Three indices of estuarine trophic status, total N (TN), total P (TP), and chlorophyll a (Chl a) were assembled from long-term monitoring data sets collected at representative mid-estuarine locations within North Carolina’s large estuarine systems. Most of the data was produced on an approximately monthly interval by the NC Div. of Water Resources Ambient Monitoring Program (NC DWR AMS) and was retrieved using the Water Quality Portal [Water Quality Data Home](https://www.waterqualitydata.us/). Data from Pamlico Sound were collected by the Neuse River Modeling and Monitoring Program (ModMon) operated by UNC Chapel Hill’s Institute of Marine Sciences. For TN data produced by NC DWR AMS, total N was calculated as the sum of total Kjeldahl nitrogen and nitrate/nitrite. For Pamlico Sound, TN was calculated as the sum of total dissolved N and particulate N. When multiple measurements were made on a single day, the arithmetic mean was calculated to determine a single daily value. Average annual values were calculated as the median of all monthly values within each year. An example of code (“ChowanRiverTN.m”) is provided on Github in the scripts folder that shows how the annual median values were calculated.

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| Table 1. Monitoring stations used as indices of long-term changes in total N, total P and chlorophyll *a* within NC estuarine waters | | | | |
| **Estuary** | **Monitoring Program** | **Monitoring station** | **Parameters** | **Time span** |
| Cape Fear River Estuary | NC DWR AMS | B9850100 | TN, TP, Chl a | 1996-2014 |
| Neuse River Estuary | NC DWR AMS | J9530000 | TN, TP, Chl a | 1989-2019 |
| Tar/Pamlico River Estuary | NC DWR AMS | O8498000 | TN, TP, Chl a | 1989-2019 |
| Albemarle Sound | NC DWR AMS | M610000C | TN, TP, Chl a | 1982-2019 |
| Chowan River Estuary | NC DWR AMS | D8950000 | TN, TP, Chl a | TN & TP: 1989-2019  Chla: 1989-2018 |
| Pamlico Sound | ModMon | Stations 1-9 | TN, Chl a | Chl a: 2000-2022  TN: 2002-2022 |