Climate Change Impacts and Adaptation
Webinar Series

The Air and Waste Management Association (A&WMA; www.awma.org) is holding a four-part series of webinars to discuss climate change impact assessments and adaptation strategies (https://www.awma.org/climatechangewebinar). The ODU School of Community and Environmental Health will host a webinar viewing site for this series. Each webinar will focus on a new impact area with a moderator and two speakers. The moderator will introduce the speakers and provide context in relation to the other topics covered in the series. The first speaker will present how to assess the climate change impact or risk for your area, and the second speaker will discuss what to consider in an adaptation plan or what can be done to reduce the risk.

This webinar series is free to all interested parties.

**Dates & Times**

The table below gives the topics and the general schedule of the webinar series:

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<thead>
<tr>
<th>Topic</th>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>Storm intensity duration</td>
<td>Wednesday, 8/16</td>
<td>1:00 – 2:30 pm</td>
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<tr>
<td>frequency</td>
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<tr>
<td>Sea level rise</td>
<td>Thursday, 8/24</td>
<td>1:00 – 2:30 pm</td>
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<tr>
<td>Agriculture</td>
<td>Wednesday, 9/6</td>
<td>1:00 – 2:30 pm</td>
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<tr>
<td>Health</td>
<td>Thursday, 9/14</td>
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**RSVP:**

James Blando at jblando@odu.edu

**Location:**

Old Dominion University

College of Health Sciences
School of Community and Environmental Health

Health Sciences Annex Building
LPEI Laboratory
1014 West 46th Street
Norfolk, VA 23529
Phone (757)683-4259 – mail departmental number

Room 1008 Annex Large Conference Room

**Parking:**

Please park at meters on the street or park on level 2 of the 46th Street garage. Parking requires payment at the street meters (coins) or garage (self-serve at kiosk on level 2). This garage is behind the Springhill Suites hotel on Hampton Boulevard. The 46th Street garage is a 5 minute walk to our annex building. Map is at:

[http://www.odu.edu/about/visitors/campus-map](http://www.odu.edu/about/visitors/campus-map)

**Webinar Details and Speakers:**

**Storm Intensity Duration Frequency**

As atmospheric temperatures increase, the atmosphere can hold more moisture, and as a result storms are expected to be more intense. Hong Liu and Sean Capstick will discuss how and why to use the Intergovernmental Panel on Climate Change (IPCC) data to forecast storm intensity-
duration-frequency (IDF) using the City of Surrey in British Columbia as an example. Mr. Andrew Wiens will discuss how the City of Surrey is using the new IDF curves in planning stormwater infrastructure renovations.

**Sea Level Rise**

The as a result from climate change the sea level will rise in two different ways, first by the melting of land-based glaciers and second by the thermal expansion of the oceans. Additionally geologic forces cause land upwelling and subsidence. On top of the sea level rise storms cause additional sea level surges, and as storm intensities increase so also may storm surges. William Sweet will present the latest data from NOAA projecting sea level rises and strategies for estimating storm surges. Benjamin McFarlane will discuss the various adaptation approaches being used by different jurisdictions in the Hampton Roads Virginia area.

**Agriculture**

Besides the increased flooding caused by increased rainfall intensity duration frequency, increased coastal flooding from sea level rise and increased droughts, discussed in previous webinars, the agriculture will also be affected by other climate changes including:

- Changes in the growing season,
- Increases pests ranges, and
- Direct effects due to higher CO$_2$ concentrations.

Dennis Todey will discuss how assess the climate change impacts to agriculture for your area. And Jerry Hatfield will discuss what the agricultural practices can change to minimize the impacts and take advantage of the beneficial effects.

**Health**

The health webinar well build on all the other webinars in the series:

- Increased rainfall and sea level rise will lead to hazards associated with flooding including drowning, and increased prevalence of respiratory problems associated with molds;

- Increased drought will cause increased forest and fires and the associated health impacts; and
• Decreases in agricultural production will cause famine, malnutrition and decreases immunity.

But in addition there are other health impacts including:

• Increased potency of allergens,

• Increased range for vector borne diseases,

• Increased heat stroke prevalence, and

• Increased psychological risks due to the stresses caused by everything else.

The first speaker will discuss how to assess the various health risks for your community and the second speaker will discuss what can be done to adapt to the changes or reduce the risks.