

Water Quality – Important Concepts

- Water Chemistry
- Balance your System
- Water Source
- pH, DO, Nitrogens
- Temp, Alkalinity, Chlorides, Iron, Salinity
- Photosynthesis
- Nutrient Dynamics

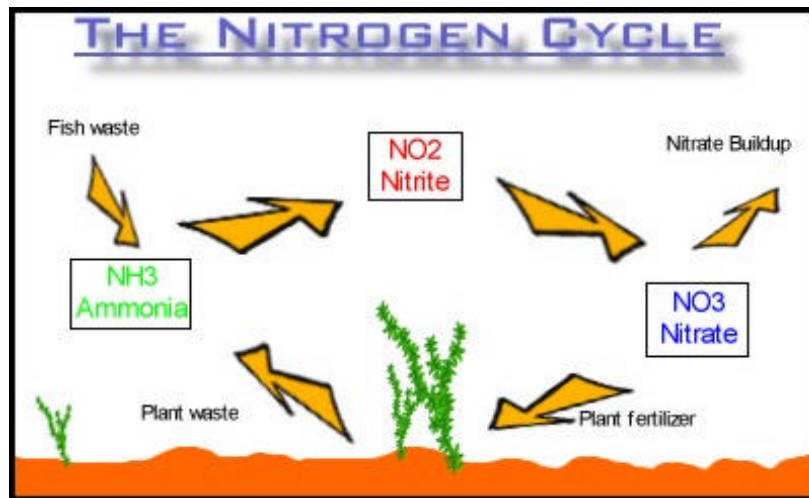
pH

- Hydrogen Ion Activity (0-14)
- Influences Other Parameters
- Base Additions
- Nutrient Supplements
- Compromise
- Tilapia Ranges

Nitrogen Species

- Ammonia, Nitrite, Nitrate
- (TAN, $\text{NH}_3 \rightleftharpoons \text{NH}_4$, NO_2 , NO_3 , N_2)
- Nitrification/Denitrification
- Acclimation Period

Nitrogen Con't



Nutrient Supply for Plants

- Additions May Be Necessary
- UVI Lettuce Results
- EC Measures Strength
- Nutrients Continuously Replenished
- pH Interactions

Sources of Information

- Water Quality in Ponds for Aquaculture
- Water Quality and Pond Soil Analysis for Aquaculture
- Standard Methods for the Examination of Water and Wastewater
- Hydroponic Food Production
- Recirculating Aquaculture Systems