Appendix

Glossary

algae: a group of chiefly aquatic plants (e.g., seaweed, pond scum, stonewort, phytoplankton) that contain chlorophyll and may passively drift, weakly swim, grow on a substrate, or establish root-like anchors (steadfasts) in a water body.

anoxia: the absence of dissolved oxygen.

benthic organisms: organisms living in association with the bottom of aquatic environments (e.g., polychaetes, clams, snails).

chlorophyll: pigment found in plant cells that are active in harnessing energy during photosynthesis.

copepod: zooplankton whose bodies are covered with a hard shell or crust; order of crustacea.

cyanobacteria: formerly known as blue-green algae.

demersal organisms: organisms that are, at times, associated with the bottom of aquatic environments, but capable of moving away from it (e.g., blue crabs, shrimp, red drum).

denitrification: nitrogen transformations in water and soil that make nitrogen effectively unavailable for plant uptake, usually returning it to the atmosphere as nitrogen gas.

diatom: a major phytoplankton group characterized by cells enclosed in silicon frustules, or shells.

edge-of-field nitrogen loss: a term that refers to the nitrogen that is lost or exported from fields in agricultural production.

eutrophic: waters, soils, or habitats that are high in nutrients; in aquatic systems, associated with wide swings in dissolved oxygen concentrations and frequent algal blooms.

eutrophication: an increase in the rate of supply of organic matter to an ecosystem.

hydrogen sulfide: a chemical, toxic to oxygen-dependent organisms, that diffuses into the water as the oxygen levels above the seabed sediments become zero.

hypoxia: very low dissolved oxygen concentrations, generally less than 2 milligrams per liter.

mesotrophic: intermediate between oligotrophic (low-nutrient) and eutrophic (high-nutrient) systems.

nitrate: inorganic form of nitrogen; chemically NO_3.

nonpoint: a diffuse source of chemical and/or nutrient inputs not attributable to any single discharge (e.g., agricultural runoff, urban runoff, atmospheric deposition).

nutrients: inorganic chemicals (particularly nitrogen, phosphorus, and silicon) required for the growth of plants, including crops and phytoplankton.

oligotrophic: waters or soils that have low concentrations of nutrients and have low primary productivity.

pelagic: living or growing in the water column or at the surface of the ocean near shore.

phytoplankton: plant life (e.g., algae), usually containing chlorophyll, that passively drifts in a water body.

plankton: organisms living suspended in the water column, incapable of moving against currents.

productivity: the conversion of light energy and carbon dioxide into living organic material.

pycnocline: the region of the water column characterized by the strongest vertical gradient in density, attributable to temperature, salinity, or both.

recruitment: the influx, initial survival, and establishment of new members into a population by reproduction or immigration.

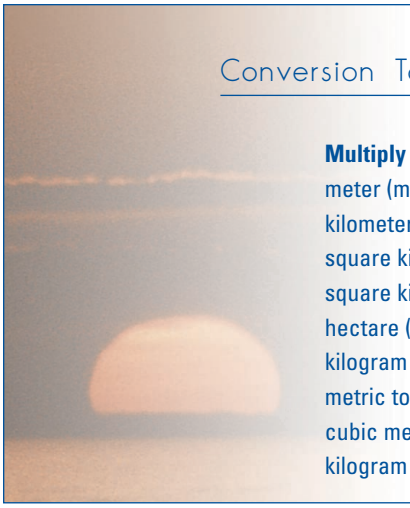
respiration: the consumption of oxygen during energy utilization by cells and organisms.

riparian areas: area adjacent to a river or other body of water.

senescence: the aging process in mature individuals; in plants, the process that occurs before the shedding of leaves.

stratification: a multilayered water column, delineated by pycnoclines.

zooplankton: animal life that drifts or weakly swims in a water body, often feeding on phytoplankton.



Conversion Table

Multiply	By	To Obtain
meter (m)	3.281	foot
kilometer (km)	0.6214	mile
square kilometer (km2)	0.3861	square mile
square kilometer (km2)	100	hectare
hectare (ha)	2.471	acre
kilogram (kg)	2.205	pound
metric ton (t)	1,000	kilogram
cubic meters (m3) per second	35.31	cubic feet per second
kilogram per sq. kilometer (kg/km2)	0.008924	pounds per acre

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Proper citation of this document is as follows:

CENR. 2000. Integrated Assessment of Hypoxia in the Northern Gulf of Mexico. National Science and Technology Council Committee on Environment and Natural Resources, Washington, DC.

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