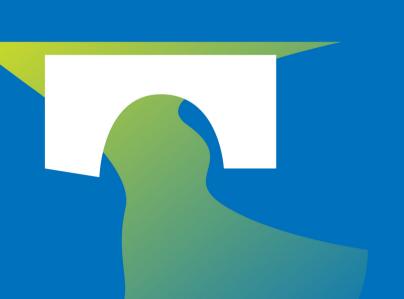
NITROGEN & THE NATURAL ENVIRONMENT

The natural environment can act to reduce nitrogen in several ways, one of which is to remove nutrients, or "polish" the water. Additionally, this type of functional open space can provide habitat and recreational opportunities.





PROCESSES THAT REDUCE NITROGEN, NATURALLY



Tidal Flushing

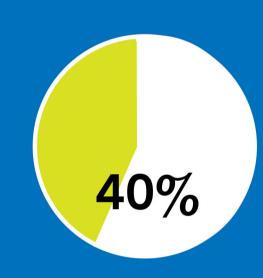
Opening restricted culverts, restoring wetland areas, and widening inlets to bays and harbors can enhance the benefits of tidal flushing - the transfer of water between fresh and ocean waters.

Ponds, Wetlands, and Streams*:

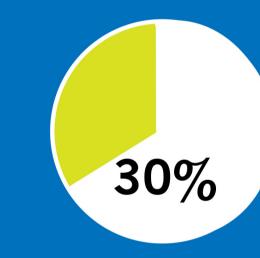
A significant amount of nitrogen can be removed as groundwater passes through freshwater wetlands and waterbodies in a natural process called denitrification.

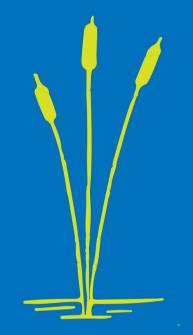


Wetlands



Streams





Constructed Wetlands

Constructed wetlands simulate the functions of natural wetlands by utilizing vegetation, soils, and microbial activity.



Open Space Conservation:

Protecting areas that drain directly to nitrogen sensitive embayments from development through zoning changes or land purchase can function to process nitrogen & eliminate new nitrogen loading.

Special Plantings:

Plants can remove nitrogen via organic decomposition and conversion, often referred to as "phyto" technology. Using certain plants in rain garden areas, pond and ocean buffers, and roadsides can help soak up nitrogen slowly over time.