

**WRITTEN QUESTION TO THE MINISTER FOR THE ENVIRONMENT
BY DEPUTY R.J. WARD OF ST. HELIER
QUESTION SUBMITTED ON MONDAY 20th SEPTEMBER 2021
ANSWER TO BE TABLED ON TUESDAY 28th SEPTEMBER 2021**

Question

Will the Minister advise what action, if any, apart from physical clearing has been undertaken to try to overcome the green algal bloom in St Aubin's Bay?

Answer

The quantity of nitrates entering St Aubin's Bay from land run-off and from the waste-water treatment works (WWTW) at Bellozanne impacts the growth of the nuisance weed, sea lettuce. Officers across my departments in IHE have recognised the importance of reducing levels of nitrates for some time, particularly given that the bay receives run-off from a large proportion of the island and the potential negative impact on drinking water standards and health (especially for households on private boreholes and wells).

Relevant stakeholders, including potato and dairy farmers and officers from Jersey Water and Natural Environment, have worked closely together in the Action for Cleaner Water Group for some time to reduce levels of nitrates in water across the island. This includes streams and groundwater entering the bay, and by default the quality of water being treated by the WWTW. Their collaborative work has been very successful and average nitrate levels in streams and groundwater have reduced by one-third during the past 20 years (the annual average level of nitrates in streams is currently less than 50 mg/l).

The WWTW will be replaced in 2024. The new facility will result in lower levels of total nitrogen entering the bay and increased volumes of treatment during storm conditions leading to less shock loading of total nitrogen. These improvements will help limit the annual volume of this nuisance weed. A discharge permit issued under the Water Pollution (Jersey) Law 2000 will ensure that levels of potential pollutants (including total nitrogen) entering the Bay are regulated.

The excessive growth of sea lettuce in St Aubin's Bay is highly complex. Multiple factors contribute to its growth, including bay topography, land reclamation, sea temperatures, nutrient inputs and more.

Natural Environmental officers undertake regular monitoring of St Aubin's Bay in line with the EU Water Framework Directive (WFD). This work gathers base line data to assesses the chemical and ecological status of the bay. In 2015, following the collection of 3 years of data, the water quality of St Aubin's Bay was classified as 'moderate' according to the classification of the WFD. This was driven by the outcome of the opportunistic sea lettuce and the level of dissolved available inorganic nitrogen, both of which are indicators of nutrient enrichment. This classification is currently being updated.

Additional nutrient monitoring of the surf (inshore) zone of St Aubin's commenced in 2014. This will lead to a better understanding of the source and distribution of nutrients across the bay and identify the conditions responsible for the variation in the growth of sea lettuce. Over time, the data collected will be used to assess the impact of the expected decrease in nutrient loadings from the new WWTW and from the work of the AFCW group tackling land-based sources.

The IHE Operations & Transport directorate responsible for removal and disposal of sea lettuce along the amenity beach areas of St Aubin's Bay have increased the amount harvested and disposed of directly to

suitable farm land this year. This provides the land owners with a source of organic fertiliser thereby reducing the amount of additional chemicals being used by the industry.

The estimated totals for sea lettuce removed this year between June and September (to 21 September) were: 2400 tonnes to land and 400 tonnes to the La Collette Green Waste site for composting.

It remains, that sea lettuce will always be present and that it will vary in quantity from year to year.