



The Nahoon Estuary Nature Reserve

While climate change impacts vary regionally, coastal communities and estuaries are clearly on the front lines of climate change. Coastal ecosystems, especially estuaries, are particularly vulnerable to the impacts of global climate change for three major reasons:

1. Estuaries are influenced by both **upland and coastal environmental factors**. Since estuaries are where two distinct bodies of water meet and mix, each body of water brings its own unique climate sensitivities causing estuaries to have more climate impacts than many other ecosystems. For example, an estuary would feel the impact of both a reduced water levels caused by a climate related drought and climate induced changes in ocean currents, since estuaries lie at the interface of terrestrial and marine environments.
2. Estuaries are highly productive ecosystems because they are **shallow**, nutrient-rich, protected waters. However, being comprised of shallow waters mean that estuaries do not have a buffer to absorb changes in the environment, associated with climate change, such as sea level rise or changes in water temperature.
3. Many estuaries are already experiencing the stresses of **coastal development**. Climate change will interact with existing stresses from coastal development, intensifying their negative impacts on estuaries.

National Estuarine Research Reserve System

<https://coast.noaa.gov/estuaries/curriculum/climate-extension.html>

The Nahoon Estuary Nature Reserve was formed in 2000 by

The Friends of the Nahoon Estuary,

which is a community based non-profit organization whose objective it is to manage the Nahoon Estuary Nature Reserve in East London.



Situated on the North-East bank of the Nahoon River Mouth, the estuary comprises of over 25 hectares of uniquely preserved coastal land in the heart of the urban settlement of Buffalo City.

Mangrove swamps, natural ponds, forests, beaches and hundreds of different indigenous coastal plants, insects, sea and land animals make up the reserve.

The city council has come on board to upgrade and repair the specifically designed recycled boardwalk which had been damaged by rising sea levels. There are educational and directional signboards which guide visitors through the reserve without harming the highly sensitive vegetation of the inter-tidal zone.



The Enviro-Visitors Centre and bird hide located in the reserve has full Audio-Visual facilities that can be used for environmental activities such as lectures, demonstrations, workshops, exhibitions, excursions, education and research.

The Buffalo City council, through its twinning partnership with the City of Oldenburg (in Germany), has **provided educational material around the themes of wind, water and solar.** In addition, to promote energy efficiency, **the city council has installed solar panels at the centre.**



The trails start at the Visitors Centre, proceed through a dappled forest area before opening onto a wide vista of mud flats lined with mangrove trees. Hugged by impressive cliffs on one side and the river on the other, this relatively pristine estuarine environment is representative of the bigger river systems in the area and is host to a wide range of bird life, fish, mangroves and the forest.



Open to the public, the reserve has become a popular place of inspiration, education and relaxation for families, school children, elderly citizens – basically anyone who appreciates the beauty and harmony of this intact environmental system situated a stone's throw away from the city.



The Nahoon Estuary Nature Reserve, a gem ... in the heart of our city!

Photos: Sandy Loppnow / Information: Mike Loppnow (Chairman – Nahoon Estuary Nature Reserve)