

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION IX**

75 Hawthorne Street San Francisco, CA 94105-3901

SEP 1 6 2014

Colonel Michael J. Farrell
District Engineer, Sacramento District
U.S. Army Corps of Engineers
1325 J. Street, Room 1350
Sacramento, California 95814

Subject: Sierra Vista Specific Plan (PN 200601050), Placer County, California

Dear Colonel Farrell:

EPA Region 9 appreciates the ongoing coordination regarding your pending permit decision for the Sierra Vista Specific Plan, located in Placer County, California. Enclosed please find comments reflecting our review of the *Sierra Vista Revised Conceptual Onsite Wetland Creation* plan dated July 23, 2014, which is a revision of the previously submitted Sierra Vista Conceptual Mitigation Plan dated February, 2011, as well as of the *Alternatives Analysis for the Sierra Vista Specific Plan* dated November 5, 2012. We trust our comments will be useful to the Corps in advancing the project through the regulatory process.

In summary, we believe the applicant's proposed project is not the LEDPA and the proposed mitigation plan would fail to compensate for the project's impacts to waters. Among the most significant issues are:

- The proposed project is not in compliance with the Clean Water Act 404(b)(1) Guidelines (Guidelines) at 40 CFR 230.10(a). The Sierra Vista Applicant's Group (applicants) have not demonstrated the proposed project is the least environmentally damaging practicable alternative (LEDPA). EPA strongly believes further avoidance is practicable.
- The compensatory mitigation is inadequate and fails to comply with the 2008 Mitigation Rule. Stormwater treatment wetlands created on-site fail to offset the loss of depressional wetlands such as vernal pools, seasonal wetlands and seasonal swales.
- The open space preserve designed to preserve the Curry Creek and Federico Creek stream corridors lack the buffers necessary to maintain riverine ecosystem function. The function and services of these waters will continue to diminish due to surrounding high density development.

EPA remains concerned that substantial loss and/or degradation of water quality and ecosystem functions are likely if the project is constructed as proposed. Mitigation begins with avoidance and minimization of impacts and compliance with 40 CRF 230.10(a) (alternatives) and is a prerequisite to assessing compliance with 40 CFR 230.10(d)(mitigation) or the requirements of Subpart J of the Guidelines. While the proposed project generally avoids impacts to the two main drainages on the site, Curry and Federico Creeks, the proposed project would directly impact 24.81 acres of waters of the United States (waters), which represents 68 percent of the total waters on the site. The majority of these

impacts (21.12 acres) will occur to depressional wetlands including vernal pools, seasonal wetlands and seasonal swales. These wetlands are habitat to several Special-status plant and wildlife species that are legally protected under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) including Dwarf downingia (*Downingia pusilla*) and Conservancy fairy shrimp (*Branchinecta conservatio*). Furthermore, we note that the project is located within the Western Placer County core recovery area of the Southeast Sacramento Valley vernal pool region. Core recovery areas were identified by the Fish and Wildlife Service as areas to focus recovery actions for 20 species of animals and plants that are listed as either Endangered or Threatened.<sup>1</sup>

Based on the high resource values, the proposed impacts, and the apparent lack of practicable avoidance, the EPA identified the permit action in 2008 as a candidate for review by our respective Headquarters pursuant to our 1992 Memorandum of Agreement regarding CWA Section 404(q). The letter provides detailed comments regarding our concerns with the impacts of the proposed project on the on-site aquatic resources. The 2012 and 2013 EPA comment letters to the Draft Environmental Impact Statement and Final Environmental Impact Statement, respectively, reiterate these concerns, as well as the inadequacy of the proposed conceptual mitigation plan. These concerns remain unaddressed, and are supplemented with the attached detailed comments on the July 2014 mitigation plan update and November 2012 Alternatives Analysis.

Thank you for the opportunity to provide you with additional comments. If you have any questions, please contact Leana Rosetti of my staff at (415) 972-3070, or rosetti.leana@epa.gov.

Sincerely,

Jason Brush Supervisor

Wetlands Section

cc:

Kathy Norton, USACE, Regulatory Division Kellie Berry, US Fish and Wildlife Service, Sacramento Valley Office

### Attachments:

- 1) EPA's detailed comments, PN 2006-01050 for the proposed Sierra Vista Specific Plan
- 2) EPA ARNI letter dated April 28, 2008
- 3) EPA ARNI letter dated May 12, 2008
- 4) EPA DEIS comment letter dated September 4, 2012
- 5) EPA FEIS comment letter dated July 8, 2013

<sup>&</sup>lt;sup>1</sup> Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon" (US Fish and Wildlife Service 2005).

# Detailed EPA Comments PN 2006-01050 for the proposed Sierra Vista Specific Plan

## **Project Purpose**

As described in the Public Notice and the applicant's alternatives analysis, the proposed Sierra Vista Specific Plan (SVSP) is a mixed-use master planned community with residential, commercial, open space, and recreational uses.<sup>2</sup> This SVSP consists of individually owned properties. As part of the SVSP, property owners have applied for separate section 404 permits and will develop their property separately, while sharing infrastructure outside the individual project footprints. These permit applications have been grouped together in order to evaluate the environmental impacts of the project at a landscape level. While EPA recognizes the benefit of such a landscape level assessment, the applicant fails to comply with the Guidelines by: 1) using the term "masterplan" as a way to maximize human amenities without determining whether particular project features impacting waters are critical or essential to the viability of the project; and 2) by including the City's General Plan goals and policies as screening criteria which gives local zoning bodies undue deference, thereby prohibiting a meaningful analysis of alternatives.<sup>3</sup>

*Masterplan Development* - The applicant is defining the project as a masterplan or specific plan development. In doing so, the applicant is requesting the project be reviewed as a whole; including all of the residential and nonresidential elements of such a community and foregoing any assessment of whether it is truly necessary to locate particular elements of the project in waters. This is contrary to the Guidelines and avoids a hard look at whether all the amenities associated with a project truly are necessary and/or whether they can be downsized or reconfigured to avoid impacts to waters of the United States.<sup>4</sup>

A good masterplanning effort will factor in the 404(b)(1) Guidelines so as to make sure only truly necessary fills are proposed, making it far more likely that a well-planned project will be the LEDPA. However, as currently proposed, the SVSP uses masterplanning to bundle functionally independent project features as essential project components, thereby rendering alternatives with potentially fewer impacts to waters unavailable. It is not acceptable for an applicant to cite the master plan itself as sufficient reason to look no further at the practicability of further avoidance of impacts to waters. Additionally, while the applicants' masterplan/specific plan seeks to govern the entire area, and share common infrastructure, they object to avoidance and minimization of waters if it creates an unequal burden on individual properties. This defies the purpose of a regional plan that considers resources as a whole rather than as individual parcels, as well as the purpose of doing the alternatives analysis for the entire development.

<sup>&</sup>lt;sup>2</sup> Section 404(b)(1) Alternatives Analysis for the Sierra Vista Specific Plan Army Corps Permit Application No. SPK-2006-01050 dated November 5, 2012 prepared for Sierra Vista Owners Group by Sheppard, Mullin, Richter and Hampton, LLP.

<sup>&</sup>lt;sup>3</sup> See HQUSACE Review and Findings Old Cutler Bay Elevation at page 6 and HQUSACE Review and Findings Hartz Mountain Permit Elevation at page 4.

<sup>&</sup>lt;sup>4</sup> See Old Cutler Bay Elevation and Twisted Oaks Elevation.

Project Elements Related to the Basic Objectives of the Specific Plan – The applicant states the Specific Plan implements the goals and policies of the Roseville General Plan within the Specific Plan area. The applicant maintains it is appropriate for the alternatives analysis to "include attainment of the Specific Plan Basic Objectives as an element of the overall project purpose under the 404(b)(1) Guidelines" (page 9). This statement is more restrictive than the Corps purpose statement, which guides the alternatives analysis under Section 404. The detailed features should be stated as objectives of the project, recognizing that alternatives without all of these features may still meet the Corps purpose statement and therefore be practicable under Section 404. By narrowing the range of alternatives in its project purpose description to "attainment of the Specific Plan Basic Objectives," the applicant unreasonably precludes opportunities to consider less damaging practicable alternatives as required by 40 CFR 230.10(a).<sup>5</sup>

We would like to reiterate that it is essential to consider local communities' planning goals and objectives, but we object to requiring consistency with local plans as an element of the project purpose. Doing so gives local zoning bodies undue deference and so narrowly defines the project purpose that it is difficult to do a meaningful alternatives analysis.

The applicants' following statement in the alternative analysis, "The applicant and the Corps must defer to these binding decisions of the local land use authority" (p. 2) affirms the very issue of concern we have just described. EPA does not object to proper consideration of the goals and objectives of the general plan in the assessment of the LEDPA, but evaluating general plan compliance through the screening criteria in the alternatives analysis is unacceptable and contrary to the Guidelines.

## **Alternatives Analysis**

The applicant does not demonstrate that the Proposed Alternative is the LEDPA. Based on the information provided, the EPA concludes that Alternative 1, Reduced Footprint/Increased Density, is the LEDPA because it appears practicable, and would result in the lowest level of environmental impacts for the majority of the resource categories assessed. As stated in the DEIS, Alternative 1 would also develop the 2,064-acre project site but would reduce the footprint of development within the site by increasing the acreage designated as open space, with the additional open space focused in areas that contain the greatest concentrations of sensitive habitat (vernal pools and/or drainages). Under this alternative, total acreage to be developed would be reduced to 1,027 acres, compared to 1,370 acres under the proposed project, and open space would increase to 599 acres, compared to 257 acres under the proposed project. The residential development footprint would decrease to 593 acres, versus 820 acres under the proposed project. However, residential densities would increase to accommodate a similar number of residential units (6,655 residential units under this alternative, compared to 6,650 under the proposed project). In addition to reducing impacts to waters by 65% (from 24.81 acres to 8.66 acres overall; vernal pool impacts from 7.9 acres to 2.6 acres), Alternative 1 would reduce total air emissions by 10.4 percent.

If Alternative 1 proves not to be the LEDPA due to practicability considerations that are currently undisclosed, then it appears Alternative 4, called "Focused Avoidance," may also be practicable and less damaging than the Sierra Vista Specific Plan proposed alternative.

<sup>&</sup>lt;sup>5</sup> An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes [OPP]." 40 CFR § 230.10(a)(2).

The applicant's Alternatives Analysis deemed all other alternatives aside from the Proposed Alternative as impracticable. However, the alternatives are screened by whether they (1) meet the overall project purpose (which is too narrow for an alternatives analysis, see above); (2) provide at least one regional commercial center of sufficient size and configuration to meet retail market requirements; (3) provide sufficient tax revenue to meet the City's fiscal requirement; (4) allow each property owner to develop their property consistent with the project purpose (again, see above section on the project purpose); (5) meet the City's adopted Blue Print Scenario, and (6) are within 5% of the total cost of the Proposed Alternative. While we recognize these are important considerations, they are inappropriate as strict screening criteria in an alternatives analysis. Under CWA Section 320.40, the Corps must recognize the importance of land use decisions. However, the same regulations also state that the "preservation of special aquatic areas, including wetlands" have overriding national importance that take precedent over local land use decisions. For the cost analysis under Section 404, the proposed project is not the baseline by which other alternatives are compared. An alternative may be practicable from a cost perspective even if is more expensive than the applicants proposed project. A cost analysis should be performed by an independent third party that can determine whether the project will produce a positive return on investment under forecasted market conditions.

### Recommendations:

• EPA recommends that the Corps conduct an alternatives analysis using a valid project purpose and screening criteria consistent with the Guidelines.

# Compensatory Mitigation for Impacts to Waters of the U.S.

The Conceptual Mitigation and Monitoring Plan (mitigation plan) states, "The open space preserves were designed to place the highest priority on preserving stream corridors and those wetlands in close proximity to these streams" (p. 18). However, the open space design fails to provide adequate protection to ensure ecological sustainability.

The mitigation plan states that the applicants will purchase 7.88 acres of vernal pool credits from an off-site mitigation bank, and that 28.86 acres of riverine/seasonal wetlands will be constructed on the project site within the 257 acres of open space along the two drainage corridors. The proposed compensatory mitigation plan does not comply with the 2008 Federal Mitigation Rule (40 CFR Part 230, Subpart J) for the following reasons:

- 1) **Permittee-responsible, out-of-kind mitigation is not justified.** The 2008 rule give preference to mitigation banks over permittee-responsible mitigation when the permitted impacts are located within the service area of an approved bank, and the bank has the appropriate number and resource type of credits available. The rule states that the district engineer can only override this preference when, "a permittee-responsible project will restore an outstanding resource based on a rigorous scientific and technical analysis." The mitigation plan does not provide enough information to justify the use of onsite, out-of-kind, permittee-responsible mitigation over the approved mitigation banks located near the project.
- 2) Replacing naturally occurring seasonal wetlands with stormwater treatment wetlands is not compensatory. According to the plan, the 28.86 acres of wetlands will be constructed on the terraces adjacent to the existing stream channels and "are designed to be inundated during frequent storm events," and will accommodate post-development flows from the surrounding developments. While we agree that these riverine wetlands can improve water quality and may support wildlife, we do not believe

they are appropriate compensation for the loss of depressional wetlands such as vernal pools, seasonal wetlands and seasonal swales.

3) The proposed mitigation is limited to the Preliminary Drainage and Stormwater Management Plan. The geomorphic study conducted by cbec, inc. in Appendix B of the mitigation plan makes it clear that the mitigation proposed is actually the drainage and stormwater plan, which attempts to minimize the indirect impacts to Curry Creek and Fiddyment Creek through creation of terraces and riverine wetlands (which are essentially catchment basins) adjacent to the creek. Both creeks will be adversely affected by the large increase in impervious surfaces and resultant runoff flow alterations, resulting in increased incision, erosion and overall degradation of the creeks. These indirect impacts do indeed need to be minimized and mitigated. The proposed mitigation may be appropriate for these *indirect* impacts, though it is inappropriate for mitigating the direct impacts to vernal pools, seasonal wetlands, and seasonal wetland swales.

If the proposed mitigation were to move forward taking into account the above considerations, major improvements are needed. The cbec study that was included as an appendix to the mitigation plan states that the proposed terraced wetlands are not sustainable due to the continuing incision of the creek, and in fact raising the bed of the creek is recommended as the best option for stabilizing the creek and ensuring the continued function of the wetlands. It appears that that the applicant is not following this recommendation, meaning that the created wetlands will soon disconnect from the creek. Additional study, hydrological monitoring, analysis of the impacts to the creeks, and a detailed mitigation plan with appropriate performance standards, is necessary for this work to be done.

- 4) The phased implementation of the mitigation plan, to be implemented by each property owner as they develop their own property, entails a high risk of failure. The plan states that the on-site mitigation will be constructed in segments, and "for any given phase, more wetlands may be constructed than are actually needed to provide the commensurate amount of compensation for that phase." This also implies that a phase which does not provide for its own commensurate amount of compensation could occur first, and if the latter independent phase meant to provide for that compensation were never to occur, the impacts would go unmitigated. In addition, it appears all of the monitoring and maintenance of the permittee-responsible mitigation will be piecemeal and managed differently by each owner. This would not comply with the 2008 Mitigation Rule, which states that the mitigation plan must include a work plan describing the timing and sequence of construction, and comprehensive maintenance plans, performance standards, and monitoring requirements.
- 5) Open space may not qualify as preservation unless it meets certain standards. Open spaces are different from preserves, and usually allow much more public access and disturbance of the sensitive resources. It is not clear how these open spaces will be managed and what measures will be put in place to enhance the seasonal wetlands and swales they contain.
- 6) The proposed buffers will not protect or enhance aquatic resource functions. According to the mitigation plan, 100-foot buffers were established along the stream corridors to minimize indirect impacts from the proposed development. Based on the revised Conceptual Onsite Wetland Creation map dated July 23, 2014, there are many vernal pools and wetlands that are directly adjacent to the open space, with what appears to be no buffer. In addition, there are stormwater detention basins (described as volumetric storage facilities or attenuation enhancement features) proposed to be constructed directly adjacent to existing vernal pools and wetlands, and/or constructed within what may be meant to be the

buffer itself. Constructing a stormwater treatment wetland within a buffer in essence eliminates that buffer.

An appropriate wetland buffer is essential to maintaining ecosystem integrity. It protects and enhances the quality and health of in-stream physical, chemical and biological characteristics, which enables the stream to provide important services, such as sequestering carbon, metabolizing organic matter, and degrading and processing pollutants. A new study by the Journal of the American Water Resources Association reviews the important role buffers play with regard ecosystem function (*e.g.*, nitrate removal, sediment trapping, channel meandering and bank erosion, temperature, and macroinvertebrate and fish communities).<sup>6</sup> Based on their review of the literature, the authors concluded that buffers 100-feet wide or greater are needed to protect water quality, habitat and biotic features associated with fifth order or smaller streams (p. 576).

Climate change will produce more extreme storm events, increase the number and intensity of floods and alter the infiltration and conveyance capacity of stormwater. Consideration of climate change is essential when establishing adequate wetland buffers in areas of urban development.

## Recommendations:

- The Corps should not give compensatory mitigation credit for the on-site, out-of-kind constructed stormwater treatment wetlands.
- The Corps should require the applicants to purchase seasonal wetland and vernal pool credits from an approved wetland mitigation banks rather than the allowing the applicant to mitigate on-site.
- The Corps should only approve off-site permittee-responsible mitigation when it occurs in an area that is selected using the principles of the watershed approach and where it is practicable and likely to be successful and sustainable.
- To the extent practicable, the form of all off-site mitigation should be in-kind rehabilitation and re-establishment rather than creation or preservation.
- If the Drainage and Stormwater Management Plan is to be considered as mitigation for the indirect impacts to the creeks, a detailed mitigation plan that is not phased but is managed as one project, with appropriate performance standards, long term maintenance plan, and additional hydrologic studies to ensure the best design, is needed.

<sup>&</sup>lt;sup>6</sup> Sweeney, B.W. and J.D. Newbold. June 2014. *Streamside Forest Buffer Width Needed To Protect Stream Water Quality, Habitat And Organisms: A Literature Review.* Journal of the American Water Resources Association. pp. 560-574.

·