

Seaview Temporary Discharges: Preliminary assessment of options on natural character, visual amenity and recreation

1. Introduction

The following is a preliminary assessment of effects on visual amenity, recreation and natural character of four options for temporary discharge of wastewater from Seaview Wastewater Treatment Plant (Options 2, 3, 5 and 6).

Brief description of the options

Options 2 and 3 have discharge points into the Hutt River Mouth from pipes off Port Road. The pipe and discharge point at the mouth of Waiwhetu Stream in Option 2 will be visible although at times partly submerged or submerged depending on the water level. The discharge point of Option 3 is 100 metres out from the end of Barnes Street and the pipe will be submerged to a depth of 1.3 to 3 metres depending on the tide. Options 5 and 6 will discharge into Wellington Harbour through submerged pipelines extending 100m and 600m off-shore from the corner of Port Road. The pipe in Option 5 will be up to 2 metres below the water surface at its discharge point and Option 6 will be 10 metres deep at the discharge point.¹

2. Summary of assessment of effects

+ More than minor effects – Less than minor effects

Option	Natural Character	Visual	Recreation	Rationale
2	+	+	+	An additional built structure will further modify the river's edge, the pipe will be visible, viewed sequentially with existing stormwater pipes and extend 20 metres into the river (further out than existing stormwater pipes). There is a risk of negative effects on aquatic life in a location where people take part in land and water-based recreational activities.
3	–	–	–	The pipe is buried and not visible. The discharge point is into the harbour in the middle of the river mouth away from land based recreational activities. It is assessed to have a moderate to low effect most of the time, although it may

¹ Refer to Hutt City Council Seaview WWTP 'Alternative Outfall Options Study' for the locations of these options and details of the discharge pipes.

				affect recreational activities that take place on the water at the river mouth at times of discharge.
5	+	-	+	The discharge point and pipe is below the water and not visible but is in relatively shallow water and near to the beach. The beach is a less modified landscape feature where natural patterns such as tidal movement are evident, and where people take part in land and water-based recreation.
6	-	-	-	The discharge point is away from the shoreline and recreational areas and the pipe is unlikely to affect recreational activities.

3. The site

The site is at the Hutt River mouth and harbour edge, on the river and harbour side of Port Road. The road is one of two major connecting roads around the edges of Seaview. The landward side of Port Road has a range of industry, businesses and services. Buildings with street frontage view over the road and Esplanade Reserve along the harbour and river edge to the water and wider views beyond.

The dominant natural and landscape features are the Hutt River, the shoreline, the harbour, shoreline vegetation and the natural character of the river mouth and coastal environment: the movement and processes of water, wind and tides, light reflecting off the water, bird, fish and other life and their habitats, and views out over the water.

The eye is drawn to recreational activities on and next to the water. They typically include fishing, walking, dog walking, cycling, jogging and running, picnicking, river and sea kayaking, power boating, sailing, kite surfing, wind surfing and paddle boarding. Some recreational activities such as white baiting are seasonal. This is a site where humans have intervened with land reclamation, revetment and dredging of the river mouth, but where the natural environment and its elements, patterns processes still dominate.

The Esplanade Reserve between Port Road and the water is approximately 15 metres wide. Over the last few years a number of initiatives have enhanced its appearance, amenity and safety: pathway and grassed edge, tree planting along the pathway for shade and amenity, picnic tables and seats, information and directional signs, sculpture and interpretation at Waiwhetu Stream mouth. Revetment along the river bank is largely made up of fill material and rubble – bricks, concrete and other building material. Reinforcing rods protruding up from amongst the concrete rubble

have been cut or bent recently for the safety of users.² Revetment on the western side of the river mouth is rip rap of boulders rather than rubble.

Eight existing stormwater pipe outlets discharge into the Hutt River between the mouth of Waiwhetu Stream and the southernmost corner of Port Road. They vary in diameter and length from approximately 4 to 18 metres and can be seen from the Esplanade Reserve, the pathway along its length and from the water. Depending on the viewpoint, up to 6 structures can be viewed at one time.

The pathway is part the Great Harbour Way, a trail for pedestrians and cyclists that when completed will run along the harbour edge from Fitzroy Bay south of Eastbourne to Sinclair Head on Wellington's South Coast on the opposite side of the harbour. The pathway links to the Hutt River Trail under the Waione Street Bridge, through Hikoikoi Reserve and the Petone foreshore to the west, and eastwards through Seaview Marina and along the eastern harbour foreshore. Among pathway users are walkers, joggers, dog walkers, runners and cyclists and its popularity and use is growing. This trend is likely to continue as further sections of the Great Harbour Way are completed and given the growing popularity of cycling and walking. Walking and cycling are two of the most popular recreational activities for adults in New Zealand.³

The corner of Port Road where the river enters the harbour has views out over the harbour to the heads. Port Road Reserve, a Hutt City Council Local Purpose Reserve (Community Use), has a picnic table and path to the only beach in Seaview. The sandy beach is sheltered and curves to a rocky headland on its southern edge with views across the harbour and out to the heads.

Seaview Marina adjoins the beach and is a major facility in the area, attracting industry associated with the marina, water-based recreation and visitors. The marina has identified options for development with cafes, shops, gym, market and residential apartments.⁴ Port Road is one of two primary roads to the marina.

Lowry Bay Yacht Club is next to Seaview Marina, has approximately 200 members and holds sailing and boating events as well as social events in their club rooms.

² Personal communication with a member of Seaview Business Community

³ Recreation NZ 'Sport and Active Recreation in the lives of New Zealand adults 2013/14, Active New Zealand Survey Results'

⁴ Hutt City Council 'Seaview Marina: Design vision report' September 2015

4. Value placed on natural character, recreation and visual amenity

Natural Character

The river mouth and the coastal edge have been modified with land reclamation, dredging, revetment, stormwater discharges and development of the marina. Nevertheless, natural characteristics of the river mouth and harbour edge dominate with physical processes such as tidal action and sedimentation. A range of bird species, their communities, habitats and ecological processes are evident. Migratory freshwater fish species and marine fish species access the Hutt River from the harbour for breeding, feeding and spawning.

GWRC has identified the mouth of the Hutt River to 1.3 km upstream as a site of significance for indigenous birds. The western side of the river mouth has an area of tidal mudflat and is an important site for wading, roosting and feeding for indigenous birds and efforts have been made to restore the habitat. Restoration is an indication of the value placed on this type of habitat. The Department of Conservation considers it a Site of Special Wildlife Interest (SSWI) with a moderate value and a site with educational and scenic values.⁵

Natural coastal formations such as the sandy beach and rocky shore off Port Road are subject to natural processes and are valued, evidenced by the people who are seen to recreate there. People come to fish at the river mouth and harbour edge as well as sightsee and participate in recreational activities on and off the water. Places like these are especially valued because of their proximity to the urban built environment and their accessibility from where people live and work.

Special Recreation Area

The Esplanade Reserve from the corner of Port Road to Seaview Marina, Port Road Reserve, the adjacent beach and breakwater, Seaview Marina, Lowry Bay Yacht Club and The Great Harbour Way where it passes through the area is zoned a Hutt City Council Special Recreation Activity Area. This zoning places value on recreation associated with the coastal setting and marina. GWRC Hutt River Management Plan identifies the area as a key site which could become an important foreshore recreation area.

⁵ GWRC, 'Hutt River Floodplain Management Plan: Hutt River Environmental Strategy, undated, pge 53.

Steps taken to increase amenity values

Hutt City Council promotes Seaview as an industrial and commercial hub and actively works to attract industry and commercial activities in order to compete with other industrial areas in the region. Value is placed on recreation and amenity - actions include making better use of recreational opportunities and enhancing the area's landscape, general appearance and amenity and improving factors that affect the general ambience of the area.⁶ Initiatives that develop social places, promote and improve lunchtime routes for recreational use and connect to the sea, Waiwhetu Stream and the Hutt River trail are particularly encouraged.

One of the aims of the Seaview Business Community is to enhance the physical and working environment in Seaview.⁷ On behalf of the business community, the Seaview Working Group are working to improve flood protection and amenity on the Hutt River edge along Port Road. They recognise that the area is now part of the cycle way and is heavily used by the public. Their efforts have resulted in the rusty metal rods in the fill being removed, trees planted, the pathway improved and seats and picnic tables established. They want the esplanade protected from further erosion and the quality of fill dumped on the edge improved, preferring revetment to be rock rip rap similar to the western side of the river mouth at Hikoikoi Reserve.

5. Preliminary assessment

Methodology

In preparing this preliminary assessment I attended the meeting held on 8 November at Seaview Wastewater Treatment Plant when the options were presented, visited discharge points and the immediate area, identified the elements that make up the character of the landscape, the likely viewing audience and views of the discharge points, and identified recreational use in the area of the discharge points. I observed recreational users and have a photographic record of that use. To supplement personal observation, I spoke with a member of Seaview Business Community with business premises that overlook the Hutt River mouth on Port Road. Desk top research revealed recreational use that I have not personally observed, and I contacted Hutt City Council Parks and Gardens staff.

I used a seven point scale from very low effects to very high when assessing the effects on natural character, visual amenity and recreation. This scale informed an overall judgement that identified which effects are likely to be minor, more than minor

⁶ Hutt City Council 'Seaview Gracefield 2030: Transforming the Future' February 2011.

⁷ <http://seaviewbusiness.co.nz/> (accessed 21 November 2016)

or less than minor.⁸ I kept in mind that discharge of wastewater would be temporary due to repair and maintenance of the Main Outfall Pipeline or during and immediately after heavy rain events when the storm tank is full. Planned discharge associated with inspections and repairs to the main pipeline are in winter when recreational activity is arguably less than during the warmer months. However, unplanned discharge due to heavy rain or unplanned repairs may take place throughout the year.

Limitations of the assessment

This is a preliminary assessment and produced within a short time frame. It does not include the landscape policy context or consultation with tangata whenua or stakeholders (apart from attendance at the meeting on 8 November with some of the stakeholders and a conversation with a member of Seaview Business Community). The site investigated during this preliminary assessment was largely confined to the Port Road side of the river mouth. The assessment does not refer to all the aspects which are usually included in this type of assessment such as cultural associations, history and memories of the area. It does not include possible mitigation measures and has not been peer reviewed.

5.1. Assessment of effects on visual amenity

People who would view the discharge points can be divided into the immediate viewing audience and the medium distance viewing audience. The immediate viewing audiences are people recreating on the Esplanade Reserve, on the water and in vehicles on Port Road. The more distant viewing audiences are people in Hikoikoi Reserve using the boat ramp and boat sheds on the western side of the river mouth, and pedestrians, cyclists and fishers on the Waione Street Bridge.

Only Option 2 will be visible. The pipes and discharge points of the other options are underground and under the water. The discharge point of Option 2 is proposed to be under the water even when water levels in the river are low, but the pipe where it issues from under Port Road and enters the water would be visible for up to 20 metres depending on water levels. This pipe is longer than existing stormwater pipes issuing into the river along this stretch of Port Road and will be viewed by people recreating on the Esplanade Reserve and from people in vehicles on Port Road.

The attention of the viewing audience is likely to be focused on the river, the river's edge, activities on the river and more distantly Hikoikoi Reserve on the

⁸ NZ Institute of Landscape Architects Best Practice Note 'Assessment Methodologies'. The overall significance of effects rated moderate to very high is considered to be effects that are more than minor; those rated low to moderate-low are considered to be minor or less.

opposite bank. The pipe will be viewed in this context and bring an additional built element into view that is at odds with the more natural elements of the river environment and recreational activities on it. The view of the pipe in this context is likely to be a moderate to high level of effect on the character of the location. As people walk, jog or cycle on the pathway along the Esplanade Reserve they will view the pipe sequentially with the existing stormwater pipes. The effect of an additional pipe that is longer than the others and viewed sequentially is likely to be moderate to high. The effect on visual amenity of Option 2 is therefore assessed to be more than minor.

People recreating on the water will view the pipe in the context of revetment at the water's edge and the effect is likely to be more benign. However, when viewed sequentially with the existing stormwater pipes, the cumulative effect is assessed to be moderate which is a more than minor effect.

People in Hikoikoi Reserve using the boat ramp and boat sheds on the opposite side of the river mouth are approximately 332 metres away and people on the path along the edge of Hikoikoi Reserve are approximately 196 metres away. They will view Option 2 in the context of revetment at the water's edge with tanks and buildings on the Port Road beyond. At that viewing distance and scale, the pipeline is not likely to reduce visual values. People on Waione Street Bridge are approximately 504 metres away. Cyclists will be moving across the bridge and are unlikely to be able to view Option 2 pipe. Fishers and pedestrians may be able to view the pipeline but at this distance and because the pipe will be viewed within a wider context, the pipeline is not likely to reduce visual values.

5.2. **Assessment of effects on Recreation**

Types of Recreation

The Esplanade Reserve along Port Road, the river mouth, Port Road Reserve and the adjacent beach, Seaview Marina and Lowry Bay Boat Club all provide recreational opportunities that are valued and important. Four of the five most popular recreational activities among adults (16+) take place along the Esplanade Reserve (walking, cycling, jogging and running). Swimming is the fifth most popular activity among adults and this takes place on the beach next to the marina. Other valued and important attributes are that these activities are free, the site is accessible,

people do not have to travel far to reach the site and walking and cycling pathways connect to the wider pathway network.⁹

Recreation along Port Road is both land and water based and consists of casual passive and active recreation, organised and commercial recreation and events.

Land based recreation

As discussed above, the five most popular recreational activities among adults are all carried out along the Port Road Esplanade Reserve - walking, cycling, jogging and running, with swimming from the beach. Other recreation activities on the esplanade reserve are people fishing and white baiting in the Hutt River Mouth. People walk, cycle or drive to Port Road for views of the river mouth and harbour beyond from seats along Port Road and picnic using picnic tables along the river's edge or sit in cars facing the views.

The beach is accessed from Port Road through Port Road Reserve. People fish, dive, walk, and picnic on the beach and swim from the beach.¹⁰

Observation on Sunday 20 November over 30 minutes from 11.30am showed a range of recreational activities. I recorded 49 people along Port Road between the Waione Road Bridge and the corner of Port Road: 7 people fishing, 23 cyclists (4 were children), 3 groups picnicking (including three children) on the Esplanade Reserve near discharge points of Option 2 and 3, 6 joggers and walkers, 1 dog walker and 1 truck driver sitting in his cab having lunch overlooking the river.

On 8 November 2016 at approximately 8pm after the evening meeting on the various options, I recorded three people fishing from the breakwater on the southern side of the beach next to Port Road Reserve, one dog walker, one person walking out on one of the existing stormwater pipes that discharge into the river mouth and two cars parked on the Esplanade Reserve with a view of the river or harbour with people having takeaways.

In June 2013 while I was assessing Port Road Reserve for its reserve values, I recorded 17 people on the reserve, beach, in the water or on the pathway on a winter Saturday afternoon over 45 minutes: two families with children were fishing and picnicking on the beach, 1 diver, 2 cyclists, 2 joggers, 1 dog walker and three people in cars looking at the harbour view from the Esplanade Reserve at Port Road corner.

⁹ Sport New Zealand has identified that lack of time is the main barrier to participation in recreation with cost coming in second (Refer 'The Future of Sport in New Zealand', <http://www.srknowledge.org.nz/wp-content/uploads/2015/04/Future-of-Sport-FINAL.pdf>)

¹⁰ Personal observation and information from Seaview Business Community member and occupier of business premises on Port Road.

The families said they came to the beach to introduce their children to fishing and chose this site because of easy access and parking.

Commercial indoor recreational facilities on Port Road also draw people to the area. A facility at the Port Road corner has indoor ice-skating, a raceway, mini put and paintball.

Water-based recreation

Water based activities include activities based at Hikoikoi Reserve on the western side of the river mouth and yachts and boats associated with Seaview Marina and Lowry bay Boat Club. Boat ramps, boat sheds and sea scouts in Hikoikoi Reserve are located opposite the discharge points of Options 2 and 3. Hikoikoi Waka Ama is based at Hikoikoi Reserve. Other water based recreation at the river mouth are kite surfing, wind surfing, paddle boarding, sea and river kayaking and power boating. Water-based events include Hikoikoi Waka Ama Clubs Matariki event, the annual Crazyman kayaking event from Days Bay to the Hutt River and events associated with the marina and boat club.

Assessment of effects on recreation

All recreation on the water would be affected when the pipes are discharging into the river mouth or harbour, but the magnitude of the effects would vary.

Option 2: During periods when Option 2 is discharging, the discharge point 20 metres out from the river bank will affect water based recreational activities on the eastern side of the Hutt River mouth near the Esplanade Reserve, as well as land based activities such as fishing and white baiting. At all times, because the pipe will be above, on or just below the surface depending on the water level, and because it will be longer than existing stormwater pipes, water based activities such as kayaking and paddle boarding will have to avoid the pipe. The effect is assessed to be moderate - high and more than minor.

Option 3: The pipe in this option is buried, submerged 1.3 to 3 metres below the water level and the discharge point is 100 metres from the river edge. It will not affect land-based or water-based recreational activities except when it is discharging. At these times it will negatively affect water based activities in the middle of the river mouth such as kite surfing and wind surfing. At other times, the effect will be moderate - low and less than minor.

Option 5: The harbour bed is shallow for some distance out from the shoreline on the eastern side of the Hutt River mouth with a maximum depth of 2 metres at the

discharge point. The discharge point is 100 metres out from the shoreline. Because of the shallow pipeline, its proximity to the beach, its location where people dive and fish and a discharge point in shallow water, the effect on recreation will be high and more than minor.

Option 6: The pipe extends 600 metres from the shoreline and the discharge point is at a 10 metre depth. The breakwater between the harbour and the marina is some 300 metres from the discharge point and the marina entrance approximately 400 metres away. The effect on recreation is assessed to be low less than minor.

5.3. **Assessment of effects on natural character**

The degree or level of natural character within an area depends on the extent to which natural elements, patterns and processes occur, and the nature and extent of modifications to the ecosystems. High levels of naturalness occur where there are low levels of modification. However, the effect of different types of modification on natural character varies depending on the context and who is perceiving the effect.

In terms of natural character, the effects of Option 2 are assessed to be the highest of the 4 options. A new built structure will be introduced into the river bank and extend 20 metres into the river. Natural processes of aquatic life risk being negatively affected during and after discharge when risks of contamination and increased toxicity of the water may reduce diversity and the composition of the fish community.¹¹

The outfall in Option 3 is assessed to have a moderate to low level of effect on natural character due to its location in the middle of the river mouth at a depth up to 3 metres. The assessment of effects on aquatic ecology expects the primary plume of discharge to move parallel to the shoreline, although notes that there is a slight increase in risk of increased toxicity and contamination to invertebrates and filter feeding shellfish at slack tide or when the wind is onshore.

The pipe and discharge point in Option 5 is in shallow water and according to the '*Assessment of effects on the aquatic ecology*' has poor mixing efficiency and the plume would move towards the beach and shoreline along Port Road in a southerly. The beach and shoreline next to the reserve on Port Road is an area that is less modified than other parts of the site with natural patterns and processes such as

¹¹ Assessment of effects on the aquatic ecology of Waiwhetu Stream, Hutt Estuary and Wellington Harbour, October 2016.

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tidal changes evident. The effects of Option 4 on natural character are assessed to be moderate to high.

Option 6 is assessed to have better mixing efficiency compared to Option 5 and its location further out into the harbour away from the shoreline mean a low level of risk for contamination or toxicity at the beach and coastal edge along Port Road. The effects on natural character are assessed to be low.

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