

NACWA Comments on the Draft National Climate Assessment

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Comments on the Executive Summary

Page 9, lines 5-7

In addition to "roads, buildings, ports, and energy facilities," wastewater treatment facilities should be cited as an example of infrastructure that is affected by sea level rise and storm surges. Wastewater treatment facilities are typically built in low-lying areas, to utilize gravity flow of wastewater from the collection system to the treatment works. They are also usually located near coasts or other water bodies to facilitate discharge of the effluent. This makes wastewater treatment facilities particularly vulnerable to flooding and sea level rise.

Page 9, lines 15-27

Although this list of Report Findings addresses the problems associated with climate change and not the solutions, the authors should be aware of potential solutions to the reduction in the reliability of water supplies that is described in point 7. Water reuse provides a potential solution to water shortages, whether treated wastewater is reused directly or recharged into a natural aquifer. Both of these methods are currently used in the U.S. and other countries, and are not emphasized enough in this report.

Also, the increasing sediment and contaminant concentrations after heavy downpours can be controlled through the use of green infrastructure, which is cited several times in the report as an example of actions municipalities have taken. Again, the potential of green infrastructure to improve water quality and also mitigate greenhouse gases should be emphasized more in this report.

Comments on Chapter 11, Urban Systems, Infrastructure, and Vulnerability

Chapter 11, page 6

In the box about the impacts of Hurricane Sandy, wastewater infrastructure should be used as an example of infrastructure that was damaged by the storm, with long-term effects. Even now, five months after the storm, wastewater utilities are still repairing their damaged infrastructure. More resources are needed to increase the resiliency of these systems and to repair them after a devastating natural event, such as Hurricane Sandy.

Comments on Chapter 27, Mitigation

Chapter

This chapter should include a discussion of how federal regulations that are meant to be environmentally protective can create additional greenhouse gas emissions. Wastewater utilities experience this with Clean Water Act regulations. In some locations, strict nutrient discharge requirements must be met, but the nutrient removal technology available to utilities is energy-intensive and expensive. The net environmental benefits of these requirements should be considered, along with alternate methods for reducing nutrients in water bodies.

Green infrastructure may also be an effective method for improving water quality in some locations, with the added benefits of improving greenhouse gas mitigation and community aesthetics. However, some communities have faced opposition from federal officials to reopening their consent decrees dealing with combined sewer overflows. Municipalities must have appropriate flexibility to use green infrastructure and receive appropriate credit for it in the combined sewer overflow and stormwater control programs.

Page 969, Table 27.2

In this table, the Clean Air Act Prevention of Significant Deterioration (PSD) and Title V permitting programs are listed as federal regulations that "target ways to reduce future climate change by decreasing greenhouse gas emissions emitted by human activities." However, the Title V and PSD permitting programs are not effective in reducing greenhouse gas emissions from wastewater utilities.

Wastewater utilities are performing a necessary and vital function to protect human health and the environment. The processes generating carbon dioxide in a wastewater treatment facility are the same as those that occur in nature, except that in a wastewater treatment facility they occur in an environment optimized for waste destruction. Regulating these carbon-neutral emissions that would occur naturally anyway creates unnecessary costs and burdens for wastewater utilities, diverting resources that the utility could use on other issues.

The processes used to treat wastewater at utilities also generate biogas and biosolids which, when combusted, are among the most carbon-neutral fuels available. While greenhouse gas emissions from these biogenic sources are currently deferred from the Title V and PSD permitting programs, if EPA does not permanently exempt combustion of biogas and biosolids from these regulations, the costs for utilities may be too high to use these environmentally friendly, renewable energy sources.