

The site selection process to date

Council adopted a Solid Waste Management Plan for Buller District in the year 2000.

The plan recognised the need to find a replacement for the district's existing landfills. The options available were; to construct a new in-district landfill, or transport solid waste out of the district to the McLeans Pit landfill in Grey district

Investigations into a suitable potential new landfill location began with the development of a site selection process. This process was developed for Council by MWH New Zealand, in line with national landfill guidelines (*Towards Sustainable Waste Management in New Zealand* produced by the Centre for Advanced Engineering).

The site selection process that was developed provided a list of constraints (we talk about these more below). Council then produced maps of the area surrounding Westport, and overlaid these constraints onto the maps. This removed areas that were not suitable for further investigation.

Council identified some possible sites for a new landfill within the areas deemed suitable. A preliminary assessment of those sites was made.

Council carried out some further investigations on a potential site at Virgin Terrace in 2005. These investigations will provide geo-technical and groundwater information to assist the site selection process, and will help to confirm the estimated costs of constructing a new landfill. These estimated costs have been included in the draft long-term plan.

What makes a good site for a new landfill?

There are lots of things to consider when planning a site for a landfill.

While we would often like landfills to be as far away as possible, we need to consider issues such as access to the site, distance (the costs of transferring refuse from the transfer station to the site), as well as technical considerations, such as the makeup of the land, and the ability to meet engineering requirements.

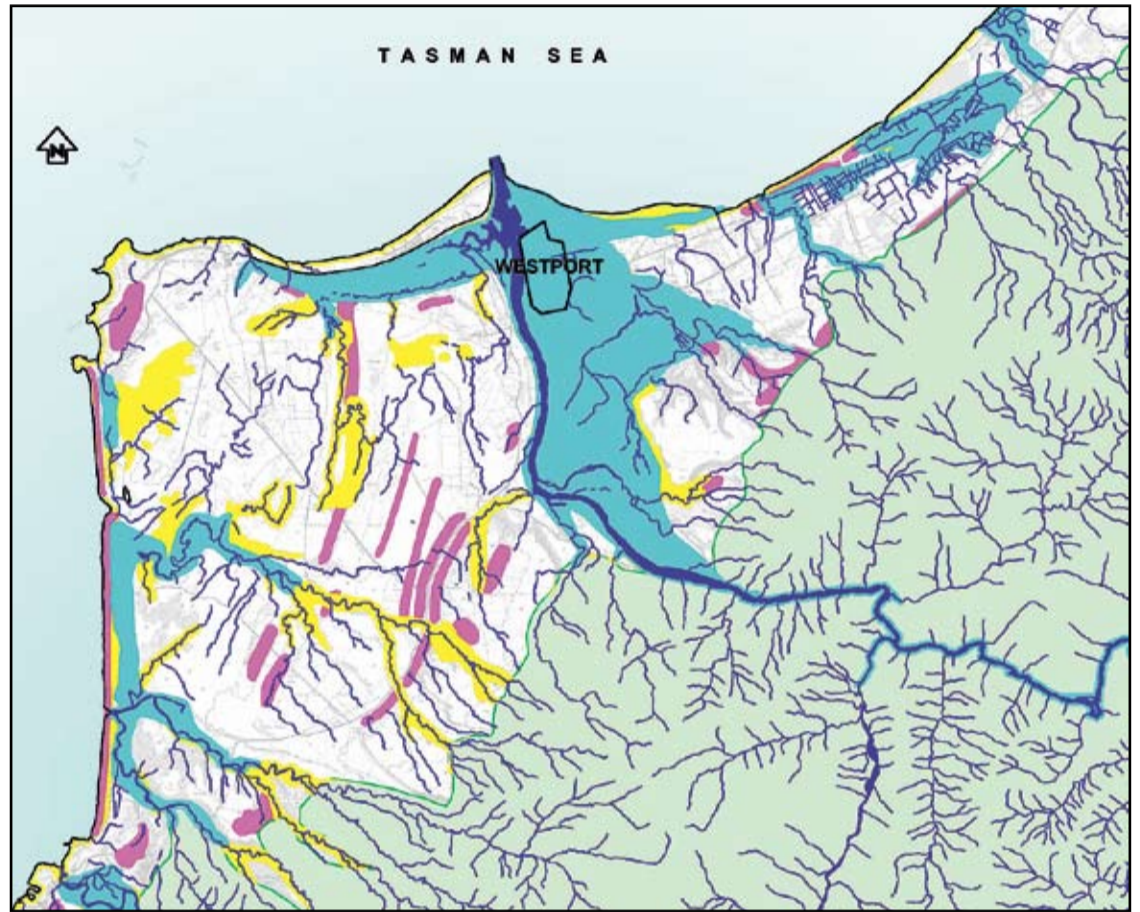
All of these considerations affect both the quality of the service able to be provided, and the cost to ratepayers and users.

We have briefly outlined some of the constraints we need to consider when looking at potential sites for a landfill.

We are able to provide much more detailed information on this constraint mapping process. If you are interested in this process, you may like to look at the national landfill guidelines *Towards Sustainable Waste Management in New Zealand*, available on the Ministry for the Environment website www.smf.govt.nz or look at a copy of the constraints report by MWH, which is available from Council, or on our website www.bullerdc.govt.nz.

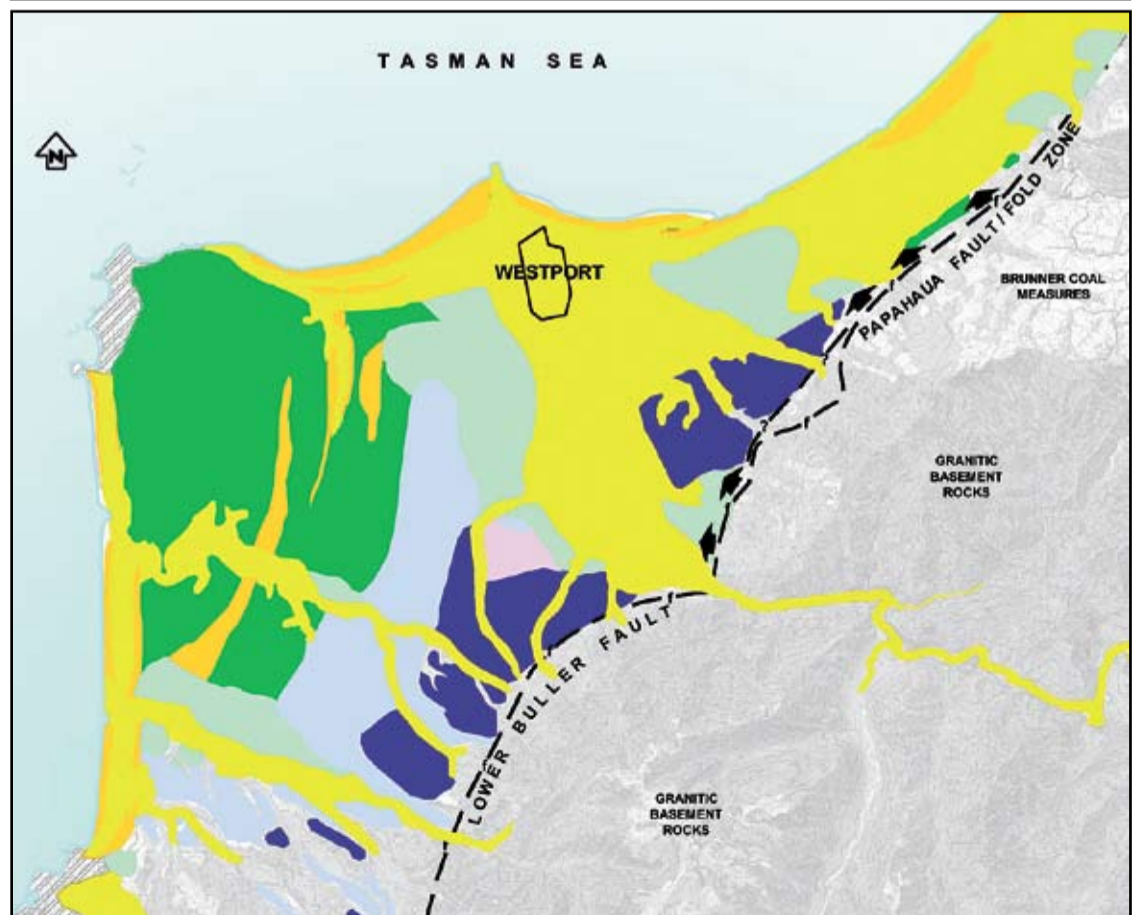
When considering sites for an engineered landfill, we need to consider a range of technical requirements, including the following:

- geological makeup of the area – will the land meet requirements for providing a good natural barrier and groundwater protection?
- ground stability/potential to be affected by earthquakes
- proximity to waterways including streams, rivers, drinking water and designated water supplies
- potential for flood risk
- previous land use - areas that have been used for extensive underground mining are considered less suitable.
- proximity to areas of high environmental importance (including whitebait spawning areas, native forest areas, lakes or estuary areas known to have high biodiversity, nature reserves and wetlands)
- proximity of the site to Westport airport (civil aviation guidelines state that refuse disposal should be at least 6.5km away from any aerodrome. While the current Westport landfill is sited within this zone, any areas within the designated restriction zone will not be considered suitable for the development of a new landfill)
- size of the site –sufficient space for the landfill footprint, amenity buildings, leachate and gas treatment, and buffers between neighbouring areas
- transport distance – is the site close to a main road and within 20km of Westport?



ENVIRONMENTAL CONSTRAINTS

KEY	Floodplains	Rivers	Mining	Environmentally Sensitive	Mountains



GEOLOGY

KEY	Cemented marine sand & gravel	Partly cemented marine sand & gravel	Marine sand & gravel	River gravels on int Tce	Coarse granite gravel - high Tce	Dune sands	River gravels