

## **Effects of Sea Level Rise on Fresh Water Impoundments for Migratory Waterbirds**

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Sea level rise is expected to increase as a result of global warming. This would have major implications on freshwater habitat availability in the Ted Harvey Wildlife Refuge along the Delaware Bay. This particular wetland habitat hosts many freshwater migratory bird species each year. This freshwater habitat provides a staging ground which supplies food and shelter to depleted migratory birds. A saline pond (15-20ppt) in Little Creek Wildlife Refuge along the Delaware Bay will be compared to a freshwater pond (0-2ppt) in Ted Harvey Wildlife Refuge. Species utilizing each site will be compared to determine each species preferred salinity. Our oceans have already risen 30cm in the past century (Titus, 2008). As of now, sea level rise is occurring at a rate of 3mm/yr or more in low lying areas. Rising sea level inundates low-lying lands, erodes wetlands and beaches, exacerbates flooding, and increases the salinity of estuaries and aquifers (IPCC, 2007). This research represents how sea level rise may affect waterbirds freshwater habitat availability if freshwater impoundments are inundated with saltwater.