

**WILMAPCO Sea-Level Rise**  
Steering Committee Meeting Notes  
*May 4, 2011*

Attendees:

David Ames, University of Delaware	davames@udel.edu
Silvana Croope, DelDOT – TMC	silvanacroope@state.de.us
Tamika Graham, WILMAPCO	tgraham@wilmapco.org
John Janowski, NCC, Dept. of Land Use	jpjanowski@nccde.org
Michael Kirkpatrick, DelDOT	michael.kirkpatrick@state.de.us
Susan Love, DNREC/DCP	susan.love@state.de.us
Weifeng Mao, University of Delaware	weifengm@udel.edu
Bob Scarbrough, DNREC/DCP	bob.scarbrough@state.de.us
Peggy Schultz, League of Women Voters, NCC	schultz_peggy@yahoo.com
Bill Swiatek, WILMAPCO	bswiatek@wilmapco.org

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### **1. Introductions**

Bill Swiatek opened the meeting and attendees introduced themselves.

### **2. WILMAPCO In-kind Sheets**

As an administrative task, Mr. Swiatek distributed a handout for eligible committee members to fill out, that allows WILMAPCO to match their time spent on the committee with federal highway funds.

### **3. Review of Chapters 1 (Background) and 2 (Methods)**

Mr. Swiatek mentioned that WILMAPCO staff has been working on integrating the document edits identified at the last committee meeting. Dr. Ames pointed out that in the introductory text, subsidence should be removed as “occurring during periods of climate warming”.

Ms. Croope shared with the group a study underway by DelDOT’s TMC which will assess infrastructure failures and interdependencies relating to SLR. Mr. Swiatek stated the final document will note this upcoming study in the background chapter. Mr. Kirkpatrick inquired of the relevance of including sea-level rise (SLR) impacts on environmental justice (EJ) communities, since the study is primarily assessing roadway infrastructure. Mr. Swiatek stated that WILMAPCO has an initiative to further increase transportation investments in our EJ areas based on both local and national historic data that confirms disinvestment in these communities. He continued that in the literature review on SLR, studies found that EJ communities are more susceptible to SLR.

Dr. Ames suggested adding more details of the characteristics of the Delaware River and the Chesapeake Bay that help explain the differences of SLR impacts for each county. Ms. Schulz expressed her sustained concern over the map colors and possible difficulty in distinctions between various SLR scenarios. Mr. Swiatek explained that there will be issues with print quality depending on the type of printer used and the document will be made available online for better viewing. Dr. Ames asserted that the maps are meant to serve as general policy maps and they sufficiently serve their purpose.

During a recent conference he attended, Mr. Swiatek stated that he witnessed several presentations on SLR best practices from various jurisdictions. He noted that our study's approach aligns well with the SLR work being done except in prioritizing critical infrastructure. As a result, he drafted a Critical Roadway Infrastructure Index found in the methods chapter of the report. The committee inquired about the reasoning behind the weighed scores, and then noted several changes such as spelling out "P & E" in the index, which represents population and employment.

#### **4. Review of Chapter 3: Regional Impacts**

Mr. Swiatek guided the group through chapter 3, summarizing each of different types of transportation infrastructure that were evaluated. Mr. Scarbrough asked about the method used to determine total railroad mileage impacted, which appears to differ from the approach used by the Delaware Coastal Program (DCP) that sums the rail tracks cumulatively. Mr. Swiatek noted that this study uses the corridor mileage and he would add a brief explanation in the methods section.

Dr. Ames requested that, in addition to the percentage of inundated land, the square mileage of land be added for better context. Mr. Scarbrough inquired of the source of bus stops data used, as DNREC has a different number of bus stops. Mr. Swiatek answered that the bus stop base file is from DART; however, WILMAPCO has edited the file to include many bus stops that were missing. Mr. Janowski suggested adding the roadway maintenance numbers into the table of impacted roadways, which are found within the centerline file.

Other suggestions from the committee included making the titles of related tables and maps consistent, define "impacted" and "challenged" used in the document, and note in the methods chapter how inundated bridges are defined. Ms. Love stated that DCP is using the word "exposed" in reference to infrastructure that overlaps with SLR scenarios because it is often hard to tell if the infrastructure will indeed be "impacted".

The committee pointed out that the map of black neighborhoods does not look like neighborhoods and that the threshold for black neighborhood needs to be better defined. Mr. Swiatek stated that the map footnote states that neighborhoods are defined as the 2000 census block group boundaries and that the map shows census blocks that are two to three times higher than the regional average for blacks per census block groups. The group insisted that the map contain a more descriptive title and legend (as well as on the map of low-income neighborhoods) and to update the map using with 2005-09 data from the American Community Survey.

Ms. Croope suggested adding graphics or a diagram to the methods chapter, under the critical infrastructure section, to depict SLR secondary impacts. Mr. Kirkpatrick also said the text should better define “critical”, and state that the index is an initial step in moving towards prioritization of impacted infrastructure. Other edits from the committee included spelling out abbreviations and adding additional roadway map labels.

## **5. Review of Chapter 4: Cluster Profiles**

Mr. Swiatek turned the discussion of this chapter over to Ms. Graham. She stated that for each of the 20 identified clusters, a base map, a transportation infrastructure impact map, and an impacted planned projects map, are included. Ms. Graham guided the group through some of the cluster maps and general observations found from the analysis. Several committee members agreed that the cluster maps need a better explanatory legend, as it may be difficult for some readers to infer that the inundation scenarios refer to impacts for roads, rails, and bridges. They also suggested showing a map of the clusters again in the beginning of this chapter; include a descriptive summary of “how to read these maps”, and explain how the planned projects are selected in the maps. The text should explain that roadway surfaces may not be overtaken by SLR, but sub-surface supports may be challenged. It was asked if bridges and overpasses would be distinguished on the maps, in which the answer was no.

## **6. Review of Chapter 5: Policy Recommendations**

Mr. Swiatek stated that the final chapter primarily covers policy changes for WILMAPCO, and re-emphasizes planned project considerations. He also noted that in the future, WILMAPCO would quantitatively measure the effectiveness of incorporating climate change strategies using the Climate Change Adaption Tool for Transportation (CCATT): Mid-Atlantic. The tool was developed by Michelle Oswald, a doctoral candidate at the University of Delaware.

Ms. Croope stated she would like to see a discussion on linking planning and operations in this section. Mr. Scarborough noted that a recently added statement in the text, that a future storm surge scenario would be assessed in New Castle County, should be removed.

## **7. Path Forward**

Mr. Swiatek closed the meeting by saying WILMAPCO staff would incorporate changes to the draft document by June 9<sup>th</sup>. The final draft document will be presented to the Technical Advisory Committee (TAC) in mid-May, and then for TAC endorsement in July. A presentation will be given to our Council in May as well, followed by a request for adoption in July.