| From: | Mike Murray |
| :--- | :--- |
| To: | Timothy Pinion |
| Cc: | Britta Muiznieks; Sandra Hamilton; Doug Wetmore |
| Subject: | Fw: CWB DFCs and nest counts |
| Date: | $10 / 07 / 2010$ 08:45 AM |
| Importance: | High |
| Attachments: | 20100922 email Allen to Muiznieks-RE_CWB nest totals.pdf. |
|  | CWB DFCs.rev100610.docx |

## Tim,

See messages below and the attached document. As you will recall, our intent in revising the DFCs for colonial waterbirds that were in the DEIS was to be responsive to comments/concerns that the DFCs were based on historically low 2007-2008 nest counts and therefore the DFCs were much of a target for improvement. Britta and I are now inclined to revise the most recent version of DFCs for CWB (that you developed based on the NCWRC goal of re-establishing populations to the 19771983 levels) primarily because the resulting DFC for common terns (COTE) seems unrealistic, considering the current nesting numbers (2004-2007) for COTE in NC. Our thinking is that if we base our long-term targets on a broader data set for nesting at the Seashore (i.e., the "long-term average" nest counts for the period 1977-2004), rather than on the "recent average" for 2007-2008, it would be responsive to the concerns expressed, while providing short- and long-term target numbers for all species that are reasonably "ambitious" and, particularly in the case of common terns, more realistic. The reality is that whatever DFC we use, the target numbers are a SWAG at best, but useful as an indicator to evaluate progress.

## We are pressed for time to decide on this and incorporate any changes into the draft FEIS. We would appreciate your review and input of the attached revised DFCs for CWB. Do you have any suggestions for improvement (e..g, other references or rationale to cite, etc.) or concerns?

Please "Reply to All' with your response.
Thanks,

Mike Murray
Superintendent
Cape Hatteras NS/ Wright Brothers NMem/ Ft. Raleigh NHS
(w) 252-473-2111, ext. 148
(c) 252-216-5520
fax 252-473-2595
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----- Forwarded by Mike Murray/CAHA/NPS on 10/07/2010 09:27 AM -----

| Mike <br> Murray/ CAHA/ NPS | To | Sandra Hamilton/DENVER/NPS |
| :--- | ---: | :--- |
|  | cc | Doug Wetmore/DENVER/NPS@NPS |
| $10 / 06 / 201004: 57 ~ P M ~$ | Subject | CWB DFCs and nest counts |

Sandy,
As background, see message below.

> I'll make edits in 2nd draft of Chapter 1 to revise DFCs for CWB as described in the file below. I do not intend to include the "calculations" piece in Chapter 1 unless you think it should be included, but attach it now as background for how the numbers were derived. I believe this approach is responsive to the SELC comments that the DEIS CWB DFCs were based on historical low nest totals from 2007-2008. I'm not sure if the revised DFCs will mean we need to revise the response to that particular comment (I don't remember how specific we were in saying it would be revised: did we say it would be revised, in general, based on longer term data, or did we say it would be revised in a specific way with specific new target numbers?), so someone should check it to see if the response needs to be revised or not.

Also, see Britta's comment about the 2010 CWB nest counts, which may be an underestimation per David Allen's email (attached). Would someone at EQD or LB decide where this should be mentioned in the FEIS. My thought would be to include it once as a footnote for Table 30 on page 255, then cite and add David's email as a reference; then not add the explanation anywhere/everywhere the else that the 2010 counts are mentioned in text. I don't fully understand all the procedural requirements of editing, citing references, etc. so someone besides me should decide how to handle it.

Will send Chapter 1 comments, with revised CWB DFCs, soon.
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----- Forwarded by Mike Murray/CAHA/NPS on 10/06/2010 04:43 PM -----

## Britta <br> Muiznieks/ CAHA/ NPS

10/06/2010 03:53 PM

Let's go with this version.
FYI. I'm not sure if you ever saw David Allen's response on how to handle chicks
when conducting nest counts. If you only use the nests from our counts and ignore the chicks, we know it is an underestimate of the actual number of nests. It might be worth mentioning that our totals are underestimates if we are including the 2010 totals for CWBs elsewhere in the EIS.


20100922 email Allen to Muiznieks-RE CWB nest totals. pdf
Britta Muiznieks
Wildlife Biologist
Cape Hatteras National Seashore
252-995-3740-Office
252-475-8348-Cell
252-995-6998-FAX

## $\nabla$ Mike Murray/CAHA/NPS

Mike
Murray/ CAHA/ NPS

10/06/2010 03:13 PM

$$
\begin{aligned}
& \text { To Britta Muiznieks/CAHA/NPS@NPS } \\
& \text { cc } \\
& \text { Subject try again }
\end{aligned}
$$

See message below. Consider, along with this attachment.


CwB DFCs.rev100610.docx
Mike Murray
Superintendent
Cape Hatteras NS/ Wright Brothers NMem/ Ft. Raleigh NHS
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----- Forwarded by Mike Murray/CAHA/NPS on 10/06/2010 03:11 PM -----

| Mike <br> Murray/ CAHA/ NPS | To <br> cc | Britta Muiznieks/CAHA/NPS |
| :--- | ---: | :--- |
|  | cC |  |
| 10/06/2010 02:44 PM | Subject | one last try at CWB DFCs |

Britta,
In looking at the numbers, I came up with another approach for CWB DFCs that seems to provide reasonably ambitious short- and long-term targets that are more realistic (at least for COTEs) than Tim's approach. See attached.

In general, the long-term target would be the "long-term average" number of nests that occurred for the period of 1977-2004 before the recent "historic low" nest counts occurred. The short-term target would be based on the mid-point between the "recent average" for the historic low period of 2007-2010 and the "long-term average" from 1977-2004. All data used is from Table 30 in the FEIS. I think this approach would be responsive to the comments/concerns that the DEIS DFCs for CWB were based only on the recent, historically low numbers. This new approach seems a little more logical to me. Does this approach make sense (as much as any of the approaches do)? Can you live with this?
[attachment "CWB DFCs.rev100610.docx" deleted by Mike Murray/CAHA/NPS]

## Mike Murray

Superintendent
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| From: | Timothy Pinion |
| :--- | :--- |
| To: | Mike Murray |
| Cc: | Britta Muiznieks; Doug Wetmore; Sandra Hamilton |
| Subject: | Re: Fw: CWB DFCs and nest counts |
| Date: | 10/07/2010 09:06 AM |

Hi, Mike and gang.
I have taken a look at the revised DFCs for CWBs and compared them to previous versions of the targets. I have no problem with them in their revised form. I think that they are still reasonably ambitious and, hopefully, realistic.

Thanks,
--Tim
Tim Pinion
Wildlife Biologist and T \& E Coordinator
National Park Service, Southeast Region
100 Alabama St., SW. 1924 Bldg.
Atlanta, GA 30303
404-507-5815
Timothy_Pinion@nps.gov

- Mike Murray/CAHA/NPS

| Mike <br> Murray/ CAHA/ NPS |  |  |
| :--- | ---: | :--- |
|  | To | Timothy Pinion/Atlanta/NPS@NPS |
| cc | Britta Muiznieks/CAHA/NPS@NPS, Sandra <br> Hamilton/DENVER/NPS@NPS, Doug |  |
| $10 / 07 / 2010$ 10:29 AM |  | Wetmore/DENVER/NPS@NPS |

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\author{

Mike <br> Murray/ CAHA/ NPS <br> 10/06/2010 04:57 PM <br> | To | Sandra Hamilton/DENVER/NPS |
| ---: | :--- |
| cc | Doug Wetmore/DENVER/NPS@NPS |
| Subject | CWB DFCs and nest counts |

}

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## Britta <br> Muiznieks/ CAHA/ NPS

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Britta Muiznieks
Wildlife Biologist
Cape Hatteras National Seashore
252-995-3740-Office
252-475-8348-Cell
252-995-6998-FAX

Mike
Murray/ CAHA/ NPS

10/06/2010 03:13 PM
Subject try again

See message below. Consider, along with this attachment.
[attachment "CWB DFCs.rev100610.docx" deleted by Timothy Pinion/Atlanta/NPS]

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Murray/ CAHA/ NPS

10/06/2010 02:44 PM
To Britta Muiznieks/CAHA/NPS
CC
Subject one last try at CWB DFCs

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