

US EPA ARCHIVE DOCUMENT



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

January 14, 2008

Robert D. Williams  
Field Supervisor  
U.S. Fish & Wildlife Service  
Nevada Fish and Wildlife Office  
340 Financial Boulevard, Suite 234  
Reno, Nevada 89502-7147

Subject: Draft Environmental Impact Statement (DEIS) for Coyote Springs  
Investment Planned Development Project (CEQ# 20070455)

Dear Mr. Williams,

We appreciate the opportunity to review the DEIS for the Coyote Springs Investment Multiple Species Habitat Conservation Plan (MSHCP) and Development. The DEIS is intended to evaluate the impacts of federal actions, including issuance of an Endangered Species Act Section 10(a)(1)(B) incidental take permit from US Fish and Wildlife Service (Service); issuance of a Clean Water Act (CWA) Section 404 permit from the US Army Corps of Engineers (Corps) for fill of waters of the U.S. (WOUS); and reconfiguration of lands under management of the Bureau of Land Management (BLM). EPA has reviewed the DEIS and provides comments consistent with our authority provided by Section 309 of the Clean Air Act and the National Environmental Policy Act. Our detailed comments are enclosed and should be considered in the development of the Final EIS (FEIS).

Based on our review, we have rated this DEIS as EO-2, Environmental Objections - Insufficient Information (see attached "Summary of the EPA Rating System"). EPA objects to the substantial amount of impacts to WOUS and the insufficient analysis of reasonable project alternatives that would further avoid impacts to WOUS and comply with the CWA Section 404(b)(1) Guidelines that require the identification of the Least Damaging Practicable Alternative. EPA believes that significant environmental degradation could be avoided through project modification or other alternatives.

While we recognize efforts to prepare a mitigation plan and functional analysis for WOUS as suggested in our August 6, 2007, comments on the Administrative DEIS, we are concerned with aspects of the analysis of direct and indirect impacts to WOUS and the adequacy of the functional analysis and proposed mitigation plan.

Due to the regional significance of water supply in the arid region of southern Nevada, EPA remains concerned with the insufficiency of the cumulative effects analysis on groundwater basins that would service the project. We also find the DEIS provides insufficient information

to determine whether supply is adequate for the life of the project without having significant impacts on groundwater basins.

The DEIS also lacks sufficient analysis of increased vehicle traffic and resulting air quality impacts due to increased vehicle trips to and from the Las Vegas and North Las Vegas areas, and does not provide sufficient information regarding the expected level of fugitive dust emissions associated with increased off-highway vehicle use.

We recognize the level of effort that has gone into the development of this MSHCP; however we remain concerned with some aspects of the analysis of direct and indirect impacts to covered species and habitat, adequacy of conservation and mitigation measures for covered species, and potential impacts to movement corridors for bighorn sheep.

We recommend the FEIS expand the alternatives analysis to include designs that reduce the project footprint, further avoid and minimize impacts to WOUS, and comply with CWA Section 404(b)(1) Guidelines. We also recommend improved analysis of groundwater impacts and commitments to additional water conservation measures, expanded air quality analysis, and expanded impact analysis and mitigation for biological resources.

We appreciate having had the opportunity to speak in advance with you and members of your office, as well as the Corps, about our concerns. We look forward to a follow-up meeting with the Service, Corps, BLM and project proponent to work with the EPA to address the issues we raise in our comment letter. When the FEIS is released for review, please send one hard copy and two CD copies to the address above (mailcode: CED-2). If you have any questions, please contact me at 415-972-3846 or Paul Amato, the lead reviewer for this project. Paul can be reached at 415-972-3847 or amato.paul@epa.gov.

Sincerely,

/s/

Nova Blazej, Manager  
Environmental Review Office

Enclosure:

Summary of EPA Rating Definitions  
EPA Detailed Comments

Cc: Steven Roberts, U.S. Army Corps of Engineers  
Leilani Tokano, U.S. Fish & Wildlife Service  
Jeff Weeks, Bureau of Land Management  
Brad Hardenbrook, Nevada Department of Wildlife  
Tracy Taylor, P.E., Nevada State Engineer  
Ronda Hornbeck, Lincoln County Water District  
Donald A. Pattalock, Vidler Water Company  
Ruth Sundermeyer, Coyote Springs Investments  
Jo Morgan, Las Vegas Valley Water District

**ENVIRONMENTAL PROTECTION AGENCIES' DETAILED COMMENTS ON THE COYOTE SPRINGS INVESTMENT DEVELOPMENT DRAFT ENVIRONMENTAL IMPACT STATEMENT, JANUARY 11, 2008**

**Project Purpose and Need**

*Expand the purpose and need statements.* The Draft Environmental Impact Statement (DEIS) describes the need for federal actions of the US Fish and Wildlife Service (Service), US Army Corps of Engineers (Corps), and Bureau of Land Management (BLM), associated with the proposal to build a green-designed planned town in Lincoln County (p. 2-1). There is no information describing the need or purpose of the proposed project itself. The purpose and need section of the DEIS must explain the “underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action” (40 CFR 1502.13). Chapter 1 of the Draft Multi-Species Habitat Conservation Plan (MSHCP) describes the need for increased economic opportunities and housing as the purpose and need of the CSI Development and links this need to population growth in the Las Vegas area, but does not demonstrate why a new town the size and composition of the CSI development is needed in Lincoln County. This information is crucial in the EIS as it sets the parameters for a reasonable range of alternatives, discussed below under Waters of the U.S.

*Recommendation:*

The purpose and need section of the FEIS should be expanded to include the purpose and need of a green-designed planned town. The FEIS should provide information on expected population growth and housing demands for the Las Vegas area over the life of the Draft MSHCP and why the CSI Development in Lincoln County is necessary to meet those demands.

**Waters of the U.S.**

*Clean Water Act Section 404*

*Aquatic Resources*

A jurisdictional delineation was conducted within the 21,454 acres of CSI land, 13,767 acres of CSI lease land in Lincoln and Clark counties, as well as the BLM Utility Corridor located west of U.S. Hwy 93 (3,331 acres) (p. 4-31). EPA assisted with this delineation but acknowledges that it has not yet been approved by the US Army Corps of Engineers (Corps). Based on this delineation, 63.8 acres of waters of the U.S. (WOUS), consisting of ephemeral drainages, occur on the proposed Lincoln County site (p. 3-27, Table 3-7). The applicant proposes to discharge fill into 33.3 acres of waters; 52 percent of the waters on the project site. EPA is concerned with the potential loss of aquatic resources due to the proposed project. In addition to providing the following comments, we are available to coordinate with the project proponent and the Corps to further develop avoidance, mitigation, and monitoring measures for the proposed project.

EPA is particularly concerned about potential impacts to ephemeral and intermittent streams from the proposed project because these impacts directly affect the functional condition of higher

order waters downstream and the environmental services performed by these aquatic resources. Ephemeral and intermittent tributaries serve as the filtering headwaters for primary sources of drinking water and their coarse beds allow water infiltration to recharge groundwater aquifers. Healthy ephemeral waters with characteristic plant communities also control rates of sediment deposition and dissipate the energy associated with flood flows. The loss of these waters results in increased costs associated with flood control facilities, as well as the increased need for drinking water and wastewater treatment infrastructure. Likewise, degraded water quality resulting from development in and around these waters may adversely affect fisheries and recreational uses throughout the watershed and downstream.

### ***Functional Analysis***

#### ***Expand the functional analysis of WOUS to differentiate functions and values of waters.***

EPA appreciates the attempt to conduct a functional analysis of WOUS as suggested in our Administrative DEIS comments; however we recommend a comprehensive analysis be conducted and reported beyond the list of generalized functions and values in Table 3 (p. 4-35). Based on the information provided, all ephemeral drainages are considered to have the same level of functions and values and were not assessed for individual conditions. The FEIS and Mitigation Plan should describe the results of a comprehensive assessment and how this information will be used to identify where impacts to highly functioning WOUS will be avoided.

#### ***Recommendation:***

The FEIS and the Mitigation Plan should expand the functional analysis to define the functions and values of individual desert dry wash ephemeral drainages on the site, categorize them based on their functions and values, and use this information to develop or modify project alternatives that avoid impacts to higher quality drainages and their associated habitats (discussed below).

### ***Clean Water Act Section 404(b)(1) Alternatives Analysis***

***The FEIS should assess a reasonable range of alternatives to comply with 404(b)(1) Guidelines and avoid direct impacts to WOUS.*** The goal of the Clean Water Act (CWA) is to restore and maintain the chemical, physical and biological integrity of WOUS. This goal is achieved, in part, by controlling discharges of dredged or fill material to WOUS. Any permitted discharge into waters must be the *Least Environmentally Damaging Practicable Alternative* (LEDPA) available to achieve the project purpose. See Section 404(b)(1) Guidelines (40 CFR 230). Based on this provision, the applicant is required in every case (regardless of whether the discharge site is a special aquatic site) to evaluate opportunities for use of non-aquatic areas and other aquatic sites that would result in less adverse impact on the aquatic ecosystem. A CWA Section 404 permit cannot be issued, therefore, in circumstances where a less environmentally damaging practicable alternative for the proposed discharge exists.<sup>1</sup> The project proponent bears the burden of clearly demonstrating that the preferred alternative is the LEDPA that achieves the

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<sup>1</sup> Memorandum: Appropriate Level of Analysis Required for Evaluating Compliance with Section 404(b)(1) Guidelines Alternatives Requirements. 2006. <http://www.epa.gov/owow/wetlands/guidance/flexible.html>

overall project purpose, while not causing or contributing to significant degradation of the aquatic ecosystem, including fill.

The DEIS has evaluated three alternatives: 1) the No Action Alternative; 2) the Preferred Alternative; and 3) Alternative One. The preferred Alternative is similar to Alternative One and only varies through implementation of a phased construction approach and some additional conservation measures. No alternatives have been considered that would meet the project purpose and reduce impacts to WOUS by reconfiguring or reducing the footprint of the current alternatives through modifications to acreage of residential, commercial, transportation or recreation components. Based on our review of the DEIS, the current alternatives analysis does not demonstrate compliance with the 404(b)(1) Guidelines.

*Recommendation:*

The FEIS should consider a broader range of project alternatives that would reduce direct impacts to WOUS and comply with 404(b)(1) Guidelines. The LEDPA could be developed by implementing several impact avoidance measures including, but not limited to the following:

- Low Impact Development (LID) alternatives with reduced project footprint – LID is a “sustainable landscaping approach that can be used to replicate or restore natural watershed functions and/or address targeted watershed goals and objectives.”<sup>2</sup> More information is available at the EPA website.<sup>3</sup> The FEIS should consider a range of alternatives that meet the project purpose and need while reducing impacts through a variety of footprint reconfigurations and implementation of LID practices. Currently the impacts of only one footprint configuration are considered in the DEIS. While EPA recognizes the current efforts to reduce impacts through adoption of green building standards (xeric landscaping, water recycling, solar, etc.), and implementation of a Storm Water Management Plan (SWMP), the proposed project could further implement LID planning and building practices to further avoid impacts to WOUS and associated habitat by reconfiguring the development to avoid critical habitat areas.
- Increasing the buffer widths along avoided waters – To ensure the long term integrity of WOUS on the CSI property, appropriate buffers should be established. Waterway buffers are essential in protecting the functions of stream systems including desert washes. Land use changes that expand the cover of impervious surfaces tend to increase: (1) the frequency, rates, and volumes of stormwater run-off; (2) the annual pollutant loads to receiving waters; and (3) the modification of physical and biological processes of the receiving waters. To minimize the adverse effect of the proposed project on ephemeral waters, the buffer widths should be increased to capture more of their floodplain and help maintain ecosystem processes. We recommend from top of bank, a minimum 300-foot buffer on Pahranaagat Wash and 100-foot on the avoided and restored tributary washes. Because the Pahranaagat Wash is ecologically and hydrologically significant to the site and region, and because it drains directly to the Muddy River, it should be protected from

<sup>2</sup> Greening EPA Glossary. 2007. <http://www.epa.gov/greeningepa/glossary.htm#lid>

<sup>3</sup> Low Impact Development Literature Review and Fact Sheets. 2006. <http://www.epa.gov/owow/nps/lid/lidlit.html>



the proposed development that would surround it at the project site. Unlike the Clark County development where the east side of the Pahranaagat Wash is preserved open space within the RCMA, the Lincoln County portion would be surrounded by a variety of development types. Increasing buffers on preserved and restored tributaries to the Pahranaagat Wash to 100 feet would be consistent with the U.S. Army Corps of Engineers Section 404 Permit No. 200125042 for the Clark County CSI Development Special Condition 2(b)(3) that authorized buffers of up to 100 feet for preserved drainages and up to 80 feet for restored drainages. EPA believes that greater buffers will significantly increase the protection of these valuable resources, as well as provide increased flood protection for the proposed community.

- Protection of Kane Springs Wash – Avoid Kane Springs Wash, starting from Kane Springs Road north draining toward Kane Springs Wash, by implementing a minimum 100-foot buffer on the north side of Kane Springs Wash.
- Protect all waters west of Pahranaagat Wash (including a 300-foot buffer east of the wash). Due to the density and complexity of waters west of Pahranaagat Wash and the importance of these waters to the function of Pahranaagat Wash and downstream waters, proposed development should be removed from this area.
- Protection of ephemeral drainage BL13 and its contributing waters which flow into Pahranaagat Wash. This significant wash is located adjacent to the Resource Management Area and should be incorporated into the Resource Management Area and not developed as currently proposed.

***Off-site alternatives should be further assessed.*** The DEIS lacks a sufficient analysis of all reasonable off-site alternatives that meet the project purpose (Council on Environmental Quality's (CEQ) Forty Questions<sup>4</sup>, #2a and #2b). In addition to on-site alternatives that reduce impacts through changes to the project footprint, the FEIS should include a more detailed evaluation of the parcels described in Appendix N. Based on Figure N-4, several parcels that were considered to be too small individually are adjacent to other parcels that combined would result in much larger potential project areas. For example, parcels 1, 2 and 7 would equal approximately 30,000 acres combined, parcels 3 and 4 would equal nearly 22,000 acres, and parcels 5 and 6 would equal 14,703 acres. The FEIS should further describe why these combined parcels would not be adequate locations for further analysis.

*Recommendation:*

The FEIS alternatives analysis of the off-site parcels described in Appendix N should include analysis of combined parcels or clarification as to why combined parcels are infeasible.

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<sup>4</sup>Forty Most Asked Questions Concerning CEQ's NEPA Regulations, 40 CFR Parts 1500-1508, Federal Register, Vol. 46, No. 55, March 23, 1981.

### *Indirect Impacts to WOUS*

***The DEIS should provide sufficient information to describe indirect effects to WOUS.*** The DEIS states that, “indirect effects to WOUS would not occur under the preferred alternative. All aquatic habitat values are expected to be restored as a result of implementing the mitigation plan.” (p. 5-27). EPA does not agree with the DEIS assessment that indirect effects to WOUS would not occur under the Preferred Alternative or that implementing the Mitigation Plan will adequately avoid all indirect effects. WOUS and aquatic habitat values will be altered by permanently changing physical and hydrological conditions, including modifying the timing, velocity and volume of stormwater flows, changing sediment transport conditions, and discharging pollutants from nuisance flows from the development into receiving waters. EPA is concerned with the level of indirect changes to the physical and hydrologic conditions of the functioning network of WOUS and aquatic habitat values on the site, and with the lack of sufficient detail in the DEIS to understand these changes.

#### *Recommendations:*

The FEIS should include a detailed analysis demonstrating how indirect effects to WOUS would not occur and how aquatic habitat values would be restored through implementation of the mitigation plan.

The FEIS should include sufficient information to understand how flow and sediment transport in restored and preserved channels will change and what effects these changes could have on physical channel conditions. A discussion of potential long-term channel maintenance activities, maintenance frequency and resulting impacts should be included.

### *Impacts to Hydrology and Water Quality*

***The FEIS should disclose complete information about the adverse direct effects of the proposed project on Hydrology and Water Quality.*** While the DEIS does disclose direct effects to hydrology and water quality, it does not accurately assess all of these impacts that would occur as a result of the proposed project. The DEIS states that “the Preferred Alternative would result in slight positive direct effects to hydrology of the WOUS within the Development Area by controlling flooding in the human environment.” (p. 5-32). EPA does not agree with the use of post-project conditions as the National Environmental Policy Act (NEPA) baseline to which impacts should be assessed nor do we agree that achieving flood control through channel modification to functioning natural drainages results in a positive direct effect on the current baseline conditions of the site. In addition, the DEIS states that “implementation of the SWMP and BMP (Best Management Practices) would produce slight positive [direct] effects on the hydrology in the Development Area by controlling pollutants.” (p. 5-33). While we commend the development of a SWMP and BMPs, EPA does not agree with the use of post-project conditions to evaluate impacts on baseline water quality nor do we believe that implementation of the SWMP and BMPs will have a positive effect on pollutants when compared to current conditions.



*Recommendations:*

The FEIS should assess direct effects to hydrology based on the appropriate baseline conditions that presently occur at the site, and not post-development conditions.

The FEIS should assess direct effects of the project to water quality using current conditions as baseline and not post-development conditions.

***Mitigation***

***Mitigation for impacts to WOUS should be further developed to adequately compensate for impacts.*** Compensatory mitigation is intended only for unavoidable impacts to waters after the LEDPA has been determined. Therefore, it would be premature to provide detailed comments on the mitigation proposal before compliance with 40 CFR 230.10(a) is established. However, EPA does have concerns with the current mitigation approach described in the Mitigation Plan, Appendix L of the DEIS, which proposes to avoid 30.5 acres of waters on the project site and restore 66.6 acres of desert dry wash habitat to compensate for fill of 33.3 acres within the project area. Based on Figure 3 in Appendix L, fill of ephemeral drainages would result in a significant reduction in the length and distribution of ecological and hydrologic features across the project site. In addition, based on Figure 3, the majority of the restored channel length would be attributed to the more highly concentrated historic washes in the RCMA that were filled with alluvium through normal geologic processes. It is unclear at this time whether this area would be suitable for restoration given the dynamic nature of the area. If these channels filled in naturally, it may be that they are unsuitable and inappropriate for restoration purposes. The DEIS also proposes to restore adjacent washes that were cut off when U.S. 93 was constructed in the 1960's. It is unclear whether these washes would be restored to serve as flood control for the development.

*Recommendation:*

The FEIS should include additional mitigation measures to compensate for unavoidable impacts to WOUS due to the loss of length and distribution of channels as well as total acreage. Restoration of naturally filled channels in the RCMA should be further evaluated for appropriateness and likelihood of success, and it should be clarified whether channels that were formerly cutoff by Hwy 93 would be restored to serve as flood control for the development.

***Flood Conveyance Channels***

***Flood conveyance channels should be further described.*** The DEIS proposes that the washes reconstructed as flood control structures serve as mitigation. These conveyance channels would transport the off-site storm flows from the detention basins through the Development Area. These channels would be planted with native plantings, but it is unclear as to the extent of hardscape necessary to maintain the integrity of the flood control channels. These channels would be subject to 14 major crossings and 32 minor arterial crossings, which could contribute to permanent habitat impacts and excessive channel erosion or deposition if designed improperly. In addition they are subject to the Drainage and Maintenance Easement. This easement language allows for maintenance and repair. It also allows for the use of non-invasive non-native

plantings within the buffer and includes uses such as open space landscaping and golf courses. In addition, it prescribes for the potential use of pesticides, herbicides and rodenticides as described in the Chemical Application Management Plan (CHAMP) for golf course facilities (Table 8b). We commend the use of native plantings, gentle side slopes and adequate buffers when designing flood control facilities, but based on the information provided to date, EPA does not believe the restored washes provide compensatory mitigation for project impacts. Once the applicant complies with the Guidelines, for unavoidable impacts that remain, alternative types of mitigation should be evaluated. These may include restoration, conservation, and acquisition within the upper watershed of Pahranaagat Wash.

*Recommendation:*

We recommend the FEIS include more detailed information regarding the design of the flood conveyance channels in order to determine whether they would provide appropriate mitigation for impacts to WOUS. The extent of hardscape that could be used in restored channels, as well as the changes in channel cross-section, length and slope should be provided and illustrated in representative drawings. The design of bridges, opportunities to reduce crossings, and designs that prevent placement of structures in the active channel should be included. We also recommend the FEIS include easement language that would reduce potentially degrading activities that are currently proposed for inclusion in the channel buffer areas.

***Mitigation Monitoring***

***Mitigation monitoring length and criteria should be expanded.*** According to Section 5 of the Mitigation Plan, monitoring for preserved desert dry wash and restored desert dry wash habitats will be conducted for a minimum of 5 years. EPA is concerned that this may be too short a minimum monitoring period for these channels given the periodicity of the hydrologic regime in desert dry wash systems. As described in the DEIS, “the drainages crossing Hwy 93 generally do not flow every year. Rather they flow periodically during large localized regional rain events...” (p. 4-37). Restored channels will only be stable if they are designed to adequately convey contributions of sediment and flow and if human land use and infrastructure do not interfere with these functions. Because the proposal under the Preferred Project to restore many desert dry washes would enlarge channel cross-sections to convey the 100 year storm, and because several bridges are proposed in addition to modifications to runoff characteristics, there is potential for the washes to function far differently than before. As a result, the periodicity of flows in these channels could mean that a minimum of 5 years is insufficient to determine whether the channels have been designed properly. Proposed changes to the project site could also lead to indirect effects to preserved desert washes which may not be evident in only 5 years.

*Recommendation:*

To sufficiently monitor channel performance, the Mitigation Plan for the proposed project should increase the minimum monitoring period of preserved desert dry wash to 10 years following the completion of development within an individual drainage area. Monitoring for restored desert dry washes should also be increased to 10 years following construction. Monitoring should include physical parameters that would indicate whether

the channels are adequately conveying flow and sediment and maintaining a relatively stable geometry under post-development conditions.

## **Groundwater**

### ***Groundwater Development Cumulative Effects***

The proposed Project would significantly increase water supply demands in Lincoln County, resulting in the need to draw groundwater from local hydrographic basins. EPA is concerned with the lack of information to accurately describe impacts to groundwater and dependant surface water habitats in the southern Nevada arid region that could be diminished as a result of long-term water demands.

***Include a study of the cumulative effects of regional groundwater development projects.*** The DEIS does not provide sufficient information to assess cumulative impacts of groundwater development on groundwater quantity, quality and surface water contributions. The DEIS states that future groundwater development projects in the study area could significantly affect the alluvial and carbonate aquifers under CSI lands in Lincoln County and reduce surface water flows such as the Muddy River (p. 5-104). The document also cites studies from the Southern Nevada Water Agency (SNWA) and Las Vegas Valley Water District (LVVWD) that indicate water in the carbonate aquifer would decline and flows in springs and the Muddy River would be reduced after several decades of groundwater pumping. However, as stated in the DEIS, “a study on the effects of groundwater development combining the water rights and pending applications in Table 5-27 has not been completed.” (p. 5-104). EPA continues to be concerned that the level of impacts to groundwater and surface water in the area remains unclear without further study.

#### ***Recommendations:***

The FEIS should include a cumulative impacts analysis of the effects of existing and reasonably foreseeable groundwater development projects on groundwater quality, quantity and contribution to surface waters in the study area. The FEIS should include such a study or, at a minimum, explain why this study has not been conducted as part of the proposed project analysis. If the intent is to utilize information from ongoing groundwater development studies, the FEIS should identify these studies, provide a schedule for their expected completion, and provide a schedule for completing an analysis of the effects of groundwater development combining the water rights and pending applications in Table 5-27 (40 CFR 1502.22).

We also recommend the FEIS address what measures would be taken, and by whom, should groundwater resources in the basin become overextended due to additional growth, continued drought, and the utilization of existing or pending water rights in the basin(s).

***Include a comparison of estimated net pumpage and estimated outflow.*** The DEIS cites a recent USGS draft study that includes several of the hydrologic basins included in the proposed Clark, Lincoln and White Pine Counties Groundwater Development Study. The DEIS notes that

the draft study determined that current groundwater pumpage (127,000 acre feet annually (afa) in 2005)) has not significantly altered evapotranspiration rates, distribution of native vegetation, or regional spring flow in the study area. The DEIS does not mention that the draft study also states “reductions in outflow would be more likely in sub-basins or hydrographic areas where net pumpage is nearly equal or greater than the estimated outflow...” The FEIS should include an analysis of the net flow of groundwater in the hydrographic basins compared to the estimated net pumpage that would provide water to the proposed project.

*Recommendation:*

We recommend the FEIS include a comparison of the anticipated net pumpage and the estimated outflow of groundwater basins that could be used to supply water to the proposed project.

***Groundwater Effects Evaluation Criteria***

***Expand the evaluation criteria discussion regarding a lack of surface and groundwater interaction.*** The DEIS, states that “Depth to groundwater beneath the Development Area is over 400 feet and there are no data that suggest surface water and groundwater interact beneath the Development Area” (p. 5-29). Thus, there is no further analysis of potential direct or indirect impacts on groundwater at the project site from the proposed project alternatives. It is unclear why groundwater could not be affected by pumping or hazardous materials associated with the proposed project.

*Recommendation:*

EPA recommends the FEIS describe how this evaluation criterion was determined and why an apparent lack of interaction between surface and groundwater at the project site precludes potential impacts to groundwater or surface water resources. A detailed analysis of conditions that protect the groundwater aquifer from impacts from the proposed project should be provided.

***Describe apparent discrepancies in Table 5-27.*** We note that permitted and pending water rights applications greatly exceed the perennial yield of the individual hydrographic basins as reported in Table 5-27 of the DEIS (p. 5-105). For example, CSI, which has a permitted water right of 16,304 afa, and LVVWD pending application for 135,000 afa in the Coyote Spring Valley Basin would result in a total of 151,304 afa, well over the estimated perennial yield of 18,000 afa. As explained in Table 5-27, perennial yield is defined by the Nevada Division of Water Resources as “the amount of usable water from a ground-water aquifer that can be economically withdrawn and consumed each year for an indefinite period of time. It can not exceed the natural recharge to that aquifer and ultimately is limited to maximum amount of discharge that can be utilized for beneficial use.”

*Recommendation:*

The FEIS should clearly describe the reason for the discrepancies between the amounts of perennial yield, permitted water rights, and pending water rights applications described in Table 5-27.

### ***Development of a Regional Groundwater Framework***

***Provide information on the development of a regional groundwater framework.*** EPA provided comments, dated August 20, 2007, on the DEIS for the Kane Springs Valley Groundwater Development Project of which the CSI Development would be the primary beneficiary of groundwater yield. These comments recommended the formation of a regional groundwater framework and are also relevant for this project. Our Kane Springs comment is included below.

***Recommendation:***

EPA commends the collaboration between the water right applicants and U.S. Fish and Wildlife to address potential impacts to Muddy River Springs sensitive species (Appendix A) from use of the carbonate-rock aquifer. We recommend the BLM, Cooperating Agencies, Lincoln County Water District (LCWD), Vidler Water Company (VWC), Coyote Springs Investments (CSI), and other water right applicants continue this collaboration in the form of a regional groundwater framework to ensure efficient long-term sustainable use of the deep carbonate-rock aquifer and avoidance of adverse impacts to third parties and surface and groundwater quality and quantity. Opportunities for such collaboration should be discussed in the FEIS.

### ***Groundwater Supply, Conservation and Climate Change***

***Clearly demonstrate water reliability for the project.*** The DEIS states that the proposed project will require up to 70,000 afa of water at full build-out and that upwards of 50 percent would be provided by reclaimed water once sufficient reclaimed water is available (p. 1-18). EPA commends the proposed use of reclaimed water to reduce demands on surface and groundwater resources. However, the DEIS is still unclear as to how much groundwater will be needed each year as the project develops vs. the amount that is available and whether there is a proven source of water for the lifetime of this project. EPA believes water supply commitments should be tailored to reflect long-term sustainable supplies reasonably expected to be available under varying conditions (e.g., wet versus dry years). We advocate an approach which is focused on efficient use and management of these water supplies. The quantity of allocated water supply should be based on the availability of long-term sustainable supplies and not on estimated needs, demands, or potential additional supplies. We recommend avoiding water supply commitments that exceed reasonably foreseeable sustainable supplies.

***Recommendation:***

EPA recommends the FEIS clearly demonstrate whether there is sufficient groundwater for the lifetime of this project. The FEIS should include a commitment to phase development based on secured water rights that will not negatively affect groundwater supply and spring flows. The commitment should describe triggers for the continuation or discontinuation of future phases of development, including all relevant State or local permits and regulations.

***Implement additional water conservation measures.*** The DEIS mentions water conservation measures such as water reclamation, xeric landscaping, and green building design.



*Recommendation:*

EPA strongly encourages the FEIS include a description of all water conservation measures that will be implemented to reduce water demands for the proposed project and that the project proponent maximize smart growth strategies during design and construction. Water saving strategies can be found in the EPA's publication *Protecting Water Resources with Smart Growth*.<sup>5</sup>

***Include information on water pricing as a water conservation measure.*** Variable pricing of water can significantly influence water demand and supply. Pricing which accurately reflects the economic and environmental costs of water increases the ability to ensure scarce supplies are used efficiently. Effective and sustainable management of water supplies depends on an accurate knowledge of water supply availability and water use. This knowledge can only be obtained through monitoring and accounting of water supply and demand. For additional information, we recommend referring to the *USEPA Water Conservation Guidelines, Appendix A, Water Conservation Measures*.<sup>6</sup>

*Recommendation:*

The FEIS should include an in-depth discussion of pricing and how it will be utilized by the Coyote Springs Water Resources District (CSWRD) to balance water demands and water supply. We also recommend inclusion of water measurement devices and reporting to accurately balance water supply and demand. We strongly suggest the FEIS include a firm commitment by the CSWRD to timely and accurate monitoring and accounting. This commitment should include dedicated funding for this effort.

***Describe potential effects of climate change on water availability.*** A number of studies specific to the Colorado River Basin, which includes the project area, indicate the potential for significant environmental impacts as a result of changing temperatures and precipitation.<sup>7</sup> A more extensive discussion of climate change and its potential effects on water supply and reliability for the proposed project would better serve decision-making on this project, as well as long-term, regional water management planning and planned development.

*Recommendation:*

We recommend the FEIS include a qualitative discussion on climate change and the potential effects on groundwater supply for the proposed development. We recommend this discussion provide a short summary of climate change studies specific to the project area and Colorado River Basin, including their findings on potential environmental and water supply effects and their recommendations for addressing these effects. For example, if there is a projected 10-20 percent reduction in precipitation for the Colorado

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<sup>5</sup> Several strategies for water resource protection are found in the EPA publication *Protecting Water Resources with Smart Growth*, found at [http://www.epa.gov/piedpage/pdf/waterresources\\_with\\_sg.pdf](http://www.epa.gov/piedpage/pdf/waterresources_with_sg.pdf).

<sup>6</sup> EPA provides several conservation measures that utilities can use to develop water conservation plans at: [http://www.epa.gov/watersense/docs/app\\_a508.pdf](http://www.epa.gov/watersense/docs/app_a508.pdf)

<sup>4</sup> For example, *Colorado River Basin Water Management: Evaluating and Adjusting to Hydroclimatic Variability* (2007); *The Colorado River Basin and Climatic Change*, Linda L. Nash & Peter H. Gleick (1993) (EPA Publication 230-R-93-009).



River Basin<sup>8</sup>, we recommend the FEIS describe the potential effect on groundwater supply for the proposed project and potential impacts on groundwater resources, including other existing water rights, water quantity and quality, and surface water contribution.

## **Air Quality and Traffic**

### *Clean Air Act*

***Air quality impacts should be expanded to include increased traffic and OHV use.*** The DEIS mentions that an increased population base would result in increased vehicle emissions but that because current air quality is high, air quality would not be expected to exceed state and federal standards (p. 5-53). However, the traffic analysis and the air quality analysis in the DEIS do not sufficiently address the increased vehicle traffic and air quality effects at the proposed development nor from commuters traveling between the development or the employment and entertainment centers in the Las Vegas and North Las Vegas areas. The Las Vegas area of Clark County is designated as serious non-attainment for carbon monoxide, Subpart 1 non-attainment for 8-hour ozone, and serious non-attainment for PM10 (particulate matter with a diameter of 10 microns or less). The FEIS should describe cumulative effects on air quality from increased traffic between the proposed project in Lincoln County and the Las Vegas and North Las Vegas areas.

The DEIS also states that off-highway vehicle (OHV) use would likely increase resulting in localized, infrequent emissions and increased fugitive dust (p. 5-54) but defers to BLM Regional Management Plans to address air quality issues associated with OHV use. The DEIS lacks sufficient information on the expected level of emissions and fugitive dust from increased OHV use associated with an increased population base at the proposed development. This analysis should be provided in the FEIS.

#### *Recommendations:*

The FEIS air quality impact analysis should provide sufficient detail to assess the impacts from traffic increases as people relocate to Lincoln County as a result of the development, as documented in Appendix R of the DEIS. The FEIS should include an analysis of what percentage of the traffic associated with the development would be traveling between the development and the Las Vegas and North Las Vegas areas and what impacts to existing non-attainment areas would be expected.

The FEIS should clarify to what degree OHV use is expected to increase in the study area and should include an analysis of expected effects to air quality.

***Clarify why PSD requirements do not apply to the proposed project.*** The DEIS describes the CSI Development area as having insufficient air quality data to determine attainment status resulting in a listing of unclassified (p. 5-46). As described, unclassified areas are treated as attainment areas for regulatory purposes. The DEIS goes on to explain that Prevention of

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<sup>5</sup> Nash and Gleick, p. ix.

Significant Deterioration (PSD) is a Clean Air Act regulation that limits increases of pollutants in attainment areas to certain increments even though ambient air quality standards are being met. EPA agrees with this description but questions the DEIS assertion that PSD would not apply to the project area since it is unclassified. This is a contradiction that should be clarified.

*Recommendation:*

The FEIS should clarify that PSD does apply to the proposed project area and provide justification used to determine that PSD requirements do not apply to emissions from the proposed project.

***Missing and erroneous air quality information should be updated in the FEIS.*** Table 4-9, Clark County and Nevada Air Quality Standards, should include the National Ambient Air Quality Standards (NAAQS) to demonstrate comparability of monitoring data from nearby stations with local, state and federal air quality standards.

Table 5-5, Ambient Air Quality Standards, includes NAAQS but contains several errors. For 8-hour ozone, the table incorrectly lists the standard as 9.0 parts per million (ppm) and 10,000 micrograms per cubic meter (ug/m<sup>3</sup>), however the standard is 0.08 ppm. The 1-hour ozone standard has been revoked for all areas except fourteen 8-hour ozone non-attainment areas, none of which are in Nevada. The annual standard for PM<sub>10</sub> has also been revoked. The PM<sub>2.5</sub> twenty-four hour standard is now 35 ug/m<sup>3</sup> (previously 65 ug/m<sup>3</sup>) and has not been included in the table. Lead is listed at 1.5 g/m<sup>3</sup>, and should be 1.5 ug/m<sup>3</sup>.

Table 5-10, Modeled Estimated Air Quality Impacts, PM<sub>10</sub> and PM<sub>2.5</sub> standards should be corrected. The PM<sub>10</sub> annual standard has been revoked and the PM<sub>2.5</sub> standard is now 35 ug/m<sup>3</sup>. As a result, the DEIS only mentions PM<sub>10</sub> as being significantly effected and disregards impacts to 24-hour PM<sub>2.5</sub> since the incorrect standard is used. Based on modeled estimates, both PM<sub>10</sub> and PM<sub>2.5</sub> 24-hour standards could be exceeded by construction of the proposed project every year for the life of the project. The FEIS should revise these standards, the assessment of impacts, and describe adequate mitigation measures to control PM<sub>10</sub> and PM<sub>2.5</sub>. This will become increasingly important as residents begin to relocate to the proposed development and are subjected to air quality impacts from on-going construction.

*Recommendation:*

The FEIS Tables 4-9, 5-5, and 5-10 should be updated so they all include proper NAAQS and properly assess effects of the proposed project construction on 24-hour PM<sub>10</sub> and PM<sub>2.5</sub> air quality standards. Appropriate mitigation measures to address significant impacts to PM<sub>10</sub> and PM<sub>2.5</sub> air quality standards should be described and committed to.

### ***Construction Mitigation Measures***

***Construction related emissions should be adequately controlled.*** As a result of the project phasing approach, the proposed project could cause ongoing air quality impacts from construction activities for several years. EPA acknowledges that the project area is unclassified for air pollutants but we remain concerned that construction related emissions could affect

Coyote Springs residents and the local work force. Impacts could be especially significant to initial residents subjected to emissions for several years during construction.

*Recommendation:*

EPA recommends the FEIS include the following air pollutant controls to reduce air quality impacts in the area and prevent negative effects to residents and visitors of the development:

*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. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturers recommendations
- If practicable, lease newer and cleaner equipment meeting the most stringent of applicable Federal or State Standards.
- 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:*

- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.)
- Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification. Use low sulfur fuel (diesel with 15 parts per million or less) in engines where alternative fuels such as biodiesel and natural gas are not possible.

- Develop a construction traffic and parking management plan that minimizes traffic interference and maintain traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors away from fresh air intakes to buildings and air conditioners.

## **Biological Resources**

### ***Endangered Species Act Section 10(a)(1)(B)***

The Draft MSHCP and the DEIS, in part, have been prepared to obtain an incidental take permit from the Service for several species listed under the Endangered Species Act (ESA). EPA supports the development of HCPs that clearly identify minimization, conservation and mitigation measures that will reduce take of listed species from otherwise legal activities, and help promote the health of the species populations and habitats. Following review of the Draft MSHCP and the DEIS for the proposed project, EPA has the following comments and concerns:

***Desert tortoise habitat fragmentation impacts should be assessed and mitigated.*** The construction of a 21,454 acre development and all the appurtenant activities that will accompany it will result in significant fragmentation of desert tortoise habitat. The proposed project is located within designated critical habitat for the federally threatened and state of Nevada protected desert tortoise. Section 5.2.2.2.3 of the DEIS discloses several direct and indirect impacts to desert tortoise and desert tortoise critical habitat including habitat fragmentation. While EPA recognizes the many efforts of the project proponent and the Service to implement avoidance and conservation measures for desert tortoise, the DEIS does not appear to link the impacts of habitat fragmentation to conservation measures in the MSHCP. The DEIS states that “habitat fragmentation is a major contributor to population declines of the desert tortoise.” (p. 5-14). The configuration of lands to form the RCMA are intended to aid in maintaining contiguous habitat along the eastern side of the proposed development but as described, the project would significantly impede movement of desert tortoise through the development area. EPA remains concerned with the impact of habitat fragmentation on this species and the lack of avoidance.

#### ***Recommendation:***

The FEIS should assess the degree of impacts on the population and recovery of desert tortoise from habitat fragmentation and identify project alternatives that further reduce impacts, and increase mitigation and conservation measures that directly address unavoidable impacts of habitat fragmentation. Recommendations to develop alternatives that reduce impacts, including impacts to desert tortoise, can be found under the Clean Water Act Section 404(b)(1) Alternatives Analysis section of this letter.

***Bighorn sheep movement corridors should be protected.*** While big horn sheep are not included as covered species in the Draft MSHCP, or listed as federally or state protected species, it is worth noting that the proposed project borders the Service Desert National Wildlife Refuge which was established to protect and conserve big horn sheep populations in Nevada. The DEIS

describes the existence of intermountain movement corridors in the project area but does not describe potential impacts to this species that could occur from interrupting these corridors.

*Recommendation:*

The project proponent should consult with the Service and Nevada Department of Wildlife on measures to protect movement corridors for bighorn sheep. Results of this consultation should be provided in the FEIS.

***Restoration of 66.6 acres of ephemeral drainage should not be counted as Moapa dace and Virgin River Chub mitigation.*** Mitigation measures for federally endangered Moapa dace and Virgin River chub include restoration of 66.6 acres of WOUS at the project site. EPA commends the creation of an MOA to protect Moapa dace and Virgin River chub through monitoring and maintenance of flows from springs. We also agree with the avoidance and minimization measures and most of the mitigation measures described in Section 6.1 of the MSHCP. However, we do not agree that the proposed 66.6 acres of restored ephemeral drainage channel is appropriate mitigation for these species. Filling of existing functioning channels, creation of larger channels to convey flood flows, and restoration of naturally filled channels would not be expected to compensate for impacts to Moapa dace or Virgin River chub that occur 17 miles downstream of the project site.

*Recommendation:*

The FEIS and Mitigation Plan should not count 66.6 acres of ephemeral drainage restoration as a mitigation measure and should identify more appropriate measures with a higher probability of long-term success and sustainability, such as increased avoidance of impacts to WOUS or restoration of currently degraded habitat. Otherwise, inclusion of this mitigation measure should be clearly justified.

***Western burrowing owl and banded Gila monster population surveys should be conducted.***

The DEIS states that no known surveys have been conducted for banded Gila monster and that Western burrowing owl may potentially occur at the site, suggesting a lack of population data for both covered species (p. 4-23). Without proper species population data, it is difficult to estimate the level of take and appropriate mitigation and conservation measures for the species<sup>9</sup>.

*Recommendation:*

EPA suggests conducting population surveys for these species and developing avoidance, mitigation and conservation measures based on these estimates. For Western burrowing owl, survey protocols such as those developed by the California Burrowing Owl Consortium may be appropriate<sup>10</sup>. Absent any population data, the Service should consider assuming a total loss of the local populations of these species and development of concomitant mitigation and conservation measures.

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<sup>9</sup> Watchman, L.H., M. Groom and J.D. Perrine. 2001. Science and Uncertainty in Habitat Conservation Planning. *American Scientist* 89: 351-359.

<sup>10</sup> Burrowing Owl Survey Protocol: <http://www.dfg.ca.gov/wildlife/species/docs/boconsortium.pdf>



***Demonstrate adequate conservation measures for indirect impacts to desert tortoise, western burrowing owl and banded Gila monster.*** Several indirect effects to desert tortoise, western burrowing owl, and banded Gila monster are described (pps. 5-14 to 18). EPA is concerned that conservation measures for indirect negative impacts to these species do not adequately offset the impacts described. Indirect effects that do not appear to be adequately mitigated include on- and off-road vehicle collisions, illegal collection, predation and harassment from domesticated and introduced animals, toxic effects, noise, habitat fragmentation, and vandalism. EPA recognizes the inclusion of weed management and fire prevention measures, and fencing to reduce indirect effects to these species. EPA also commends the commitment to address the effectiveness of conservation measures through adaptive management. However, EPA suggests development of additional mitigation measures to reduce indirect impacts.

*Recommendation:*

EPA recommends further coordination with Service, Nevada Department of Wildlife and conservation groups to develop comprehensive indirect impact avoidance measures and mitigation measures that are directly linked to indirect impacts described in the DEIS. This information should be included in the FEIS.

***Demonstrate consistency with other conservation efforts.*** Section 1.3.2 of the DEIS describes relevant planning efforts occurring within Lincoln and Clark Counties but lacks a clear description of how the proposed activity will maintain or promote consistency with several of these efforts. EPA is specifically interested in an assessment of how the CSI MSHCP would coincide with the Desert Tortoise Recovery Plan (U.S. Fish and Wildlife Service 1994), the February 8, 1994 Designation of Critical Habitat for Mojave Population of Desert Tortoise, the Clark County MSHCP, and the Approved Caliente Management Framework Plan Amendment and Final EIS for the Management of Desert Tortoise Habitat (BLM 2000).

*Recommendation:*

The FEIS should demonstrate consistency with relevant conservation efforts.

***Native vegetation impacts should be avoided.*** The Preferred Alternative would result in the removal of approximately 21,340 acres of native vegetation, and the habitat it provides, due to construction of residential, commercial, recreational and flood control facilities and the BLM Utility Corridor (p. 5-5). Measures to reduce impacts include salvage of native plants, revegetation of buffer areas along created flood channels and preserved ephemeral channels, control of invasive plants, and landscaping with native vegetation. The DEIS does not describe measures to adequately mitigate for permanent and temporal impacts to native vegetation.

*Recommendation:*

The FEIS should include measures to further reduce impacts to native vegetation and to compensate for unavoidable impacts. Measures described under the CWA Section 404(b)(1) Alternatives analysis section of this letter could apply. Alternatives that reduce impacts through LID practices and avoidance of existing WOUS could further reduce impacts to native vegetation. Local ordinances that prohibit invasive species and promote the use of native vegetation for public and private landscaped areas should be considered.



## Population Growth and Housing

*Expand the cumulative impacts section to specifically address impacts to the existing landscape from population growth and increased urbanization.* Both the MSHCP and the DEIS anticipate the likelihood of increased development demand and population growth in the project study area as a result of this project. However, the DEIS also states that indirect effects of the project on future population growth would be unlikely due to the lack of private land available within the vicinity of the proposed CSI Development (p. 5-68). The cumulative impacts section does not analyze landscape change from population growth and increased urbanization.

EPA recognizes that significant portions of Nevada are public lands. However, federally owned public lands can and are made available for sale and exchange through the Southern Nevada Public Land Management Act of 1998, the Federal Land Policy Management Act of 1976, (FLPMA), and the Lincoln County Conservation, Recreation, and Development Act of 2004. Section 203 of the FLPMA, provides for the sale of public land for community expansion and economic development (43 U.S.C. 1713(a)). Federal lands could continue to be sold to private owners for development in the Las Vegas area as the region grows.

Title 1, Federal Land Sales of the Lincoln County Conservation, Recreation, and Development Act of 2004, authorizes the sale of up to 87,005 acres of federal lands adjacent to existing private property in Lincoln County. With implementation of the CSI development approximately one hour north of Las Vegas, it is probable that pressure to develop lands near CSI and between CSI and Las Vegas could increase in the interest of expansion of communities and economic development. This is supported and anticipated by the MSHCP, which states that “it is anticipated that as developable land in Clark County becomes scarcer, the population will need to spread into adjacent Lincoln County.” (p. 1-5). The DEIS assessment of indirect visual effects appears to agree with the possibility of additional growth stating that “construction of the CSI Development could result in increased development demand in nearby areas.” (p. 5-44).

### *Recommendation:*

EPA recommends the FEIS analyze the cumulative effects of reasonably foreseeable population growth and urbanization on the landscape in the project area. This should include a discussion of potential growth in the nearby communities of Alamo and Moapa, which may grow to accommodate an increasing number of service providers to the proposed project. A review of existing or pending legislation that would facilitate the sale or exchange of federal lands in the region should be included in the cumulative impacts analysis.

## Minimization Measures

*Green building standards should be expanded in the FEIS.* EPA acknowledges and supports the green building standards adopted by the Green Building Partnership between the Southern Nevada Home Builders Association and Green Building Initiative of Portland, Oregon. EPA also recognizes that implementation of green building techniques for developments of the scale of CSI can significantly reduce impacts to the environment. Based on the brief description in the

DEIS, it appears that the adopted green building standards are limited to resource efficiency, energy and water efficiency, as well as indoor environmental quality.

While these are commendable building practices, environmental impacts of the proposed development can be further minimized through modifications to the project footprint and configuration. For example, high density, transit oriented and bicycle and pedestrian-friendly villages reduce the need for residents to drive to services and amenities thus reducing the amount of greenhouse gasses such as carbon dioxide. Integrating solar power and other sources of renewable energy generation also reduce greenhouse gas emissions. Building materials selected from sustainable sources such as lumber from sustainably managed forests, lumber alternatives, and building products made from recycled materials reduce the impacts from natural resource demands. Several green building resources are available<sup>11</sup> and EPA encourages CSI to commit to maximizing the implementation of these practices at the proposed project in addition to the already adopted standards.

*Recommendation:*

EPA encourages CSI to commit to maximizing green building standards beyond resource, energy and water efficiency, and indoor environmental quality, and include green design and building materials into each alternative. Project specific environmental benefits of green building and design standards should be described in the FEIS.

***Increased density could reduce impacts of the proposed project footprint.*** Currently, multi-family homes make up only 5-10 percent of the project area, and inclusion of additional multi-family homes could lead to reduced habitat impacts and increased conservation areas. The FEIS should provide a justification for the low percentage of multi-family housing, including any market rate information used to set this percentage.

*Recommendation:*

EPA recommends that the FEIS analyze alternatives that include more multi-family housing, reduce project impacts by reducing the project footprint and increasing conservation areas.

### **Aesthetics**

***Include project alternatives that reduce visual impacts.*** The DEIS describes the project area as being in “nearly natural ecological conditions.” (p. 4-6) and further describes the alteration of the area with residential and commercial development as “dramatically altering the visual landscape in a permanent fashion.” (p. 5-44). EPA agrees with these statements. However, the DEIS also notes that public sensitivity to aesthetic resources is moderate due to the limited population in the area (p. 4-63). The DEIS does go on to suggest that people driving on Highway 93 and recreating in the area could view the change in visual resources. The FEIS should describe measures to reduce visual impacts to the area beyond the already described Lincoln County Planned Unit Developments (PUD) requirements developed for the project. Alternatives that

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<sup>11</sup> EPA provides information on green building at <http://www.epa.gov/greenbuilding/index.htm>

reduce the project footprint and mitigation measures that address impacts to visual resources should be included.

*Recommendation:*

EPA recommends the FEIS include an evaluation of project alternatives that reduce impacts to visual resources beyond the Preferred Alternative and Alternative 1.