



February 14, 2013

John Thompson  
Thompson Holdings, LLC  
P.O. Box 2015  
Horsham, PA 19044

Mr. Thompson,

Per your request, WRA is providing an assessment of potential stream and riparian habitat impacts associated with the proposed reconstruction of the Paraiso Springs Resort. The assessment addresses the stream and riparian issues identified by the County of Monterey in the email from John Ford dated February 1, 2013. Wetland impacts were previously assessed in the wetland delineation report prepared by WRA (2009). Because the creek channel itself does not support wetlands, this letter focuses on potential impacts to stream and riparian habitats. Although there will be minor impacts to stream and riparian habitat associated with the construction of the project, the ecological benefits received from the restorative aspects of the project outweigh these potential impacts, resulting in a net ecological gain from the proposed project. These gains would completely mitigate any potentially significant impacts to a less-than-significant level.

The site contains an intermittent drainage running from west to east as identified in the wetland delineation report prepared for the site by WRA (2009). The drainage was dry during the time of the site visit conducted for the delineation and appeared to carry water infrequently, likely only after major storms given the small size of the associated watershed. Within the site, the drainage is currently culverted in four locations, including a significant portion of the stream which is underground for approximately 300 feet as shown on Figure 3 of the delineation report prepared by WRA. This area is shown between stations 1,175 and 1,125 on the mark-up of Sheet CT-4 included in the "Paraiso Springs Resort (PLN 040183) – Stream Setback Plan" Technical Memorandum prepared by CH2MHILL (2012). Upstream of the existing spring, hydrologic input to the drainage appears to be limited to stormwater runoff from the surrounding hills. Downstream of the spring, hydrologic inputs to the drainage appear to include stormwater runoff from the surrounding hills, groundwater from a high water table, and overflow from the spring. Riparian habitat adjacent to the drainage consists of predominantly-continuous oak woodland canopy with smaller areas of arroyo willow (*Salix lasiolepis*) stands and annual grassland. This riparian habitat is described in further detail in the wetland delineation report prepared by WRA (2009). Due to the relative infrequency with which the drainage appears to carry water and the type of vegetation present, it is likely that the riparian vegetation at the site is largely supported by the high groundwater table rather than by water conveyed in the drainage.

The proposed project may impact riparian vegetation in several discreet areas. The Tree Removal Plan provided for review (Sheets L4.1 to L4.6; Rana Creek Habitat Restoration 2005) indicates that a number of trees potentially associated with the riparian canopy along the drainage may be removed to facilitate project construction. Most of the trees planned for removal are located outside of the 50-foot setback and are not associated with the riparian canopy. However, some trees within the riparian canopy are planned for removal, and are

identified in the tree removal plan. Most are located north of the drainage in the western portion of the site. Because these trees are located north of the drainage, their removal will have minimal effects on the amount of direct solar radiation reaching the drainage. With the implementation of appropriate erosion control measures during and after construction the removal of these trees is not likely to result in increased erosion and associated sedimentation of waters conveyed by the drainage. Removal of riparian vegetation may reduce the amount of available habitat for birds and other common riparian-associated wildlife; however, such impacts may be mitigated by enhancing riparian habitat elsewhere on the site. Given the intermittent nature of the drainage, it does not represent suitable habitat for fish, or other aquatic wildlife, and thus the proposed development is not likely to result in impacts to such species.

Although the proposed development within the 50-foot setback has the potential to increase erosion impacts, when combined with appropriate best management practices and erosion control measures, work within the 50-foot setback will not affect the 100-year flow capacity of the drainage and is not likely to increase erosion and associated sedimentation. As such, I believe that the impacts associated with this development will have negligible effects on the drainage and associated riparian habitat.

The project proposes to daylight four sections of the drainage which are currently culverted, including the approximately 300-foot section shown between stations 1,175 and 1,125 on the mark-up of Sheet CT-4 in the Stream Setback Plan (CH2MHILL 2012). Within three of the four areas of culvert removal, the drainage channel will be restored and native vegetation will be planted. Within the 300-foot section of culvert removal described above, an in-stream pond will be created between the existing segments of the drainage. This pond will be lined and filled using the overflow from the spring. As the pond fills and overflows water will be directed into the downstream portion of the drainage. This is not significantly different from existing conditions at the site, where currently the downstream portion of the drainage is fed by overflow from the spring. The inclusion of the pond will provide valuable wildlife habitat which currently does not exist at the site. Daylighting these sections of the drainage, combined with their restoration and associated riparian vegetation plantings in these areas, will increase in the total area of non-wetland waters present at the site and provide significant benefits to the water quality and wildlife habitat values associated with the drainage. These improvements would outweigh any negative impacts to the drainage that may occur under the proposed project.

In summary, the project will not result in any significant impacts to riparian vegetation and the bed and banks of the drainage in question. However, the drainage appears to be of low ecological value, and any minor impacts would be negligible and easily mitigated through on-site habitat restoration, planting of native riparian vegetation, and daylighting the segments of the drainage which are currently culverted. With the above mitigation, combined with appropriate best management practices and erosion controls to be implemented during and after construction, it is my opinion that the proposed project will have negligible effects on the drainage and associated riparian vegetation and may in fact result in a net ecological benefit.

Sincerely,



Geoff Smick, MA  
Principal Ecologist

**References:**

CH2MHILL. 2012. Paraiso Springs Resort (PLN 040183) – Stream Setback Plan. Technical Memorandum. Prepared for Thompson Holdings, LLC. April 20.

Rana Creek Habitat Restoration. 2005. Tree Removal Plan, Sheets L4.1 to L4.6. Prepared for Thompson Holdings, LLC. July 15.

WRA, Inc. 2009. Section 404 Wetland Delineation, Paraiso Springs Resort, Monterey, California. Report prepared for Thompson Holdings, LLC. February.