

Constructed wetlands are natural for wastewater mgmt.
Examine significance & challenges of these wetlands

Constructed wetlands are the
engineered structures that replace the
role of natural wetlands. In India many
constructed wetlands are recognized
as Ramsar sites. Ex: East Kolkata wetlands

Ingenious solutions

Human Innovation + Natural process = wastewater treatment

Constructed wetlands provide eco-
friendly alternative to conventional
treatment methods. It faster & effectively
as it employs microorganism, plants,
birds among others.

Significance Treatment The wetlands help in converting the ammonia to nitrate and phosphorus to stable compounds.

Environment benefits: They help in carbon sequestration, flood control and ground water recharge.

Nutrient recycling as the systems interact with nutrients

Challenges * Encroachment of wetlands combined with wetlands changing to dumpsites

* Role of climate change and reducing water availability.

* Lack of awareness and co-ordination

Constructed wetlands acts as a buffer during water surplus and deficient times. Ownership of such wetlands at all levels can improve its significance.