NORFOLK ISLAND REGIONAL COUNCIL

MEDIA RELEASE

Proposed Update to the Water Resources Development Control Plan

The Norfolk Island Regional Council is proposing amendments to the Water Resources Development Control Plan (DCP No 2). These changes are aimed to improve water security for new developments and to help to protect the island's ground and surface water systems and the marine environment.

In recent years, Norfolk Island has seen a reduction in the average annual rainfall and ground water levels, increased pollution of freshwater systems and significant degradation of the coral habitat in Emily Bay.

In the coming weeks, NIRC will place on exhibition an update to the Water Resources DCP No 2, which will consider improvements to Onsite Wastewater Management Systems for new developments. This will be an important step in improving water quality from individual properties. Changes will be focused on designing systems that prevent water quality impacts beyond a property's boundary and to protect sensitive water resources such as groundwater bores and downstream catchments. There will also be proposed changes regarding water storage and rainfall catchment requirements for new activities or developments.

The DCP No 2 is the guiding document for Council to set conditions for new developments with regards to minimum water storage, roof catchment and the management of sewerage. If adopted, the new DCP will provide a step-by-step guide for the community to assess their minimum requirements when lodging a development application. The Waste and Environment Team will also be available to assist those in the community prior to lodgment.

Water Storage and Roof Catchment

The way the minimum requirements is calculated for water storage and roof catchment is proposed to change, based on the water demand for the proposed development. Once the water demand has been determined, then a minimum tank size and roof catchment will be identified.

These minimum requirements have been tested using the Norfolk Island Rainwater Tank Simulator from the CSIRO to optimize the tanks sizes based on Norfolk Island's conditions.

The main change will be for residential development, where the water demand will be determined based on the proposed number of bedrooms. The current DCP requires a minimum storage of 44 000 litres and a roof catchment of 150 square metres for up to 4 bedrooms.

The proposed change to the DCP includes a scaled assessment based on the number of bedrooms. A one-bedroom dwelling will need a minimum 120 square metre catchment with a tank size of 32 000 litres. As additional bedrooms are included each will require a minimum of 40 square metres of roof catchment and the tank tank sizes will become progressively larger. This progression is shown in the below table.

Number of Bedrooms	Water usage (L/day)	Min water storage requirement (L)	Min roof area requirement (sqm)
1	280	32000	120
2	420	50000	160
3	560	70000	200
4	700	80000	240

Although the minimum roof areas are proposed to increase for the majority of development types, the total catchment can be made up of multiple buildings such as outbuildings, carports or even the roof of your water tank where water saver devices are installed.

Onsite Sewerage Management

A rapid evaluation procedure has been developed to determine the most effective on-site system for new developments. The procedure includes 4 stages to guide applicants through assessing site requirements for the treatment and re-use of domestic wastewater at an early stage of the development process.

The procedure helps determine relevant constraints/limitations to achieving ecologically sustainable on-site wastewater management (OSWM) through evaluation of site limitations and minimum assessment and design criteria.

The new DCP will still require all new developments to connect to the sewer where a property is in close proximity to the Water Assurance Scheme. However, for areas of the island that are not serviced by sewer, the procedure will determine the most effective system for a particular land-use or development.

The procedure sets out which system can be used on a particular site based on its proximity to waterways and groundwater bores and the gradient of the portion of land. The following tables shows the proposed allowable systems based on buffer zones to waterways.

Evaluation of suitable treatment options based on minimum waterway buffer requirements (metres)

	Permanent surface waters (rivers, streams & lakes)	**Other Waters (Intermittent waterways & farm dams)**	**Groundwater Bores**
Septic tank	150	80	250
AWTS	100	40	250
Tertiary treatment	50	20	100
Compost. Toilet	50	20	100
Secondary Greywater System	30	30	30
Advanced Secondary Greywater System	10	10	10

Once a system has been decided for the site, then an effluent application area is determined. The proposed DCP has 4 options for effluent application and will be determined based on the type of system being installed. These will be one of the following:

- Surface Irrigation
- Subsurface Irrigation
- Evapotranspiration Trench
- Mound System

Given the impact that absorption trenches or soakage trenches have on the receiving environment due to the high porosity of the island's soil, there will be no provision for these in the new DCP.

NIRC will provide more information to the community on the types of treatment and effluent application systems during the exhibition period.

The impact of human activity on the island, in particular, poorly placed and managed septic tanks is known to have a detrimental impact on the receiving environment. The high nutrient loads from soakage trenches and livestock is now severely degrading the reef in Emily Bay which is showing signs of significant coral death and algae growth. These proposed changes to the DCP are an important step for the island to become more sustainable and to reduce our impact to the environment.

These proposed changes will go out on Public Exhibition for 28 days in the coming weeks to give the community the opportunity to provide feedback. If you have any queries, please contact Customer Care on local free call 0100 or via email customercare@nirc.gov.nf.

PJ Wilson
Team Leader Waste & Environment

21 July 2021