

Nurdles on our beaches

What is a nurdle?

Nurdles are pre-production plastic beads (they look like tiny hailstones) used in the manufacturing of everyday plastic goods and products. They can enter storm water and sewerage systems through spills at industrial facilities or during losses in transportation from trucks or shipping containers. Nurdles are easily dispersed by winds and ocean currents and they are known to wash up on beaches across the globe.



Illegally dumped

In mid-November, several members of the public noticed large concentrations of nurdles washed up on Warrnambool's Shelly Beach (about four kilometres west of the Warrnambool Surf Life Saving Club). This site is close to the Warrnambool Sewage Treatment Plant operated by Wannon Water. After being made aware of the contamination, Wannon Water conducted an inspection of the sewage plant and discovered nurdles in the tank and other equipment. An investigation showed the nurdles had been illegally dumped through the sewage treatment system and were being expelled to the ocean through the plant's effluent outfall. Operations staff isolated the tank and have physically removed hundreds of litres of nurdles from the plant's infrastructure, preventing these from entering the ocean environment. Unfortunately, as evidenced by clean-up efforts to date, in excess of 500,000 of the plastic beads had also washed up on nearby beaches.

We are continuing our investigations into the original source of the nurdles with assistance from the EPA. The Warrnambool Sewage Treatment Plant treats waste from Koroit, Allansford, Warrnambool and a range of other locations and facilities across the region. Despite a number of interviews and inspections of various sites, we do not yet know the original source of the nurdles and the investigation will therefore continue into the foreseeable future.

Clean-up

The clean-up on beaches at Warrnambool, Port Fairy and Killarney has involved a concerted and sustained effort by the community, Wannon Water and other agency staff. We acknowledge the very significant contribution by community volunteers to remove nurdles from the beaches, and we continue to work in collaboration with the Good Will Nurdle Hunting group.

Stay Informed

For more information, please visit our website: www.wannonwater.com.au/nurdles

Nurdle collection information

Please follow the below steps when bagging and reporting nurdles you have collected.

1. Collect nurdles:

Listed below are some suggested methods for collecting nurdles from beaches.

- Manually handling, including sieving areas of sand
- Collecting sand in buckets of water and waiting for the nurdles to float
- Shaking clumps of seaweed over a bucket or sieve.

2. Bag nurdles:

- Please record the following information on the bag:
 - a) Location (with approx. distance covered)
 - b) Date
 - c) Time period
 - d) Number of people who collected the nurdles
 - e) Approx. number of nurdles collected



3. Pass on collected nurdles:

Community members are encouraged to pass on any nurdles collected to:

- Wannon Water Office, 25 Gateway Road Warrnambool

4. Report of nurdle information:

Wannon Water recognises that community observations are useful to help target our ongoing clean up, however we will no longer monitor third party social media sites for reports of nurdles.

Community members wishing to report nurdles to us are requested to :

- Complete a 30-minute “nurdle sample” on the beach as follows : collect nurdles for 10 minutes at a location, then move at least 50 metres to another part of the beach and collect for another 10 minutes, and then move once more and collect for 10 minutes. This gives a 30 minute sampling of actual numbers of nurdles able to be collected along a beach, and will help us decide if a clean-up crew would be effective.
- Community members should report their results direct to Wannon Water via either:
 - **Email:** nurdles@wannonwater.com.au
 - **Phone:** 1800 926 666
 - **Facebook:** www.facebook.com/wannonwater

We need to know how many nurdles were collected in 30 minutes, how many people did that collecting, and where the collection was.

- Where we receive a community report, we will endeavour to follow up within five days to advise whether we completed a clean up, and what the results were.

Key safety advice

We ask everyone to take necessary steps to work safely on beaches as there are many potential hazards to consider, such as weather (storms to sunburn), wildlife (snakes, spiders), sharps (sticks, glass, etc.), dehydration and tidal considerations. Take care, plan your activity and be aware of your surroundings. Please check the weather forecast before heading out and we advise you not to venture to district beaches during severe weather.

The nurdles themselves are not toxic in nature. While nurdles can absorb some other contaminants in the ocean over long periods of time, advice from Deakin University suggests this does not pose any significant risk for those handling them during collection. As a precaution, we have been advising nurdle collectors to use good hygiene practices after handling them (i.e. washing hands thoroughly).

Working around Hooded Plover nest areas

To get an update on the nesting activity at locations, call Robyn Bush of Parks Victoria on 0403 261 145 to determine if there are nest sites on the beach (usually marked by signage and fencing) and whether they are "active" (i.e. presently or imminently have chicks or eggs).

- Do not go inside the fenced area – there is a real risk of treading on nests, eggs and chicks. If nurdles are within the fenced areas a special activity under the guidance of experienced Hooded Plover monitors will be conducted to remove these.
- For sites with chicks, which move about the beach well beyond the fenced area, an experienced Hooded Plover monitor needs to determine the location of the family of birds immediately before the clean-up.
- The 'disturbance zone' for Hooded Plovers is the area in front of the nest sites and 100m either side. Do not set up marquees, tents, tables, bases of operation, rest points, sit, loiter, etc in the 'disturbance zone'
- Do not use machinery in the 'disturbance zone' hand sieve instead.
- Limit time working in the 'disturbance zone' to 20 minutes per hour if temperature is less than 25 degrees or 10 minutes per hour if greater than 25 degrees. Returning to the area after a break of 40-50 minutes to allow birds time for incubation/brooding duties.

