# *Florida Department of Transportation*

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| **TO:** | Dr. Jeffrey Duncan, National Park Service |
| **FROM:** | Hannah Hernandez, District Permit Coordinator, FDOT D5 |
| **SUBJECT:** | Potential Impacts to Avian Species –<br>Proposed Wekiva River Bridge Elevation |
| **DATE:** | September 23, 2013 |
| **DOT FM NUMBER:** | 238275-7-32-02 |

This memorandum has been prepared in a response to comments received during the initial National Park Service (NPS) workshop for the Wekiva Parkway Bridge, held on June 18, 2013. During the workshop, Dr. Daniel Smith stated that the proposed height of the bridge should be examined to address potential bird strikes of species protected under the Migratory Bird Treaty Act (MBTA) of 1918 as well as resident central Florida species. The proposed Wekiva Parkway Bridge will be constructed at a higher elevation above the river than the existing bridge (the current bridge height is approximately 15 feet above Normal High Water Elevation, versus a proposed bridge height of 55 NGVD). The proposed elevation of the bridge deck is located approximately 12 feet below the current top of the canopy. It is anticipated that there will be no adverse effects associated with the chosen elevation. The following discussion provides historic migratory species flight information as well as conversations with the relevant regulatory staff. Information provided in this memorandum serves to support the assumption of no adverse impact to flight and/or migratory pathways of migratory or resident species.

A list of the species of birds that may be impacted by the new bridge was developed through the use of the U.S. Fish and Wildlife Service (USFWS) data including species that utilize the Atlantic fly-way, birds listed as "priority" species by the Audubon Society, the known range/migratory pattern of these species, the preferred habitats of these species and the species identified during the PD&E Study. Representative species include raptors that winter in Florida such as bald eagles, snail kites, kestrels, and several species of warblers that migrate through Florida in the spring and fall. Shore birds such as terns and sandpipers have been excluded from consideration since their preferred habitats are coastal beaches along the Atlantic Ocean.

In the recent years, the Department of Transportation has funded several recent wildlife movement and road-kill studies along similar highways that directly abut conservation lands. These studies have been conducted by wildlife ecologists and by extension staff from the University of Central Florida. As an example, recently completed studies along SR 40 in Marion County documented wildlife mortality within the area of the Ocala National Forest. The study area includes the SR 40 Bridge over the Ocklawaha River. This bridge is approximately 40 to 50 feet above the river level and the large part of the bridge

deck is situated within the top of the canopy. During three separate road-kill surveys, no evidence of adverse impacts to birds was observed in this area. The bridge over the Ocklawaha River is in the same major watershed, the St. Johns River, as the bridge over the Wekiva River, with similar orientation and expected occurrences of similar migratory and resident bird species. Furthermore, while the Ocklawaha River Bridge is located close to a designated Migratory Bird flyway (see attached exhibits depicting historic migratory flyways), the Wekiva River Bridge is not located in this same pathway.

A phone conversation with Andrew Phillips, regulatory point of contact with U.S. Army Corps of Engineers (USACE) for the Wekiva Parkway project, was conducted on July 11, 2013. Mr. Phillips stated that consultation with USFWS typically occurs for impacts to species listed as threatened and endangered under the Endangered Species Act (ESA). At the time of the conversation, he was unsure if there is a formal nexus for ESA migratory bird species to be evaluated for this project, but he felt that the worst case scenario would result in a May Affect, Not Likely to Adversely Affect (MANLAA) determination. If there is no documented take of migratory birds at the location of the current bridge, the USACE will not likely seek consultation (this is the current situation). Historically, bridge projects that have had to explore options to retrofit solutions are only locations where actual take of specific migratory bird species was occurring. During the conversation, Mr. Phillips also noted that most of the documented bridge projects (known to the Corps Cocoa office) that addressed any type of potential migratory bird strikes were situated in a coastal setting.

A phone conversation between Mark Easley (consultant staff member for FDOT) and Al Manville, USFWS, Arlington, Virginia was also conducted in July 11, 2013, shortly after the initial workshop for the Wekiva Parkway Bridge. Mr. Manville participates in the Avian Power Line Interaction Committee (APLIC) which develops guidelines aimed at reducing avian/power line interactions. Mr. Manville stated that a bridge structure which is lower than the surrounding canopy height is less prone to bird strikes than bridges just at/above the canopy height. Mr. Manville furthermore expressed that hanging elements from the bridge could actually result in a greater number of bird strikes. He suggested that lighting not be used on the structure. No lighting is proposed on the bridge at this time.

The USFWS' Migratory Bird Program has an office in Tallahassee that covers Florida and the Caribbean. The contact for this program is Ms. Cindy Furry. A phone conversation with Ms. Furry was conducted on July 16, 2013. Ms. Furry indicated that she will comment on projects for the USFWS if the Ecological Field Office requests her input, the nexus being involvement of federally listed species. Typically, she is called for input on existing structures that have resulted in multiple bird strikes to develop retrofit options. Ms. Furry does not recall any bridge projects in the State of Florida where she has had to historically comment related to this topic.

With the information provided above, FDOT anticipates that no adverse impacts will occur to migratory bird species as a result of current proposed Wekiva Parkway bridge elevation over the Wekiva River.

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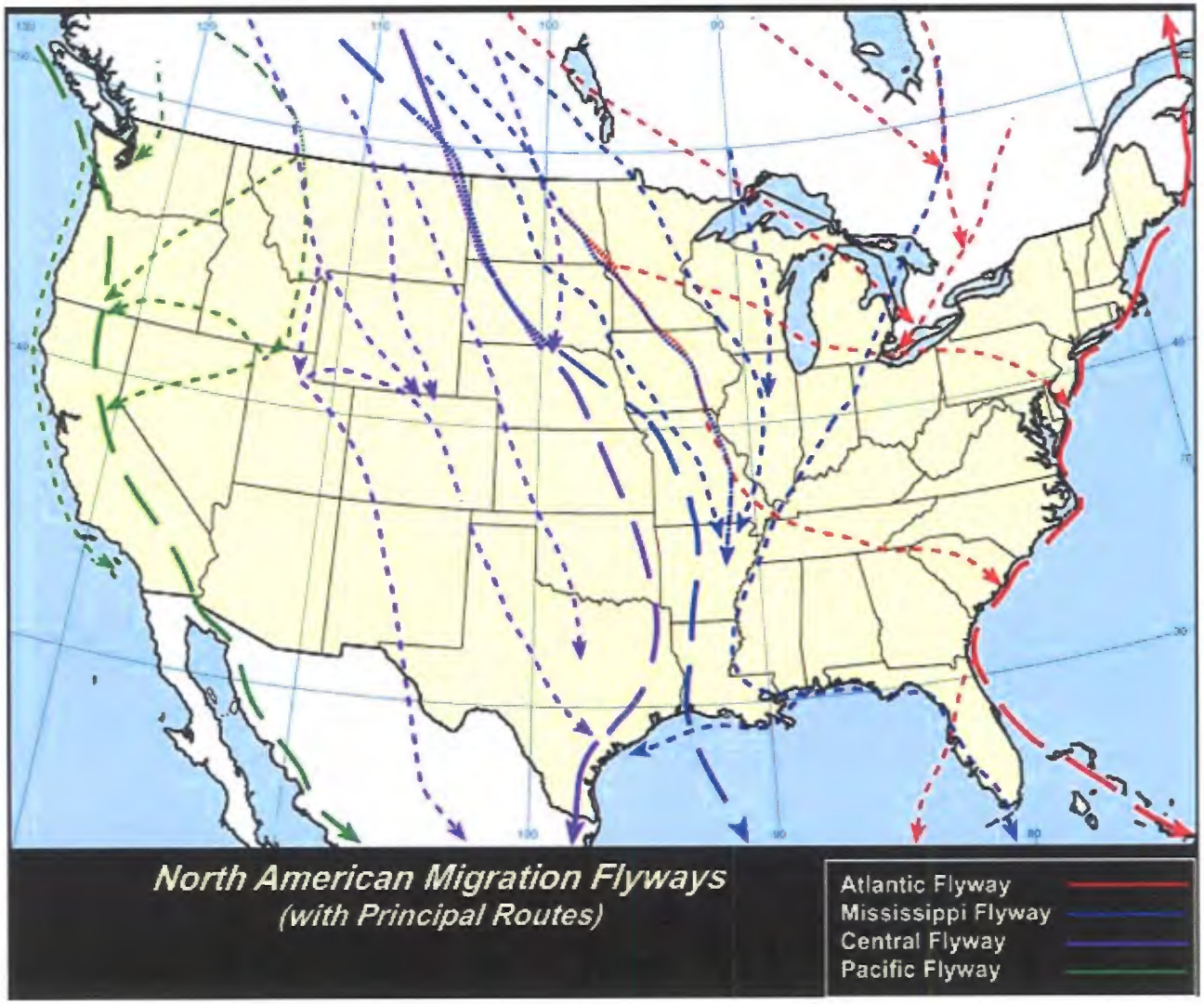


Background Source: http://www.birdnature.com/flyways.html

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# Wekiva Parkway Section 6

North American Flyways (with Principal Routes)

SCALE: N.T.S. | DATE: 7/17/2013

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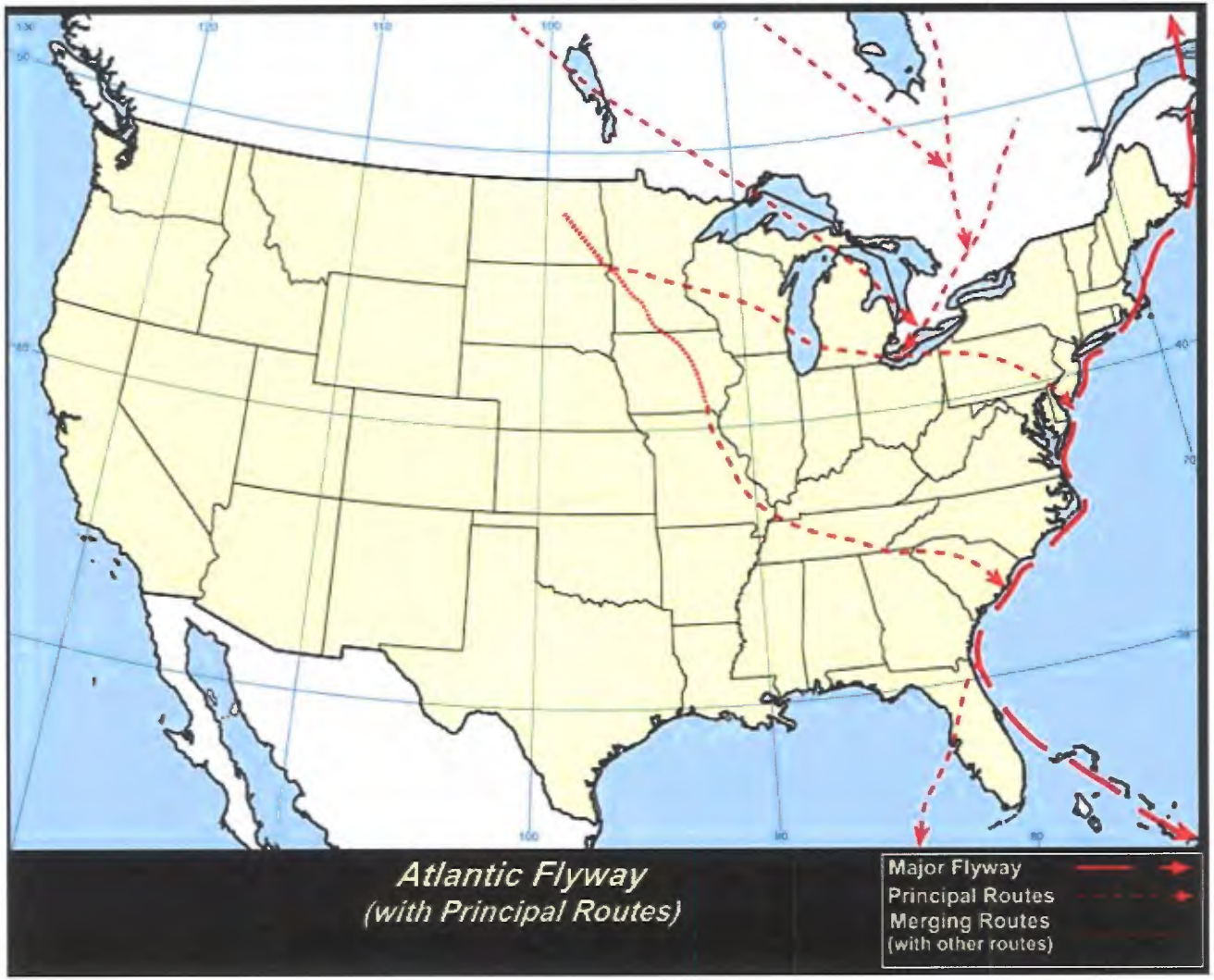


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# Wekiva Parkway Section 6

Atlantic Flyway
(with Principal Routes)

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