lower water demand value (p. 4.3-5). Although the proximity of the Cloverdale WWTP presents clear opportunities for water recycling and EPA encourages pursuing these opportunities, unless it is known that water recycling will definitely occur, for the purposes of the analysis, it appears that it would be more conservative to utilize the higher water demand values to predict these impacts, to avoid underestimating them if water is not recycled.

> *Recommendation:* EPA recommends that the impact analysis also include estimated impacts to Russian River flows and neighboring wells from the water demand that does not assume recycling, since this appears to be a possibility.

Impacts to Threatened and Endangered Fish Species
The DEIS does not indicate that consultation has been initiated with the National Marine Fisheries Service (NMFS) for potential impacts to the federally listed California Coastal Chinook, Central California Coast coho, and Central California Coastal steelhead. The DEIS concludes that impacts to these salmonids will be less than significant with the implementation of construction stormwater best management practices (BMPs). In our comments on the Administrative DEIS (dated April 30, 2009), EPA recommended consulting with NMFS regarding whether the project area provides suitable habitat and whether standard erosion control BMPs during the construction phase (mitigation measure 5.5-3) would be sufficient to reduce these impacts to less than significant.

Based on conversations with NMFS, it appears that the project would have potentially significant direct impacts to salmon rearing habitat. We recommend that BIA consult with NMFS as soon as possible to identify the measures needed to adequately prevent impacts to these impacted species. Any additional impacts to such a stressed resource would result in cumulatively significant impacts. Conversations with NMFS could also reveal restoration opportunities that could be incorporated into the project.

> *Recommendation:* Initiate consultation with NMFS and update the Final EIS to better convey the potential indirect impacts to these species. The cumulative impact assessment for these resources should also be improved and reflect the existing status of the species. The cumulative impacts analysis should identify how the resources have already been affected by past or present activities in the project area, and should characterize the resource in terms of their response to change and capacity to withstand stresses, including any additional project-related stresses.

Green Building
In general, the project lacks innovative 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. In contrast, the proposed project offers few such features in its project description, with the exception of some energy efficiency measures and "enhanced recycling", which is not defined, as air quality mitigation measures. Sustainable or "green" buildings include many more 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. More information about the LEED green building rating system is available at http://www.usgbc.org.

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 certification. Be aware that surveys completed by J.D. Power and Associates show that a large majority of customers prefer a smoke-free environment and environment-friendly facilities. 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[6]. 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[7].

> *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.
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> The parking lot offers an opportunity to generate clean, renewable energy through installation of photovoltaics on carport structures. Photovoltaic carports provide highly desirable shade for parked cars and offer the opportunity for public education, energy reliability, and better air quality. For other green building resources please visit Region 9's websites at:
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> - 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

[6] See http://www.jdpower.com/travel/articles/2007-North-America-Hotel-Guest-Satisfaction.
[7] See: http://www.jdpower.com/travel/articles/2009-North-America-Hotel-Guest-Satisfaction-Study.