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Drupal.behaviors.print = function(context) {$(window).load(function() {window.print();});}>
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**WHSRN.org** (<http://www.whsrn.org>)

## Climate Change Tool

Source (retrieved on 08/20/2013 - 1:45pm): <http://www.whsrn.org/tools/climate-change-tool>

# Climate Change Vulnerability Assessment for Shorebird Habitat (CC-VASH)

CC-VASH User's Guide <sup>[1]</sup> (740 KB, PDF file)

CC-VASH <sup>[2]</sup> (420 KB Excel [.xls],  
Piloted version)

or, CC-VASH <sup>[3]</sup> (200 KB Excel 2007 [.xlsm],  
Piloted version)

### Overview

The **Climate Change Vulnerability Assessment for Shorebird Habitat** (CC-VASH) is an innovative, Excel-based assessment and decision-making tool that was developed during 2009/2010 by the Manomet Center for Conservation Sciences's Shorebird Recovery Project <sup>[4]</sup> in partnership with the United States Fish and Wildlife Service (USFWS <sup>[5]</sup>) Northeast Region's Division of Refuges. This partnership, funded in large part by the generosity of individual Manomet donors concerned about climate change impacts on shorebirds, enabled Refuge Biologist Dorie Stolley to develop and pilot the tool during a one-year assignment to Manomet.

National wildlife refuges comprise approximately half of the more than 80 WHSRN sites to date, therefore partnering with USFWS was a natural choice. While valuable input from refuge managers and biologists helped to shape and strengthen the tool, it is designed to be applicable to any coastal site containing shorebird habitat - not just refuges.

The CC-VASH guides participants through a series of worksheets and exercises that enable them to assess the vulnerability of coastal shorebird habitats to climate change, using three categories:

1. Effects of sea-level rise;
2. Effects of other climate-change variables, such as predicted changes in temperature



Dorie Stolley facilitates the climate change vulnerability assessment with refuge staff and other partners at E.B. Forsythe National Wildlife Refuge in New Jersey, USA. / Bill Butcher, USFWS

and precipitation; and,

### 3. Effects of increased frequency and intensity of storms.

Once the vulnerability is measured, the assessment outlines explicit strategies and adaptation options, and evaluates each option's chances for success.

The CC-VASH marks an important step towards more strategic conservation of vulnerable coastal sites that are critical for breeding, migrating, and wintering shorebirds. Modeled after the [WHSRN Site Assessment Tool](#) <sup>[6]</sup>, the CC-VASH gives WHSRN site partners a tangible base upon which to address climate change issues in their management plans and other strategic planning efforts.

#### Our Pilot Sites

With enthusiastic support and participation, refuge staff and partners at three WHSRN sites along the U.S. Atlantic coast successfully piloted the CC-VASH in a series of on-site workshops led by Dorie Stolley in 2010. While participants knew their site's coastal habitats and shorebird species were vulnerable, they hadn't had any systematic way before of assessing or prioritizing habitats and strategies for climate-change adaptation actions.



American Oystercatcher (*Haematopus palliatus*) / © Shiloh Schulte

Guided by their site's vulnerability assessment results, these partners are now more strategically considering climate change impacts as they plan for the continued protection of Federally threatened Piping Plover nests at [Chincoteague National Wildlife Refuge](#) <sup>[7]</sup> (NWR) in Virginia; valuable acres of habitat for Red Knots at [Monomoy NWR](#) <sup>[8]</sup> in Massachusetts; and prime nesting habitat for American Oystercatchers at [Edwin B. Forsythe NWR](#) <sup>[9]</sup> in New Jersey.

#### Additional Resources

A video of Dorie Stolley presenting an overview of the CC-VASH can be viewed [here](#) <sup>[10]</sup>.

[CC-VASH User's Guide](#) <sup>[1]</sup> (740 KB, PDF file)

[CC-VASH](#) <sup>[2]</sup> (420 KB Excel [.xls], Piloted version)  
or, [CC-VASH](#) <sup>[3]</sup> (200 KB Excel 2007 [.xslm], Piloted version)

For more information, please contact the [WHSRN Executive Office](#) <sup>[11]</sup>.

#### Links from this page:

[1]

[http://www.whsrn.org/sites/default/files/file/Climate\\_Change\\_Vulnerability\\_Assessment\\_Instructions\\_10\\_07-03.pdf](http://www.whsrn.org/sites/default/files/file/Climate_Change_Vulnerability_Assessment_Instructions_10_07-03.pdf)

- [2] [http://www.whsrn.org/sites/default/files/file/Climate\\_Change\\_Vulnerability\\_Assessment\\_10\\_07-03\\_XLS.xls](http://www.whsrn.org/sites/default/files/file/Climate_Change_Vulnerability_Assessment_10_07-03_XLS.xls)
- [3] [http://www.whsrn.org/sites/default/files/file/Climate\\_Change\\_Vulnerability\\_Assessment\\_10\\_07-03\\_XLSM.xlsm](http://www.whsrn.org/sites/default/files/file/Climate_Change_Vulnerability_Assessment_10_07-03_XLSM.xlsm)
- [4] <http://www.manomet.org/srp>
- [5] <http://www.fws.gov>
- [6] <http://www.whsrn.org/tools>
- [7] <http://chinco.fws.gov>
- [8] <http://monomoy.fws.gov>
- [9] <http://www.fws.gov/northeast/forsythe>
- [10] <http://vimeo.com/27811334>
- [11] <mailto:info@whsrn.org?subject=Climate%20Change%20assessment%20tool%20>