

**United States Department of the Interior
U.S. Fish and Wildlife Service
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AESO/FA
22410-2006-FA-0040

October 2, 2006

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 2006-00834-RWF (PN) dated August 28, 2006, issued by the U.S. Army Corps of Engineers. Stardust-Tartesso, Inc., has submitted an application for a Section 404 Clean Water Act (CWA) permit to construct the 7,258-acre Tartesso East master-planned residential community in the Town of Buckeye, Maricopa County, Arizona (Sections 1, 3, 4, 9-11, T1N, R4W; Sections 13, 14, 24-26, 33, 35, 36 T2N, R4W). We also thank you for granting an extension of the comment period to October 6, 2006. 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.

According to the PN, the proposed project will be located in the desert plains, bajadas, and foothills of between the western edge of the White Tank Mountains and the Hassayampa River. The proposed project area ranges in elevation from approximately 1,950 feet above mean sea level in the northwest portion to approximately 1,070 feet in the southwest portion. The land is generally undeveloped Sonoran desertscrub, surrounded by more open desert.

The PN indicates that, of a total of 153.52 acres of jurisdictional waters on site, the proposed project would directly affect 43.63 acres through the discharge of dredged and fill material for the construction of road crossings, pad fills, utility crossings, and drainage control integral to the Tartesso East development plan. We believe it is proper to assess the total impact of the development, including any parts to be located on uplands, and any secondary effects, including those located above the ordinary high water mark. The totality of existing and projected cumulative impact of all developments affecting a waterway or group of related waterways and the dependent resources thereof should also be considered. We believe the footprint of the permitted project that should be assessed by the Corps is the total 7,258 acres of development. The PN provides no information regarding the effects of upland development on jurisdictional

washes not subject to a discharge, nor does it provide information on the effects of the larger project on a landscape scale.

Our rationale for this approach has been presented to your agency in comments on other 404 Public Notices such as Rocking K Ranch (974-0475-RJD), Lone Mountain (2000-01928-RWF), Whitestone (974-0218-RWF), and Willow Ridge (2005-00230-MB). We believe this project is functionally similar to Lone Mountain, for which your agency previously expanded the scope of analysis to the entire project footprint. Expanding the scope of impact analysis would be consistent with Corps regulations involving the public interest review (33 CFR 320.4), regulations for implementing the National Environmental Policy Act (CFR 33, Appendix B to Part 325) (40 CFR, Parts 1502.16 and 1508.8), and the 404(b)(1) Guidelines (CFR 40 Part 230 and 230.11).

We recently provided comments on environmental assessments for both Lone Mountain and Festival Ranch (posted at <http://www.fws.gov/arizonaes/>), and believe those comments would be useful in guiding the preparation of your NEPA document. We request the opportunity to review the draft NEPA document for Tartesso East so we may evaluate your environmental impact analysis and complete our mandated review of the proposed project.

Based on the development that is currently ongoing and planned around the White Tank Mountains and Hassayampa River, we recommend that a regional cumulative impacts analysis be undertaken. This is particularly important in a regional context considering the growing list of other section 404-permitted and/or proposed residential activities including Festival Ranch (PN 2000-00966-RWF), Verrado-Whitestone (PN 974-0218-RWF), Sundance (PN 2000-01264), Tartesso West (2002-00844-RWF), Trillium (2003-01009-AP), Westwind (2002-01341-AP), Elianto (2001-01153-RWF), Anthem West (2001-01566-RWF), Mirielle (2006-00346-RWF), Surprise Foothills (2005-01191-AP), Sunhaven (2002-00976-AP), and Broadstone Ranch (2006-00878-RWF). The EPA expressed a similar concern to the Corps in a letter dated November 10, 2004, regarding the need for comprehensive analysis under NEPA for master-planned communities in the Buckeye Valley.

Without thorough impact analysis and mitigation, we believe it will be difficult to preserve the biological integrity of jurisdictional waters within this region of the State. This could have significant environmental consequences on the biological diversity and productivity of the greater White Tank Mountains ecosystem, including foothills, bajadas, and alluvial fans; and the Hassayampa River. These issues should be coordinated with appropriate agencies and stakeholders that have an interest in preserving and protecting the integrity of these resources, including jurisdictional washes, which are inseparably linked both ecologically and biologically to the entire regional ecosystem.

Your analysis for Tartesso East should address the potential effects of the development on Sonoran desertscrub vegetation communities and local and regional wildlife resources, including potential shifts in community structure and long-term effects on population demographics and viability. These methods should be derived from standard texts, such as Bookhout (1996) and other relevant literature, and developed in coordination with all appropriate Federal, State, and local agencies and stakeholders.

The PN states that a conceptual mitigation plan has been submitted to Corps that includes preservation of 25-foot wide buffer along washes, preservation of 269 acres within uplands, creation of 38.45 acres of xeroriparian vegetation, and participation in an in-lieu-fee program. In accordance with existing regulations and procedures, mitigation measures should be developed that first address the issues of avoidance and minimization, then address compensation. 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." Compensatory mitigation should mitigate both vegetative and animal parameters. Monitoring provisions and criteria should be developed to track the success of mitigation for animal populations as well as vegetation communities. We have not been provided evidence that preserving small isolated habitat islands within an urban landscape can adequately mitigate the expected detrimental affects on regional wildlife communities and the loss of habitat contiguity. In general, the principles of landscape ecology support the notion that landscape islands from 250 to 12,000 acres in size *begins* to be large enough to protect ecosystem integrity and function (Barnes and Adams 1999). Larger reserves are preferred by conservationists because they contain a wider range of conditions to support more species, particularly those requiring large home ranges (Hunter 1996).

We believe it would be within your authority to require mitigation that addresses the totality of project-related impacts, both above and below the ordinary mark. The Corps recently acknowledged its authority over uplands in the March 28, 2006, Proposed Rule for Compensatory Mitigation for Losses of Aquatic Resources (71 FR 15520-15556) where it states on page 15527 "...the district engineer may grant compensatory mitigation credit for upland areas within a compensatory mitigation project, if those uplands increase the overall ecological functioning of the compensatory mitigation site or other aquatic resources in the watershed or ecoregion." The Corps also recognized this authority in the August 9, 2001, Proposal to Reissue and Modify Nationwide Permits (66 FR 42070-42100) where it states on page 42071 "The Corps statutory authority to require vegetated buffers next to streams and other open waters originates in the goal of the CWA which is to restore and maintain the chemical, physical and biological integrity of Nation's waters." In this case, the PN states that 269 acres of mitigation is uplands, implying some level of jurisdiction. We request that the conceptual mitigation and monitoring plan be provided to our office so that we may evaluate the scope of the plan, review the proposed methodologies, provide written recommendations, and complete our review.

We request this permit be held in abeyance and the comment period extended until we have had an opportunity to review the draft EA and mitigation plan, and provide additional comments and recommendations in accordance with the FWCA and section 404(m) of the CWA. We would also appreciate the opportunity to review any response to our comments prepared by the applicant. We encourage you to coordinate the review of this project with the Arizona Game and Fish Department.

If we can be of further assistance please contact Mike Martinez (x224) or Debra Bills (x239).

Sincerely,

/s/ Steven L. Spangle
Field Supervisor

cc: Regional Administrator, Environmental Protection Agency, San Francisco, CA
Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ
White Tanks Concerned Citizens, Waddell, AZ

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Literature Cited

- Barnes, T.G. and L. Adams. 1999. A guide to urban habitat conservation planning. Cooperative Extension Service. University of Kentucky, College of Agriculture. 8 pp.
- Bookhout, T.A., Editor. 1996. Research and management techniques for wildlife and habitats. Fifth ed., rev. The Wildlife Society, Bethesda, Md. 740 pp.
- Hunter, M.L. 1996. Fundamentals of Conservation Biology. Blackwell Science. 482 p.