

US EPA ARCHIVE DOCUMENT



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

November 28, 2005

Clay Gregory, Regional Director
Bureau of Indian Affairs
Pacific Region Office
2800 Cottage Way, Room W-2820
Sacramento, CA 95825-1846

Subject: Draft Environmental Impact Statement (DEIS) for Elk Valley
Rancheria, Martin Ranch Fee-to-Trust Transfer Project, Del Norte
County, California (CEQ # 20050396)

Dear Mr. Gregory:

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 Section 309 of the Clean Air Act.

As a cooperating agency for the project, EPA submitted comments on the preliminary DEIS on May 11, 2005, noting our concern for maintaining the hydrology of the site to reduce impacts to on-site wetland features and the Crescent City marsh. In response to our comments, the stormwater management structure was changed from a detention basin to a vegetated swale system. EPA supports the swale concept, but many factors affect the success rate of swales. For this reason, we recommend an adaptive management approach be utilized for the stormwater management system, including the incorporation of a monitoring plan and maintenance schedule. The adaptive management approach should be detailed in the Final Environmental Impact Statement (FEIS).

We also request additional information be provided in the FEIS regarding the coordination of the future culvert sizing survey with the design and construction of the stormwater management system, and the need for a Clean Water Act Section 404 permit in relation to bridge or culvert construction. Because of concerns related to potential off-site impacts and uncertainties regarding the effectiveness of the stormwater management system, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed “Summary of Rating Definitions”).

We appreciate the opportunity to review this DEIS and commend the Bureau of Indian Affairs (BIA) and the Elk Valley Rancheria for reducing the amount of impervious surfaces

created by the project from 18 acres to 9.3 acres. EPA is available to work with BIA and the Elk Valley Rancheria to further enhance environmental protection through development of this project. 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 or Karen Vitulano, the lead reviewer for this project. Karen can be reached at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

/S/ Laura Fujii for
Duane James, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosure: EPA's Detailed Comments

cc: Dale Miller, Chairman, Elk Valley Rancheria
Ray Martell, EPA/Maintenance Manager, Elk Valley Rancheria
Mike Long, U.S. Fish and Wildlife Service

Water Quality

Stormwater management system / impacts to wetlands

We commend the Bureau of Indian Affairs (BIA) and the Elk Valley Rancheria for reducing the amount of impervious surfaces for the project from 18 acres in the preliminary DEIS to 9.3 acres in the current project design. This reduction in new impervious surfaces helps to minimize alterations to the hydrological regime which impacts on- and off-site wetlands.

The DEIS includes use of vegetated filter strips instead of a detention basin, to maintain the existing hydrology in sub-basins 1, 2 and 3. We understand that this change to a decentralized stormwater management system was partially in response to our comments that the original hydrology of the site be maintained to avoid impacts to on-site wetland features and the Crescent City marsh. While vegetated swales have the potential to manage and treat stormwater on-site, various factors must be considered for effective functioning of a vegetated swale system of this kind, including soil infiltration requirements, vegetation selection, and proper monitoring and maintenance. Proper design requires careful consideration of site conditions and slight problems in the design, such as improper grading, can render the swale system ineffective in terms of pollutant removal.

The effectiveness of a vegetated swale system depends on regular maintenance. While the mitigation measures state that the Tribe shall create, utilize, and update as necessary a maintenance plan for all BMPs, there is no specific mention of the important maintenance needed for the vegetated swale system. Since maintenance of the management system is vital to operational efficiency, more information should be included in the FEIS.

EPA recommends the Center for Watershed Protection's *Design of Vegetative Filtering Systems – Open Channels and Filter Strips* as a design resource. A slide show containing useful design and maintenance information is available at:

<http://www.stormwatercenter.net/Slideshows/open%20channel%20for%20smrc/sld001.htm>

Maintaining existing on-site hydrology also includes preserving existing off-site flows. The *Drainage Study and Preliminary Grading Plan* indicates that there is insufficient information to assess whether the culverts leading off-site are adequately sized to convey post-project flows (Appendix B, p. 11). The Plan recommends a future survey of the property to obtain information regarding culvert length and invert and outlet elevation for each basin outlet device and for culverts located along the existing access road. However, the DEIS does not specify when, or if, this survey will occur and how it will be coordinated with the design and operation of the vegetated swale system. Since reducing impacts to on-site wetlands and the Crescent City marsh depend on maintaining the pre-project hydrology of the site, more information should be provided in the FEIS that outlines timing and coordination of future studies with the implementation of mitigation measures.

Recommendation:

Use an adaptive management approach to the vegetated swale stormwater management system and prepare an adaptive management plan that includes a monitoring and maintenance component. A typical maintenance activity schedule can be found at http://cfpub.epa.gov/npdes/stormwater/menuofbmps/post_24.cfm or http://cfpub.epa.gov/npdes/stormwater/menuofbmps/post_11.cfm, as well as in the Center for Watershed Protection slideshow mentioned above. Include the adaptive management plan in the FEIS, with a commitment to its implementation in the Record of Decision (ROD). Include in the adaptive management plan a discussion of the criteria that will be used to evaluate effectiveness of the system and what modifications are available to address typical problems to serve as a troubleshooting guide. For example, describe actions that should be taken if adequate infiltration is not occurring after storms, or if flooding occurs on roads or parking lots.

Address the timing of the culvert survey in the FEIS and coordinate the construction of the vegetated swale system with results of the survey in order to best maintain existing flows from sub-basins 1, 2 and 3. Since the Drainage Plan indicates that an existing water line carrier pipe should not be used as a drainage conveyance, use of this pipe for drainage should be avoided.

Wherever possible, the FEIS should estimate the specific environmental benefits that will occur as a result of the proposed avoidance and mitigation measures.

CWA Section 404 permit

References to a Clean Water Act (CWA) Section 404 permit were removed from discussions of the Preferred Alternative A in the DEIS when compared to the preliminary DEIS (pp. xiv, 4.5-2, 5-6). However, the DEIS states that the proposed project would span several creeks and/or drainage channels by either using inverted “U” culverts or clear span bridges (p. 4.3-3). If there is a discharge of fill material to waters of the U.S. associated with culvert installation, a CWA Section 404 permit and associated mitigation will be required. If a Section 404 permit is required for the project, EPA will be the agency to issue CWA Section 401 Water Quality Certification, which will ensure the project construction and operation will not adversely affect water quality.

Recommendation:

The FEIS should include a discussion of CWA Section 404, an estimate of expected fill, both permanent and temporary, and the regulatory requirements associated with a Section 404 permit in relation to culverting or bridging waters of the U.S. EPA recommends clear span bridges instead of culverts where feasible. The Elk Valley Rancheria will be required to apply Best Management Practices (BMPs) in the construction of these structures, as required by the CWA Section 404 permit. Environmental benefits of all BMPs should be estimated in the FEIS.

Stream alteration mitigation

The DEIS states that the proposed inverted “U” culverts or clear span bridges could adversely affect the physical, chemical, or biological properties of on- and off-site surface waters (p. 4.3-3). Mitigation measures are necessary to reduce these potential impacts to less than significant levels, and the DEIS states that mitigation is discussed in Section 5. However Section 5 includes only erosion and sediment control mitigation measures and does not address other impacts to surface waters from stream alterations through bridging or culverting, such as flow alterations and habitat loss.

Recommendation:

In the FEIS, describe potential impacts to surface waters as a result of culverting or bridging creeks, and identify mitigation that will reduce these impacts. We recommend restoring wetlands or creek corridors on-site as mitigation for these alterations. If the Elk Valley Rancheria adopts this recommended mitigation, the FEIS should identify and estimate the environmental benefits of this restoration.

Noise

The preliminary DEIS contained a reference to construction noise mitigation – the limiting of construction activities to normal daytime hours. This mitigation is not contained in the DEIS. Since residences are located within 250 feet of the proposed project (p. 4.10-1), this mitigation for noise impacts is reasonable and should be discussed in the EIS.

Recommendation:

In the FEIS and ROD, to mitigate noise impacts, restrict noise generating activities within 300 feet of occupied residences to normal daylight hours, Monday through Saturday.

Other noise mitigation could include prior notification to potentially affected residences within 1000 feet of construction, identifying the type, duration and frequency of construction activities, with a mechanism for residents to register complaints if construction noise levels are overly intrusive or occurs outside required hours.