

AAPA climate change conference

Port Concerns Discussion – Panel Discussion

The layman's view of climate change – sea level will rise and weather patterns will change.

Ports operate in different environments, i.e. weather patterns

What are the positive and negative impacts of climate change on ports?

1. Changes in channel water levels
 - a. Will channels naturally become deeper?
 - b. What effect will subsidence (sinking land) have on channel depth?
 - c. Will tidal ranges change?
 - d. Will tidal current velocities change and effect channel navigation?
 - e. What impact will changing channel depths have on dredging cost?
 - f. What is the impact of changing channel depths on ports' facilities (i.e. will wharf heights be too low for cargo operations – i.e. ro-ro facilities)?
2. Changes in ocean salinity
 - a. Will ships carry more or less cargo per vessel?
 - b. Will this result in more or less vessels to carry the same amount of cargo?
 - c. If more ships are needed, will more cargo handling facilities be needed?
3. Changes in trade patterns
 - a. Will the Panama Canal become deeper? If so, what are the impacts on shipping?
 - b. Will a year-round ice free Northwest Passage develop? If so, what are the impacts on shipping?
 - c. How will changing trade patterns impact freight rates?
 - d. Will changes in trade patterns impact the location of manufacturing and distribution centers?
4. Inland infrastructure
 - a. Roads – Will I-95 and I-10 be inundated or more vulnerable to storms?
 - b. Water – Will the Atlantic and Gulf intracoastal waterways remain viable? Will the inland waterways carry more or less cargo?
 - c. Rail – Are major rail corridors affected by rising water levels and increases in the size, intensity and frequency of storms?
5. What are the expected impacts of the items above in the short, medium and long term based on optimistic, most likely and pessimistic projections?