CHATTEN-BROWN & CARSTENS
2601 OCEAN PARK BOULEVARD
SUITE 205
SANTA MONICA, CALIFORNIA 90405
www.cbcearthlaw.com

TELEPHONE:(310) 314-8040
FACSIMILE: (310) 314-8050

E-MAIL:
ACM@CBCEARTHLAW.COM

January 27, 2010

Via Email
Ms. Rosa Laveaga
City of Pasadena Department of Public Works
Parks and Natural Resources Division
P.O. Box 7115
Pasadena, CA 91109-7215

Re: Additional Comments on Biological Impacts of Draft Hahamongna Watershed Park Master Plan Addendum for Hahamongna Annex

Dear Ms. Laveaga,

Enclosed please find a report on the draft Hahamongna Watershed Park Master Plan Addendum for the Hahamongna Annex prepared by Land Protection Partners. The Land Protection Partners report, prepared by biological experts Travis Longcore and Catherine Rich, analyzes the impacts associated with the tree removal proposed as part of the Annex Plan.

Thank you for the opportunity to comment upon the Hahamongna Annex Plan. Feel free to contact me if you have any questions

Sincerely,

Amy Minteer
Attorney at Law

cc: Pasadena City Council

Enclosure: Land Protection Partners "Analysis of Impacts to Trees in the Hahamongna Watershed Park Annex"
Curriculum Vitae of Travis Longcore and Catherine Rich

Land Protection Partners
P.O. Box 24020, Los Angeles, CA 90024-0020
Telephone: (310) 247-9719

Analysis of Impacts to Trees in the Hahamongna Watershed Park Annex

January 26, 2010

Travis Longcore, Ph.D.
Catherine Rich, J.D., M.A.

The City of Pasadena (City) acquired a property known as the Hahamongna Annex adjacent to the existing Hahamonga Watershed Park. This park has a Master Plan with an associated Master Environmental Impact Report that was certified in 2003. In 2009, the City released a Master Plan Addendum to add the annex to the park and redevelop it for habitat values and recreation. The City released an Initial Study as the environmental review for this action. Chatten-Brown and Carstens retained us to review this plan and its environmental effects, particularly the removal of trees. We obtained the November 20, 2009 versions of the Initial Study and Master Plan Addendum from the City's website for review.

The Master Plan Addendum proposes to remove all exotic trees from the Annex site. This removal is proposed to be done in phases to retain "appropriate" tree canopy on the site (Initial Study ["IS"], p. 2-23). The trees would be replaced "with native species where appropriate" (IS, p. 2-23). This action, it is argued, would improve habitat values directly through installation of additional native plants, increasing water and sunlight availability for native plants, and reducing the seed bank of exotic species.

The City presents four reasons to remove the trees.

1. Habitat restoration. The City does not appear to have mapped the trees on site, but estimates that there are 800, of which they estimate that 92% (736) are native. The remaining 64, which the City rounds up to 70, are exotic species for which removal is proposed as part of restoration activity (IS, p. 3-19).

2. Hazard or health of the tree. The City plans to remove all trees that are allegedly unhealthy, diseased, or hazardous (IS, p. 3-19). The City does not provide an estimate of the number of trees that will be removed for this reason.

3. Removal for bikeway and trail construction. The City proposes to remove 35 trees to accommodate the construction of a bikeway and trail on the perimeter of the site (IS, p. 4-12). Of these, two are native and the remaining 33 are exotic. The bikeway and trail are near an additional 15 native trees, which could be encroached upon by the construction.

4. Potential removal to accommodate development other than the bikeway and trail. The City allows for the possibility that the design of other improvements could result in the loss of trees but does not provide any estimates of locations, numbers, or species.

In its analysis in the Initial Study, the City argues that the removal of trees would have no impact on the environment, and in fact would enhance habitat. In theory, this could be possible, but there are a number of problems with the City's claims.

First, the City does not provide sufficient details or performance standards to evaluate its claims. The public must rely on the City's judgment as to what is an "appropriate" amount of cover that will be maintained during the removal of trees. The City makes no promises to replace tree numbers or tree cover, but asserts that an "appropriate" amount of cover will be maintained. Even with the best of intentions, the City cannot rely on a vague assertion that it will maintain "appropriate" cover to support its assertion of no impacts. If trees are to be removed for habitat restoration, then a mitigation ratio for replacement should be established, with a schedule for replacement and performance standards and mitigation monitoring plan.

Second, the City cannot state how many trees will be removed, or where they will be removed, but uses the proportion of total trees as an argument why impacts are minimal. This is misleading, because the proportion of trees removed on a 300-acre site does not provide any insight on the location of those trees. From the Initial Study, it seems that 51 trees will be removed or impacted along the northern boundary of the project site alone (Table 4.2). This is a concentrated and localized impact, which belies the argument that only 8% of all trees will be removed. In this area, the percentage of trees proposed for removal is far greater.

Third, the large number of trees removed for one project element also contradicts the assertion that tree removal will be phased. If 70 trees are to be removed in total, and 51 are removed for the path along the northern boundary (which would presumably be done all at once), the overall removal will be phased very little.

Fourth, the City claims that all exotic trees will be removed for habitat restoration, but limits the areas designated for habitat restoration to the south and east of the project site (IS, Exhibit 2.5). The figure has some amorphous indication of "habitat restoration" just south of the bikeway/trail, but no description of this project element. The bikeway/trail is *not* identified as a habitat restoration site.

Fifth, the City does not appear to consider the habitat and ecosystem values provided by the existing trees, especially those in areas that appear unlikely candidates for restoration; e.g., immediately adjacent to the proposed bikeway/trail. This final point deserves further discussion.

It is a common error in environmental planning and impact assessment to draw the conclusion that the removal of exotic vegetation will have no environmental impact. Although exotic plants do not contribute to native plant diversity, and may or may not support native insects, they do provide habitat for native birds and other vertebrates (e.g., bats). A body of research indicates that native birds in cities are attracted to, and their distribution influenced by, tree canopy cover and structural characteristics, with little regard to native status. For example, wooded streets promote native bird diversity and movement in a Mediterranean biome city (that is similar to Pasadena) (Fernández-Juricic 2000), tree abundance and height (but not native status) predicted bird diversity along streets (Murgui 2007), and tree species diversity (but not native status) was positively associated with bird diversity (Husté et al. 2006). In short, birds are attracted to increased vegetation structure and diversity (Evans et al. 2009).

The very trees that are proposed to be removed in the Annex area support sensitive bird species (Cooper's hawk is reported to nest in this area) and native mammals as well (e.g., western gray squirrel). The mere presence of western gray squirrel should cause planners to stop and take note, since this species has declined to the point of extirpation in the urbanized Los Angeles basin (Muchlinski et al. 2009).

Although some evidence indicates that native streetscapes support more native birds than do streets planted with exotic trees (White et al. 2005), it is unclear whether the proposed project will involve a conversion from exotic to native cover. There is no plan given for the replacement of the exotic trees to be removed, and the vague term "appropriate" is used to describe the tree cover that will be provided at the end of the project. Furthermore, for the 51 trees removed for the bikeway/trail, it seems unlikely that they will be replaced at all but rather will be replaced with built infrastructure and impervious surface. So the question is not whether exotic tree cover or native tree cover provides more or better wildlife habitat, but rather whether exotic tree cover or paved surfaces provides more or better wildlife habitat. To this question the answer is unequivocal and conclusive: it is far better for habitat values to maintain exotic tree cover than to build the equivalent of a road in its place. Conversely, removal of trees in a limited area of the project site to make way for a piece of road-sized linear infrastructure will have adverse impacts that should be analyzed in this context and mitigated.

Furthermore, the removal of mature trees has adverse effects that have not been considered in the Initial Study (Dwyer et al. 1992). Trees intercept rainwater and thereby reduce peak flows and total amount of stormwater (Xiao et al. 1998). They reduce local temperatures, and in doing so ameliorate some of the urban heat island effect (Huang et al. 1987). Trees themselves are a carbon sink, until they are cut down, when that carbon is again released to the atmosphere (Nowak et al. 2002). Cutting down mature trees, even with replacement plans, represents an increased emission of CO_2 because of the release of stored carbon in the tree.

To summarize, the Initial Study has a number of flaws in its analysis of the impacts of tree removal on habitat values.

1. The full number of trees to be removed is not established (there has been no complete survey for allegedly "hazardous" or diseased trees).

2. There is no restoration plan that provides a tree replacement ratio or ensures that exotic trees will be replaced with native trees in the same areas.

3. The majority of tree removals would be clustered in one location and no plan is provided to replace them in a similar location, number, and configuration. Such replacement is unlikely because they are proposed to be replaced by transportation infrastructure.

4. The majority of tree removals would not be "phased" as asserted in the Initial Study because they would be removed for the bikeway and trail on the northern edge of the property.

Literature Cited

Dwyer, J. F., E. G. McPherson, H. W. Schroeder, and R. A. Rowntree. 1992. Assessing the benefits and costs of the urban forest. Journal of Arboriculture **18**:227–234.

Evans, K. L., S. E. Newson, and K. J. Gaston. 2009. Habitat influences on urban avian assemblages. Ibis **151**:19–39.

Fernández-Juricic, E. 2000. Avifaunal use of wooded streets in an urban landscape. Conservation Biology **14**:513–521.

Huang, Y. J., H. S. Akbari, H. Taha, and A. H. Rosenfeld. 1987. The potential of vegetation in reducing summer cooling loads in residential building. Journal of Climate and Applied Meteorology **26**:1103–1116.

Husté, A., S. Selmi, and T. Boulinier. 2006. Bird communities in suburban patches near Paris: determinants of local richness in a highly fragmented landscape. Ecoscience **3**:21–34.

Muchlinski, A. E., G. R. Stewart, J. L. King, and S. A. Lewis. 2009. Documentation of replacement of native western gray squirrels by introduced eastern fox squirrels. Bulletin, Southern California Academy of Sciences **108**:160–162.

Murgui, E. 2007. Factors influencing the bird community of urban wooded streets along an annual cycle. Ornis Fennica **84**:66–77.

Nowak, D. J., J. C. Stevens, S. M. Sisinni, and C. J. Luley. 2002. Effects of urban tree management and species selection on atmospheric carbon dioxide. Journal of Arboriculture **28**:113–122.

White, J., M. Antos, J. Fitzsimons, and G. Palmer. 2005. Non-uniform bird assemblages in urban environments: the influence of streetscape vegetation. Landscape & Urban Planning **71**:123–135.

Xiao, Q., G. McPherson, J. R. Simpson, and S. L. Ustin. 1998. Rainfall interception by Sacramento's urban forest. Journal of Arboriculture **24**:235–244.