

**Kelly's notes**  
**Natural Resources Workgroup Meeting**  
**4/28/2011**

**Table of Contents discussion:**

- Refer to scrub/shrub wetlands as just shrub
- Show impacts to different vegetation types – more to break out than just tidal and non-tidal wetlands
  - Should this fit under the habitat impacts category?
- Executive summary must be very tight to hold the attention of high level reviewers. But full document should be as specific as possible so the committee can do assessment of vulnerabilities and recommendations for adaptation
- Habitat Impacts is a broad category that will overlap others in the TOC, but we are trying to keep it specific to just habitat impacts, such as habitats within protected lands
- Should we present the assessment in terms of private vs. public lands?
  - Could have a visual (pie chart) that shows proportion of impact on different types of lands
  - Where are the state wildlife areas located in the TOC?
- Should we start the TOC by covering water impacts first and then move spatially up to uplands?
  - Move the section on water resources up to the first section
  - Easier to read (more logical) for non-natural resource people to read
- Should beaches be an entire subcategory – same priority as other habitats
  - However the societal and economic impacts are too great to make it a lesser issue. Overlaps with society and economy's workgroup characterization
  - Want to also incorporate findings of the beach workgroup
  - Makes sense to highlight beaches because they are so vital to protection of property (esp. agriculture) from rising seas and are so vulnerable to it as well
- So in terms of categorical organization start with waterways – then beaches – then wetlands – then uplands
  - Set up other ways could be politically incorrect and inadvertently show a value judgment on some subjects being more important than others

- It may not make total sense to re-organize it completely geographically , because it could repeat itself, but maybe some kind of hybrid of geospatial organization and categorical
- But it doesn't hurt to have overlap – helps to drive home the point that issues are common amongst different subjects
- In terms of water resources as a category – the impacts to the ocean vs. the Del. Bay are so different that they would need to be address differently
  - But we don't have very specific information on hydrodynamic changes – would have to make broad statements about it
- Looking at categories in terms of what is vulnerable to SLR – most of the ocean beaches (Rehoboth) will be fine – but over 95% of wetlands will disappear – might need to rank them in terms of vulnerability
- Key Wildlife Habitats are included in different categories – so may not need their own subcategory
- Difference between types of lands – and how we use it.
  - Need to describe why these different categories are important to us, and why they would be vulnerable to SLR
- Add additional category – Vegetation – where it is located, the population levels of it there
  - State rare species, globally rare, and federally listed species
    - Bill McAvoy will provide DCP with data layer on this
- Need to look at differences between certain beaches – and the different implications of SLR on each. Ex. Rehoboth Beach vs. Fowlers Beach
- Will this vulnerability assessment transition to showing that some natural areas will be more vulnerable than others – example certain spartina marshes will be affected more than others
- This vulnerability assessment process will lead into identifying where the next SLR problems will be – and what we propose to fix them

DCP will work on the TOC, add in edits and send out re-draft by email to workgroup

## **Vulnerability Assessment Template**

- How detailed does the fiscal assessment need to be? A general overview – not financial specifics like operating budgets
- National Survey of Hunting Fishing and Wildlife Recreation, 2006 – gives economic value index
  - Studies activities like bird watching,
  - But would have to make an indirect link between the value of a nature preserve and the economic values it provides
- PDE has study underway by UD that looks at economic value of the Del. Estuary
  - Will have to pick and choose the studies that show economic value of each category
  - Study is complete, report should be out in May
- Can also site the Industrial Economics study of wetland economics
  - Contact Mark Biddle or Amy Jacobs
- But there the point of the economic assessment of the natural resources – is to show that there is value to it all. Not just economic \$\$\$ - can't put \$ on all of its value
- Language used to describe the value of a natural resource should be carefully worded; suggestion made to have UD review economic terms used to ensure accuracy.
- Karen Bennett will send Trish economic survey

DCP will distribute these economic studies to the group as available

- Although there may be numbers on Agriculture service values, not all the models that produce these numbers are perfect, and may not account for all the benefits
- And it's not just the economics values that are important to agriculture, but the societal values as well
- Need to take all the economic impacts of natural resources, and fold it into the societal analysis of them. Incorporate the cultural value of it to locals that use it every day. Ex. Benefits of birding at a local park, field trips to parks, educational impacts of parks & refuges. Can get numbers of visitors to parks? Number of students per year?
  - Work of getting children back into nature – value of special places to doing this
  - How do you assess value of being able to buy local food
- For the table on the worksheet – round numbers off