West Pasco Audubon Society
PO Box 1456, Elfers, FL 34680

District Engineer .
US Army Corps of Engineers
10117 Princess Palm Avenue, Suite 120,
Tampa, FL 33610

January 10 2012

Dear Sir,
I write on behalf of the West Pasco Audubon Society (WPAS) to comment on the documents relating to Pasco County's application to extend Ridge Road to the east through the Serenova Tract, land originally set aside in mitigation for the construction of the Sun Coast Highway. What is proposed here involves the wildlife habitat we seek to conserve and treasure for generations to come.

The main argument for the Ridge Road Extension (RRE) is to improve the eastward evacuation routes provided by SR 54 and SR 52 from the coast of Pasco County in the event of a storm or hurricane threat. A far less destructive, alternative would be the improvement of Moon Lake Road that already connects the eastern end of Ridge Road with SR 52.

We are especially concerned with the wildlife/habitat impact analyses carried out by the applicant's consultants. These were prepared to facilitate comparisons of the alternative routes the RRE might take. The narrative document refers to a method of analysis of Endries et al (2008) which is not listed among the references cited. On page 30 of the narrative document Appendix F is said to "contain(s) a copy of Endries et. al (2008), which details the (above analysis)". We were unable to find this. In fact Appendix F, as made available to us, consists only of tables of data with no explanation of the terms used, description of what the figures mean, or the methods of analysis used, or any references to them. Since none of the tables have meaningful captions or explanations of what they are intended to show we are unable to draw conclusions from them. We looked in vain among the other documents on the ACOE web site for a statement of what conclusions can be drawn from them, and with what degree of probability these conclusions are correct.

The narrative document also refers to GIS survey information in the form of raster datasets. The cell size used is not given and there is no summary of how this information was used. The citations to a Biological Research Associates 2005 report and to an EMS 1998 Ridge Road Wildlife Report are incomplete. These reports are not among the documents provided by ACOE.

We understand the data in Appendix F is derived from examining aerial photographs of the land involved from which estimates were made of the kind of

vegetation cover and the likely direct and secondary impacts of the road extension, where secondary impacts apparently refer to areas presumably 150' on either side of the road. Neither Appendix F or the accompanying narrative define how impact effects were estimated.

In the document describing the FDOT mitigation plan there are tables that list Wetland Rapid Assessment Protocol (WRAP) scores with no references to publications describing the techniques employed or any discussion of their reliability. It would help non-specialists deeply concerned with the impacts of the proposed construction to know how figures for wildlife utilization (WU), Wetland Canopy (O/S), Wetland Ground Cover (GC), Field Hydrology (HYD), and WQ (which is undefined) were derived.

We have similar concerns with the data for the Uniform Mitigation Assessment Measures (UMAM) scores, which are also devoid of accompanying references to methods used, or discussion of their significance and reliability.

We believe it would be helpful to have a meeting where questions of this kind, and others noted below, can be raised and answered.

Our principle concern is with two kinds of impacts of the RRE. The first is that of the road construction where heavy machinery is used to: remove trees and other vegetation that occupy the site of the road bed and areas on either side, excavate and/or fill the construction site, and install bridges, culverts, drainage, retention ponds etc. These disturbances are locally extremely severe. The period of time over which they will take place is undefined but may well extend over more than two wildlife annual breeding seasons. They will drastically affect the reproduction and distribution of the vertebrate wildlife present. It appears that the construction impacts on wildlife have not been considered at all in the documents. They are likely to effectively "sterilize" the areas surrounding the site and markedly reduce the population densities of birds, mammals and other vertebrates. Although some re-colonization may occur once construction has finished, its extent will be limited because of the establishment of a new major highway, our second concern.

Once the road itself is in use it will exact a toll on the habitat and wildlife. Jackson (1999) has summarized how highways impact wildlife in the following ways:

. Direct loss of habitat.
. Degradation of habitat quality.
. Habitat fragmentation. Highways dissect contiguous habitat patches resulting in smaller patch sizes and higher edge to interior ratios.
. Road avoidance. Some wildlife avoid areas adjacent to highways due to noise and human activity associated with noise.

. Increased human exploitation. Highways increase human access for hunting and poaching. This may reduce wildlife populations in areas adjacent to roads and highways and contributes to avoidance.
. Road mortality leading to loss of populations.
. Reduced wildlife access to vital habitats.
. Population fragmentation.

The application refers to the provision of wildlife underpasses but provides no information on their nature, whether or not they will be designed specifically to protect the species of wildlife found in the Serenova Tract, whether there will be fences or barriers to encourage wildlife to use them, or provision for their maintenance, which in a wetland area like this will be challenging.

Some road kill is not ameliorated by underpasses. Cultivated roadsides and shoulders expose foraging rodents and other small mammals. Owls, and other raptors, seeing prey in these areas, swoop in low to make easy captures and as a result are hit and killed by vehicles.

We are especially concerned with the effects of habitat and population fragmentation having observed ourselves the decline of the populations of Florida Scrub Jay in areas of Pasco County and most recently on the nearby Cross Bar Ranch owned and managed by the Pinellas County Utility Department. In this instance the Serenova Preserve will be bisected into two areas. The proposed areas for mitigation are blocks of land already compromised by their relatively small size and high edge to interior ratios.

Although no breeding colonies of threatened or endangered birds have been identified within the Serenova Tract many other species are present. Some 115 species of birds breed in Pasco County. Many can be found at times in the Serenova Tract. The incremental destruction of habitat resulting from highway construction, and the development that inevitably follows, will no doubt result in more species becoming listed as endangered or of special concern.

We have noted the effects of traffic noise on birds close to the Suncoast Parkway where populations have declined (K.F.Tracey, personal communication). Research in the UK, Holland and Canada has shown that bird song is altered in the presence of anthropogenic noise (Mockford & Marshall, 2009, Halfwerk et al. 2011) and that foraging and mate attraction may be impaired (Habib et 2007, Slabbekoorn, and Ripmeester, 2008). We believe the noise from road vehicles on a RRE in the Serenova Tract will have an effect on wildlife populations by interfering with bird song.

We oppose the Ridge Road Extension. We think it unnecessary and that it will further fragment and spoil what few areas remain in Pasco County to support our native wildlife. We believe the assessment of the wildlife impacts of the RRE is incomplete since it addresses only the relative impacts of the alternative routes

proposed and makes no comparison with leaving the area undisturbed. The information provided is insufficient to reveal the inherent weaknesses of the methods used and the assumptions behind them. The only viable option in our opinion is No Build.

Sincerely,

Peter R. Day
President, West Pasco Audubon Society

Literature cited

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Halfwerk, W., S Bot, J.Buikx, M.van der Velde, J. Komdeur, C. ten Cate, and H. Slabbekoorn, 2011. Low-frequency songs lose their potency in noisy urban conditions. Proc. Nat. Acad. Sci, 108 (no. 35) 14549-14554.

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