NUDGEE BEACH environmental education centre

CAUSES OF WATER POLLUTION

- 1. The continued clearing of land lowers the water table and increases mineral salt concentrations. This threatens to salinate much of the freshwater supply which irrigates farming land in temperate Australia. This water is also used for drinking.
- **2.** Run-off containing excess nutrients from fertilizers enters waterways. These excess nutrients contribute to excessive growth, in surface waters, of algae, including toxic blue-green algae.
- **3.** Logging of forests and removal of vegetation ground cover results in bare soil which is susceptible in erosion. The quantity of sediment entering streams and rivers is increased as a result. This causes an increase in the suspended solids in the water (referred to as turbidity). This reduction in water quality threatens a number of species. The increased sediment also increases the rate of siltation of waterways.
- **4.** Wetlands are a natural form of water treatment and flood control. However they continue to be filled in for urban and other development. Wetlands could be utilized to treat urban storm water run-off before it reaches sensitive water bodies. Additional facilities may be required in the future as a result of their destruction. Wetlands could also be used to provide final treatment of sewage effluent.
- **5.** Waste materials which are not reused or disposed of properly mat end up in waterways where they could kill fish and other species, whether they are from general household garbage or are toxic materials.
- **6.** Pesticides that wash off crops and gardens may run directly into creeks and rivers. This can threaten the health of the entire good chain, from the smallest aquatic organism through to humans who consume fish and other seafood.
- **7.** Storm water run-off carries pollutants, such as oil and pesticide, into local creeks and streams. These pollutants can have adverse environmental impacts that are often difficult to measure but could affect fish, invertebrate species and other aquatic life. All creeks and streams flow into larger water bodies including important fishing habitats.
- **8.** Oil spills can be consequence of shipping accidents. These spills have a detrimental impact on ecosystems in the affected region. These impacts include contamination of the food chain, reduced water quality and destruction of habitats.
- **9.** Detergents used for cleaning by industry and households can enter waterways in run-off. If these detergents contain phosphates they may contribute to excessive algae growth. This could lead to the water becoming undrinkable and could also threaten the oxygen supply of fish and other organisms living in the water.