

10 Water Conservation

Council recognizes the need to manage water wisely and conservatively to mitigate land degradation problems and to ensure an adequate, healthy and affordable supply of water for the future

The Issues:

Next to Antarctica, Australia is the driest continent on earth. The availability of water on the east coast and to a lesser extent, in the southwest corner of the continent, has encouraged heavy settlement. Water supply reservoirs are expensive to build and impact the integrity of wildlife habitat and catchments hydrology. The less water we use - or more specifically, waste the easier it will be to provide an adequate, healthy and affordable supply of water now and in the future.

In cities such as Sydney and Melbourne, some 50% of the reticulated water supply is used to water municipal and private gardens. It is probable that the figure is greater in Townsville due to the long dry season we experience. The alternative where green open space is required is to use recycled water, such as from storm water retention ponds and treated sewage. Even where reticulated water is used, there are many ways to increase the efficiency of use.

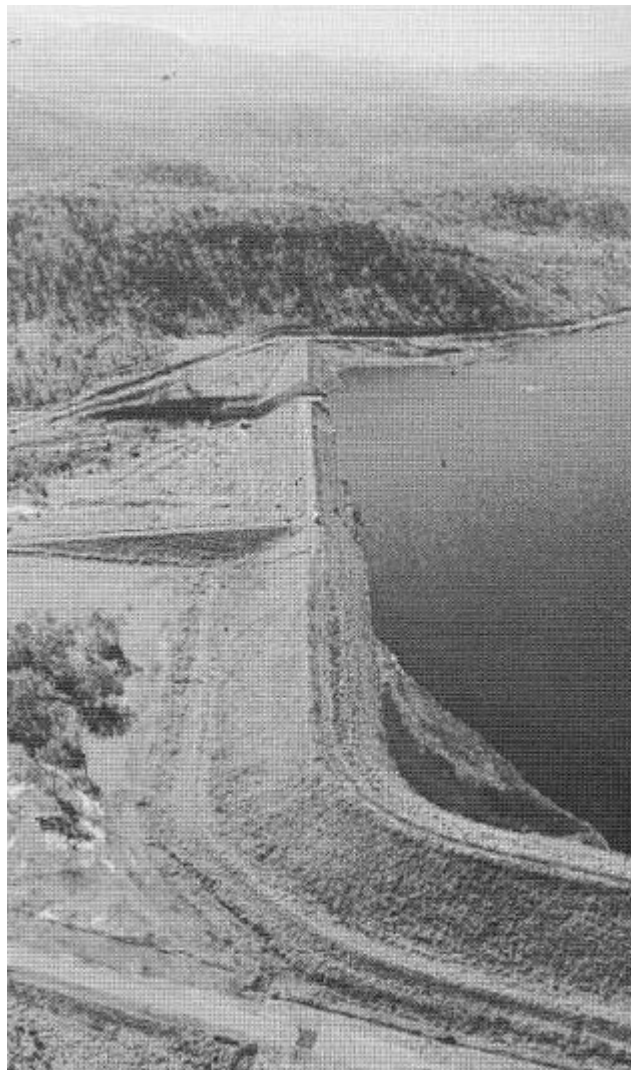
Thanks to the completion of the Burdekin and Ross Dams, Townsville is relatively well supplied with water to the extent that it is now considered virtually "drought-proof". The problem is not so much as running out of water as the cost of distribution and disposal of run off and effluent. In the interests of land protection and energy conservation, there is a responsibility to ensure that water is used in the most efficient manner possible.

To this end, Council has introduced automatic sprinklers in some areas (e.g. Queens Gardens) for overnight irrigation. In the selection of species for use in amenity plantings, such as median strips, emphasis is given to those that don't have a high demand for water. Treated sewage effluent has been recycled for irrigation of farmland, the Rowes Bay golf course, recreation reserves and the RAAF Base.

The objectives of Water Conservation for Townsville are to:

Provide the infrastructure and incentives for efficient use of water; and

Dispose of wastewater in an environmentally responsible manner, and to recycle such water where possible.



The assurance of water from the Ross River Dam must not diminish our sense of conservative and responsible use.

Areas for Council Action:

To reduce per capita water consumption in Townsville and achieve responsible disposal, Council should consider the following actions:

Educate residents, nursery staff and park managers about using local native plant species where possible to reduce water consumption on gardens. (ENV)

Promote the importance of maintenance and use of water saving devices in the home e.g. water saving toilet systems, aerators for taps, water efficient showers, with by-laws for new installations where possible. (ENV: PD)

Review the present charging system for water consumers to encourage more efficient use (WS).

Investigate the re-use of treated wastewater for amenity irrigation. (ENG)

Pursue the use of treated effluent for irrigating public and private land. (ENG)

Introduce nighttime irrigation where possible on all council parks and reserves and fit rain sensors where possible. (ENV)

Consider introducing water restrictions for sprinklers in the middle of the day, to reduce waste through evaporation (ENV)

Fit rain sensors to parks and median strip watering systems. (ENV)

Areas for Community Action:

Aim to decrease water consumption around the home all year round.

Install an irrigation system in the yard, it saves water and time.

Maintain plumbing in a sound condition.

Avoid using plants which have a high water demand.

Put a brick in the toilet cistern to reduce the amount of water used in each flush.

If installing a new toilet select water saving dual cistern type.

Mulch your garden beds to retain soil moisture. Water your garden in the cooler parts of the day to reduce evaporation.

Obtain copies of the educational pamphlets "Water Wise" from the Dept. of Primary Industries.

Areas for Research:

The means of harnessing, and redistributing local runoff for use in gardens and open space areas without compromising health or flood protection objectives is worthy of examination.

The ecological treatment of runoff and effluent in specifically designed wetlands is becoming more common in Australia and overseas, and is definitely worth pursuing in the Townsville area.

11 Air, Water and Noise Pollution

Council recognizes the need to anticipate and prevent air, water and noise pollution and promote work practices that aim to reduce pollutant production.

The Issues:

Pollution of air and water involves release of contaminants into the environment. This can result in alteration to the physical, chemical and biological properties of these essential parts of our life support system. Of particular concern are emissions due to burning of fossil fuels such as sulphur dioxide, nitrogen oxides, carbon monoxide and suspended particles. Industrial effluents, agricultural chemicals and sewage contamination can be significantly reduced by placing strict controls on use and disposal of these materials, although it needs to be ensured that such regulations do not promote illegal discharge, which could happen if unreasonable costs were imposed on proper disposal.

The community can also be placed under enormous stress due to noise pollution and can alter the surrounding physical and social environment significantly.

Presently the Queensland Department of Environment and Heritage is developing policies under the new Environmental Protection Act, which will set standards for the quality of the environment in line with relevant aims and objectives. A component of this legislation will provide for the devolution of responsibility to the local authority regarding certain premises and the activities associated with them. On completion of this process, Townsville City Council will be empowered to enforce various aspects of emission standards for air, water and noise pollution.



The waste stream we don't need.

The new Town Plan provides for the strategic siting of industry to minimize deleterious effects on the surrounding physical and social environment. Town planning policies, while not directly addressed by the Town Plan, can largely prevent noise pollution. Existing noise pollution sources from premises under the control of the local authority can be effectively resolved or abated by sound development and implementation of the Town Plan. The objectives for Pollution Management in Townsville are to:

Minimize, and where possible eliminate, air, water and noise pollution problems; and,

Enforce those areas of pollution control devolved to Council by the Department of Environment and Heritage.



The proposed relocation of the railway workshops will vastly improve the amenity of inner Townsville



If you throw it away, it'll end up in the bay.

Areas for Council Action:

To mitigate and control air, water and noise pollution problems, Council should consider the following actions:

Conduct a review of current Council procedures for controlling air, water and noise pollution addressing such issues as personnel, training, funding and equipment required to monitor pollutants and sources. This will enable Council to efficiently apply the responsibilities devolved by DEH.
(ENV: ENG)

Co-operate with state and federal agencies to ensure a co-ordinate approach to pollution problems.
(ENV:OA)

Address possible pollution sources at the planning stages of developments. This would include: enforcing emission standards; promoting waste minimization and waste management plans to be included in the processes of the development; and, recommending processes and procedures within operations that preclude or reduce certain wastes.
(ENV: PD: ENG)

Prepare management plans, which address effluent discharge to waterways. (ENV)

Encourage awareness within industries and Develop educational techniques directed at all sectors of the community with regard to responsibilities in producing pollution sources and emissions. (ENV)

Areas for Community Action:

Observe Council regulations with respect to backyard burning. Consider alternatives for garden waste such as composting and mulching. The Townsville City Council is able to offer advice in this area.

Observe the types and volumes of wastes being generated from your premises. Think carefully about the waste disposal path of your waste and what affects this will have on pollution loadings in the environment.

Take part in the kern-side recycling program.

Put into practice waste minimization techniques in your home or business by reducing your rubbish in the first instance and recycling as much as possible.

Become aware of the litter problems in Townsville and attempt to alleviate these by taking part in Community projects such as the Clean up Australia program and taking an interest in pollution issues around you such as a neighborhood creek or bush land and generating local action to protect and clean up these sites.

Take an interest in the functions of Council and use its services for identifying problems and providing advice.

Areas for Research:

Research into the types of pollution associated with different land-user practices and industries can aid in reducing pollution loadings. Issues addressed in the planning stages can provide for more appropriate siting and control standards in developments, in order to minimize the environmental impact of these operations.

The design and development of Pollution Control Ponds on drainage lines and at sewage treatment plants to intercept pollutants and nutrients prior to discharge to the natural environment.

In the long term, Council should endeavor to develop a total waste management strategy to provide cradle-to-grave control over all aspects of pollution, waste generation and disposal.