



The Section 4(f) Evaluation, has been updated to address comments. Please refer to Appendix E.



intentionally moved into the Vaughn Tract. The FHWA guidance on Section 4(f) states that:

"In order to demonstrate that there is no feasible and prudent alternative to the use of 4(f) land, the evaluation must address both location alternatives and design shifts [emphasis added] that totally avoid the 4(f) land. As noted before, supporting information must demonstrate that there are unique problems or unusual factors involved with the alternatives that avoid the use of 4(f) land, such as findings that these alternatives result in costs, environmental impacts or community disruption of extraordinary magnitudes. Likewise, design shifts that cannot totally avoid use but that minimize the impact, must also be employed unless they are not feasible and prudent."

Appendix D of the DEIS justifies this Section 4(f) impact through a comparison of costs and impact acreages. The comparison was made in order to demonstrate the need for impacts due to 'extraordinary magnitudes.' The DOI, however, finds the DEIS inappropriately based its comparison of costs and wetland impacts between the alignment and the entire roadway, providing exaggerated differences. We feel it is more appropriate to compare only the two alignments crossing the Little Pee Dee River.

Section 3.9 Noise

The DEIS provides a review and analysis of noise impacts for each of the considered alternatives. Assessments of decibel levels (dBA) were made for ambient dBA levels, dBA levels as a result of common activities, and approximate dBA levels for a specified distance to each alternative. However, the DEIS only considered impacts to human residents near the respective alternative corridors. No analysis and discussion was performed on potential noise impacts to resident or transient wildlife populations. Traffic related noise has been shown to significantly alter the behavior of a multitude of species throughout the country. The DOI recommends the Final Environmental Impact Study (FEIS) acknowledge the adverse impact traffic noise has on resident wildlife, explore (via literature search) and discuss potential noise impacts to wildlife populations as a result of transportation projects, and discuss ameliorating actions the SCDOT and the FHWA may take to offset these impacts. The DOI would not object to the SCDOT limiting the noise analysis to the preferred alternative if it can be demonstrated that there is no significant difference among each of the eight alternatives.

Section 3.10 Air Quality

Similar to Section 3.9, the DEIS performs an analysis, although shortened, of potential air quality impacts as a result of the project. The DEIS concludes that air quality is not likely to be impacted. This conclusion was reached, in part, on the fact that the three-county area traversed by the roadway is currently in



Text has been included in the Section 4(f) Evaluation to address the comment, refer to Appendix E.

Comment has been addressed in Chapter 3, Section 3.14.4, page 3-182.



attainment with air quality standards. Although the SCDOT is not required to evaluate air quality impacts, the DOI believes air quality is likely to be affected due to the potential economic development and increased traffic this project may create. We recommend the FEIS evaluate long term impacts to air quality on the three county-region. Again, the DOI would not object to limiting the analysis to the preferred alternative.

Section 3.16.5 Wetland Impacts

A list of wetland impact types are provided in this section, including temporary impacts along the proposed roadway. The SCDOT currently proposes to allow these temporarily cleared areas to naturally revegetate once the project is completed. The DOI is concerned with this approach as it will provide an opportunity for the establishment of non-native and invasive species. This approach appears to be in direct conflict with Executive Order (EO) 13112 (February 1999), prohibiting use of Federal funds on projects unless all reasonable measures are taken to prevent the spread of invasive species. As a result of the EO, the FHWA developed policy guidance directing consideration of invasive species in the NEPA process. The NEPA analysis should include identification of possible invasive species, potential impact of the disturbances caused by the project's construction and a discussion on preventative measures or eradication procedures should an invasion occur. A project of this magnitude will provide ample opportunities for invasive species to obtain a foothold in the roadway corridor. Therefore, the DOI recommends the SCDOT follow FHWA guidance culminating in a plan for active revegetation of all temporarily disturbed areas, including haul roads and areas where trestles, mats or barges will be used to facilitate construction (Section 16.13), to prevent infestation of invasive or non-native species. The plan should be included in the FEIS discussions for the preferred alternative.

Section 3.16.10 Indirect Impacts

The DEIS considers impacts due from borrow areas as indirect impacts. The DOI disagrees with this assessment and feels impacts from borrow areas must be considered as direct impacts. Unlike potential land development that may be associated with new road construction, borrow pits will be created specifically for the road project. Their creation and use is essential for the construction of the project, similar to hauls roads, trestles, and temporary clearing, all of which are considered as direct impact in the DEIS. Wetland loss that may result from the creation of a borrow area must therefore be considered as direct impacts and accordingly included in the mitigation plan for I-73.

Section 3.18.7 Watershed impacts

The DEIS assumes no impacts during operation and maintenance of the roadway through use of Best Management Practices (BMPs) to control runoff into the regional watershed. The U.S. Fish and Wildlife Service (USFWS) finds this determination unacceptable as BMPs are often incorrectly installed and poorly maintained due to budget constraints, manpower, or by the mere expense of the



Currently, no air quality models exist to quantify potential future impacts of the project. Additional text has been added to Chapter 3, Air Quality (Section 3.9.3, page 3-124) that qualitatively addresses long term impacts.

Please refer to new section added in Chapter 3 that addresses invasive species (Section 3.13, page 3-168).

As noted in Chapter 3, Section 3.12.8, page 3-156, potential impacts from borrow areas have been considered as direct impacts.



State's road system. The DOI has noted numerous occasions where sediment and erosion control measures have either failed or were not properly maintained allowing untreated runoff to enter adjacent lands. In addition, direct introduction of herbicides into streams through overspray has been witnessed in parts of South Carolina. Therefore, we feel that the FEIS must address the potential water quality impacts to watersheds within the project area.

Section 3.18.9 Minimize Runoff

This section briefly addresses methods to control runoff pollution from the roadway via the use of grassy swales, sediment ponds or other BMPs. Treatment of runoff from bridges focused on the feasibility of using a closed drainage system to prevent pollutants from entering streams directly. This section concluded that a closed system would not be utilized. The DEIS assumed flat bridges, or those having low points, would be built across waterways which do not lend themselves to closed drainage systems, particularly in consideration of their complex designs constraints, cost, and maintenance. Further justification was given through the statement that pollutant loading from bridges is a small fraction compared to that of the entire roadway.

The DOI does not agree that all bridges associated with this project must be flat or contain low points. The DOI believes a number of the bridges for this project can be designed with an arch or on an incline provided the surrounding landscape is suitable, particularly during these early stages of project development. Arched or inclined bridges would allow for sheet flow back onto approaches where grassed shoulders or sediment ponds may provide surface treatment, minimizing the need for a totally enclosed drainage system. Costs associated with the design and construction of appropriate systems would be a fraction of the total cost of the roadway.

We feel that a comparison of the pollutant loading between the bridges and roadway is immaterial as the entire roadway will not empty into streams alone. Further, the DEIS does not consider impacts of long term pollutant loading and its detriment to streams. We recommend that the FEIS address potential pollutant and nutrient loading due to bridge runoff for the preferred alternative. It is imperative to review and analyze impacts to ecologically important areas such as the proposed crossing of the Little Pee Dee River at SC-917 which is adjacent to protected Wildlife Management Areas.

Section 3.20 Federally Protected Species

During the development stages of this project, the ACT determined that certain resources were to be afforded heightened protection to avoid impacts from the roadway's construction. These resources were designated as constraints. This designation precluded any of the potential road alternatives from directly impacting known threatened and endangered species locations. However, the FEIS should address potential indirect impacts through loss of feeding, foraging,



Please refer to Chapter 3, Section 3.12.13, pages 3-162 through 3-164 that discusses the applicable BMPs that have been implemented and determined to be successful.

Text concerning the use of a closed system was removed from the FEIS and will be evaluated during the final design of the Preferred Alternative.

Comment noted. The design of bridges will be completed during final engineering. It has not yet been determined if flat-slab bridges or inclined bridges will be used.

Please refer to Chapter 3, Section 3.17.6.1, page 3-220 and Section 3.17.6.3, page 3-224 for potential pollutant and nutrient loading associated with the Preferred Alternative.



or roosting areas for both resident and transient threatened and endangered species.

For clarification, the first information inset box should be rewritten to separate the definitions of threatened and endangered species. While the USFWS correspondence ubiquitously refers to both groups simultaneously, there remains a distinct quality between the two categories. Threatened plant and animal species are those that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range. The endangered category is reserved for those species at risk of becoming extinct throughout all or a significant portion of their range.

3.22.1 Indirect and Cumulative Impacts

The DOI is pleased to see that the DEIS recognizes the population of black bears inhabiting the study area; however, we anticipate an increase in vehicle/bear collisions as a result of this project and its connection with SC-22. The DOI recommends the FEIS expand on this discussion and include measures designed to significantly reduce bear mortality. Such measures should include incorporation of appropriately sized wildlife crossings in the new roadway, upgrading existing structures, and retrofitting SC-22 with additional wildlife crossings.

In the past several years, the DOI has become aware of the dramatic increase of the number of cell towers constructed in South Carolina and their deleterious impact upon migratory birds. Impact mortality is particularly severe along migratory flyways. The DEIS, however, avoids addressing the potential for impacts by stating that the height of cell towers cannot be predicted. We disagree with this conclusion as the Federal Communication Commission (FCC) maintains ample data on permitted cell towers. The FCC data will contain, at a minimum, cell tower location and heights. A review of this data and comparison to past cell tower construction efforts along major highways would provide valuable insight to potential cell tower placement along the proposed I-73 route. The DOI recommends that the SCDOT and the FHWA utilize available FCC information to address potential impacts that cell towers and their supporting guy wires may have on migratory birds.

The DOI believes that this section must consider potential impacts as a result of the northern phase of I-73. Clearly recognized in the DEIS, NEPA defines cumulative impacts to include past, present and reasonably foreseeable future actions (40 CFR §1508.8). The northern phase of I-73, to be reviewed under a separate NEPA document, is clearly a reasonably foreseeable future action associated with the southern phase of I-73. Preliminary alternatives for the northern phase of I-73, from I-95 to the North Carolina State line, have already been developed and are currently under review by the ACT. Estimates of habitat loss and other impacts have been generated using the Corridor Analysis Tool, which provides a glimpse of the total effects I-73 will cause in South Carolina.



Text has been added to Chapter 3, Section 3.15.6, pages 3-202 through 3-204, concerning potential indirect impacts on threatened and endangered species.

Call out box has been revised as noted (refer to Chapter 3, Section 3.15.1, page 3-189).

Chapter 3, Section 3.14.7, page 3-186 through 3-188, has been updated to include additional text regarding black bears. At the time of the FEIS, no decision had been made concerning the use of wildlife crossings.

Please refer to Chapter 3, Section 3.15.6 on pages 3-202 through 3-204, for an additional discussion pertaining to cell towers.

The I-73 North Project has been added throughout Chapter 3 to accurately represent potential cumulative impacts.



The FEIS must expand its review of cumulative impacts for the preferred alternative to include a discussion on impacts resulting from the northern phase of I-73.

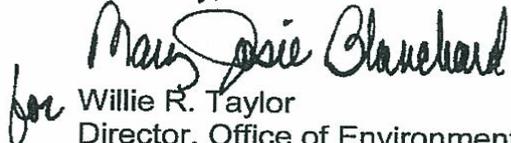
3.16.12 Mitigation

The DEIS provides a discussion on the Conceptual Mitigation Plan to compensate for habitat loss due to the proposed project. Specific measures cannot be identified at this juncture since an accurate accounting of resource impacts will not be available until the I-73 roadway design is finalized. However, the Conceptual Mitigation Plan has appropriately focused on potential restoration and preservation opportunities within the project area.

The DOI appreciates the opportunity to provide input at this stage of the NEPA process. As mentioned above, the DOI believes the FEIS should direct the majority of its review and analysis upon the preferred alternative. Impacts to wetland resources, wildlife habitat and behavior, mitigation, and watershed protection must be thoroughly analyzed in the FEIS. If you have any questions on this matter or require additional documentation, please contact Mr. Mark Caldwell, USFWS, of the Charleston Ecological Services Field Office at 843-727-4707,

We appreciate the opportunity to review this important project, and apologize for the lateness of these comments.

Sincerely,


for Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc:
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Comment noted. This discussion has been expanded to address the I-73 North Project.



Dear Sirs,

Thank you for the opportunity to comment on the draft EIS for the proposed I-73 project in SC. I will try to be brief in my comments. As a biologist having worked primarily with natural resources in the north coastal plain of SC I am particularly interested with impacts to plant, fish and animal species as well as their associated habitats. Chapter 3.20 of the DEIS addresses threatened and endangered species that may occur in the project area. There are some discrepancies worth noting; in Horry County there are two known red-cockaded woodpecker (*Picoides borealis*) groups that nest in Pond Pine in pocosin/bay type habitat in Lewis Ocean Bay (a similar group is known on Hobcaw Barony in Georgetown County.) This habitat-type differs markedly from the characterization of suitable habitat in the DEIS, yet fits well with the DEIS statement “The majority of the pine stands in the project study area have dense undergrowth present...” (3-196.) From my own field knowledge of this species’ habits, the statement that “no red-cockaded nest cavities or woodpeckers were observed during the preliminary site visits” is hardly conclusive to the absence of the birds from the project study area.

More troubling points are found in the section regarding shortnose sturgeon (*Acipenser brevirostrum*.) The document states “suitable habitat was identified for the shortnose sturgeon” (3-198) and “spawning migrations occur from January through March” (3-198.) The document then states that “SCDOT has agreed to implement a seasonal moratorium for all in water work between Feb. 1 and April 30.” (3-199) The statements that “filling wetlands...would result in a direct loss of potentially suitable nursery habitat” then “the project may affect, but is not likely to adversely affect, the shortnose sturgeon” seem to be contradictory, and of special concern when applied to a federally endangered species.

The document states that USFWS lists American chaffseed (*Schwalbea americana*) as “possible” in Horry County. SCDNR historical records show the plant as having been found in the county, though it is doubtful than anyone has undertaken to search for it in more recent times. Another troubling point is found in the SCDNR list of rare, threatened or endangered species (3-202,203) that excludes species such as swallow-tailed kite (*Elanoides forficatus*) (state endangered according to www.dnr.sc.gov/wcp/pdf/Swallowtailedkite.pdf) which is known to occur in the Pee Dee basin. It is also notable that many birds listed as species of concern in SC (by USFWS and/or SCDNR) are not considered in the DEIS, nor is any mention made of impacts to state threatened turtle species that may occur in the project study area (spotted turtle (*Clemmys guttata*) has been observed in Lake Swamp.)

I stated I would try to be brief in my comments, although there are several other issues that could use additional attention (especially impacts of the project on water quality, both short- and long-term.) Much of the landscape within the project study area remains relatively unexplored from a natural resources and water quality standpoint. I would recommend that a thorough on the ground assessment be completed ASAP so as to be used for preparation of the Final EIS.

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Comment noted.

The Preferred Alternative has minimized potential impacts to wetlands and streams. Although potentially suitable nursery habitat maybe lost due to filling of wetlands, it was determined not to have an overall adverse affect on the shortnose sturgeon population.

A section was included in the DEIS, as well as the FEIS, to address State Species of Concern within the project study area (refer to Chapter 3, Section 3.15.7, page 3-204).

Field investigations were completed within a 600-foot wide corridor of the Preferred Alternative.



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Re: I-73 Southern Project Draft EIS; No. 20060245

Dear Mr. Metts and Mr. Tyndall,

The Southern Environmental Law Center ("SELC"), on behalf of the Coastal Conservation League, submits these comments concerning Draft Environmental Impact Statement ("DEIS") approved by your agencies May 30, 2006 for the portion of proposed Interstate 73 in coastal South Carolina from Interstate 95 to the Myrtle Beach area. These comments are intended to supplement the previous comment letters submitted by SELC on this project on March 19, 2004, September 15, 2004, May 5, 2005, August 8, 2005 and January 31, 2006, which are incorporated by reference.

We applaud the efforts of South Carolina Department of Transportation (SCDOT) to pursue this EIS with a greater level of agency and public participation than for past projects, by engaging the various federal and state agencies in the Agency Coordination Team process and providing numerous opportunities for public input. We also commend the SCDOT for defining a reasonable study area and focusing on alternatives that make use of SC 22 as the final leg of the I-73 project in Horry County. Such an approach makes sense from both an environmental and economic perspective, especially given that construction funds have not yet been secured for this approximately two billion dollar project.

We also appreciate the thoroughness of the data collection effort regarding economic, community and environmental impacts reflected in the DEIS and supporting memoranda. Based on this extensive information collection effort, the DEIS fails,

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