UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 10 1992

Honorable Nancy P. Dorn
Assistant Secretary (Civil Works)
Department of the Army
Washington, DC 20310-0130

OFFICE OF
WATER

Dear Ms. Dorn:

In accordance with the provisions of the 1992 Memorandum of Agreement (MOA) between the U.S. Environmental Protection Agency (EPA) and the Department of the Army under Section 404(q) of the Clean Water Act (CWA), I am requesting your review of the decision by Colonel Laurence R. Sadoff, District Engineer, U.S. Army Corps of Engineers (Corps), Sacramento District, to issue a Section 404 permit to Elliott Homes (applicant) for a proposed residential/commercial project (Churchill Downs) located approximately eight miles south of Sacramento, California. The draft permit and decision document were received by EPA on November 5, 1992. The proposed permit would authorize discharges of dredged or fill material into approximately 17 acres of waters of the United States consisting of vernal pools and seasonal wetlands. The proposed permit would provide, in part, after-the-fact permit authorization for unpermitted fill activities conducted during 1987-90 by Elliott Homes which resulted in the filling of 8.7 acres of wetlands, including vernal pools. After a thorough review of available information, EPA has determined that this case warrants elevation in accordance with the criteria in the MOA for elevation under Part IV, Elevation of Individual Permit Decisions.

Aquatic Resources of National Importance

This referral meets the criteria in Part IV based upon EPA's finding that the completed and proposed discharges of dredged or fill material into vernal pools and seasonal wetlands associated with the project would result in substantial and unacceptable adverse effects to aquatic resources of national importance at the Churchill Downs site. Vernal pools and seasonal wetlands are widely recognized as high quality habitat providing unique aquatic functions and values including wildlife habitat for numerous species such as migrating waterfowl and shorebirds in the Pacific flyway, and endangered species habitat. The 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands and proposed 1991 revisions recognize the importance of these vital wetland systems as supporting a unique assemblage of plant and animal species that are specifically adapted to the seasonal nature of these ecosystems. In recognition of these characteristics, both the 1989 Manual and 1991 proposed revisions provide special procedures for delineating these ecosystems to ensure their protection as waters of the United States. Nevertheless, vernal pools in the Central Valley of California have

suffered historical losses of ninety to ninety-five percent, with corresponding impacts to associated aquatic values and functions. Based upon the best available data from the California Department of Fish and Game, a minimum of approximately 3,150 acres of vernal pools remain in the Central Valley of California out of 63,000 acres estimated to have originally existed in the area. As a basis for comparison, a relative loss of prairie potholes wetlands equivalent to the loss of 17 acres of vernal pool complex would equate to 54,000 acres of prairie pothole (based on current estimates of 10 million acres of prairie potholes).

The unique functions and values of the Churchill Downs site are illustrated by the variety of wildlife that are known to inhabit the site, including reptiles and amphibians, birds including waterfowl in the Pacific flyway, mammals, and invertebrates. With regard to invertebrates, two species (the vernal pool tadpole shrimp and the California linderiella) now proposed for listing as endangered under the Endangered Species Act (ESA), are known to occur at the project site. Further, one candidate plant species (Boggs Lake hedge-hyssop) has been found on the project site. Churchill Downs is also within the geographic range of eight candidate plant species currently being considered for possible inclusion in an ESA listing package. Moreover, it is highly likely that the vernal pool fairy shrimp, a species proposed for listing under the ESA, also uses the project site [December 17, 1990 U.S. Fish and Wildlife Service letter and Personal Communication]. Finally, a wetlands functions/values assessment (Wetlands Evaluation Technique), performed by the applicant's consultant at the project site, found the vernal pools on-site rated high for aquatic diversity/abundance and high for uniqueness/heritage.

Substantial and Unacceptable Impacts of the Proposed Discharge

a. Alternatives Analysis

Based on information developed in support of Elliott Homes' application for a CWA Section 404 permit to discharge fill material in waters of the United States at the Churchill Downs site, EPA has concluded that the loss of vernal pool wetlands is unacceptable based, in part, on our concern that compliance with the requirements of Section 230.10(a) of the Guidelines has not been demonstrated. Section 230.10(a) requires that no permit may be issued if "there is a practicable alternative to the proposed discharge that would have less adverse effect on the aquatic ecosystem, so long as such alternative does not have other significant adverse environmental consequences." The record for this proposed permit decision indicates that the District's decision has almost exclusively relied on an alternatives analysis conducted for another project (Elliott Ranch). EPA believes that the Churchill Downs alternatives analysis is based upon inappropriate criteria which has unduly restricted the scope of analysis of potential practicable alternatives. For example, in their analysis of practicable alternatives, the District eliminated off-site alternatives if they were not currently zoned for residential development. Rezoning is a common practice and is often sought in circumstances where developers are seeking to facilitate commercial or residential projects. In fact,

Elliott Homes has stated in their alternatives analysis that rezoning is possible in a substantial portion of the northern and eastern parcels of the Churchill Downs property. Therefore, EPA believes that eliminating potential off-site alternatives based on current zoning is inconsistent with the way EPA and the Corps have considered zoning restrictions in past cases and does not reflect what appear to be valid opportunities to obtain zoning variances in the project area.

The District also eliminated consideration of off-site alternatives if the sites were fragmented or smaller than the proposed site. Yet, there is no information provided by the applicant as to whether the proposed project could be downsized or housing density increased (as may occur in the northern/eastern parcels of the Churchill Downs site) to render an otherwise smaller site practicable. Further, sites were not considered if they contained existing wetlands. However, a comparison of the extent or quality of wetlands on these sites to the preferred site was not conducted and it is not reasonable to assume that all wetlands on these sites would be lost, or that such losses would be more significant than those at the Churchill Downs site. Finally, sites were also eliminated by the District if they were located beyond the "eight mile commute shed" purportedly required by the provisions of the Sacramento County General Plan. The General Plan establishes a policy of reducing air pollution in the Sacramento area by striving to reduce commuting distances and encouraging higher density land uses, among other broad policy objectives. The General Plan does not establish restrictions for locating residential developments, but rather, it proposes goals for reducing commuting distances by encouraging the location of housing near employment centers. The District has not provided any reasons to support why residential development outside the "eight mile commute shed" defined in the Elliott Homes alternatives analysis, would, in fact, not be fully consistent with the clean air objectives of the General Plan.

Available information also indicates that infrastructure costs (i.e., "sunk costs") associated with construction at the site previously filled without CWA authorization have been inappropriately factored into the alternatives analysis. From the documentation provided by the applicant, consideration of these "sunk costs" further limited the review of alternative locations potentially practicable to the applicant. Although the District has stated an adjustment for "sunk costs" was made in the Corps analysis, no supporting documentation is provided in the decision document or other documents provided by the applicant. The "sunk cost" issue is similar to that raised by EPA in its elevation of the Tennessee Department of Transportation (TDOT) permit case on December 13, 1991, and we believe the Sacramento District's decision is inconsistent with the guidance issued by the Department of the Army in the TDOT case.

b. Impacts to Wildlife

EPA also believes that contrary to the requirements of Section 230.10(c) of the Guidelines, the proposed permit decision has not adequately considered adverse impacts to wildlife, including species which are candidates for listing or proposed for listing as

threatened or endangered under ESA. The Sacramento District's decision does not effectively reflect the need to avoid impacts to wetlands on the site used by these species or, where impacts are unavoidable, to identify sufficient mitigation to offset these impacts. The U.S. Fish and Wildlife Service (USFWS) has independently concluded that the District has failed to require the applicant to submit sufficient information regarding impacts to candidate plant species and proposed invertebrate species at the project site [Personal Communication and September 23, 1992, USFWS letter].

Conclusion and Request for Action

EPA is concerned by conclusions reached by the Sacramento District and by the inappropriate analysis used in support of their decision to permit the destruction of over 17 acres of vernal pools and seasonal wetlands at the Churchill Downs site. Our concerns are heightened by the fact that 8.7 acres of wetland losses to be authorized by the proposed permit would be as a result of unauthorized discharges conducted by Elliott Homes during 1987-90. The District's decisionmaking does not appear to consider this illegal activity and provides little or no deterrence for potential future violations.

In the review of this project, EPA's principle concern is compliance with the Section 404(b)(1) Guidelines. EPA is seeking guidance from your office that responds to our concerns regarding the manner in which the Sacramento District has conducted its analysis of alternatives in this case. In addition, in response to our concerns regarding project compliance with Section 230.10(a) of the Guidelines, EPA believes that the District should require additional avoidance of the most valuable remaining vernal pool complex wetlands at the site and require additional compensatory mitigation where practicable. In light of the extensive infrastructure development at the site and the impracticability of restoring the functions and values of the filled areas, EPA is not asking that the Corps deny authorization for any of the discharge that has already occurred. We do request that the Corps consider additional avoidance of approximately five acres of vernal pool complex (as part of an additional 60 acre preserve in the northwestern parcel of the property) to reduce project impacts to a level sufficient to protect aquatic resources of national importance. If discharges into these five acres of wetlands are avoided, EPA would not object to issuance of a Department of Army permit to fill approximately 12 acres of wetlands at the site, including approximately 9.6 acres previously filled plus an additional 2.5 acres. EPA also requests compensatory mitigation for the loss of these wetlands by creating new vernal pools and seasonal wetlands at a mitigation ratio of 2.4:1. This ratio has been proposed by the USFWS based on values of the wetlands proposed for filling and in response to the experimental nature of vernal pool creation techniques and unreliable attempts to create vernal pools. In addition, EPA believes that the mitigation is necessary as an appropriate enforcement response to the circumstances involved in this case.

We recognize that the Corps has stated in its decision document that "additional avoidance or mitigation would result in a negative rate of return on investment associated with the project." However, no data or information is provided to support this statement. In the absence of relevant supporting data, there is no reason to believe that additional avoidance and mitigation for the loss of vernal pool wetlands, including wetlands filled without authorization, would not be practicable.

In closing, I want to stress our concern about the nature of aquatic resources that would be impacted by discharges authorized by the proposed permit and the Corps decisionmaking process followed in this case. In this regard, I am confident your review of the record in this case will support our concerns regarding additional avoidance of approximately five acres of vernal pool complex and additional compensatory mitigation and the need to provide guidance to the Sacramento District to address policy concerns. I have enclosed a more detailed analysis of the issues in this matter for your review.

If my staff can be of further assistance during your evaluation of this request, please have your staff direct their questions to Sandy Sieg-Ross in the Wetlands Division at 260-9914. You should also, of course, feel free to contact me or Robert Wayland, Director of the Office of Wetlands, Oceans and Watersheds at 260-7166.

Sincerely yours,

Martha G. Prothro

Martha G. Prothro
Acting Assistant Administrator

Enclosures (4)

ENCLOSURE 1

ASSISTANT ADMINISTRATOR'S
EVALUATION AND REQUEST FOR REVIEW -- CHURCHILL DOWNS

Project Description

The proposed project is a 590-acre residential/commercial complex (Churchill Downs) located approximately 8 miles south of Sacramento, California. The applicant, Elliott Homes, has developed 39% of the total land at the project site and 70% of the lots have been built or sold. Some of this work, conducted in 1987-1990, entailed unauthorized discharges into vernal pools and seasonal wetlands. Activities associated with the unauthorized fill were part of the applicant's effort to install the infrastructure necessary to develop the entire property.

The proposed project would result in the combined loss of 17.14 acres of vernal pools and seasonal wetlands. Of that total, 9.6 acres were previously filled and graded (approximately 8.7 acres unauthorized filling and .89 acres filled under a Nationwide #26 for the Butler School site[1]). The proposed permit would authorize an additional 7.5 acres of fill into vernal pools and seasonal wetlands. As compensation for project impacts, the applicant would create 22.6 acres of vernal pools and seasonal wetlands at an off-site location 12 miles from the proposed project site.

Aquatic Resources of National Importance

In accordance with the requirements of Part IV, EPA believes the net loss (after considering mitigation) from the proposed project will result in substantial and unacceptable impacts to aquatic resources of national importance. Of the 39.2 acres of wetlands on the project site, 17.14 acres of vernal pools and seasonal wetlands will be impacted from the proposed project. The wetlands on the project site are relatively intact and still retain their rare and unique physical and biological characteristics. These vernal pools support a wide range of functions and values typically attributed to these ecosystems, including wildlife habitat and habitat for rare plants and invertebrates.

Vernal pools are rare, depressional wetlands found in the Mediterranean climate region of the Pacific coast. Characterized by alternating seasonal dry and wet phases, vernal pools are filled by rain for extended periods during the winter season but are completely dry in the summer. Vernal pools form in areas with seasonally perched water tables and are most commonly found in the coastal terraces of California and in the Central Valley. The 1989 and proposed 1991 "Federal Manual for Identifying and Delineating Jurisdictional Wetlands" explicitly recognizes vernal pools as unique wetlands

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[1] The District decided to review wetlands impacts from the school project in association with impacts from the proposed action. However, the District maintains that the Butler School is a separate project from Churchill Downs.

supporting many important functions and values, including habitat for wildlife, migratory birds, and endangered species.

Vernal pools are used by a unique assemblage of plant and animal species which are specifically adapted to the seasonal nature of these habitats. Dominant plant life associated with vernal pools includes vascular plants, mosses, liverworts, lichens, and algae. Animal species found within vernal pools include insects, invertebrates, and cloacal frogs, toads, and salamanders. Many species found in vernal pools are endemic to California, and may be found only in a few pools or have a limited geographic distribution. At least 15 plant species and seven vertebrate and invertebrate species which use vernal pools have been identified for protection under the Endangered Species Act (ESA).

Other wildlife including birds, small mammals, and reptiles, also use vernal pools as important feeding areas. Animals visit vernal pools while water is present to forage in the water and along pool margins, feeding on insects, tadpoles, and aquatic plants occurring in the pools. Other wildlife which tend to dominate surrounding grassland communities are also found using vernal pools and include opossums, raccoons, California ground squirrels, coyotes, and mule deer. Migratory waterfowl also use vernal pools as feeding, resting, and brooding areas.

The last remaining pools are disappearing at an alarming rate. About 90-95% of vernal pools in the Central Valley of California have been lost to urban expansion and agricultural development. Many of the 5-10% remaining have been disturbed (i.e., have altered drainage patterns). Based upon the best available data from the California Department of Fish and Game, a minimum of approximately 3,150 acres of vernal pools remain in the Central Valley of California out of 63,000 acres estimated to have originally existed in the area. As a basis for comparison, a relative loss of prairie pothole wetlands equivalent to the loss of 17 acres of vernal pool complex would equate to 54,000 acres of prairie potholes (based on current estimates of 10 million acres of prairie potholes).

Many vernal pools that remain are located in or near heavily urbanized areas. Due to increasing urban encroachment, remaining vernal pools continue to be vulnerable to development pressures. Recent significant losses in the Central Valley have contributed to the already high level of cumulative impact. Given the scarcity of these wetlands, the current, persistent loss of remnant pools could ultimately lead to the loss of valuable wildlife habitat and the imperiled plants and animals which depend upon vernal pools for their continued existence.

The unique habitat characteristics of the vernal pools and seasonal wetlands in the project area are supported by field inspections conducted for plants, invertebrates, and other wildlife by the applicant's contractor, Sugnet and Associates. Botanical surveys revealed the presence of the Boggs Lake hedge-hyssop (Gratiola heterosepala)

which is a federal candidate species for listing under the Endangered Species Act. Surveys also indicated the presence of other plant species adapted to vernal pool habitats including wooly marbles, Vasey's coyote thistle, popcorn flower, meadowfoam, goldfields, white-headed navarettia, downingia, Carter's buttercup, and flowering quillwort. The project site is also in the geographical range of at least eight other candidate plant species currently being considered for possible inclusion in an ESA listing package. However, the applicant's contractor did not conduct adequate surveys on the project site to determine their presence. A plant list for the site is attached (Enclosure 2).

Invertebrate surveys of the Churchill Downs site have confirmed the presence of a wide range of aquatic invertebrates in the vernal pools at the project site including numerous crustaceans and insects. Of these, two crustaceans are currently proposed for listing as endangered under the Endangered Species Act, including the vernal pool tadpole shrimp (Lepidurus packardi) and the California linderiella (Linderiella occidentalis). It is also highly likely that the vernal pool fairy shrimp (Branchinecta lychi), another crustacean species proposed for listing, occurs on the project site [December 17, 1990 U.S. Fish and Wildlife Service letter and Personal Communication]. A list of species found thus far on the project site is provided in Enclosure 3. We understand that these findings are based upon a limited survey performed by the applicant's contractor and that a comprehensive invertebrate survey has not been performed.

Wildlife resource lists compiled by the applicant's contractor suggest that a wide range of wildlife use the vernal pools at the Churchill Downs project site including reptiles, amphibians, birds, and mammals. The project site is in the Pacific flyway and is used by a number of migratory birds. Direct observations by the USFWS and EPA also support the findings that wading birds, waterfowl, amphibians, and invertebrates use the project site. A wildlife resource list for the site is provided in Enclosure 4. Of the birds listed, all but three (California quail, starling, and house sparrow) are migratory birds.

Using field survey data as well as site-specific literature, the applicant's consultant conducted a study on site values, using the Wetlands Evaluation Technique (WET). Under the WET analysis, the vernal pool wetlands were rated "high" in their predicted ability to support wildlife diversity and abundance in terms of breeding, migration, and wintering. The study supports the conclusion that the project site has unique and exceptional wildlife habitat attributes.

Given the tremendous cumulative loss of vernal pools and the high resource values of the pools at the project site, we believe the loss of 17.14 acres of vernal pools and seasonal wetlands on the project site would result in substantial and unacceptable impacts to aquatic resources of national importance. Furthermore, EPA does not believe compensatory mitigation currently proposed by the District would adequately offset impacts to the aquatic resource of national importance. (See discussion: Section 230.10(d) -- Mitigation).

Compliance with the Section 404(b)(1) Guidelines

EPA believes the criteria for elevation under Part IV are met based upon our findings that the proposed project will result in substantial and unacceptable impacts to aquatic resources of national importance. To protect the aquatic resource of national importance, we believe the draft permit for the Churchill Downs complex, as proposed, should be modified, conditioned or denied based upon identified concerns regarding compliance with the Section 404(b)(1) Guidelines, 40 CFR Part 230. Specifically, EPA believes (1) less environmentally damaging practicable alternatives may be available [40 CFR 230.10(a)]; (2) the project may result in significant degradation of the aquatic environment, including possible impacts to candidate species and species proposed for listing as endangered under the Endangered Species Act [40 CFR 230.10(c)]; and (3) the proposed mitigation fails to compensate for project impacts [40 CFR 230.10(d)].

Alternatives Analysis - Section 230.10(a)

As noted in our cover letter, we are extremely concerned that the on-site alternatives analysis conducted by the applicant was inappropriately skewed in favor of the current location because of consideration given to the costs incurred by the applicant to pursue its illegal fill activities. Because of extensive infrastructure development and the impracticality of restoring the functions and values of the site, we are not requesting a reanalysis of off-site alternatives and restoration of the illegally filled area. Rather, our primary concern is that the Corps District take steps to ensure that on-site loss of high value wetlands is minimized. To accomplish this objective, we think it is important that analysis of future projects by the Corps District not perpetuate the types of flaws that plagued its off-site alternatives analysis in the current case discussed below.

Off-site alternatives analysis

EPA believes that application of the Guidelines by the Sacramento District is inconsistent with Section 404 national program policies and goals concerning the analysis of practicable alternatives. The Draft Decision Document provides no information on off-site alternatives considered by the applicant nor does it describe the results of any such study in detail. We understand that in reviewing practicable alternatives to the Churchill Downs project, the Sacramento District relied on results from an offsite alternatives analysis for a separate project in the same area (Army permit 198900090 - Elliott Ranch). While, in general, EPA supports the transfer of common information elements from one study to another, the use of the Elliott Ranch analysis to demonstrate compliance of the Churchill Downs project with the Guidelines is inappropriate. The District has not shown that they have considered factual information specific to the Churchill Downs project in the evaluation of practicable alternatives (i.e., project design, wetland impacts).

Furthermore, in its assessment of the off-site alternatives analysis, EPA maintains the District restricted the scope of analysis of potential practicable alternatives by use of several inappropriate criteria. For instance, on page 3 of the Draft Decision Document, the Corps eliminated an alternative as not practicable where the site was not currently zoned as residential. While local policies and restrictions may increase the difficulty in obtaining or otherwise using a site, zoning does not automatically render a site unavailable to meet a specific project purpose. Rezoning is a common practice and is often sought by project proponents to facilitate their projects. An applicant must demonstrate the inability to obtain variances to zoning and other land use restrictions before using these measures to restrict the scope of the alternatives analysis. For example, there is no information in this case to indicate that Elliott Homes sought a variance or that previous variances were sought by others to support a conclusion that current zoning makes a site unavailable.

The District has also restricted the scope of the alternatives analysis by: (1) automatically eliminating sites with wetlands without comparing the extent and quality of those wetlands with wetlands at the Churchill Downs site; (2) eliminating sites smaller than the proposed project site without considering the feasibility of splitting the proposed project into two or more components at different sites, downsizing the project, or increasing housing densities; and (3) eliminating sites if they were located beyond the Elliott Homes alternatives analysis "eight mile commute shed" purportedly required by the provisions of the Sacramento County General Plan without providing any explanation as to why residential development outside of the commute shed would, in fact, not be fully consistent with the clean air objectives of the General Plan.

In light of these factors, we believe the alternatives analysis does not fulfill the requirements of Section 230.10(a). Under Section 230.10(a)(3), alternatives to non-water dependent proposals are presumed to exist unless demonstrated otherwise. We believe the applicant, by using inappropriate factors to restrict the alternatives analysis, has failed to rebut this presumption. Unless these restrictive factors are removed from the alternatives analysis, we do not believe the applicant can clearly demonstrate that the preferred Churchill Downs project site is the least environmentally damaging practicable alternative for the proposed project.

On-site alternatives analysis

During review of the Section 404 permit for the Churchill Downs proposal, the District maintained that further on-site avoidance was not practicable because it would result in the applicant incurring a net monetary loss. This position was based on Elliott Homes' assertion that selection of a down-sized project design would result in additional, unacceptable project costs, including costs incurred in project redesign and foregone development opportunities.

EPA is concerned that the Sacramento District has inappropriately allowed the applicant to manipulate the cost analysis of alternatives under Section 230.10(a) of the

Guidelines. Conclusions concerning costs associated with the Churchill Downs proposal included costs expended by Elliott Homes prior to permit approval. These costs were incurred for (1) unauthorized activities associated with infrastructure placement for the proposed project and (2) activities already authorized under a previous Nationwide permit 26 for the Butler school site. Although the District has stated an adjustment for sunk costs was made during review of the alternatives analysis, no evidence in support of this statement is provided in the Decision Document.

EPA believes that costs associated with unauthorized activities should not limit the exploration of alternatives to the proposed Churchill Downs project. It is our understanding that in February 1986, the Corps submitted comments to the County as part of the Elliott Homes draft environmental impact review (EIR) process and proposed general plan amendment. The comments stated that the Corps would have to be notified if the project impacts more than one acre of wetlands or waters of the U.S. The Corps also stated that impacts to 10 acres or more would require an application for a Department of Army permit. However, the record does not indicate that Elliott Homes attempted to contact the District before discharging fill. During this time, Elliott Homes proceeded to commit resources to its currently proposed project with no indication from the permitting authority regarding the likelihood that a permit would or would not be required or issued. EPA believes that a lack of coordination with the permitting authority prior to making a discretionary commitment of resources should not restrict the scope and analysis of on-site alternatives.

Furthermore, by considering costs incurred for unauthorized actions, the District has provided the applicant no future incentive to seek Section 404 permit approval before discharging into waters of the United States. We believe the District's apparent acceptance of these costs is inconsistent with the policies and goals of the Section 404 enforcement program. We believe this factor is particularly relevant in the case of Churchill Downs where the unauthorized discharge is associated with development activities, which are the very activities which have contributed significantly to the cumulative loss of the vernal pool resource.

Finally, in its assessment of the cost analysis for the Churchill Downs project, the District has further allowed the applicant to factor in costs incurred for activities previously authorized in 1990 under a Nationwide #26 for the Butler School site. Even while the District has chosen to review the school as a separate project under Nationwide 26, the applicant has proceeded to factor costs incurred for the school into the cost analysis for the proposed Churchill Downs project. By doing so, the Corps has allowed the applicant to use this expenditure to restrict the analysis of practicable alternatives under Section 230.10(a). We believe that before the District can make an appropriate determination under Section 230.10(a), it must require the applicant to remove costs for activities authorized under the Nationwide #26 from the costs analysis for the Churchill Downs project.

EPA also believes that by factoring school costs into the cost analysis for the proposed project, Elliott Homes has in fact acknowledged that the school is part of the basic project purpose for the Churchill Downs project. Additionally, we understand that the District authorized fill under Nationwide permit 26 for the school only five days before it circulated the Public Notice for the Churchill Downs individual permit application to resource agencies. When considered together, the recognition of the school as an integral aspect of the overall development of Churchill Downs and the close timing of the Nationwide permit and public notice strongly suggest that fill associated with the school should have been part of the overall permit for activities at Churchill Downs.

By issuing a Nationwide 26 for the school site the District has allowed part of the Churchill Downs project to proceed before a Section 404 permit decision was rendered for the entire project. The overall effect of this action has been to restrict the on-site alternatives analysis for the entire project by limiting project design options to those including the school at its existing location. Such fixed project designs ultimately limit opportunities to avoid and minimize on-site impacts to vernal pools. Therefore, we believe the piecemealed authorization of the proposed project by the District is inconsistent with Section 404 policies and goals requiring the selection of the least environmentally damaging practicable alternative.

Significant Degradation -- Section 230.10(c)

Based upon information available in the record, EPA believes that impacts to 17.14 acres of vernal pools may result in significant degradation of the vernal pool and seasonal wetland ecosystem at the project site. This finding is based upon our conclusion that the District has not adequately considered impacts to wildlife at the Churchill Downs site, particularly to species identified as candidate and proposed for listing as endangered under the Endangered Species Act. While the invertebrate and plant species at the Churchill Downs site are not yet formally listed as endangered, the mere fact the species have been identified for evaluation under the Act should provide sufficient incentive to take precautions necessary to ensure that their habitat is not further degraded or lost.

EPA believes that before making a permit decision, the District failed to take necessary precautions to protect the continued existence of proposed and candidate species at the Churchill Downs site. In the Draft Decision Document, the Corps failed to address impacts to proposed and candidate species and has provided no in-depth discussion of measures to offset such impacts. The District has stated that due to increased avoidance of vernal pools and seasonal wetlands required as part of the Corps preferred alternative to the project, the proposed and candidate species will not be jeopardized by the Churchill Downs project. However, we believe that without sufficient information and analysis to determine project impacts to these species, the District cannot fully ascertain whether the project meets the requirements of Section 230.10(c).

In its September 23, 1992, letter to the District, the USFWS requested that the Corps initiate a conference on Churchill Downs pursuant to the requirements of the Endangered Species Act. The Service maintained that sufficient information concerning the proposed animal species [vernal pool tadpole shrimp, California linderiella, and vernal pool fairy shrimp] had not been provided by the applicant to assess project impacts to these species. To conduct a comprehensive analysis of impacts, the Service recommended that additional baseline information be collected on the project site including the "results of adequate surveys of the species at all vernal pools and swales at the site; direct, indirect, and cumulative impacts to any populations of these species found to occur at Churchill Downs; and the proposed mitigation to avoid/offset project impacts." The Service concluded that "if the Corps elects not to require the acquisition of necessary information, we will evaluate the project on the assumption that all the vernal pools and swales at this location[s] provide suitable habitat for these proposed endangered species."

In addition to these species of concern, available site-specific information in the record also indicates that the project site supports a variety of other wildlife including invertebrates, birds (including migratory birds), reptiles, amphibians, and mammals. Given the likely existence of imperiled species at the project site and its overall high wildlife resource value, EPA believes that the proposed 17-acre impact to vernal pools and seasonal wetlands may result in significant degradation to waters of the United States.

The current inadequacies of the Draft Decision Document and the lack of sufficient baseline information on the project site indicate that the District has failed to meet the requirements of Section 230.10(c): to avoid potential adverse impacts to waters of the United States to protect valuable wildlife habitat. We believe that the scarcity of this resource and the wildlife values which exist at the Churchill Downs site should prompt the Corps to fully review impacts to wildlife as required under Section 230.10(c).

Mitigation - Section 230.10(d)

We believe the mitigation currently required by the District in its draft permit for Churchill Downs does not adequately compensate for impacts to vernal pools and seasonal wetlands resulting from the proposed fill. In reaching conclusions regarding total mitigation requirements, the District used a 1.3:1 compensation to impacts ratio, which under the proposed permit would require the applicant to create 22.6 acres of vernal pools and seasonal wetlands.

EPA (and USFWS) maintains that this ratio is flawed because it is based upon a HEP analysis which: 1) failed to fully address existing habitat values at the project site and 2) overestimated the potential for recreating these values at the proposed mitigation site. In response to these inaccuracies, the USFWS conducted a second HEP analysis for the site. The results of the HEP analysis showed that the applicant must mitigate at

a 2.4:1 ratio at the mitigation site to adequately replace the functions and values of the vernal pools at the Churchill Downs site.

EPA supports the 2.4:1 compensation ratio. In particular, we are concerned that the 1.3:1 ratio relied upon by the District does not reflect the fact that vernal pool mitigation remains experimental and has not been empirically proven to fully restore lost habitat functions and values. We believe that given the high value of the vernal pool resource at the project site and the uncertainities and risks associated with vernal pool mitigation, the District must require additional mitigation in an attempt to adequately restore the functions and values of the vernal pools and seasonal wetlands that would be lost under the proposed permit.

Insufficient Information -- Section 230.12

Section 230.12(a)(3)(iv) states that a discharge fails to comply with the requirements of the Section 404(b)(1) Guidelines where there does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the Guidelines. Without the additional information we have identified above, EPA remains concerned that conclusions reached by the Sacramento District in support of its decision to issue a permit to Elliott Homes do not comply with the requirements of the Section 404(b)(1) Guidelines at Sections 230.10(a),(c), and (d).

In accordance with Part IV of the Section 404(q) MOA, EPA believes that the proposed permit should be revised to reduce project impacts to a level sufficient to protect aquatic resources of national importance. EPA remains convinced that the District: (1) allowed the applicant to rely on conclusions of a flawed, off-site alternatives analysis for a separate project; (2) accepted the inclusion of sunk costs in the cost analysis for the proposed project; (3) violated the national policies and goals of the Section 404 enforcement program; (4) piecemealed authorization of the proposed project through issuance of a Nationwide Permit 26 for the Butler School site; (5) failed to adequately determine impacts to wildlife and incorrectly concluded that the 17.14 acre discharge would not result in significant degradation to waters of the U.S.; and (6) failed to require mitigation sufficient to replace the lost functions and values of vernal pools and seasonal wetlands at the project site.

To reduce impacts to a level sufficient to protect the aquatic resource of national importance, EPA believes the District must amend the draft permit to avoid impacts to approximately 5 acres of high-value vernal pools and seasonal wetlands in the northwest parcel of the applicant's proposed project site. Given the likely existence of proposed and candidate species throughout the project site and its overall high wildlife value, we believe that avoidance of vernal pools and seasonal wetlands is the preferred approach to protect their rare physical and biological features. Furthermore, to fully compensate for the lost functions and values from fill at the project site, EPA believes the Corps should require mitigation at a 2.4:1 compensation ratio.

The District maintains that additional avoidance and mitigation is not practicable for the applicant because it would result in the applicant incurring a net monetary loss. However, the District has provided no substantive information or analysis in the Decision Document that reflects this point. Unless this information is provided, we believe the District cannot fully ascertain whether the applicant is able to incur the costs for the additional avoidance and mitigation currently proposed by EPA.

ENCLOSURE 2

Plant Survey, Sugnet and Associates, 1991

CHURCHILL DOWNS PLANT LIST		
Scientific Name	Common Name	Status*
Aira caryophyllea	Hair grass	NL
Allocarya stipitatus	Slender popcorn-flower	OBL
Alopecurus howellii	Howell's foxtail	FACW
Anagallis arvensis	Scarlet pimpernel	FAC
Avena fatua	Wild oat	NL
Briza minor	Little quaking grass	FACW
Brodiaea elegans	Harvest brodiaea	FACU
Brodiaea minor	Dwarf brodiaea	NL
Bromus diandrus/rigidus	Ripgut grass	NL
Bromus mollis	Soft chess	FACU
Crypsis schoenoides	Swamp Timothy	OBL
Cynodon dactylon	Bermuda grass	FAC
Deschampsia danthonioides	Annual hair grass	FACW
Downingia species	Downingia	OBL
Eleocharis species	Spikerush	
Epilobium adenocaulon	Willow herb	NL
Euphorbia species	Spurge	
Eremocarpus setigerus	Turkey mullein	NL
Erodium botrys	Filaree	NL
Erodium moschatum	Filaree	NL
Eryngium vaseyi	Vasey's coyote thistle	FACW
Eucalyptus species	Gum tree	NL
Elymus caput-medusae	Medusea head rye	FACU
Gastridium ventricosum	Nit grass	FACU
Glyceria borealis	Prostrate manna grass	OBL
Gratiola ebracteata	Bractless hedgehyssop	OBL
Hemizonia fitchii	Fitch's spike weed	NL

CHURCHILL DOWNS PLANT LIST cont.		
Scientific Name	Common Name	Status*
Holocarpha virgata	Tarweed	
Hordeum geniculatum	Barley	NL
Hypochoeris radicata	Cat's ear	NL
Juncus bufonius	Toad rush	FACW
Juncus phaeocephalus	Brown-head rush	FACW
Lasthenia fremontii	Fremont's goldfields	OBL
Lasthenia glaberrima	Smooth goldfields	OBL
Lactuca serriola	Prickly lettuce	FAC
Lippia lanceolata	Mat grass	NL
Lolium multiflorum	Annual rye grass	FAC
Lythrum hyssopifolia	Loosestrife	FACW
Mollugo verticillata	Indian-chickweed	FAC
Navarretia leucocephala	White-head navarretia	OBL
Navarretia intertexta	Needle-leaf navarretia	OBL
Navarretia tagetina	Navarretia	FACU
Orthocarpus species	Owl's clover	
Orthocarpus campestris	Field owl's-clover	OBL
Phalaris lemmonii	Lemmon's canary grass	FACW
Phalaris paradoxa	Canary grass	
Plagiobothrys *californius*	Popcorn flower	NL
Plagiobothrys leptocladus	Popcorn flower	NL
Plantago hookeriana	Plantain	NL
Plantago lanceolata	Common plantain	FACW
Poa annua	Annual bluegrass	FACW
Pogogyne zizyphoroides	Sacramento mesa mint	OBL
Polypogon species	Rabbit's foot grass	OBL
Psilocarphus brevissimus	Wooly marbles	OBL

CHURCHILL DOWNS PLANT LIST cont.		
Scientific Name	Common Name	Status*
Psilocarphus tenellus	Slender wooly marbles	OBL
Quercus lobata	Valley oak	FAC
Ranunculus bonariensis	Carter's buttercup	OBL
Rumex pulcher	Fiddle dock	FAC
Sidalcea calycosa	Annual mallow-checker	OBL
Trichostema lanceolatum	Vinegar weed	NL
Trifolium depauperatum	Dwarf sack clover	FAC
Trifolium hirtum	Clover	NL
Trifolium repens	White clover	FACU
Vicia species	Vetch	
Vulpia myuros	Fescue	FACU
Wyethia angustifolia	Narrow-leaf mules ears	FAC

*Based on *National List of Plant Species that Occur in Wetlands: California (Region 0).* U.S. Fish and Wildlife Service, 1988.

Bogg's Lake hedge-hyssop was found on the project site during earlier field surveys (1986).

ENCLOSURE 3

CHURCHILL DOWNS

INVERTEBRATE LIST

Nematodes

Snails

Flatworms

Crustaceans
- vernal pool tadpole shrimp
- California linderiella
- clam shrimp
- seed shrimp
- water flea
- Copepods

Insects
- mayflys
- predacious diving beetle
- water scavenger beetle
- midges

Source: Sugnet and Associates, Invertebrate Survey 1991-1992, Vicinity of Vintage Road

Pools surveyed: 5 in March 1991, 3 in March 1992

ENCLOSURE 4

Wildlife Resource List for Churchill Downs
Source: Sugnet and Associates

Reptiles and Amphibians

California Tiger Salamander CSC,2	*Ambystoma tigrinum californiense*
California Slender Salamander	*Batrachoseps attenuatus*
Western Spadefoot	*Scaphiopus hammondi*
Western Toad	*Bufo boreas*
Pacific Treefrog	*Hyla regilla*
Western Fence Lizard	*Sceloporus occidentalis*
Gilbert's Skink	*Eumeces gilberti*
Western Skink	*Eumeces skiltonianus*
Southern Alligator Lizard	*Gerrhonotus multicarinatus*
Ringneck Snake	*Diadophis punctatus*
Sharp-tailed Snake	*Contia tenuis*
Racer	*Coluber constrictor*
Gopher Snake	*Pituophis melanoleucus*
Common Kingsnake	*Lampropeltis getulus*
Common Garter Snake	*Thamnophis sirtalis*
Western Terrestrial Garter Snake	*Thamnophis elegans*
Night Snake	*Hypsiglena torquata nuchalata*
Western Rattlesnake	*Crotalus viridis*

Birds

Great Blue Heron *	*Ardea herodias*
Green Heron	*Butorides striatus*
Great Egret*	*Casmerodius albus*
Snowy Egret*	*Egretta thula*
Mallard	*Anas platyrynchos*
Cinnamon Teal	*Anas cyanoptera*
Turkey Vulture	*Cathartes aura*
Black-shouldered Kite *	*Elanus caeruleus*
Red-tailed Hawk	*Buteo jamaicensis*
Swainson's Hawk ST	*Buteo swainsoni*
Golden Eagle CSC	*Aquila chrysaetos*
Prairie Falcon CSC	*Falco mexicanus*
American Kestrel	*Falco sparverius*
California Quail	*Callipepla californica*
Killdeer	*Charadrius vociferus*
Long-billed Curlew 2	*Numenius americanus*
Ring-billed Gull	*Larus delawarensis*

California Gull CSC	*Larus californicus*
Common Snipe	*Gallinago gallinago*
Mourning Dove	*Zenaida macroura*
Barn Owl	*Tyto alba*
Screech Owl	*Otus kennicottii*
Great Horned Owl	*Bubo virginianus*
Burrowing Owl CSC	*Athene cunicularia*
White-throated Swift	*Aeronautes saxatalis*
Black-chinned Hummingbird	*Archilochus alexandri*
Anna's Hummingbird	*Calypte anna*
Allen's Hummingbird	*Selasphorus sasin*
Rufous Hummingbird	*Selasphorus rufus*
Western Kingbird	*Tyrannus verticalis*
Black Phoebe	*Sayornis nigricans*
Say's Phoebe	*Sayornis saya*
Horned Lark	*Eremophila alpestris*
Violet Green Swallow	*Tachycineta thalassina*
Tree Swallow	*Tachycineta bicolor*
Rough-winged Swallow	*Stelgidopteryx serripennis*
Barn Swallow	*Hirundo rustica*
Cliff Swallow	*Hirundo pyrrhonota*
Scrub Jay	*Aphelocoma coerulescens*
Yellow-billed Magpie	*Pica nuttalli*
American Crow	*Corvus brachyrhynchos*
Plain Titmouse	*Parus inornatus*
Bushtit	*Psaltriparus minimus*
House Wren	*Troglodytes aedon*
Bewick's Wren	*Thryomanes bewickii*
Mockingbird	*Mimus polyglottos*
American Robin	*Turdus migratorius*
Western Bluebird	*Sialia mexicana*
Loggerhead Shrike	*Lanius ludovicianus*
Starling	*Sturnus vulgaris*
House Sparrow	*Passer domesticus*
Western Meadowlark	*Sturnella neglecta*
Brewer's Blackbird	*Euphagus cyanocephalus*
Brown-headed Cowbird	*Molothrus aster*
House Finch	*Carpodacus mexicanus*
Pine Siskin	*Carduelis pinus*
American Goldfinch	*Carduelis tristis*
Lesser Goldfinch	*Carduelis psaltria*
California Towhee	*Pipilo fuscus*
Savannah Sparrow	*Passerculus sandwichensis*
Lark Sparrow	*Chondestes grammacus*

Dark-eyed Junco	*Junco hyemalis*
Chipping Sparrow	*Spizella passerina*
White-crowned Sparrow	*Zonotrichia leucophrys*
Golden-crowned Sparrow	*Zonotrichia atricapilla*
Song Sparrow	*Melospiza melodia*

Mammals

Virginia Opossum	*Didelphis marsupialis*
Ornate Shrew	*Sorex ornatus*
Broad-footed Mole	*Scapanus latimanus*
Yuma Myotis	*Myotis yumanensis*
California Myotis	*Myotis californicus*
Small-footed Myotis	*Myotis subulatis*
Western Pipistrelle	*Pipistrellus hesperus*
Big Brown Bat	*Eptesicus fuscus*
Red Bat	*Lasiurus borealis*
Hoary Bat	*Lasiurus cinereus*
Brazilian Free-tailed Bat	*Tadarida brasillensis*
Brush Rabbit	*Sylvilagus bachmani*
Black-tailed Jackrabbit	*Lepus californicus*
California Groundsquirrel	*Citellus beecheyi*
Botta's Pocket Gopher	*Thomomys bottae*
Western Harvest Mouse	*Reithrodontomys megalotis*
Deer Mouse	*Peromyscus maniculatus*
California Vole	*Microtus californicus*
Coyote	*Canis latrans*
Gray Fox	*Urocyon cinereoargenteus*
Raccoon	*Procyon lotor*
Striped Skunk	*Mephitis mephitis*
Bobcat	*Lynx rufus*

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* falls into one or more of the following categories:
- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines.
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range.
- Population(s) in California that may be peripheral to the major portion of a taxon's range, but which are threatened with extirpation within California.

- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands).

ST - Listed as Threatened by the State of California
CSC - California Department of Fish and Game "Species of Special Concern"
2 - Category 2 Candidate for Federal listing (Taxa for which existing information indicates may warrant listing, but for which substantial biological information to support a proposed rule is lacking

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