0030323

From: Mike Murray
To: Britta Muiznieks
Cc: Thayer Broili; Laura Pickens; Darrell Echols
Subject: future documentation needed
Date: 11/23/2010 10:48 AM

Britta,

In thinking ahead to information we may need or want in future years, I'd like to come up with a simple (perhaps qualitative) way to track the evolving vegetation cover, particularly at the inlet spits and Cape Beach/South Beach, in the years after we implement the ORV management plan. The question is will (or how will) vegetation encroachment rates differ in an area with an ORV corridor (such as the east side of Cape Point) vs. in a vehicle free area (such as the west side of Cape Point. Will our designation of vehicle free areas in some of these locations result in an accelerated loss of available habitat due to increased vegetation encroachment (or, if not, will we be able to show that is not the case?). It would be good to have some sort of "before" data in the next year or so, in order that we can re-measure and compare to the current baseline in the years ahead "after" the plan is implemented.

I realize that the most quantitative method would be to establish transects to monitor vegetation at a number of different locations, then periodically re-take the transects (e.g., annually at the same time of year). The would also be the most labor intensive methodology to implement and sustain. A simpler approach, though not quantitative, might be to establish "photo and/or GPS points" at a number of different locations in the keys areas, so that we can "track" changes over time. For example, we could re-take the same photos (exact location and direction) of nesting habitat or re-take specific GPS points e.g., of the current dune or vegetation line) as a basis for comparison over time. Or perhaps, a periodic analysis of updated aerial photographs would allow vegetation mapping over time to show what changes, if any occur.

At this point, I don't have a strong opinion about how we should do this; I just know that it is something we should plan to track at a basic level (e.g., once every few years or so) in order that we can monitor changes over time. If we find that vegetation encroachment is happening more quickly in some locations but not others, it may be a prompt to encourage us to think about more active vegetation management in the areas being overtaken. I don't know all the high tech options (for example, would periodically updated aerial photos gives us a basis for mapping changes in beach or dune vegetation over time?). I don't know if any of the I&M monitoring protocols would be of use for this purpose. I don;t know if we would need to prepare a PMIS project to have a study done to develop the monitoring protocol (e.g., if we were to decide to use aerial photos to map vegetation changes over time, do we need someone to figure out the details and "design" the methodology?).

Please think about this issue, discuss it with Caty and Laura or other "tech" folks, and work toward coming up with a basic concept for how we might monitor changes in vegetation over time. I'll make myself a note to touch bases with you in January to see what you think may be an approach to pursue.

Thanks,

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