



Information Only – no decision		
Date:	20 May 2011	
File No:	W416	
Report No:	REP11-06-04	

REPORT SUMMARY

Report to: Environment & Planning Committee

Meeting Date: 2 June 2011

Report Author Trevor James, Resource Scientist

Subject: Tasman's Natural Swimming Holes and Bathing Beaches

- Relative Popularity and Effects on the Recreational

Experience

EXECUTIVE SUMMARY

This report presents results of an opinion survey of recreational users of swimming holes in rivers and coastal beaches in Golden and Tasman Bay, as well as sampling the numbers of people using these areas. Useful feedback for Council was received about the issues that recreational users have that affect their enjoyment of swimming and associated activities. Several recommendations are made about the monitoring and management of this resource.

RECOMMENDATION/S

That the report be received.

DRAFT RESOLUTION

THAT the Environment & Planning committee receives the report "Tasman's Natural Swimming Holes and Bathing Beaches – Relative Popularity and Effects on the Recreational Experience"



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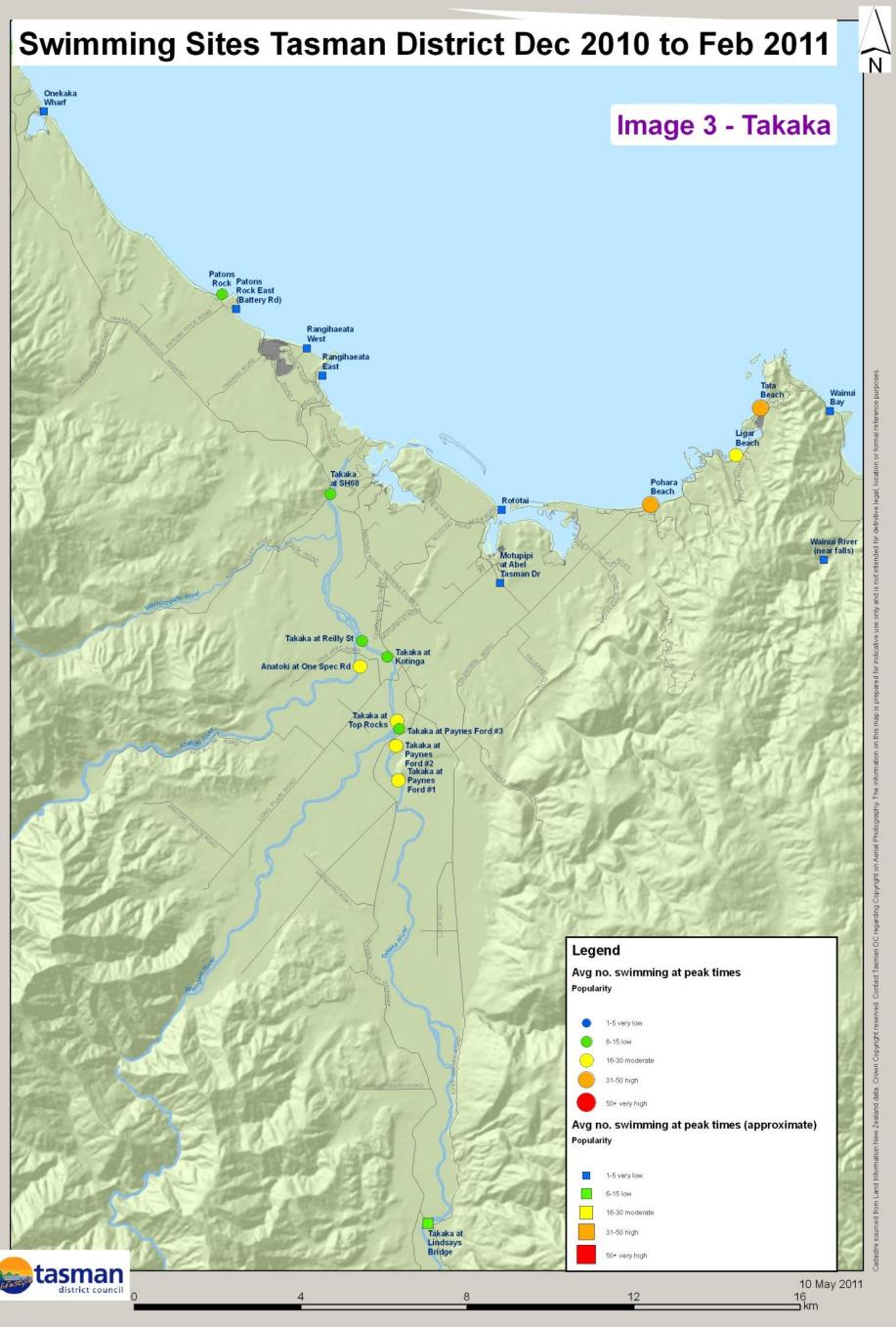
1. Usage of Swimming Holes and Bathing Beaches

This study confirmed the high use of our coast and rivers for swimming and associated recreation such as picnicking and sunbathing. Relative use of most sites was as expected, but a few reasonably popular sites were previously thought to have low use or were not known to Council prior to this survey. Conversely, some previously thought reasonably popular, had low usage.

The Roding River (Aniseed Valley) at Twin Bridges and Busch Reserves had far and away the highest use for rivers. The popularity of rivers taken as a whole listed in order from most popular to least popular are: Roding > Lee > Takaka > Motupiko > Wairoa = Waimea > Motueka > Buller > Anatoki > Aorere (see Figure 1-4). Rabbit Island Main Beach and Kaiteriteri Beach stood out strongly as being the most popular marine beaches.

The total number of people engaged in swimming in the Waimea catchment between 17 Dec and 27 Feb 2011 was estimated to be 115,000. The number of swimmers on the peak day in the Waimea catchment (6 February) was estimated at 4,000 persons. This was slightly higher than the peak day in 1985-86 and for Rabbit Island. As expected the greatest use of swimming sites was during hot, dry weather on weekends or public holidays.

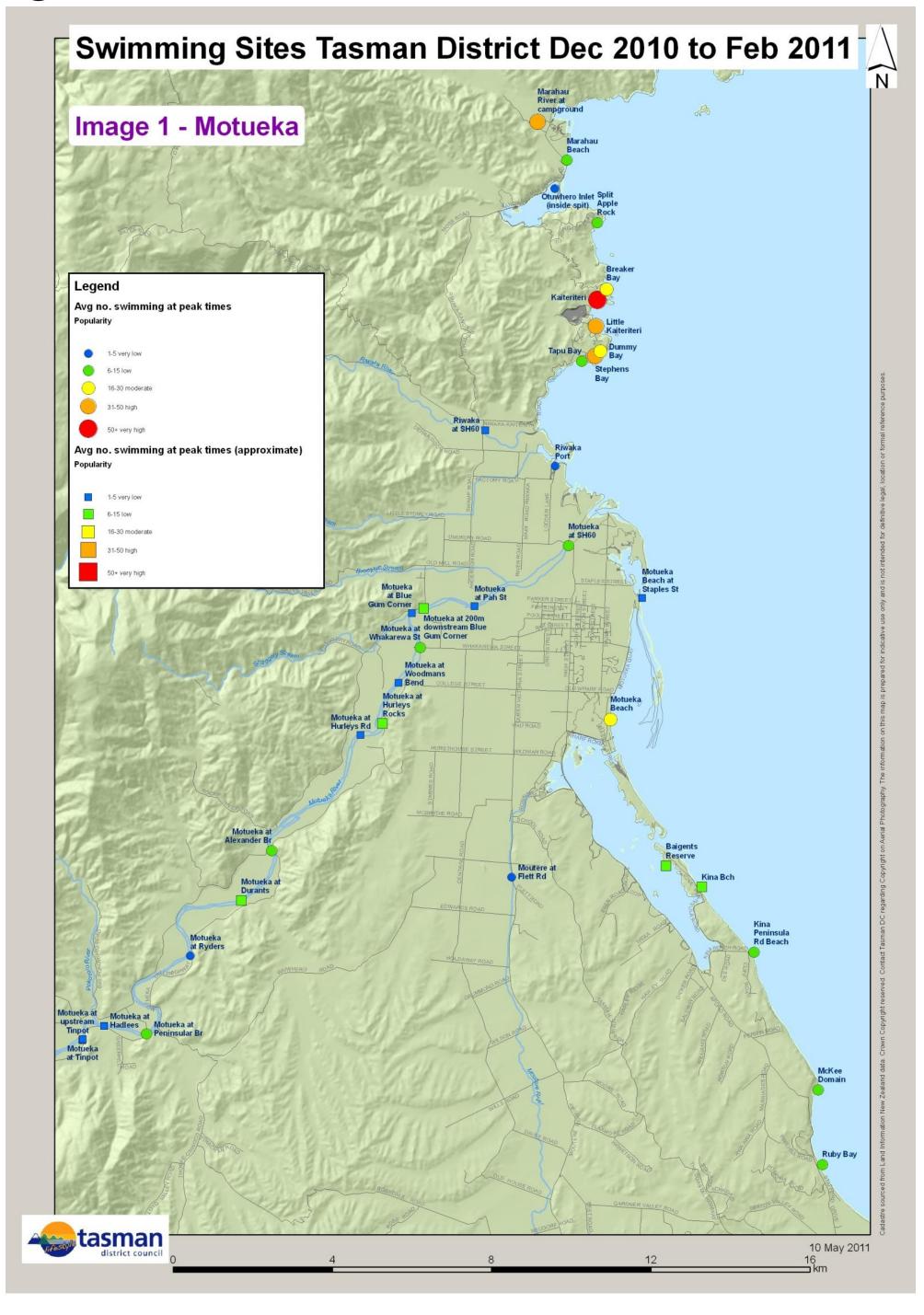


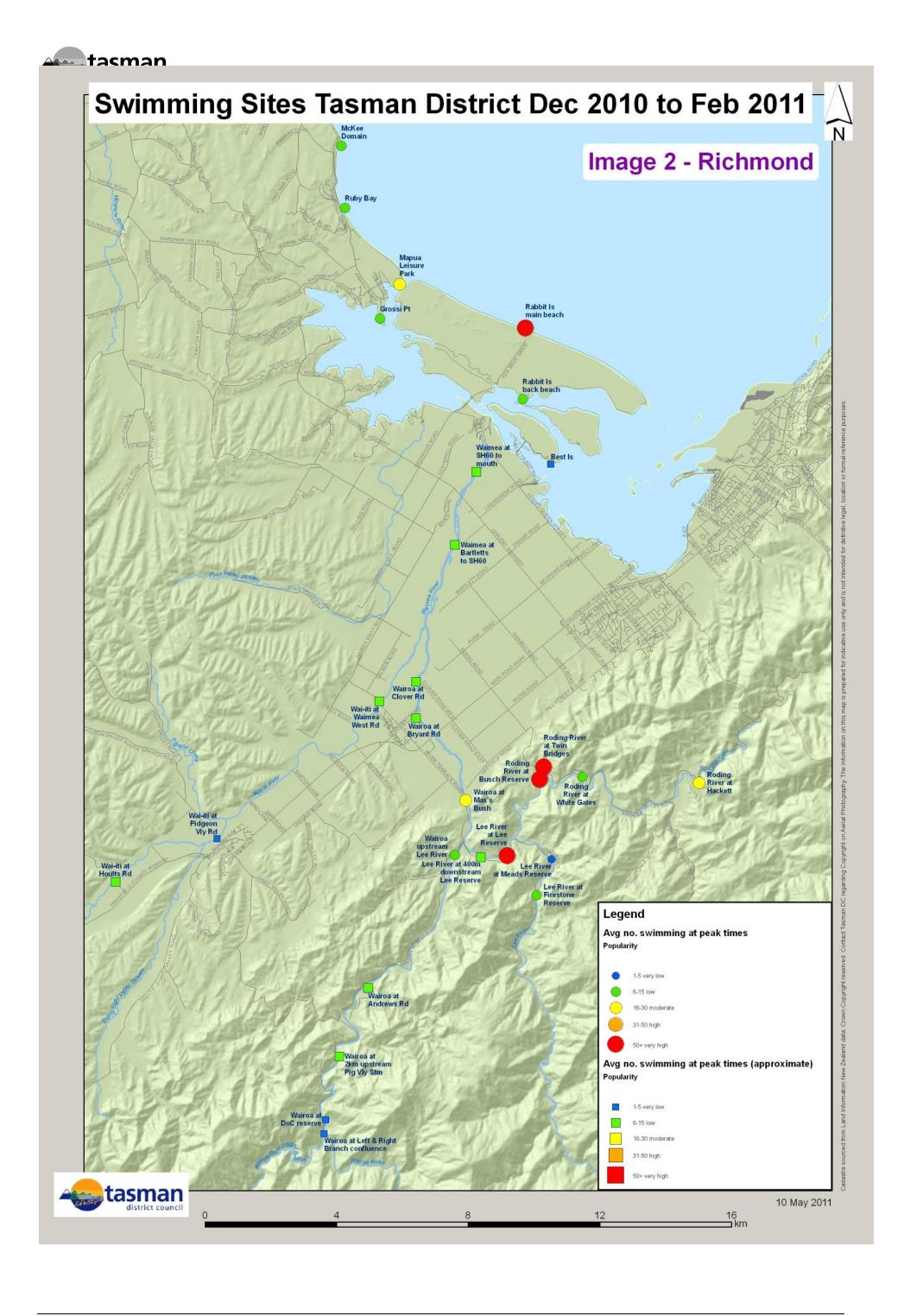




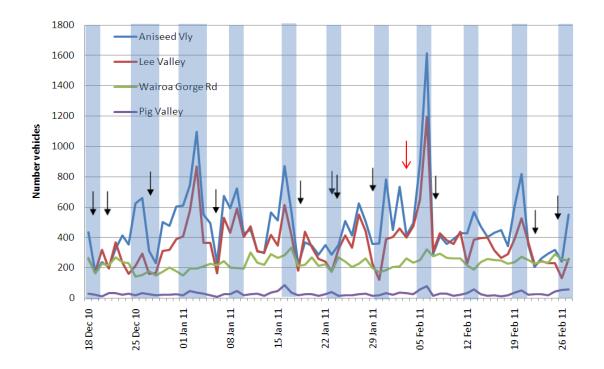












The 1985-86 survey showed peak summer usage was from 26 December to 11 January. Over the 2010-11 season usage was more even and relatively extended in comparison (higher use through late January and February. The rain on 28 December put a slight dent in total usage in the Christmas-New Year period, but then consistent moderately-high use occurred from 29 December to 6 January. The 2nd highest peak day occurred in this period (3 January). The highest usage occurred on 6 February after most schools had commenced for the year. Usage of swimming sites on 6 February was 45% higher than for any other day probably due to particularly hot and sunny weather.

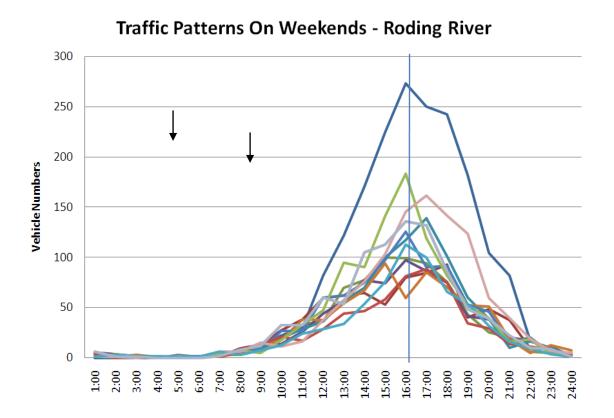
Traffic counts in the Lee and Roding River valleys were highly correlated with traffic counts with a estimated 10-15% of traffic not using recreational swimming sites. The highest use week at Lee River was the week following 31 January when almost 2300 vehicles (24 hour total) used the Lee Valley Road. The second highest usage was the period from 30 December to 5 January inclusive when over 1800 (1650 vehicles total for the 12 hours until 19:00 hours each day). For the Roding River the number of vehicles counted in the peak week was almost 2700 and almost 2800 for these two week periods respectively.



As expected, weather was a major factor affecting the level of use of swimming sites, with warm, sunny days having the highest use and cool rainy days having the least use. Water temperature is also likely also have played a part in lower usage with water temperatures (at Roding River upstream Hackett) dropping to 18°C, or just below, for the majority of the time from 13-27 February (and in the two weeks after 26 February temperatures dropped to 16°C).

Figure 5: Number of vehicles (total from 7am to 7pm) passing various counters in the Roding-Lee-Wairoa Catchment from 18 December, 2010 to 27 December, 2011. Weekends and public holidays shaded in blue. Black arrows show days with rainfall events

greater than 5mm. The red arrow indicates when most schools returned for the year.

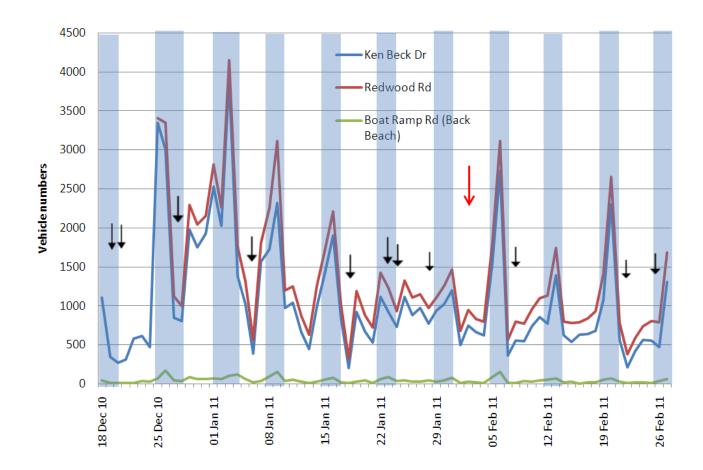


Patterns of use over a day – Waimea Catchment Case Study

This 2010-11 study found that the peak was generally later, between 16:00 on weekends and 17:00 on weekdays. From on-site observations at several sites in the Waimea catchment on 6 February estimated numbers of people rose steadily from approximately 440 people at 13:00 to at peak of approximately 1500 people at about 15:30. The 1986 Waimea catchment survey identified 14:00-18:00 as the peak use time for use of swimming areas. This held true again in this survey.



Figure 6: Traffic patterns over weekend for the Roding River.



The median of the total (24hr) traffic to Rabbit Island (17 Dec- 27 Feb) is about three times greater than for the recreational traffic (total minus baseline count) on the Roding, Lee and Wairoa combined (with assumed background traffic removed from each traffic counter site). Traffic to Rabbit Island is even more dominated by weekend or holiday traffic than the Roding or Lee Valley with weekend peaks being about 2-4 times that of the average for the previous week.

Traffic to Rabbit Island is widespread over the daytime period with a wide peak of nine hours from 11:00 to 20:00 (Figure 8a).

It is assumed from the generally close relationship of vehicle traffic with tide that most people using this road are boaties (Figure 8b).



Figure 7: Number of vehicles (total from 7am to 7pm) passing various counters on the approaches to Rabbit Is and Boat Ramp Rd from 18 December, 2010 to 27 December, 2011. Weekends and public holidays shaded in blue. Black arrows show days with rainfall events greater than 5mm. The red arrow indicates when most schools returned for the year.

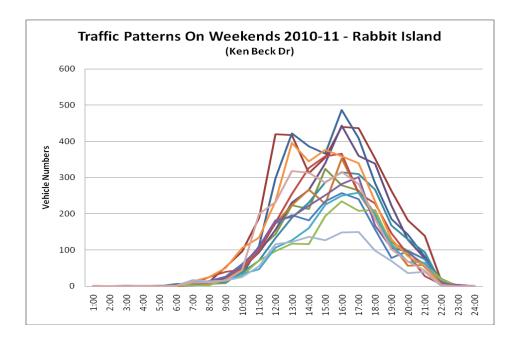
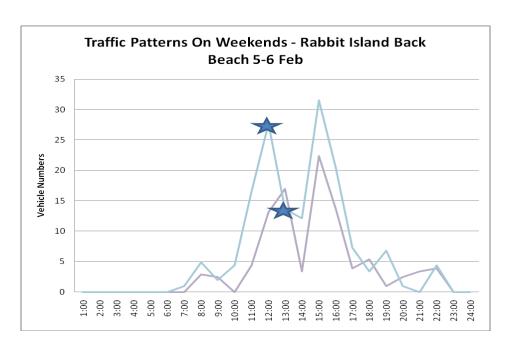


Figure 8 a and b: Traffic patterns over typical days at the approaches to Rabbit Island Main Beach and to the Back Beach (Boat Ramp Road). The stars indicate high tide.





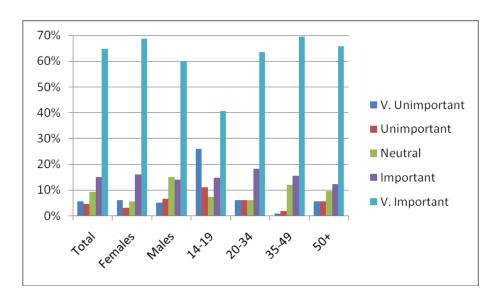
2. What Affects the Quality of the Swimming Experience

2.1 The Effect of High Concentrations of Disease-causing Organisms

The risk of getting sick from swimming was the single-most dominant factor in influencing the respondent's quality of experience with almost two thirds of respondents saying this factor was "very important" and 80% of respondents rating this factor as "very important" or "important" (Figure 9). About 10% of respondents, mostly young (under 19) people, felt this issue was "unimportant" or "very unimportant". This may be due to younger people having greater sense of invincibility and lower propensity for illness.

Many people commented that they expected Council to let them know if and when there was a concerning level of disease-causing organisms. Even though a respondent may have said that this factor was "important", they may still swim if the water looked clear and inviting.

Figure 9: The importance of the concentration of disease-causing organisms influence the quality of the swimmer's experience.



No person interviewed said they, or anyone they know of, ever got sick after swimming in waterways of Tasman District. This is useful information suggesting that poor water quality is not affecting large numbers of people. However, it is likely that only a very small number of people would be become ill after immersion in the water and these are more likely to be those more vulnerable such as the very young and old. It should be noted that the guidelines allow for 8 illnesses per 1000 swimming events which, compared to



our sample size is so low that we would not necessarily pick this up in this survey. There is also high potential for people to not link swimming in a waterway with an illness that may occur several days later. Reporting rates in New Zealand to medical professionals for official records on this matter is very low.

2.2 Water Clarity

Clear water was "very important" or "important" for two thirds of respondents. Less than 10% of respondents, mostly young (under 19) people using marine beaches, felt clear water was "unimportant" or "very unimportant". This is probably due to marine beaches, such as Rabbit Island, generally having poor water clarity but being popular beaches.

2.3 Water temperature.

While not everyone was asked their water temperature threshold causing them to avoid swimming, for the majority of people asked it was 18°C. Younger people had a lower threshold than older people, but were reluctant to swim at temperatures below 15°C. This has implications for what we consider is the start and finish of the swimming season. Council's Bathing Water Quality Monitoring Programme begins in mid November and ends at the beginning of March.

Sea water temperature is only measured continuously at two sites in Tasman which are located close to swimming areas, Port Tarakohe (data record: 2005-11) and Little Kaiteriteri (data record: 2000-11). The temperatures at these sites are likely to be lower than the bathing beach sites nearby as they are in deep water that is relatively well mixed. However, it clearly shows the peak temperature occurs in early February (Figure 11a). Weekly spot measurements at Kaiteriteri Beach, Mapua and Rabbit Island (the sites with the most data) are only available since 2006. This is not enough data to plot average daily temperatures, but it appears that water temperatures are about 2 °C warmer at Kaiteriteri Beach compared to the continuous sampler off the point at Little Kaiteriteri. Maximum spot water temperatures recorded at Kaiteriteri Beach are 24-26 °C which occur in January or February. The difference in water temperature at Pohara Beach compared to Tarakohe is likely to be much greater than Kaiteriteri. Low gradient beaches such as Pohara and Rabbit Island are very warm between 1-2 hours after low tide to near full tide as the water is warmed over the sand flats.



Water temperature of the Roding River upstream of Hackett swimming hole (data record: 2003-11) is more variable than sea water sites, but peaks at a similar time of year (Figure 11b).

If 18°C water temperature was used to define the bathing season and we align sampling to this period we would sample from mid December to end of March. However, while starting sampling in early November may not be optimum for swimming, it allows us to get some advance warning of any water quality issues prior to the season beginning. The main reason we finish sampling earlier is that we do not have student labour from mid February.

2.4 Scums/foams/odour and Slime

Like disease-causing organisms, scums/foams/odour were a factor that was "very important" or "important" to the majority (80%) of respondents, but fewer (almost 50%) thought it was "very important".

Slime was slightly less important than scums/foams/odour ("very important" or "important" for but showed a very similar pattern over the age and gender groupings. Many people commented that they expect a small amount of slime or foam and that this is natural.

2.5 Power Boats

The presence of power boats making noise, creating real or perceived safety risk or taking up space in the water or on the beach was the most equally divided of any of the factors discussed. Tata Beach was the main beach where this was raised as a major issue with many groups leaving because of boats.

2.6 The Presence of Toilet Facilities

Having toilets nearby was much more important than camping with 63% of respondents saying this is "very important" or "important" (42% thought it was "very important"). Older people and females were more likely to rank this factor of more importance.

2.7 Rope swings

These are a feature of many swimming holes in rivers. This, and cliffs and bridges make some sites particularly popular. This was a "very important" factor for young (<19) people and "very unimportant" for almost half those people over 50. Ensuring the safety of the users of rope swings was not discussed in the survey, but most are put up by private individuals and they



are seldom tested or maintained. Hang Dog campground at Paynes Ford do take some responsibility for some of the rope swings into swimming holes at this location and remove the swings when the pools below get too shallow from natural gravel movement. Council's Parks and Reserves Department has a genuine liability for the safety of recreational equipment at its reserves. If

rope swings or jumping structures are found on Council reserves, they are removed. In order to dissuade people from jumping off cliffs that may be a safety risk, the promotion of vegetation re-growth is encouraged. From experience, it has been found that fencing off unsafe areas creates more incentive for some people to use the area. If Council were to provide rope swings there is expected to be significant cost for such things as engineering design and testing of load limits and regular inspections (probably weekly as is the case for children's playgrounds). It could even be argued that Council would need to provide supervision on site. This is well beyond the scope of current Council business.

2.8 Safety for children

A clear majority of respondents (51%) thought this was "very important". As expected, those with families thought this was particularly important.

2.9 Dogs

The clear majority (60%) of respondents felt that being able take a dog was "very unimportant" (80% if you include the "unimportant" category as well). The minority of respondents (~15%) thought that taking the dog was "important" or "very important". When we asked this question however, most people said that they were offended by dogs on the beach. The reasons were deposition of dog faeces and harassing people with noise and intimidating behaviour, particularly in upsetting children.

Several of the people who did not want dogs and the beach/hole were dog owners themselves. However, they were keen to have some beaches or areas where they could take their dogs. People often go to the Waimea River because they can take dogs there.

3. Publicity about swimming areas

Currently there is little publicity about the location and features of particular swimming areas in Tasman. Several respondents to the survey thought it would be useful to provide more information to the public about the location of swimming areas. However, opinion is divided over whether less-popular swimming holes in rivers or some more-secluded beaches should be publicised or remain for the locals as 'jealously-kept secrets'. Tourists or



"non-locals" tend to be more keen on this idea than locals as they do not have access to this information. In order to satisfy many locals some sites could be excluded from publicity.

Publicity could be in the form of signage at the roadside pointing to the access point (like the Fish and Game access sign) or a guidebook like "Walk Tasman" or "Bike Tasman". In early 2011 Fish and Game produced a guide for Golden Bay and Motueka that includes access areas for fishing, picnicking, and swimming. Fish and Game are working on a guide for Buller and Waimea. This guide is distributed at information centres around the district.

It appears that the Council website is not used much by the swimming public with only 9 of 287 (~3%) respondents having gone to Council's webpages to access information on bathing water. This is despite these pages being comparable to the best among Councils in the country. About 3% of respondents have checked river flow, tide or water quality prior to going swimming. It seems that weather is by far the most important thing that will influence people to swim on a particular day.

4. Specific Feedback from the Swimming Public

4.1 The following comments from survey respondents are listed in order from common comments to less common:

- Access to beaches and swimming areas should be improved and maintained where it currently exists. Access should be open for all. This was the greatest concern for most people interviewed.
- Dogs should not be allowed at beaches or swimming holes. Faeces and intimidation/nuisance were sighted as the main reasons. Approximately 60% of respondents made this comment, even a majority of those that have dogs.
- Keep the main sights natural with no development. "Do not want high rise buildings or garish buildings like Little Kaiteriteri or the Gold Coast".
- Praise for TDC and the work they are doing maintaining river and beach reserves.
- People want access tracks to the beach/swimming hole be repaired. Many tracks are difficult for older or younger people.
- Boy racers or young hooligans are seen as a problem at several sites, mostly rivers
- Noise pollution from boats / jet skis is disliked particularly in Tata and Kaiteriteri



- The amount of rubbish and over-flowing bins during peak periods is unsightly. Broken glass at some sites is a real health issue. *Many people noted that they pick up rubbish after them.*
- Some people would like to see other facilities at site such as toilets, BBQ and tables.
- There are mixed views on freedom campers some saying that they should be charged and others saying access should be free. Toilets and rubbish bins should be installed at popular sites to stop fouling.
- A few of the facilities available need better looking after e.g. Ruby Bay and Mapua.
- People want better signage for walkways and for no dogs. Others suggest that signage is overdone, especially in places like Kaiteriteri. Mixed views
- Farmers should stop impacting on the rivers, particularly farm effluent.
- Designate more sections of beach or adjacent land for dog exercising and publicise these. Not many dog-friendly sites in the district.
- Speed limit at some sites is to high leading to a danger for kids, particularly Kaiteriteri and Paynes Ford. Most of those speeding are younger drivers.
- Charging for parking is a not a good idea as it limits access.
- Need to have areas designated for boats and swimmers, particularly at Tata Beach. Even at Kaiteriteri swimmers and kayakers become dangerously close to boats.
- Bring back more campgrounds e.g. Pakawau
- TDC should charge visitors (not rate payers) to upgrade facilities

4.2 Site-Specific Comments:

Site:	Comment:
Waimea and Wairoa Rivers	Concerns about the gravel extraction affecting the health of the river and making it feel like an industrial area.
	Upgrade the track on true right to, and provide toilets at, Wairoa at Max's Bush (toilets were also suggested for this site in the 1986 report). The land is on road reserve but a short section at the SE end of Haycock Road accessing this site is in private ownership.
	A track upgrade is needed because it is very difficult for older people to walk along. The work is only likely to take a person a couple of hours with a spade.
Lee River	Clean Up rubbish
	Farm effluent affecting water quality
	Glass is a recurring problem
	Install BBQs at Lee Reserve



Roding River	Would like to see more riparian planting to improve the water quality
	Hate to see dairy farmers impacting on rivers. Control quantity in river not too much irrigation. Keep naturalness. Not too many signs. Safety
	Glass at river sites
	Well maintained site appreciated
	Everything clean and tidy. Pleasant
	Need to look after cooking and BBQ facilities
	Farming and cows in water. Keep thing natural. Old man's beard, native planting would be good
	Farmers should fence river edge to prevent effluent flowing into river
	Keep access open
	Install BBQs at Hackett Reserve
Rabbit Island	Most against further development at Rabbit Island
	More coastal care at the beach as it is eroding away e.g. more vegetation to protect erosion. Also too much rubbish around the beach
	Maintain access and focus on controlling erosion at rabbit Island - prefer natural
	Also very dangerous at Rabbit Island with kite buggies, kite surfers, land yachts and dune buggies as they do not look out for people around them
	Dogs. More signage is needed so that people do not bring their dogs onto the beach.
	Nudists: Rabbit Island is a family beach not a nudist beach they need to go to Mapua for that. Something needs to be done abot the sex huts at the southern end of the beach
	Install a small playground at Rabbit Island like the one at Tahunanui and Kaiteriteri. Beach cafe at Rabbit Island would be good.
Tasman Bay Coast	Removal of pine trees at McKee Domain.
Mapua to Motueka	Need to enforce dogs on the beach.
	Positive improvement over last 20 years. Good toilets and water on hand. Playgrounds good at McKee and Faulkner's bush
	Great infrastructure. Clean and tidy
	Nice and unspoilt
	Motorway has been good for the people at the Mapua campground has made it a lot quieter



district council	
-	Toilets at the Mapua Grossi Point Ruby Bay area need more regular cleaning and maintenance. No soap or toilet roll holder.
	Seawall at Mapua - Ruby Bay unsightly and unnatural
	Wharf at Mapua needs fencing so it is safer for kids
Kaiteriteri Area	Advertising/signs for parking could be better
(including Stephens, Dummy,	Wasps should be better controlled
Tapu, Split Apple	Noise pollution e.g. jet skis motorboats
Rock Bays)	Restrict further development in national parks.
	Limit commercial activity on Abel Tasman coast.
	Let people build on their own land but not let them develop natural beaches
	Removed glass in water from Kaiteriteri
	Sand Erosion is a concern at Kaiteriteri
	Concerned about the sewage smell on Kaiteriteri Beach as well as debris on beach and erosion
	Would like to see life guards when conditions require it
	Air traffic unpleasant. Close up boats on the beach dangerous
	Boats should be down at boat ramp
	Traffic is sometimes too fast young hooligans. Slow traffic down - speed bumps not very effective.
	Enjoy swimming with the current from under the bridge on an outgoing tide.
	Install some picnic tables at southern end of Kaiteriteri beach
	Don't want dogs on the beaches. Harassment of children and faeces.
	Need better signage to show start of walkways at Kaiteriteri, Stephens-Bay-Dummy Bay. Have a walkway from Tapu Bay to Stephens Bay.
	Needs to be bigger signs and announcements at the campground e.g. when water quality problems occurred.
	Jumping tramp moored in the bay would be good. Existing pontoon is great.
	Kayaks should not be on north side of boat ramp. They already take up a lot of space.
	Commercial companies should not refuel on coast the smell is overpowering at times and ecologically bad for the marine animals.
	Announcements from loud speakers on tour boats are too loud. Announcements could be made several minutes before reaching the beach rather than almost at the beach.



district courier	
	Jet skis are a problem they are too noisy.
	Aeroplane aerobatics too noisy at times.
	Public access should be maintained
	Trees at Kaiteriteri have been cut, limiting the amount of shade available.
	Keeping tracks and signage at Dummy Bay fairly rudimentary so not many people will make the effort. Want few people there.
	Rubbish and pollution is a problem at peak times during the year
Marahau Area	Noise pollution at beach from powerboats & people
	Numbers should be monitored and managed in national park.
	Would not like resorts/buildings near the beach. Like things natural
	Loss of sightlines. Loss of access. Keep it natural
	Parking at road-end for track to Split Apple is inadequate.
	Part of rudimentary seawall has been partially washed out at Marahau. Sand bags litter the beach.
	Don't want development in natural areas
Motueka River	Walks along Motueka River and public access ways to the 'Queens Chain' need to be better signposted, starting from town up to Alexander Bridge and beyond. Apart from the waterfront at Motueka, there are very few walkways around Motueka.
	Appreciate access to river and good maintenance
	Concerns about the safety and hygiene of river
	More car-parking suggested for Peninsula Bridge swimming area. This site was at times very congested with cars.
	Put up better signage indicating access points for swimming holes.
	Want to see better control of the erosion of the banks and monitoring of the bacteria levels
	Keep it natural
	Need to tidy the slash/cuttings after logging of pine forest in Motueka Valley. Has to affect water quality.
Golden Bay	Improve access to Paynes Ford sites, particularly the lower site (swimming hole #1). Overgrown and start of track is not clear. (land at this site owned by Department of Conservation).
	Speed limit along SH60 past Paynes Ford should be lowered. Many people casually crossing the road with cars travelling past at 100km/h.
	Need more parking at Paynes Ford during peak times.



Carparks on both sides of the road are regularly full in peak season and spill-over parking along the highway has very little room.

Disappointed that Hang Dog Campground took rope swing away (*did so for safety reasons*).

Lots of campers leaving rubbish before or after the (Luminate) festival at Canaan Downs. Would prefer more popular sites to have long drop or toilet to stop fouling

Tata beach should have separate zones for boats and swimmers. Many people not swimming at peak times as it is so dangerous. Have some beaches with no boats

Free camping should be allowed

Would like to see toilets on Selwyn St, Pohara (road along waterfront at west end of built up area) near beach access

Prefer if people did not drive on river bed

Algae has increased over years

Waterborne diseases are a concern

Farms need to control faecal matter or adopt ways to maintain good stream health e.g. Patons Rock

Noise control is an issue, particularly at Tata Beach.

Takaka River has more gravel and mud and is more coloured than a decade ago. Some swimming holes are filling in.

More off-street parking at Kaihoka Lakes would be good at peak times. Public road is very narrow when many cars are parked along it.

5. RECOMMENDATION/S

Review of Bathing Water Quality Monitoring Programme:

The following changes are recommended to the Bathing Water Quality Monitoring Programme:

Cease sampling at the following sites:

Pakawau

Totara Ave

Parapara

Increase the sampling to 20 samples/year every year at (like Kaiteriteri, Rabbit Is, Mapua, Pohara):

Lee at Reserve

Roding at Twin Bridges

Takaka at Paynes Ford lower (#1)



Install temperature probes at the following river hydrology monitoring sites: Wairoa at Irvines,

Motueka at Woodmans,

Takaka at Kotinga.

Put Collingwood Boat Ramp in River Water Quality Monitoring Programme (costs will be managed within existing budgets)

Publicity

Produce a guide to swimming holes and coastal beaches in a similar format to 'BikeTasman' or 'WalkTasman'. Council has already provided information about the location and other details of swimming sites to Fish and Game who are producing an access guide to rivers for all recreation, not just angling.

Tasman Resource Management Plan

As the value of the recreational experience has again been shown to be intimately linked with the scenic quality and natural character of riverscapes, Council should consider a landscape protections zone in areas around river swimming holes, especially in the Lee and Roding catchments.

Access Provision

Take opportunities to add to or improve existing access to coastal and river swimming areas.

Parks and Reserves

Continue to improve parks and reserves, taking on board some of the comments from this survey.

6. DRAFT RESOLUTION

THAT the Environment & Planning committee receives the report REP11-06-04 "Tasman's Natural Swimming Holes and Bathing Beaches – Relative Popularity and Effects on the Recreational Experience"