From:	Mike Murray
То:	Sandra Hamilton
Cc:	Doug Wetmore; Fox, Lori
Subject:	Re: CAHA chapter 4
Date:	10/21/2010 09:59 AM
Attachments:	DRAFT Discussion of Impact level for visitor experience for ORV users.docx

#### Sandy,

I concur with your analysis. The likely impacts of Alternative F to ORV users is much more similar to that of Alternative F than it is to Alternative C, especially during the breeding season, which is when ORV use is most limited (i.e., impacts to ORV users is the greatest) under any of the action alternatives. The fact that under E and F that some of the preferred locations (such as Cape Point and South Point) would/could be open to ORVs during portions of the breeding season, compared to C in which those areas are guaranteed closed to ORVs for six months every year, is far more important to ORV users than the appearance that C offers more ORV access miles than F during the 6-month off-season. In other words, F offers the possibility of ORV access to some key areas when it is most wanted and needed, while C offers more access miles when it is least wanted or needed.

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Sandra Hamilton/DENVER/NPS	То	"Fox, Lori" <ifox@louisberger.com></ifox@louisberger.com>
10/20/2010 07:07 PM	CC	Doug Wetmore/DENVER/NPS@NPS, Mike Murray/CAHA/NPS@NPS
10/20/2010 07:07 110	Subject	Re: CAHA chapter 4

Hi Lori,

I took another look at this after our discussion with Nancy. I also talked to Mike to clarify my understanding of closures under the SMAs and the alt F prenesting closures and to ask for his input on the impacts of alt F compared to alt E and alt C. After considering a multitude of factors, including the patterns of ORV ramp use from the RTI ramp counts (date and location), and the likely practical result on the ground of alt F, overall it appears to us that the impacts of Alt F to ORV drivers will be more similar to alt E than to alt C. We think the

impacts of alt F continues to be appropriately described as moderate, according to the thresholds established for visitor use and experience. This is so despite beach mileage designated for seasonal ORV/VFA and YR VFA being greater for alt F than for alt E or C. There are sufficient miles of beach designated as YR or seasonal ORV routes under all the alts, including alt F, that miles of beach under alt F compared to the other alternatives is not a substantial limiting factor in the ability of ORV drivers to access an activity on the beach, as discussed in the attached.

I'll be in the rest of the day. Please give me a call so we can discuss and move on. Thanks.

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DRAFT Discussion of Impact level for visitor experience for ORV users.docx

Sandy

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> "Fox, Lori" <Ifox@louisberger.com> CC <Sandra\_Hamilton@nps.gov> CC <Doug\_Wetmore@nps.gov> 10/20/2010 11:52 AM Subject CAHA chapter 4

Hi Sandy,

Now that we have chapter 3 off to Juanita, is there anything I can do to assist you with chapter 4? I think the big issue remaining is the impact finding for visitor use. If there is anything please let me know.

Lori

Lori Fox Deputy Director, Denver Operations/Senior Planner

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DRAFT Discussion of Impact level for visitor experience for ORV users - Alt F

At three of the popular ORV areas (BI spit, Cape Point, and South Ocracoke). in particular, alt F provides a better likelihood of accessibility for ORV use during the breeding season and the shoulder season than alt C, as discussed here. We assume that the prenesting closures under alt F would be similar to those now used under alt B. The prenesting closures (SMAs) in alts C, D, and E would pretty much be the SMAs, which are larger than the prenesting closures now being used under alt B, and the prenesting closures likely to be used under alt F. The alt F and B prenesting closures would provide more space between the closure and the ORV corridor than the SMAs would, increasing the likelihood that the corridor may remain accessible longer before being closed by buffers and may have fewer buffer expansions into the corridor. Additionally the breeding and unfledged chick buffers for CWB under alt F are 200 meters versus the 300 meters under alts C, D, and E. Alt F also provides (Table 10-1 edits) that, between ramp 44 and Cape Point, maintaining ORV access may be considered as a factor when choosing among biologically equal relocation sites for turtle nests, if the nest cannot be relocated directly behind the site where it was laid (though ORV access cannot be considered in determining if a nest needs to be relocated). Also, an existing route behind the dunes at "the narrows" between ramp 44 and Cape Point has been included as an ORV route in alt F (and A/B) which will help ORV reach Cape Point when the beach narrows or if there is a turtle nest on the adjacent beach. These mitigations provide more opportunity under alt F for ORVs to use an ORV route, where one is designated during the breeding season. One of the key factors included in Table 60 explaining the moderate to major adverse impact of alt C is that no ORV corridors would be provided in the SMAs, resulting in greater impacts to ORV users. Alt F has these corridors at Cape Point and South Ocracoke. Using the park's data, now included in the FEIS on number of days popular sites were closed to ORV driving 2007 - 2010, and the provisions of alts C, E and F, I roughly estimated the number of days during the March 15 - October 14 that BI spit, Cape Point and Ocracoke would likely be closed as follows:

BI spit -- alt C 215; alt E 165 ; alt F 185 Cape Point -- alt C 215; alt E 165; alt F 150 South Ocracoke - alt C 215; alt E 165; alt F 150

The alt F carrying capacity allows more vehicles per mile than alt C or E on Ocracoke Island (260/mi for alt F vs 175/mi for alt C and E); the same as C and fewer than E at Cape Point (260/mi for alt C and alt F vs 400/mi for alt E); and the same as alts C and E in the rest of the park. For the life of the plan neither carrying capacity nor the parking requirements under any alternative is likely to be a limiting factor for where ORV go, except possibly on a couple holiday week-ends at popular sites.

Alt F provides more hours for night driving than alts C or D but fewer than alt E. Alt F is open to ORV 2 hours less than alts B/E, but 2 hours more than alts C/D. However, alts C and D have zero possibility of reopening for night driving before Nov. 15, whereas Alt E would open selected areas with no or a low density of nests on Sept 16, and alt F would reopen areas with no nests on Sept 16, thus alts E and F have more potential for additional days open for night driving

In mileage calculations, roughly Alt F is about mid-way between alts C/E and alt D for miles of YR VFA; about the same as alts C.D,E for miles of YR ORV; and about midway between alts C/E and alt D for seasonal ORV route/VFA. But the likelihood of ORV routes (seasonal or YR) to be open at the spits and points is similar for alt F and alt E, except that alt F closes Hatteras Inlet year round, and alt E only closes it seasonally. However, in this particular park the number of miles designated is a less important factor, in projecting impact on the ORV users' experience than is the mix of locations and other management elements that would affect ORV access on designated routes.

In its management of village closures, Alt F is very similar to alt E. Alt F and Alt E both provide seasonal ORV closures for 7 months (April 1 to Oct 31) and 2 areas closed YR (alt E Frisco and Hatteras; alt F Buxton and Rodanthe north of the pier).

Looking at the thresholds, it seems to me that both alts E and F fit best in the description of the moderate threshold because they would change "some," instead of " many", critical characteristics of the ORV visitor experience, if you assume the critical characteristics correlate to the activities that the 2010 visitor intercept survey and the 2002 visitor survey determined were most often engaged in by visitors. Ocean beach would be readily available in all seasons for ORV travel to accommodate access to the most often engaged in activities (swimming, sunbathing, or enjoying the beach, (99.4%) and birdwatching/wildlife viewing (70.7%). Even those activities that tend to be more site specific, such as beach fishing (37%), alt F would have designated YR ORV routes to Cape Point, and South Beach, and a season ORV route to Bodie Island Spit . Unlike alt C and D, where seasonal or year-round VFAs would be created at the points and spits, with no opportunity to switch location within the park, alts E and F do provide the opportunity. Additionally, the moderate threshold describes that the number of visitors participating in an activity would be altered. Based on the 2010 intercept survey the number of visitors engaging in ORV driving would likely be altered, but not substantially.

At three of the popular ORV areas (BI spit, Cape Point, and South Ocracoke). in particular, alt F provides a better likelihood of accessibility for ORV use during the breeding season and the shoulder season than alt C, as discussed here. We assume that the prenesting closures under alt F would be similar to those now used under alt B. The prenesting closures (SMAs) in alts C, D, and E would pretty much be the SMAs, which are larger than the prenesting closures now being used under alt B, and the prenesting closures likely to be used under alt F. The alt F and B prenesting closures would provide more space between the closure and the ORV corridor than the SMAs would, increasing the likelihood that the corridor may remain accessible longer before being closed by buffers and may have fewer buffer expansions into the corridor. Additionally the breeding and unfledged chick buffers for CWB under alt F are 200 meters versus the 300 meters under alts C, D, and E. Alt F also provides (Table 10-1 edits) that, between ramp 44 and Cape Point, maintaining ORV access may be considered as a factor when choosing among biologically equal relocation sites for turtle nests, if the nest cannot be relocated directly behind the site where it was laid (though ORV access cannot be considered in determining if a nest needs to be relocated). Also, an existing route behind the dunes at "the narrows" between ramp 44 and Cape Point has been included as an ORV route in alt F (and A/B) which will help ORV reach Cape Point when the beach narrows or if there is a turtle nest on the adjacent beach. These mitigations provide more opportunity under alt F for ORVs to use an ORV route, where one is designated during the breeding season. One of the key factors included in Table 60 explaining the moderate to major adverse impact of alt C is that no ORV corridors would be provided in the SMAs, resulting in greater impacts to ORV users. Alt F has these corridors at Cape Point and South Ocracoke. Using the park's data, now included in the FEIS on number of days popular sites were closed to ORV driving 2007 - 2010, and the provisions of alts C, E and F, I roughly estimated the number of days during the March 15 - October 14 that BI spit, Cape Point and Ocracoke would likely be closed as follows:

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