

From: [Mike Murray](#)
To: [Britta Muiznieks](#)
Cc: [Darrell Echols](#)
Subject: Fw: Desired Future Conditions
Date: 11/06/2009 09:57 AM
Importance: High
Attachments: [Desired Future Conditions combined.10.22.09.doc](#)

Britta,

See Tim's comments about the attached version of DFCs. Can you live with his recommendations, which are:

- Target for turtle nest relocations would be <30% (*not* <20%)
- Eliminate "habitat availability" as a DFC variable for PIPL (i.e., not have a target for this)
- Are you able to translate the CWB short-term targets into numbers, e.g., based on the 2007, 2008, and/or 2009 actual numbers? Need a yes or no response. If yes, then what should the numbers be? For example, instead of saying the short-term target is: "Establish trend of increasing or stable number of nests." For the short-term target, we could say something like: "Establish trend of increasing or stable number of nests relative to the 2007-2008 (or 2007-2009?) baseline average of ____ # nests."



Desired Future Conditions combined.10.22.09.doc

Thanks!

Mike Murray
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----- Forwarded by Mike Murray/CAHA/NPS on 11/06/2009 09:41 AM -----

**Timothy
Pinion/Atlanta/NPS**

To: Sandra Hamilton/DENVER/NPS, mike_murray@nps.gov
cc

11/06/2009 09:35 AM

Subject: Re: Fw: Desired Future Conditions 

Hi, Sandy and Mike. I realize that I am a bit tardy on this response. Mike and I had a chance to talk briefly about the DFCs this week. I think that the version below is

reasonable for the reasons that Mike describes. One change that I recommend is for the number of sea turtle nests relocated. Based on a conversation with Matthew Godfrey, <30% is probably a better target in North Carolina. I have not been able to come up with a good habitat variable for PIPL. The depredation rate target for AMOY should be verified by the park (it probably already has) to make sure that it is reasonable. VA DGIF didn't have any data that could help refine this target. Finally, it might be useful to translate the CWB short-term and long-term targets into specific numbers based on 2007 and 2008 surveys.

--Tim

Tim Pinion
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▼ Sandra Hamilton/DENVER/NPS

**Sandra
Hamilton/DENVER/NPS** To Timothy Pinion/Atlanta/NPS@NPS
cc
10/30/2009 06:44 PM Subject Fw: Desired Future Conditions

Here they are (below attached to Mike's email). Thanks, Tim!

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----- Forwarded by Sandra Hamilton/DENVER/NPS on 10/30/2009 04:43 PM -----

**Mike
Murray/CAHA/NPS** To Timothy Pinion/Atlanta/NPS@NPS
cc Sandra Hamilton/DENVER/NPS@NPS,
lfox@louisberger.com, Darrell Echols/CAHA/NPS@NPS,
Thayer Broilli/CAHA/NPS@NPS, Britta
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10/22/2009 09:09 AM
Subject Desired Future Conditions

Tim,

Please review the attached, latest draft of Desired Future Conditions (DFCs), which the park considers a final draft, and offer any feedback or suggestions. As background:

- We used some of Greg Eckert's work to edit and create an introductory narrative description of what "Desired Future Conditions" are. Please edit this freely to make it make sense to you (hopefully in plain English and not in scientific jargon). If the NPS has a standard description of DFCs, I would prefer to use it since it is probably already well reviewed and tested, but I am not aware of such language.
- In principle, we think that there should be a few more DFCs for T&E species, than for non-T&E species. The only exception is for seabeach amaranth, since we appear to be in a "none present" situation.
- **Piping Plover:** We have left a place holder for a DFC on "habitat availability." Need to decide if we can come up with a practical target or not, and move forward.
- **Sea Turtles:** We eliminated "depredation rate" and "hatchling disorientation" from the sea turtle DFCs for several reasons: We felt there were too many DFCs for sea turtles compared to the number for piping plovers, so we selected the four we believed to be most significant. Compared to the impacts of predation on shorebird nesting, predation of sea turtle nests has generally been a potential, but limited actual concern here. Predator impacts of sea turtle nests will continue to be monitored, documented, and addressed, in part, through the predator control plan. Hatchling disorientation will continue to be monitored, documented and evaluated as well. For example, we have identified creating a lighting assessment tool in the Adaptive Management Initiatives section of the Species Management Strategy Table. Once we have that sort of tool, we would be better able to determine if there is a statistical correlation between hatchling disorientation incidents and proximity to particular light sources, although our ability to address some light sources may be limited. The reality is that light sources outside of the Seashore are not under our control and we may have little influence on the establishment of a light ordinance. (We have recent communications indicating less interest on the part of Dare County and the state in pursuing the light ordinance option, so that appears to be deferred for the foreseeable future.)
- **AMOY:** As discussed previously, we decided to eliminate "nest survival" as a DFC for AMOY, since the fledge rate is the ultimate indicator of success and we wanted to reduce the number of DFCs to the most meaningful indicators.

- **CWB:** We decided not to use the "% of NC goal by species" that you had fleshed out for us. Once we saw the numbers that were calculated (we appreciate your effort to do that!), it was clear that some of the potential targets (e.g., least terns) were realistic and achievable, and some were not (e.g., for common tern and gull-billed tern) given the current status of breeding activity on the Seashore. One issue that has become more clear to us about basing the CWB targets on any calculation using older data is that for both the park and state data prior to 2007, it is unclear whether consistent survey methodology (technique, timing, etc.), data compilation, and quality assurance occurred. Britta has spent countless hours reviewing the data and seems convinced that we have no way of ensuring a valid comparison of CWB data collected prior to 2007. A second issue is that when nesting numbers are low (as with COTE and GUTE), it is more difficult to stabilize and increase the nesting population to a sustainable level than it is to produce an increase when there is already a sustainable level present (as with LETE). As a result, we believe it would be an appropriate short-term DFC to have a qualitative target of achieving a positive trend of increasing or stable level of nesting activity, then use that as a starting point on which to base a long-term target of a 20% increase over the level of nesting achieved in the short-term. If you have other ideas that would provide a realistic but ambitious target, feel free to suggest something else.

Hopefully, these changes make sense to you too. If you have thoughts or suggestions on how to improve any of the above, please feel free to suggest it

[attachment "Desired Future Conditions combined.10.22.09.doc" deleted by Timothy Pinion/Atlanta/NPS]

Thanks,

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