UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

JUN 1 4 2004

Colonel Richard G. Thompson
District Engineer, Los Angeles District
Attention: Ms. Cindy Lester, Arizona Regulatory Section
U.S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325

re: Public Notice (PN) 2003-00826-SDM for the proposed Whetstone Master Planned Community, Cochise County, Arizona

Dear Colonel Thompson:

We have reviewed the subject PN dated 17 May 2004 for the proposed development known as Whetstone Ranch, located in Benson, Cochise County, Arizona. The following comments were prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines (40 CFR 230) promulgated under section 404(b)(1) of the Clean Water Act (CWA). Please find our detailed comments attached.

Based on our review of the available information, we have determined the proposed project is a candidate for elevation pursuant to the 1992 Memorandum of Agreement between the Environmental Protection Agency (EPA) and the Department of the Army per CWA Section 404(q). We respectfully object to the issuance of a permit for the proposed project because the authorization **may result** in substantial and unacceptable impacts to aquatic resources of national importance (ARNIs). Also, we urge the Corps to require an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) for the proposed project to address large-scale direct, secondary, and cumulative impacts.

We look forward to working with your staff and the applicant to resolve the important environmental issues surrounding the proposed project. If you wish to discuss this matter further, please call me at (415) 972-3572, or have your staff contact Tim Vendlinski, Supervisor of our Wetlands Regulatory Office, at (415) 972-3464.

Sincerely,

Alexis Strauss
Director
Water Division

10 June 2004

cc:

Ms. Cindy Lester
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U.S. Fish and Wildlife Service
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U.S. Fish and Wildlife Service
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Arizona Department of Environmental Quality
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Arizona Department of Environmental Quality
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Arizona Department of Game and Fish
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Detailed EPA Comments
PN 2003-00826-SDM for the Proposed Whetstone Ranch Development

I. Project Description

The company known as Whetstone Partners, LLP ("the applicant") proposes to build an ~8,000-acre (~12.5 square mile) residential and commercial development on a site encompassing 475 acres of jurisdictional waters of the United States (waters). The surrounding environment is characterized by a relatively undisturbed desert ecosystem in Benson, AZ between the San Pedro River to the east and Arizona State Route 90 to the west. The proposed project would result in direct discharges of dredged or fill material into 70 acres of jurisdictional waters. Remaining on-site waters would be vulnerable to secondary and cumulative impacts.

II. Environmental Setting

The headwaters of the San Pedro River originate from summer and winter storms high on the slopes of the Sierra La Mariquita, Sierra San Jose, and Sierra Los Ajos in north central Sonora, Mexico. From its mountain headwaters, the river flows north through the rolling semi-arid grasslands of the Chihuahuan and Sonoran Deserts, eventually entering Arizona and the joining the Gila River[1]. The ecosystem of the river supports 400 species of migratory birds, 40 species of reptiles and amphibians, and 80 species of mammals -- including the jaguar.

The San Pedro River is considered one of the most significant perennial undammed desert rivers in the United States[2]. In 1988, the Bureau of Land Management (BLM) established the San Pedro River National Conservation Area (NCA) to protect 58,000 acres along 40 miles of the waterway. The goal of the NCA is to protect and enhance the desert riparian ecosystem, a rare remnant of what was once an extensive network of similar riparian systems throughout the Southwest. The NCA includes Clovis-period (c. 11,000-year old) archaeological sites, and shelters two of the rarest forest types in North America: mesquite bosque and the largest remaining stand of cottonwood/willow riparian habitat in the Southwest. Designated by the American Bird Conservancy as its first "globally important bird area," the NCA attracts thousands of birdwatchers each year from around the world.

According to the PN, the proposed project site consists of Chihuahuan desert scrub, semi-desert grassland, and a transitional zone between the two habitat types. All the direct impacts would be on ephemeral streams, and these waters are immediately tributary to the San Pedro River, an aquatic resource of international ecological significance.

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[1] http://www.lastgreatplaces.org/SanPedro/walkthebanks.html

[2] USFWS Endangered Species Bulletin, January/February 2004, Volume XXIX No. 1

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III. Scope of Analysis

Given the scale of the proposed development and the resulting adverse effects on sensitive aquatic resources, the impacts of the proposed project are clearly significant under NEPA's threshold of "significance" test (40 CFR 1508.27). Under the applicable federal regulations, the Corps is required to analyze the indirect and cumulative effects of their permit actions (see CWA 404 implementing regulations at 40 CFR 230.11(g) and 33 CFR 320.4(a), and NEPA regulations at 40 CFR 1508.27(7)).

Recently, U.S. District Judge Fredrick J. Martone granted an injunction to temporarily suspend Corps PN 2000-01928-RWF regarding a proposed master-planned community in Arizona because the appropriate scope of analysis under NEPA was not used to evaluate the full range of project impacts. This decision is relevant to the proposed Whetstone project because the judge considered the dispersed nature of ephemeral aquatic resources in the desert. He considered ephemeral stream networks as "a dominant feature of the land (where) no development of the property could occur without affecting the washes." Save Our Sonoran v. Flowers, 227 F.Supp. 2d 1111, 1113 (D.Az. 2002). Judge Martone's ruling described ephemeral streams running through non-federal lands "the way capillaries run through tissue. It is difficult to deal with tissue without dealing with capillaries and difficult to deal with capillaries without dealing with tissue..." Save Our Sonoran v. Flowers, 227 F.Supp. 2d at 1115. Figures in the PN for Whetstone demonstrate a similar dispersion of waters on the proposed site -- a comparatively larger, and more environmentally sensitive area than the site considered by the U.S. District Court.

While potentially adverse environmental effects of a project such as Whetstone are much broader than the direct discharges of fill material into waters (*e.g.,* air pollution, solid waste, induced growth, and introduction of non-native species), the potential adverse effects on aquatic resources from direct impacts are nevertheless sufficient to meet NEPA's threshold of "significance." Seventy acres of direct fill in waters adjacent to the San Pedro River, an aquatic resource critical to sustaining international biodiversity, is clearly a significant action. Moreover, as stated in the PN, the applicant wishes to "support the City of Benson's goal to emerge as a residential, recreational and retirement destination." Significant induced growth is therefore not only a reasonably foreseeable consequence of the proposed action, it is a design objective. The significant direct, indirect, and reasonably foreseeable cumulative impacts from the proposed project make the preparation of an EIS seem quite appropriate.

Finally, the Corps permit constitutes a major federal action, authorizing and/or facilitating landscape-scale environmental impacts in the San Pedro River watershed. The Corps must not limit their review to the project's direct impacts without a comprehensive examination of the permanent environmental impacts to the mosaic of riparian, desert, and grassland ecosystems. Although the PN does not address the specific secondary and cumulative impacts of the proposed project, these impacts will be significant, and the Corps has "sufficient control and responsibility"over these impacts for the Corps' scope of analysis to encompass the entire

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project, not just the direct discharges (33 CFR 325, Appendix B). A thorough environmental analysis under NEPA is the best way to ensure the full disclosure of potential impacts, and to help protect public health and the environment.

IV. Compliance with Federal Guidelines under CWA Section 404(b)(1)

To comply with the Federal Guidelines (Guidelines), the applicant must clearly demonstrate that the "preferred" alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA) that achieves the basic project purpose. As currently proposed, we cannot determine whether or not the applicant's preferred alternative represents the LEDPA.

Analyses of Alternatives -- 40 CFR 230.10(a)

To properly assess and evaluate any analysis of practicable alternatives under the Guidelines, the project purpose must not be defined too broadly (*e.g.*, "to realize a profit") because the resulting range of alternatives would be too large and unwieldy. However, a project must not be defined too narrowly (*e.g.*, "luxury waterfront housing at location X") because the resulting range of alternatives would be too small and opportunities to consider less damaging alternatives might be precluded.

Section 230.10(a)(2) states that "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." The term "overall project purposes" is not defined, but the underlying principles of the Guidelines serve to illustrate its meaning. Any interpretation of overall project purposes must not conflict with the rest of the Guidelines. Accordingly, the overall project purposes is the basic purpose plus the cost, technical, and logistical factors associated with that basic purpose. The preamble to the Guidelines explains the following:

> (W)e emphasize that the only alternatives which must be considered are **practicable** alternatives (emphasis in original). What is practicable depends on cost, technical and logistic factors ... We consider it implicit that, to be practicable, an alternative must be capable of achieving the basic purpose of the proposed activity (45 Fed. Reg. 85339).

The Guidelines at 40 CFR 230.10(a)(2) further explain that practicable alternatives may include "areas not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the **basic purpose** of the proposed activity" (emphasis added). In calling for an assessment of the overall cost/scope of the project, the Guidelines direct the agencies to consider whether the basic purpose of the applicant is reasonably achieved by the potential alternatives (as a matter of cost, logistics, and technology).

We concur with the statement in the PN that the appropriate project purpose for Whetstone is **housing**. Following this purpose statement, the Corps must determine what discharges of

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dredged or fill material are necessary for the applicant to proceed with a practicable residential development within a reasonable market area (as described in the PN, "southern Arizona"). This allows the Corps to authorize the discharge of dredged or fill material for additional features that are essential elements of a residential development (*e.g.*, roads, sewer lines, electrical utilities), and an alternatives analysis should help the Corps determine the need for particular features (*e.g.*, commercial components), and the least environmentally damaging means of incorporating these features into the project footprint.

However, it is unclear whether an alternatives analysis has been prepared. While an applicant's failure to prepare an alternatives analysis is sufficient grounds to justify denial of the application for a Department of the Army permit [40 CFR 230.10(a), 40 CFR 230.12(a)(3)(i), 33 CFR 323.6(a)], the proposed project suffers from several other substantive and procedural deficiencies, discussed below.

Water Quality – 40 CFR 230.10(b)

The proposed project presents a variety of unquantified threats to the quality of waters found in around the site. Short-term threats include those associated with potential erosion and other construction-related impacts from what is likely to be a lengthy, multi-phased project build-out. Long-term threats involve the eventual conversion of ~8,000 acres of desert and grassland habitat into suburban development and the significant and irreversible impairment of aquatic ecosystems at the landscape scale. Specifically, the aquatic ecosystems will be impaired by altered hydrological processes, the increase in the velocity and volume of stormwater flows, the discharge of pollutants into receiving waters, and groundwater extraction. The Department of the Army (Fort Huachuca) and the U.S. Fish and Wildlife Service (FWS) estimate an annual water deficit of ~5,000 acre-feet, and a total decrease in the basin's water storage of 100,000 to 200,000 acre-feet since 1940. The applicant has not disclosed sufficient detail about drinking water and wastewater infrastructure for the proposed project, and has not addressed potential adverse effects on local and regional water quality as envisioned under 40 CFR 230.10(b), 40 CFR 230.12(a)(3)(iv), and NEPA.

Endangered Species – 40 CFR 230.10(b)

The San Pedro River is home to a multitude of special-status species under the Endangered Species Act (ESA), and includes designated critical habitat for the endangered Southwestern Willow Flycatcher and Huachuca Water Umbel in the project vicinity. Several threatened and endangered species have already been extirpated from the San Pedro River (*e.g.*, Cactus Ferruginous Pygmy Owl, Desert Pupfish, Gila Topminnow, Loach Minnow and Spikedace).

We defer to FWS in its recommendations pursuant to Section 7 of the ESA, but do not know at this time whether any endangered species concerns that may have been raised by the FWS have been addressed or resolved. The Guidelines prohibit the authorization of discharges of dredged or fill material into "waters of the United States," including wetlands, if it would jeopardize the

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continued existence of any federally-listed threatened or endangered species.

Significant Degradation – 40 CFR 230.10(c)

The regulations prohibit discharges that would cause or contribute to significant degradation of the aquatic ecosystem (40 CFR 230.10(c)(3)). The Whetstone project, as proposed, has the potential to do both.

The proposed project would result in the loss of ephemeral waters important to the San Pedro River ecosystem both individually (the proposed development) and cumulatively (reasonably foreseeable induced development). Existing desert washes would be converted from topographically diverse, vegetated systems into barren channels with flat bottoms. The wildlife functions of the aquatic ecosystems would be significantly degraded or lost altogether via direct alteration of the relatively moist in-stream habitat, and the fragmentation landscapes crucial for wildlife migration, gathering, and dispersal.

Existing water consumption practices in the basin have reached a point where the draw-down of groundwater exceeds the rate of natural recharge. Given the potential for the project to accelerate and exacerbate this problem, it is reasonably foreseeable that the San Pedro River could be ultimately converted from a perennial to an intermittent or ephemeral aquatic system. This increasing degradation would be contrary to the goals of the CWA -- protecting the physical, chemical, and biological integrity of the Nation's waters.

In short, the proposed project would cause <u>and</u> contribute to significant degradation of the aquatic ecosystem. Accordingly, the project fails to comply with the regulations at 40 CFR 230.10(c).

Mitigation – 40 CFR 230.10(d)

Compensatory mitigation is intended only for unavoidable impacts to waters after the LEDPA has been determined. Therefore, it would be premature to examine in detail any mitigation proposal before compliance with 40 CFR 230.10(a) is established. However, the PN makes absolutely no mention of any plans on the applicant's part to mitigate for their unavoidable impacts to waters of the United States. In the absence of a mitigation plan, we cannot determine whether the project complies with 40 CFR 230.10(d). In theory, once avoidance and minimization of impacts has been accomplished to the greatest extent practicable, compensatory mitigation must be designed with the larger watershed in mind and comply with the **replacement** to **loss** ratio of 1:1 articulated in the "no-net loss" policy and the Corps' Regulatory Guidance Letter (RGL) 02-2.

Insufficient Information – 40 CFR 230.12(a)(3)(iv)

The regulations require the District Engineer to make a finding of non-compliance if there is not

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sufficient information to determine whether a proposed discharge complies with the substantive requirements in the regulations related to alternatives analysis, water quality, endangered species, significant degradation, and/or mitigation. The applicant has not: (1) analyzed alternatives; (2) evaluated adverse effects on water quantity and quality; (3) examined threats to federally-listed species; (4) considered adverse effects on habitat and ecosystem functions; and (5) formulated an appropriate mitigation program. Given the available information, it appears the proposed project does not comply with any of the restrictions to discharges under the Guidelines. The failure of the applicant to address specific restrictions and the general lack of information about the overall project lead us to conclude that there is not sufficient information to make a finding of compliance, and we urge the Corps to deny the application.

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