

**United States Department of the Interior
U.S. Fish and Wildlife Service
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021
Telephone: (602) 242-0210 FAX: (602) 242-2513**

AESO/FA

February 17, 2005

Ms. Cindy Lester
Chief, Regulatory Branch
U.S. Army Corps of Engineers
3636 North Central Avenue, Suite 900
Phoenix, Arizona 85012-1936

Dear Ms. Lester:

Thank you for Public Notice 2003-01009-AP (PN) dated January 18, 2005, issued by the U.S. Army Corps of Engineers. Trillium West LLC has applied for a Section 404 Clean Water Act (CWA) permit to construct the proposed 3,029-acre master-planned development in the Town of Buckeye, Maricopa County, Arizona (Sections 12, 13, and 24, T3N, R5W, and Sections 7, 8, 17, and 18, T3N R4W). These comments are provided under the authority of and in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended U.S.C. 661 et. seq.) (FWCA), but do not constitute our final review of the permit application under the FWCA.

Of a total 184 acres of jurisdictional washes on site, the proposed project would directly impact 8.91 acres of washes, including Wagner Wash, through the discharge of dredged and fill material for the construction of building pads, road crossings, bridges, and channelization integral to the Trillium development plan. While detailed plans are not yet available, the PN indicates the proposed project would include residential homes, commercial facilities, schools, public facilities, a wastewater treatment plan, parks, trails, and open space.

The proposed project area is located in the Hassayampa River valley west of the White Tank Mountains. The site is characterized by relatively flat topography sloping to the southwest and Sonoran desertscrub vegetation. Native plant species include, but are not limited to, creosote (*Larrea tridentate*), palo verde (*Parkinsonia* sp.), saguaro (*Carnegiea gigantea*), ironwood (*Olneya tesota*), cholla (*Cylindropuntia* sp.), mesquite (*Prosopis* sp.), brittlebush (*Encelia farinosa*), and triangle-leaf bursage (*Ambrosia deltoidea*). Native wildlife species likely include, but are not limited to, mule deer (*Odocoileus hemionus*), javelina (*Tayasu tajacu*), bobcat (*Felis rufus*), coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), tree lizard (*Urosaurus ornatus*), western diamond-backed rattlesnake (*Crotalus atrox*), turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), greater roadrunner (*Geococcyx californianus*), house finch (*Carpodacus mexicanus*), and song sparrow (*Melospiza melodia*). The location of the project site between the Hassayampa River to the west and the White Tank Mountains to the east increases its importance to native wildlife as foraging, breeding, and dispersal habitat.

We believe that your review should address the total impact of the development including direct, indirect, and cumulative effects; and all interrelated and interdependent activities including those above the ordinary high water mark. The total 3,029-acre development footprint should be assessed. Your assessment should include effects of adjacent development on jurisdictional waters not subject to a discharge and the effects of the larger project on a landscape scale. An evaluation should be conducted to determine the extent of secondary and cumulative effects as defined in the Section 404(b)(1) Guidelines (CFR 40 part 230.11). This is particularly important in a regional context that considers other 404 permitted or proposed activities including Festival Ranch (PN 2000-00966-RWF), Verrado-Whitestone (PN 974-0218-RWF), Sundance (PN 2000-01264), and Tartesso West (2002-00844-RWF).

The Section 404(b)(1) Guidelines require the analysis of the effects of Section 404 permitted activities on “surrounding areas” as well as “other wildlife” including resident and transient mammals, birds, reptiles, and amphibians (40 CFR Part 230.32). Corps regulations (CFR 33, Appendix B to Part 325) grant the District Engineer authority over portions of the project beyond the limits of jurisdiction where the environmental consequences of the larger project are essentially products of the Corps permit action, such as when it is impracticable to completely avoid jurisdictional waters through bridge spanning or upland buffering.

The PN states that a preliminary determination has been made that an environmental impact statement (EIS) is not required for the proposed work in accordance with the National Environmental Policy Act (NEPA). In a letter dated December 8, 2003, regarding the environmental effects of the proposed Festival Ranch project, the Environmental Protection Agency (EPA) stated that “effects are reasonably foreseeable and clearly pass NEPA’s significance threshold, both individually and cumulatively (40 CFR 1508.27)... We strongly recommend that the environmental effects facilitated by the Corps’ permit action be analyzed in an EIS.” Due to similarities in the purpose and scope of the Festival Ranch and Trillium projects, we urge you to reevaluate your preliminary determination in light of EPA’s previous comments. If your agency prepares an EIS or an environmental assessment pursuant to NEPA, we request that the draft NEPA document be submitted to our office so we may evaluate the environmental impact and complete our mandated review of the proposed project.

Your review should address the potential effects of the entire development on jurisdictional washes, Sonoran desertscrub vegetation, and local and regional wildlife resources, including potential shifts in ecosystem function, community structure, biological diversity, relative abundance, and species richness. Of particular concern is the potential effect of groundwater pumping on the Hassayampa River Preserve which provides habitat for a variety of native fish and wildlife and is important in the recovery of the endangered southwestern willow flycatcher (*Empidonax traillii extimus*). Of additional concern is the potential affect on the wildlife community within the White Tanks Mountains Regional Park.

This approach would be consistent with the Regulations For Implementing The Procedural Provisions Of The NEPA (40 CFR, Parts 1502.16 and 1508.8), prepared by the Council on Environmental Quality, which states that the environmental consequences of an action include both direct effects and “indirect effects which are caused by the action and are later in time or

farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”

The PN states the applicant is preparing a mitigation plan. The PN provides no specific information regarding the mitigation plan, particularly functional assessments performed to quantify impacts. The Corps’ recent Special Public Notice (970031200-RRS) for Mitigation Guidelines and Monitoring Requirements, in regard to compensatory mitigation site design (page 14), states “[t]he factors used in a preliminary design of the compensatory mitigation site should have a functional assessment basis.” A functional assessment should utilize objective empirical methods to quantify impacts on biotic resources for the purpose of guiding the preparation of a mitigation plan.

Your functional assessment should address vegetative parameters such as canopy cover, biomass, and total volume; and perhaps shifts in animal diversity, abundance, density, and richness. Monitoring and criteria should track the success of mitigation. Empirical criteria are needed to illustrate how the mitigation proposal would quantitatively replace the biological functions of ecosystems and biotic communities affected by the project. The mitigation plan should demonstrate that mitigation would adequately replace the loss and/or impairment of biological functions. Of particular concern is how jurisdictional waters would function within an urban landscape versus how they function in a natural setting. We suggest that biological functions provided by the totality of jurisdictional waters on the project site, including the role and influence of adjacent uplands, be evaluated in a quantitative fashion. We request that the draft mitigation plan be submitted to our office so that we may review the plan, provide recommendations, and complete our mandated review of the proposed permitting action.

In closing, we request an opportunity to review the draft NEPA document and mitigation plan, and provide substantive comments and recommendations in accordance with the FWCA and Section 404(m) of the CWA. Thank you for your coordination on this project. If we can be of further assistance please contact Mike Martinez (x224).

Sincerely,

/s/ Thomas A. Gatz
Deputy Field Supervisor

cc: Regional Administrator, Environmental Protection Agency, San Francisco, CA
Supervisor, Project Evaluation Program, Arizona Game and Fish Department, Phoenix, AZ