

Notice is given that an ordinary meeting of the Environment and Planning Committee will be held on:

**Date:** Thursday 3 August 2017  
**Time:** 9.30 am  
**Meeting Room:** Tasman Council Chamber  
**Venue:** 189 Queen Street  
Richmond

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## Environment and Planning Committee

### AGENDA

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#### MEMBERSHIP

<b>Chairperson</b>	Cr T King	
<b>Deputy Chairperson</b>	Cr S Brown	
<b>Members</b>	Mayor R G Kempthorne	Cr S Bryant
	Cr P Canton	Cr M Greening
	Cr P Hawkes	Cr K Maling
	Cr D McNamara	Cr D Ogilvie
	Cr P Sangster	Cr T Tuffnell
	Cr A Turley	Cr D Wensley

(Quorum 7 members)

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## AGENDA

### 1 OPENING, WELCOME

### 2 APOLOGIES AND LEAVE OF ABSENCE

#### Recommendation

That apologies be accepted.

### 3 PUBLIC FORUM

### 4 DECLARATIONS OF INTEREST

### 5 LATE ITEMS

### 6 CONFIRMATION OF MINUTES

That the minutes of the Environment and Planning Committee meeting held on Thursday, 1 June 2017, be confirmed as a true and correct record of the meeting.

The Minutes of the Environment and Planning Committee meeting held on 2 and 9 June 2017 TRMP Hearing 74 be confirmed as a true and correct record of the meeting.

### 7 REPORTS OF COMMITTEE

Nil

### 8 PRESENTATIONS

Nil

### 9 REPORTS

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## 9 REPORTS

### 9.1 2016-2017 DAIRY EFFLUENT SURVEY

Information Only - No Decision Required

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
<b>Report Author:</b>	Kat Bunting, Compliance & Investigation Officer
<b>Report Number:</b>	REP17-08-02

#### 1 Summary

- 1.1 This report presents the compliance results from the 2016/2017 farm dairy survey, in particular compliance with respect to Resource Consent conditions for the discharge of treated dairy effluent to water, and the discharge of dairy effluent to land as a Permitted Activity under the Tasman Resource Management Plan (TRMP).
- 1.2 In the 2016/2017 season a total of 139 dairy active discharges in the Tasman District. Of those 134 farm dairies operated as Permitted Activities and the remaining five held Resource Consents to discharge treated effluent to water.
- 1.3 At these inspections each farm was assessed against Resource Consent conditions for the discharge of treated dairy effluent to water, or against the Permitted Activity Rule 36.1.2.3 (the discharge of animal effluent to land). The final compliance results for all 139 farms were:
  - 93% - Fully Compliant
  - 4% - Non- Compliant
  - 3% - Significantly Non-Compliant

#### 2 Draft Resolution

**That the Environment and Planning Committee receives the 2016-2017 DAIRY EFFLUENT SURVEY report.**

### 3 Purpose of the Report

- 3.1 The purpose of this report is to present the results of compliance for the 2016/2017 dairy season, with respect to those farm dairies that hold Resource Consent to discharge treated dairy effluent to water, or discharge to land under the Permitted Activity Rule 36.1.2.3 of the Tasman Resource Management Plan (TRMP) - Discharge of Animal Effluent to Land.
- 3.2 The survey specifically looked at the collection, containment, and disposal of effluent from the farm dairy and other general farm management practices associated with effluent.
- 3.3 Routine sampling of waterways or receiving soils does not form part of this monitoring programme and is only undertaken during investigation phases where offences are suspected. The monitoring programme and summary report does not therefore assess wider effects of water quality, amenity, or aquatic ecology in these catchments, which are covered by other environmental monitoring reports to Council.

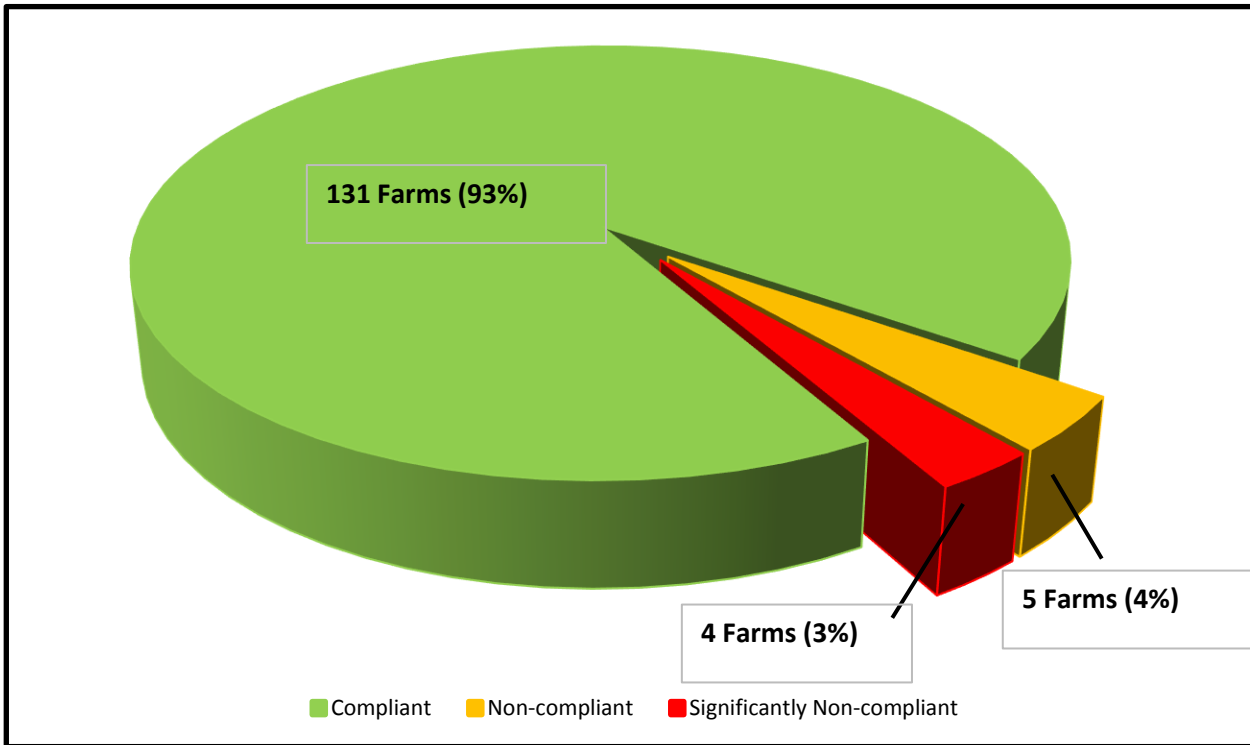
### 4 Background and Discussion

#### The Survey Process

- 4.1 The survey process used on farm was identical to that of previous surveys. It is not intended to detail that survey method in this report and the reader is referred to an earlier staff report EP06/05/18 for the methodology that is used in the farm assessment, including the geographical boundaries of the three “sub-regions” (Golden Bay, Central, and Murchison) specified in this report.
- 4.2 As with all dairy farm inspections undertaken by Council, farms once assessed were placed into one of three categories that described their level of compliance. The criteria for assigning these categories are:
  - **Compliant:** No non-compliance with any Resource Consent conditions or any sections of Rule 36.1.2.3 of the TRMP were found at the time of inspection.
  - **Non-compliant:** All issues that did not fit into either “compliant” or “significantly non-compliant” eg technical non-compliance with no adverse effect.
  - **Significantly Non-compliant:** refer to Attachment 1 for a full list of criteria within this category.
- 4.3 The compliance classes are used by all regional councils to ensure national consistency when reporting on dairy compliance and will be referred to throughout the remainder of this report.

**5 Compliance - Present Situation****2016/2017 Survey Results**

- 5.1 Compliance with respect to an individual's consent conditions, or Rule 36.1.2.3 of the TRMP and Section 15(1)(b) of the RMA 1991 as assessed from the farm inspections are presented in Figure 1.
- 5.2 Of the 139 inspections made during **2016/2017** season, 130 (93%) of all farms were graded "Compliant".
- 5.3 Inspections on five (4%) farms found issues that required a grading of "Non-Compliant". Some farms presented more than one issue of non-compliance; such non-compliance included:
- Minor ponding present after more than one hour had passed since effluent had been applied to land (three farms). In all cases the ponding was intermittent over an area less than 10m<sup>2</sup> and was just deep enough to splash.
  - Failing to adhere to setback rules for effluent application near property boundaries (three farms). In all cases, the wetted width of the discharge came within ten meters of a public road.
  - Failing to take and submit sampling results by the due date specified by a condition of consent (one farm).
- 5.4 Inspections on four (3%) farms found an issue that was graded as "Significantly Non-compliant". Such non-compliance included:
- Major ponding present after more than one hour had passed since effluent had been applied to land (two farms). One case involved a drag hose pulling apart at a join. This meant effluent was discharge directly to land through the hose end and not the irrigator. The result was the over application of effluent in one location causing ponding over approximately 10m<sup>2</sup> and was at least 5-10cm in depth.
- The second case involved the failure at the termination of a mainline that carries effluent from the storage facility to the disposal field. This was a temporary fix undertaken a few years prior; a permeant fix was never completed. The subsequent failure gave rise to a large volume of effluent being discharged to land from the hose end. The ponding that resulted flowed over land and also entered surface water. This being a secondary offence.
- A serious lack of contingency storage or back-up plan to avoid discharge to water (one farm). In this case the new storage pond was lapping at the brim and a heavy rain warning was in place. Should this pond have over-topped the flow would have entered a waterway.
  - Failing to ensure effluent storage facilities are sealed (one farm). This case involved a stormwater division system allowing an intermittent discharge containing contaminants (washdown from the yard) to enter a farm drain that flowed to a stream.

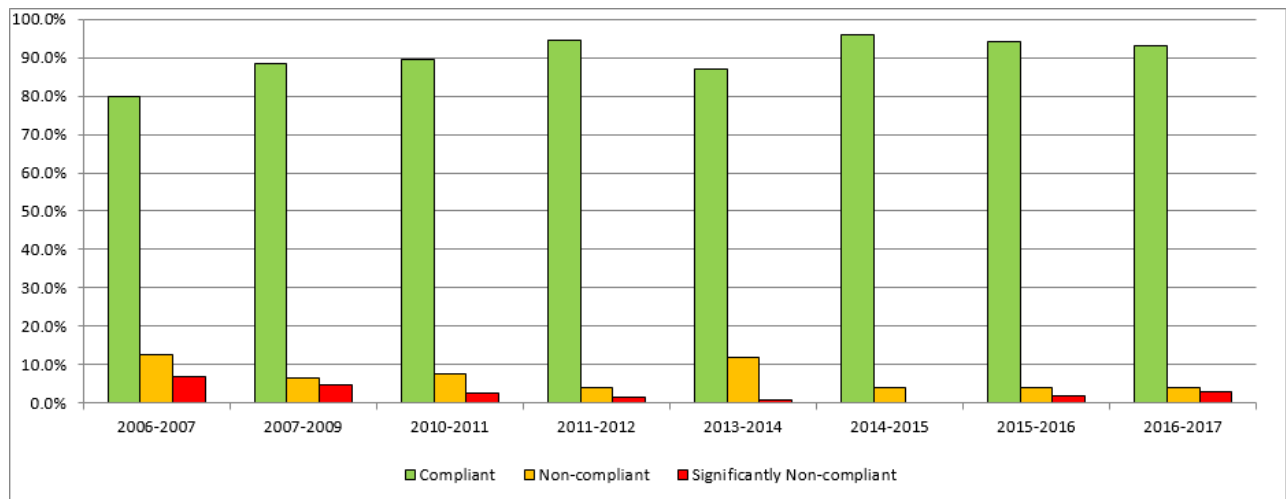


**Figure 1** Compliance with respect to Rule 36.1.2.3 of the TRMP, Resource Consent conditions, and Section 15(1) of the RMA 1991 following the inspection of all farms in Tasman District.

- 5.6 All enforcement action undertaken during the 2016/2017 season is detailed below in section 5.12 of this report.
- 5.7 Council recognises that a lot of work has been done by the dairy industry (Fonterra, Westland Milk, and Dairy NZ) in recent years, by working one-on-one with farmers with respect to system performance and wet weather contingencies. This is particularly so in the Murchison area, where inspections made in past seasons identified that non-compliance associated with ponding was far more prevalent here than any other area of the District. Over the past four seasons, Council is aware that both supply companies have audited effluent systems that were of concern and that recommendations have been made to the respective farmers. It is pleasing to report that most of these farmers have now completed or are well underway to having their new system fully commissioned by the start of the 2017-2018 dairy season. There remains a very small minority of those who will not move forward unless pushed to do so. Such a push will have to come from industry as the permitted activity rules of the TRMP do not provide Council the ability to set these standards and our intervention requires detection of a breach.
- 5.8 Council and Industry are actively promoting to farmers the benefits of engaging professionals who have gained accreditation through the Farm Dairy Effluent Accreditation Scheme. Regardless of whether the farmer chooses to engage such a person, they are required to demonstrate that any new system or modification to any existing system meets Dairy NZ’s Farm Dairy Effluent Design Code of Practice and Standards. These standards include among other things, adequate sizing and the sealing of effluent storage systems.



- 5.9 Much focus has been placed on ponding in previous years, as this was the most common issue of non-compliance found during the surveys. It is disappointing to report that the 2016/2017 season was no different even though many large storage facilities have been installed around the district, particularly the Murchison area. The ponding encountered this season was not as a result of the lack of storage, rather it was poor management of these storage facilities, poor system maintenance, and equipment failing, or in some cases just poor farm practice of over application due to not having the irrigator traveling at its maximum speed. It is anticipated that with these new purpose built storage facilities, combined with correct management regimes and better industry education we should see ponding decrease as an area of non-compliance in the Tasman Region. If not, Council will be required to apply further regulatory pressure in order to resolve this issue.
- 5.10 Figure 2 shows a comparison of the compliance rates from the 2005/6, 2006/7, 2007/8-2008/9, 2010-2011, 2013/2014, 2014/2015, 2015/2016 surveys with this latest survey. Due to the interrupted surveys of 2009/2010 (just 37 farms surveyed) and the more recent 2012/2013 (34 farms) those statistics are not included in Figure 2.
- 5.11 From Figure 2 it can be seen that full compliance has continued to improve from season to season up until 2014-2015 when it reached a very high standard. Since this time it is pleasing to report that Tasman farmers continue to maintain this high level of compliance and that the 2016/2017 (although it had more instances of significant non-compliance than last season) was keeping this positive trend. Only seven inspections found non-compliance with four of these relating to either a technical breach or a minor breach with no adverse environmental effect. This continual high standard of compliance can be directly attributed to the commitment of most farm owners and their staff to employ best farm practices with respect to the disposal of farm dairy effluent.



**Figure 2** Comparison of the compliance rates from previous surveys

**2016/2017 Enforcement Action**

- 5.12 As in previous years five modes of enforcement action were employed to address the non-compliance that arose from these farm inspections. These being: warning letters, Abatement Notices, Infringement Fines, Prosecutions, and Enforcement Orders. Nine inspections resulted in Council taking enforcement action during the 2016/2017 season. The type of enforcement action taken is determined by the resulting adverse environmental effect arising from that non-compliance and use of the Enforcement Policy for guidance.

**Formal Warning Letter**

5.13 A formal warning letter acts as a formalised staff direction and is retained on file. This is not a court process although further non-compliance that receives enforcement action will take into account that the operator had previously received formal direction. A total of four warning letters were issued this season. All inspections that were graded non-compliant with respect to minor ponding and/or setback distances to property boundaries received a formal written warning. This line of enforcement action was taken as each circumstance of non-compliance did not result in any actual adverse environmental effect and each farm had a previously good compliance history. In each case the farm owner/worker was made well aware that un-announced inspections would be made for the remainder of the season. It was also made clear that further formal enforcement action could result if non-compliance was found again. It is pleasing to report that this was not necessary as return visits to these farms found full and continued compliance.

**Abatement Notices**

- 5.14 An abatement notice prescribed under Section 322 of the Resource Management Act is a formal and legal directive from Council to cease an activity and/or undertake an action(s) in order to avoid, remedy or mitigate an actual or potential adverse effect on the environment. An abatement notice is used by Council to immediately deal with an illegal activity and to instigate corrective action. Further enforcement action can follow the issuing of an abatement notice.
- 5.15 Three Abatement Notices were issued during this reporting period. One related to the serious lack of contingency storage or back-up plan to avoid discharge to water. In this particular circumstance this was not a case of not having a storage facility, but rather the poor management of it and the potential adverse environmental effects that this poor management could have had. The newly commissioned storage pond had been allowed to fill to such a level that no contingency remained. This situation presented an unacceptable risk given the heavy rainfall event that was forecast to occur later that same day. Should this pond have over-topped, effluent would have entered a waterway. In this case the Abatement notice served to address the management of the system in its entirety both short and long-term. The other two Abatement Notices were served to address the incidence where ponding of effluent had resulted from infrastructure failings. All three parties were made well aware and any breach of the Notices or any further non-compliance may result in further enforcement action being taken. All three Abatement Notices are still remaining active heading into the new season and will remain so until Council is satisfied that the parties concerned can demonstrate full and continued compliance.

**Infringement Fines**

- 5.16 An infringement fine prescribed under Section 343C of the Resource Management Act is an instant fine issued by Council to a person(s)/company who has committed an offence against the Act.
- 5.17 One infringement fine was issued in response to farm inspections during the 2016/2017 season. This fine accompanied the Abatement Notice issued to the farm owner and involved an incidence of ponding.

### Prosecutions and Enforcement Orders

- 5.18 An enforcement order prescribed under Section 319 of the Resource Management Act is a directive from the Court to a person(s)/company to cease an activity and/or undertake an action(s) in order to avoid, remedy or mitigate an actual or potential adverse effect on the environment from their activity.
- 5.19 No orders were sought in this period.
- 5.20 One prosecution was initiated for offences found during the 2016/2017 season. The main offence involved the discharge of effluent to land where it entered water as a result of a range of poor on-farm practices. This matter is currently before the Environment Court.
- 5.21 Another significant non-compliance has been investigated and is currently making its way to the Courts with charges due to be filed in the near future.
- 5.22 It is encouraging to report that the three farms in the District that have current Enforcement Orders against them demonstrated full compliance with the requirements of these orders and the permitted activity rules.

## 6 Strategy and Risks

- 6.1 Although risks are not significant under the current Council monitoring strategy, there is always high public interest in dairy effluent disposal due to the known risk to the environment and the frequency of issues appearing in the national media. For that reason, there is potential for strong public comment if the programme does not maintain high levels of compliance and provide adequate performance reporting. Likewise, as part of the collective agreement of all regional councils to adhere to the “every farm, every year” monitoring strategy including audit, a failure to maintain the programme will not only put us out of sync with the rest of the country, but limit our ability to meet national reporting requirements.

## 7 Policy / Legal Requirements / Plan

- 7.1 Presently there is no legislative ability for Council to recover the costs incurred in the monitoring of farm dairies operating under permitted activity rules. As the majority of farms within the district operate as permitted activity, the Council cannot charge for routine inspections. When non-compliance is detected the cost of enforcement processes generally falls to the Council as it does in any area of activity, however, penalties such as infringements and court fines do provide some monetary return if and when these mechanisms are used. As the majority of farms are achieving full compliance it is fair to say that the greater part of the program costs for permitted activity monitoring in dairy are presently borne by Council via general rates.
- 7.2 For the five consented activities the costs associated with monitoring are recovered by way of annual charges.

## 8 Consideration of Financial or Budgetary Implications

- 8.1 This is not relevant to this monitoring programme except that we will report these results publicly and continue to work with farmers and the Tasman dairy industry.

**9 Conclusion**

- 9.1 A total of 139 dairy sheds had active discharges in the Tasman District during the 2016/2017 season. Of these, 134 farm dairies operated as Permitted Activities and the remaining five held Resource Consents authorising discharge treated effluent to water.
- 9.2 All farms were inspected this season. The results of this survey were:
- 93% - Compliant.
  - 4% - Non-Compliant
  - 3% - Significantly Non-Compliant
- 9.3 Where non-compliance was detected the Council took appropriate action (in accordance with its Enforcement Policy) to address any adverse environmental effects and provide an appropriate punitive response to the level of offending. This ranged from education and warnings for minor breaches, through to prosecution before the Environment Court for two serious offences with significant adverse environmental effects.
- 9.4 Heading into the new dairy season Council hopes to see continuity of a good rate of compliance with respect to farm dairy effluent management in the district, however, it recognises that improvements can always be made and will target resources to achieve this outcome.

**10 Next Steps / Timeline**

- 10.1 Farm Surveys for the 2017/2018 season commence in September 2017 and inspections will begin in earnest with a view to once again completing a full assessment of every farm in regards to dairy effluent disposal.
- 10.2 As always there is a risk that some non-compliance will surface, however, it is expected that the ongoing commitment for best farm practices will be reflected by a high standard of compliance in Tasman.
- 10.3 Next season Council staff will continue to work closely with the industry in order to build upon the positive work achieved during the past year. Such work includes the on-going promotion of on-farm best practice, particularly with respect to wet weather contingencies and also the promotion of Dairy NZ's Farm Dairy Effluent Design Code of Practice and Standards, and the new Farm Dairy Effluent Design Accreditation Scheme.

**11 Attachments**

Nil





**9.2 ANNUAL DISTRICT-WIDE WATER MONITORING REPORT****Information Only - No Decision Required**

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
<b>Report Author:</b>	Jim Trembath, Compliance & Investigations Officer; Vicky Clarke, Compliance Administrator
<b>Report Number:</b>	REP17-08-01

**1 Summary**

- 1.1 Tasman District Council runs a dedicated programme designed to record and report on the consumption of ground and surface water across the regions water zones, measure compliance with consent conditions, aid in the implementation of water restrictions and oversee the implementation and compliance of the Reporting of Water Takes Regulations 2010.
- 1.2 Key findings from this season were:
- It was a wet 2016-2017 summer season with regular rainfall throughout the district. As a result only intermittent irrigation was required by most water users.
  - The Dry Weather Taskforce convened on one occasion to impose restrictions under Section 329 of the Resource Management Act 1991.
  - Consents administered under the water metering project in the 2016-2017 season decreased from 1,486 to 1,461. This was mainly due to consent surrenders and lapses.
  - Ninety percent (90%) of all water meter readings are received electronically. Of those 80% are now received via the web page service provided by Council, 9% are received via email, and 4% are received via telemetry. Council has also introduced the ability to provide meter readings through the use of a mobile phone, although still a relatively new method, 7% of water meter readings are now being received this way.
  - Construction of a purpose built water-metering database has taken place to address limitations to the current database together with the projected increase in monitoring and compliance demands as a result of the 2010 water meter regulations and Waimea Community Dam outcomes. This new data base will go live in early August 2017.
  - 988 meters received an onsite audit during the season, down from 1055 last season.
- 1.2 Overall compliance was good this season but required significant contact between Council staff and consent holders in order to maintain standards. Due to wet weather conditions there was intermittent irrigation undertaken by most water users. A result was that many users supplied a water usage reading on the week water was used but failed to supply a reading on weeks water was not used due to rain. As the season progressed, a number of

users became very lax at supplying weekly readings as required and would supply in blocks. Constant contact was required by Council staff to ensure readings were supplied and to maintain database integrity.

- 1.3 Despite the wetter season overtakes did occur, however only one infringement notice was issued for an overtake, as many were the result of missing readings or failed equipment. Each overtake that did occur was investigated and responded to at the level appropriate to the particular circumstances. Seven Infringement notices were issued to water users who, after a number of requests from Council, continually failed to supply water meter readings. Meter audit fees were also applied to five users for staff time required to physically read water meters (up from four last season) due to ongoing failure to supply the required water meter readings after repeated requests. Council staff have now advised many water users that the requirement to supply weekly water meter readings is a consent requirement regardless of use and this will be enforced vigorously during the 2017-2018 summer season.
- 1.4 Implementation of the Resource Management (Measurement and Reporting of Water Takes) Regulation 2010 continues. Last year 319 consented takes of 5 l/s to 10l/s were required to install a complying water meter by November 2016 and to be verified as accurate by June 2017. As at 30 June 63 have no meter installed and require follow up action and 46 were yet to be verified with most of those on a waiting list. Council staff continue to liaise with water users and industry contractors to monitor progress.
- 1.5 It is envisaged that monitoring demands will increase considerably with the changes associated with the Waimea Community Dam proposal, particularly with the potential outcome of stricter water rationing triggers throughout the Waimea water use zones. Further investment in an additional compliance monitoring officer will be necessary to meet the monitoring and enforcement demands and this bid has been presented for consideration in the LTP.
- 1.6 End of water year water summaries are in the process of being sent to all consent holders including graphical representation of their individual water use record and the relevant water management zone. This reporting method was used for the majority of consent holders and is well received despite the time and cost involved.
- 1.7 The administration requirements of the water metering programme continues to increase due to the ongoing implementation of the National Regulations and projects like the Waimea Community Dam plan changes. As the staged implementation of the regulations progresses, the number of affected consent holders grows. Greater numbers submitting readings alongside increased reporting demands all impact on the administration capabilities of the programme.

## **2 Draft Resolution**

**That the Environment and Planning Committee receives the Annual District-Wide Water Monitoring Report REP16-07-04.**



### 3 Purpose of the Report

- 3.1 Tasman District Council runs a dedicated programme designed to monitor and report on ground and surface water consumption across the regions water zones, measure compliance with consent conditions and to aid in the implementation of water restrictions. In recent years, the programme has expanded to oversee the implementation and compliance of the provisions of the Central Government Reporting of Water Takes Regulations 2010.
- 3.2 At the end of each water metering season, the Compliance Department presents a summary of performance against the various activities managed under the programme and the purpose of this report is to present a summary for the 2016-2017 water year.

### 4 Water Take Compliance

- 4.1 The total number of meters on the database at the end of the 2016-2017 water year is 1,461, a decrease from 1,486 last water year (consents were surrendered or not renewed) This number of meters comprises the following:

- 1,348 Consented meter takes
- 113 Moutere domestic (permitted activity) metered takes.

Of the consented metered takes the following applies:

- 858 were deemed active and required to file weekly returns. These were the consent holders irrigating that season. Up from 814 last water year
- 100 were deemed non-active and not required to file weekly returns. These were consent holders not irrigating that season
- 390 are on future implementation.

Of the permitted activity takes the following applies:

- 101 are deemed active and filing six monthly returns
- 12 are not being used.

#### Return Method

- 4.2 90% of all meter reading returns are being received electronically including domestic takes. The remainder still provide their information through weekly card returns.
- 4.3 Of the electronic methods this season, webpage returns make up 80% of all returns coming in. Email returns are at 9%, telemetry data remains steady at 4% and Council's new mobile app makes up 7%.
- 4.4 The 10% of weekly returns not filed electronically are using the pre-paid card posted through the mail or via fax.

**Telemetry (Presented by Council Environmental Monitoring Officer Brenda Clapp)**

- 4.5 Council now has 38 telemetered water meters provided by five different telemetry hosts, with three of these new in the last year. Data transfer from the telemetry host to us has been running smoothly. There has been a few instances of problems with the connection between the water meters and telemetry. These problems have caused missing or erroneous data, and have been due to equipment malfunction or mischievous livestock. When these sites have not been working, an effort has been made to get the service providers or consent holder to provide manual readings until the problem is fixed.
- 4.6 The aligning of the telemetered water meter data with other hydrological data collected by the Environmental Monitoring section continues. With preseason and postseason checks provided by the consent holder, and mid-season meter audits, the data is being archived and quality coded to the National Environmental Monitoring Standards (NEMS), and comments are logged when issues have occurred. To meet NEMS, the accuracy of the data between the telemetry and water meter needs to be within +/- 1%.

**Compliance Summary**

- 4.7 At present, the different water management zones in this district have either a full or partial metering requirement on abstractive takes imposed through the TRMP. For the actively metered zones consent holders are required to furnish weekly usage readings over the water metering period (now 1 July to 30 June). This forms the basis of the compliance monitoring programme and has three primary objectives:
- Ensuring compliance with the obligations imposed in consent conditions and responding to non-compliance accordingly. This is a statutory requirement and underpins all monitoring programmes.
  - Ensuring comprehensive usage data is available for the purpose of sound water resource management and policy setting.
  - Ensuring ability to provide accurate usage data to central government agencies in meeting national reporting objectives.
- 4.8 With the introduction of the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010, the duties imposed through this have also been built into the programme as a dedicated project, interlocking with the current consent management framework. The monitoring, enforcement and reporting on performance for these regulations are significant and an important function for this Council to manage alongside consent monitoring.
- 4.9 The 2016-2017 water year performance is reported as follows:

**Missing Readings**

- 4.10 Overall performance in respect to returns for active meters was not as good as in previous seasons.
- 4.11 Weather patterns this season resulted in regular rainfall over the summer season. The dry weather task force was convened only once with stage 1 rationing required in the Waimea's. However, this period of rationing lasted less than a week. Because of the wet season, irrigation was intermittent and overall water use low. Unfortunately, water users across the district were lax in supplying water meter readings each week (regardless of actual use) as required. Many water users had obtained weekly water meter readings but supplied these in

batches either fortnightly or every three to four weeks. Regular contact was required seeking missing water meter readings. A number of water users received infringement fines for failing to supply weekly water meter readings in spite of regular requests from Council staff. A number of others were invoiced for second or subsequent audits that were undertaken due to missing readings. My impression was that water users gave reporting of weekly water use a low priority as they were using little water and probably assumed Council would place little importance on the regular reporting due to the obvious rainfall.

- 4.12 It is unfortunate but inevitable that the Compliance Department are now going to be required to take a more stringent approach to missing readings over the coming 2017-2018 irrigation season. Last year the approach to missing readings was based around increased verbal contact and encouragement with an attempt to rely less on punitive enforcement. This year regular rainfall and overall low use meant that there was little adverse environmental affect from the late reporting of water use, so again Staff relied on regular contact to encourage weekly water meter readings to be submitted, rather than punitive methods to achieve compliance. These users absorbed a lot of precious staff time.
- 4.13 There was also a core group of repeat offenders who, despite being given every opportunity, failed to comply. There was some suspicion that although (through the audit process) no overtake occurred, a number of water users were simply making up the missing weekly water meter readings because they were not actually read each week. The increase in staff time spent following up on missing readings didn't prove productive in ensuring water users complied with this requirement; this indicates a firmer enforcement position regarding missing readings (including the use of \$500 infringement fines) will be required for next season to re-enforce water user responsibility and obligations. Despite this, during this reporting period a number of formal warnings were issued and recorded; seven (7) Infringement notices were issued; five (5) audit fees for staff time were issued and two (2) Abatement Notices were issued for failing to supply weekly water meter readings as required.

### **Excessive Water Use**

- 4.14 There were a number of excessive water takes encountered this year, however, genuine overtakes were relatively small in number and many were within the 5% tolerance. A common theme for most recorded overtakes however was simply poor history of providing readings during consumption periods. Two water users had excess water use over a number of weeks due to breaks in the individual onsite reticulated systems. Both had contractors searching for the breaks and undertaking repairs but it took the contractors a number of weeks to test, locate and repair the breaks. Regular contact with the water users took place over this period and it was not during a time (due to weather conditions) when water resources were under stress.
- 4.15 All excessive water use situations were investigated and responded to in accordance with Council's enforcement policies. For minor overtakes or if appropriate for the first instance of non-compliance; warnings were used as a means of addressing the non-compliance and gaining future compliance. Past warnings (should they exist) are considered in determining enforcement options for non-compliance. One (1) overtake infringement notice and one (1) abatement notice were issued for excess water abstraction this season.
- 4.16 Telemetered water use data over takes were either due to or obscured by system errors or failures.

### **Water Meter Audit**

4.17 A total of 988 meters were audited during the water year, down from 1055 last year as there was only one student employed. Meter audits continue to include a reading of the meter dial, ensuring integrity of the seal and obtaining an updated (digital) photographic record of the meter. Where a reading discrepancy is found these were followed up.

### **Fictitious Meter Readings**

4.18 Some reading discrepancies were identified through the audit process and all were followed up. These were the result of human error or what staff perceive as a lax attitude toward actually reading the meter. On a number of occasions (for a small number of water users) when on receipt of a batch of readings the audit process confirmed the due reading supplied to be correct but staff suspect the late readings that were included were fictitious. It was confirmed through the audit process that two 'lifestyle block' water users supplied a false water meter reading as they did not bother to read their meters. Water use was extremely low and both were new to the requirement so this was noted and both were warned that Council may prosecute any further instances.

### **Moutere Domestic Metering**

4.19 The TRMP also requires Moutere domestic (permitted activity) takes to install meters and provide a single reading in April and then in November.

4.20 As at 30 June 2017 a total of 113 Moutere domestic bores have been identified and registered on the database. While that is the total registered, not all have installed the required meters and 12 bore owners remain unmetered due to non-use.

4.21 In respect to these domestic meters the water use data readings are required April and November each year. As at 30 June 2017 98% of readings had been received or obtained during audit for those respective meters.

## **5 Water Rationing and the Dry Weather Task Force**

5.1 Due to the prevailing wet weather patterns occurring in the district over the summer the Dry Weather Taskforce was required to convene on one occasion to consider and impose rationing restrictions under Section 329 of the Resource Management Act 1991.

5.2 The period of rationing imposed under section 329 of the Resource Management Act 1991 lasted less than a week.

## **6 Other Administrative Requirements**

6.1 In addition to the ongoing collection, monitoring and reporting of water use data during the season, other critical water monitoring administrative tasks placing high demand on staff time and resources include:

- Pre-summer season set up. Considerable staff time is dedicated to preparation for the upcoming summer. This is typically reviewing and uploading new consents and renewals, database and data integrity audits, alerts to water users of the pending start and contacting those not using water for confirmation that the non-use situation remains.

- End of water year reporting. This is an important feedback mechanism to water users and forms an integral part of the overall reporting process. While this occupies a considerable amount of staff time and receives occasional complaint from particular users, it is considered to be well worth the effort and is typically well received by the users. The reporting consists of a summary letter, graph of the individual and wider zone usage, commentary on consent condition performance together with any identified deficiencies. This water year the graphs were altered to enhance clarity. For those that find offence with this feedback loop, there is an opt-out clause and two are currently on this list.
- Electronic records. There are 35 consents now supplying readings via telemetry. The supply of electronic data in this format is likely to increase as a result of the Regulations. Council processes to manage this form of data continue to develop to meet this change. (Refer to telemetry comments for further comment). It is important to note there is still a requirement for active staff involvement with telemetered sites to maintain the integrity of information received.
- NCS database changes. The rapid changes occurring in the management and reporting of water use has meant the demand for increased database functionality. The implementation of the Regulations and their reporting requirements has certainly compounded this. Council is currently in the process of constructing a new water monitoring database. Efficiency with reporting and mail out merging for multiple consent information to single holders is a priority to reduce staff time on certain aspects of the water metering programme.

6.2 Water Zone graphs are available on request.

## **7 Resource Management (Measurement & Reporting of Water Takes) Regulations 2010**

- 7.1 Overall administration requirements of the water metering programme continue to increase due to the ongoing implementation of the National Regulations. As the staged implementation of the regulations progress, greater numbers of affected water users are required to have meters installed, verified as accurate and supply Council with weekly water meter readings.
- 7.2 The current stage of implementation for the regulations is >5 litres/second but <10 litres/second (third of the staged implementation) and applies to 319 water takes. These water takes were to have a water meter installed by 10 November 2016, with the water meters verified as accurate by 30 June 2017.
- 7.3 Of those 319 water takes, 210 are fully compliant with 46 that have failed to ensure the meters have been verified by the 30 June deadline. 63 are yet to install. Of those 109 currently noncompliant water takes, most are waiting on service providers.
- 7.4 Pursuant to section 7 (3) of the Resource Management (Measurement and Reporting of water Takes) Regulations 2010 all water takes over 20L/S which were verified as accurate in June 2013 and will require verification that the meters are accurate once again by June 2018.

## 8 Policy/Legal Requirements/Plan

- 8.1 One of the main objectives of the water metering programme is to provide Council, resource users and the community, data on the consumptive use of water in the individual management zones and the compliance behaviour of the users. This data provides information on the volumes, pattern of use, return rates and the stages and effects of rationing in the individual zone. Presentation of this information in an annual summary report is an essential part in Council meeting this requirement. Graphical representation of each water management zone and the report is also provided on the Council's website <http://www.tasman.govt.nz/one-water-usage-graphs/> for public viewing.
- 8.2 Council also has an obligation to report to the Ministry for the Environment (MfE) on the districts performance with respect to implementation of the Resource Management (Measurement & Reporting of Water Takes) Regulations 2010. This occurs annually as and when it receives the request. At present this is done through spreadsheets as there is no data share mechanism however the new water meter database will have greater reporting capacity.
- 8.3 Section 31.1.2.2 (k) Schedule 31B of the TRMP requires all water takes above 0.05L/S and below 4.99L/S to install water meters by November 2018.

## 9 Consideration of Financial or Budgetary Implications

- 9.1 A summary of the Compliance Monitoring Water income/costs for the 12-month period ending 30 June 2017 is as follows.
- 9.2 Budgeted income for the 2016/17 year was \$245,906, whereas actual income was \$240,489; this was due to a budgeted income from infringements of \$5,217 not being received. Budgeted expenditure for the period was \$262,484; actual expenditure for the period was \$223,627. This left a surplus of \$16,862 and was mostly due to a small increase in metered take revenue coupled with reduced expenditure over the period.
- 9.3 The programme was approximately 54% water user funded this year. The target remains for this activity to be 100% user funded over time.
- 9.4 It is envisaged that compliance demands will increase considerably with the implementation of rules associated with the Waimea Community Dam plan change. Further resourcing will be required to meet this need.

## 10 Conclusion

- 10.1 Water user compliance requires a significant Council administrative and field effort. Significant interaction between consent holders and Council staff is required to achieve consistent compliance every season.
- 10.2 Non-compliance with meter returns was prominent this year as discussed. As always compliance staff assess each case of non-compliance and where possible place emphasis on education and encouragement to achieve compliance. Unfortunately, this was not so

successful this season and as a result next season a harder line will be taken early on poor performance.

- 10.3 Few genuine overtakes were encountered this season. Invariably the majority were errors in meter readings or inconsistent returns. Council staff exercise discretion in these cases and worked with the consent holder with no enforcement action required. Two water meter returns were confirmed as fraudulent however, these were not industry related users and was a result of a lax attitude rather than undertaken to obtain any gain.
- 10.4 Use of the mobile phone application is growing and the application appears to be working well. There are a number of consent holders who for various reasons lack the ability to utilise electronic technology to provide returns. As a result, the old paper system still remains however, every effort will be made to move users to electronic reporting when that option becomes available to them. This will save some cost to Council in time and resources.
- 10.5 Maintaining this momentum for future seasons is critical and ongoing success relies on sufficient staff resources due to the high degree of customer contact required. The new Water Metering & Resources Environmental Monitoring Officer position fills an important technical role, alleviating some technical data management pressures with the Regulations. The recent employment of a Regulatory Administration officer will also assist at times of high demand in this programme.
- 10.6 The expanding water programme and regulations have a significant impact on Council database requirements. The demand to capture meter verification data, year round monitoring and greater reporting requirements means the old database has reached the end of its useful life. Compliance staff in conjunction with IT Services have now developed a new database which is due to go live at the start of the 2017-18 season.
- 10.7 The Waimea Community Dam and plan change proposals remain prominent due to its potential impacts on the water metering programme. The Compliance Department continues to work on its strategies for the future implementation of this proposal.
- 10.8 Telemetry (especially considered as a monitoring tool for the Waimea catchment) is a growing monitoring method, however, as it stands it does not provide a “silver bullet” to monitoring water use. Issues with technology and third party providers continue.
- 10.9 The Tasman District Council appears to be positioned well in comparison to other councils with regard to monitoring water consumption throughout the District, together with the implementation of the Central Government Measurement and Reporting of Water Take Regulations.

## 10 Attachments

Nil





**9.3 STATE OF THE ENVIRONMENT LAND 2016**

Information Only - No Decision Required

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
<b>Report Author:</b>	Bernard Simmonds, Resource Scientist - Land
<b>Report Number:</b>	RP17-08-10

**1 Summary**

- 1.1 This report to the Committee presents a summary of the latest State of the Environment Soil report. This covers six topic based areas where work has been completed within the last couple of years. The full report is available upon request and will be uploaded onto the Tasman website following this meeting. The six topic areas are:
- 1.1.1 Soil mapping has been completed for the Waimea Plains, and new soil mapping is underway in the coastal Tasman and Rural 3 zone. This will improve our knowledge of the versatility and potential productive land use, for an area that is under increasing development pressure.
- 1.1.2 A soil intactness survey carried out in 2011 is detailed. The proportion of exposed land was roughly equal between natural processes and land use activities (human). The majority of bare land disturbances were tracking and cultivation. Land use disturbances occurred over the full range of Land Use Capability (LUC) land classes. The majority (86%) of all natural process-related disturbances were measured on severe or critically steep natural back country (LUC class VIII land; equivalent to only 30% of the total survey area).
- 1.1.3 The summary of a report on erosion from storm events is presented. Recently-harvested forestry slopes are highly vulnerable to slope failure. However, a storm of sufficient intensity (eg 2011 storm) can cause significant slippage and erosion, regardless of land use, vegetative cover or geology.
- 1.1.4 The process undertaken by the Sherry River community/catchment group to mitigate contamination and declining water quality is presented.
- 1.1.5 The Council collects and interprets information on soil health in the region, as required by the Resource Management Act 1991, termed State of the Environment reporting. A total of 35 sites are routinely monitored, with data also contributing to the 500 soils project. The monitoring that has been carried out to date indicates that overall our soils are in good health. Some issues exist such as the depletion of soil organic resources and macroporosity on market gardening sites. Under dairying, soil compaction is evident with monitoring indicating that soil macroporosity is at very low levels at the majority of monitored sites. This is a concern that has been highlighted through soil health monitoring programmes nationally, and the dairy industry is promoting farming practices that reduce pugging and compaction.

- 1.1.6 Land cover database changes are detailed. There have been decreases in pasture land use and increases in exotic forestry, horticulture and urban coverage from 1996 to the present time.

## **2 Draft Resolution**

**That the Environment and Planning Committee receives the State of the Environment Land 2016 report RP17-08-10.**

## **3 Purpose of the Report**

- 3.1 To present Council with the results of the 2016 State of the Environment – Land and Soil report.

## **4 Background and Discussion**

### **4.1 Soil Mapping – Waimea Plains**

- 4.1.1 Mapping of the Waimea Plains has concluded and soil maps and reports are now available to the public (Figure 1).
- 4.1.2 The survey fills significant knowledge gaps. Council now has greater confidence in its definitions of soil types in the district, Land Use Capability (LUC) extent and boundaries, and irrigation requirements. The study is of considerable value for current or potential landowners who wish to understand the capabilities of a site for primary production.
- 4.1.3 The recently completed survey identified greater soil variability compared to that previously mapped. Changes to the soil type and variants were greatest in the areas near the Waimea, Wai-iti and Wairoa Rivers. These changes have potential implications for irrigation rate allocations, land productivity assessments, and the farm-scale management of soils.

In particular, a large quantity of land has changed from land use capability (LUC) class A to B, indicating some areas of the plains are less versatile than originally thought. The main LUC changes in the Waimea Plains resulted from better information on soil depth and stoniness. These limitations can be managed with tolerant plant species, or working the soil to reduce root restriction.

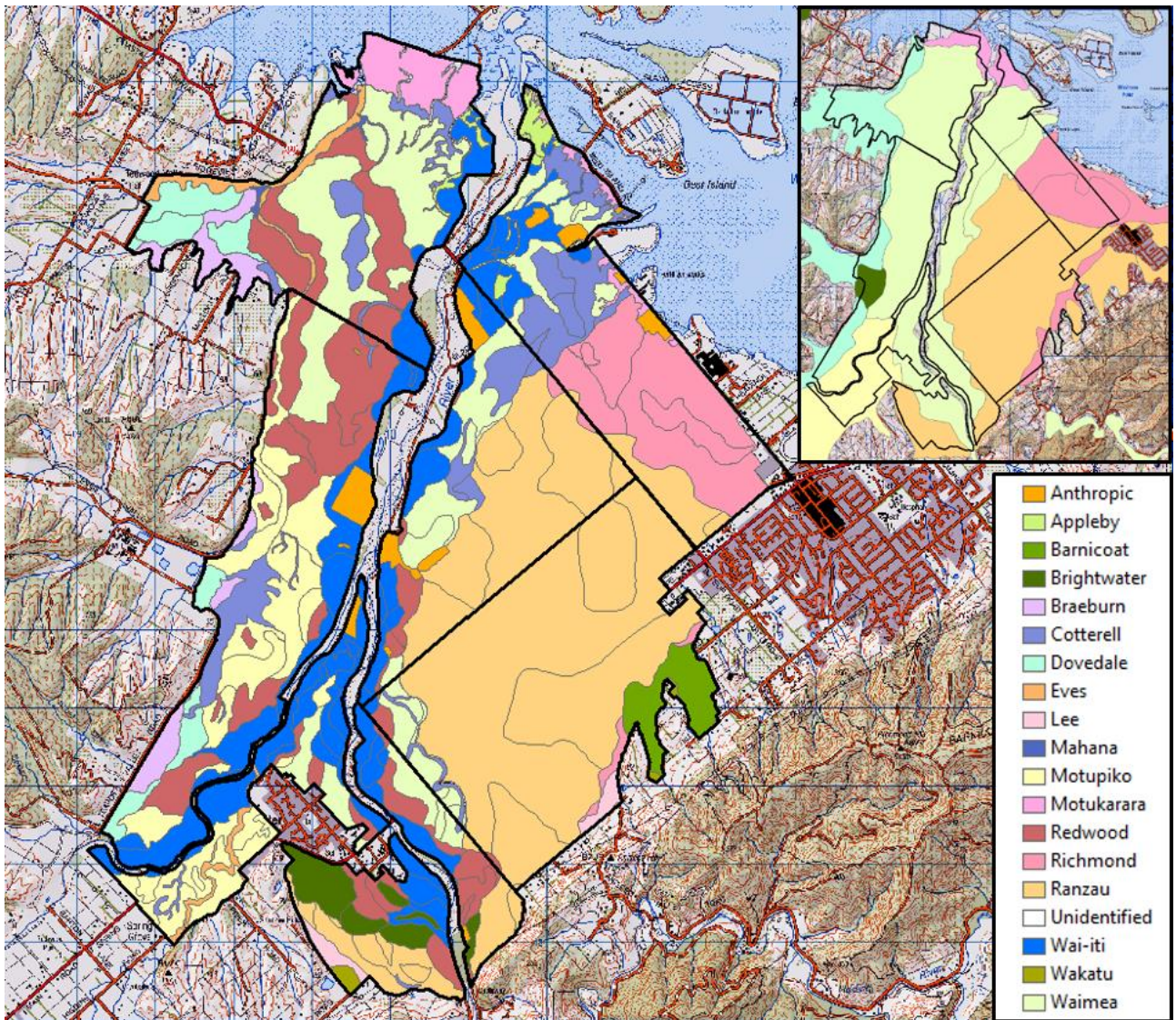


Figure 1: Latest Waimea Soils mapping data (old data inset)

4.1.4 Following the success of this project, we have now moved to address the need for improved mapping in the Coastal Tasman area (predominantly Rural 3 zone). Work has already started to gather primary soil information and undertake a test pit based survey.

4.1.5 Rural 3 and the coastal area (Figure 2) land contains some highly versatile soils, and is under increasing pressure to develop away from productive land. It is expected that this study will better highlight the limitations/versatility of the Rural 3 landscape and soils, and should help guide land use decisions, management and development in the future.





4.2.2 Overall, there had been little change to the amount of stable and unstable land from 2001 and 2011. Non-eroding vegetated sites made up the vast majority of the surveyed area (91%, predominantly native and exotic forestry, no change in area from 2001).

4.2.3 The survey area contained a greater amount of natural cover (60% of area sampled) compared with human land-use cover (38% of area sampled). However, despite being a smaller sample group, 53% of all freshly exposed surfaces were attributed to land-use related activities (e.g. tracking).

4.2.4 Tracking and cultivation accounted for 71% of land-use related disturbances (1% of total survey area; see table below). Scree and sheetwash accounted for 77% of natural-process disturbances.

Table 1: Proportions of 2011 land use disturbance types

Disturbance type	Total area 2011 (ha)	As percentage of disturbance type category	As percentage of total survey area
Land use-related			
Tracking	3,859.2	50.9%	0.63%
Cultivation	2,234.7	29.5%	0.36%
Harvest	708.7	9.3%	0.12%
Earthworks	669.7	8.8%	0.11%
Spraying	102.6	1.4%	0.02%
Drain excavation	6.2	0.1%	0.00%
Total	7,581.1		1.23%
Natural processes			
Scree	3,363.0	49.4%	0.55%
Sheetwash	1,860.4	27.4%	0.30%
Landslide or slip	506.5	7.4%	0.08%
Stream bank deposit	401.7	5.9%	0.07%
Debris avalanche	259.3	3.8%	0.04%
Gully	250.1	3.7%	0.04%
Stream bank scour	124.1	1.8%	0.02%
Wind	35.9	0.5%	0.01%
Total	6,801		1.11%

4.2.5 The survey also assessed the relationship between the soil intactness/disturbance and the Land Use Capability classification. Results showed that very few natural disturbances occurred outside of the steepest LUC class; LUC VIII. This single class contained 86% of all natural disturbances in the survey (from 30% of the sample area).

4.2.6 The 2011 soil intactness monitoring data indicates that generally our landscape vegetated and/or stable. Around 20% of all exposed sites occurred on flat land (LUC I to IV) and were associated with land-use activities. Transport of sediment from flat land is generally of less concern. However, the intensity of land disturbance by land-use activities on steeper land classes can be problematic. This is because steeper slopes facilitate the movement of sediment to a greater degree than flat land. Exotic forestry commonly operates in these steeper land classes, and the forestry industry has been working with council to identify and mitigate the risks associated with harvesting from critical areas (eg through the development of the granite management plan). Increases in tracking and cultivation were recorded between 2001 and 2011 on LUC class VI and VII land. Low intensity grazing and exotic forestry were the main productive land use

types up to 29% and 30%, respectively. A very slight increase in tracking was detected on class VIII land – however, there is very little land use activity with exotic forestry and pastoral farming covering 2.3% and 0.4% of the area, respectively.

#### 4.3 **Assessment of erosion extent from storm events since 2003.**

4.3.1 Several storm events since 2003 have been studied to see how the risk of storm damage can be minimised. The results highlight the vulnerability of recently-harvested exotic forests on steep slopes to landslide risk. Forestry infrastructure such as roads and landings can be engineered to resist a level of failure; however, the same options are not available to reduce slope failure of a recently harvested hillside.

4.3.2 The December 2011 storm demonstrated that above a certain storm intensity, the type of land use, land cover and geology will have negligible influence on how many landslides occurred and how much damage is sustained. In the 2011 example, the degree of damage sustained related more to the existence of infrastructure and private development below or within affected catchments. This has highlighted that risk assessment and management is as important as hazard assessment and management.

What is apparent from the storm data is that some lithologies present a much greater risk of slope failure, and that preventative mitigation should be a priority where human life may be affected. One such example is in Ligar Bay, where a large amount of damage occurred as a result of the 2011 storm. The surrounding hills were recently harvested exotic pine forestry, over separation point granite; a deeply weathered and highly erodible material. In order to mitigate the risk to the Ligar Bay township, Council worked with the land owner and PF Olsen to resolve concerns. The outcome was to retire the steepest slopes from forestry – planting these in a mixture of natives, and a shift from radiata pine forestry, to coastal redwood; a less valuable, but deeper rooted, coppicing tree with a longer rotation.

#### 4.4 **The management of soil erosion by a catchment group – The Sherry River**

4.4.1 In 2001, land use in the Sherry Catchment came under scrutiny when the Motueka Integrated Catchment Management (ICM) science team reported high levels of sediment and bacterial contamination in the Sherry River. Levels were unsafe for bathing and stock drinking water in its lower reaches.

4.4.2 A study of the effect of cows on water quality as they crossed the river was undertaken. The findings revealed that walking cows through waterways had a marked impact on stream water quality. As a result, three bridges were built, and a fourth bridge converted – all for stock crossing purposes.

4.4.3 Further monitoring revealed a significant reduction in bacterial contamination, however, the water quality still exceeded the guidelines at two sites for contact recreation (swimming). The Sherry River community formed a catchment group to address the issue collectively. The group successfully applied to the Sustainable Farming Trust, and gained funding for the development of best management practices, and landowner environmental plans (LEP) to be distributed among all working farms. Environment plans focused on faecal contamination, nutrient leaching and erosion, and enabled the prioritisation of nutrient and erosion risk prevention measures. Landowners gained a better understanding of how their own land use activities could impact on water quality, and how specific risks could be mitigated.

4.4.4 The development of the LEPs indicated that the main actions for improvement would still come about from managing stock access to waterways. Cattle access to streams and the main river system became the priority. Council assisted financially with approximately 5 km of riparian fencing, and additional riparian fencing was also erected without assistance. The 2011 round of SOE monitoring indicated that *E.coli* levels had been halved following the community efforts.

4.4.5 It is evident that landowners have a greater understanding of the cause and effect of their farm management practice on surface water quality. This has led to some small but significant changes in grazing management and raceway maintenance. Additional culverts for stock and vehicle crossings have been installed and reticulated stock water systems are in use. The latest round of SOE water quality monitoring reports that *E.coli* levels in the lower reaches have plateaued, but are only safe for contact bathing 80% of the time – suggesting that LEP's may need to be revisited.

#### 4.5 Soil Health Monitoring

4.5.1 Monitoring of Soil Health in the Tasman District was initiated in 2000. Currently the programme covers 35 sites on a variety of land uses and soil types (Figure 3).

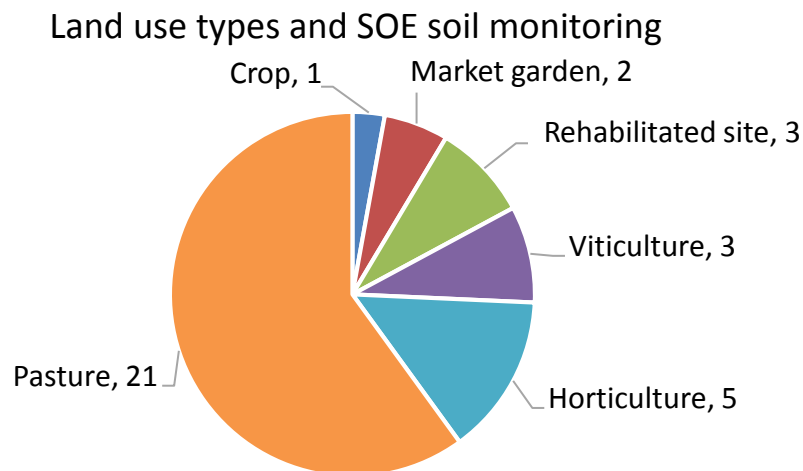


Figure 3: Proportion of different land use types covered by soil health monitoring

Soil health is determined by a number of biological, chemical and physical indicators (Table 2). These indicators have been selected through a national programme to provide a robust monitoring platform for soil health across New Zealand.

Table 2: List of soil health/quality indicator tests and outputs.

	Soil Quality Indicators	What this tells us
Biological properties	Anaerobically mineralisable N	Readily decomposed organic Nitrogen
	Total Carbon	Organic matter status
	Total Nitrogen	Organic N reserves
Chemical properties	Olsen P	Plant available phosphate and general fertility
	Soil pH	Soil acidity
	Trace elements	Level of heavy metal contaminants
Physical properties	Bulk density	Level of soil compaction
	Macroporosity	Level of soil compaction and aeration
	Aggregate stability	Resistance soil crumbs to breakage

4.5.2 *Biological properties*: The market gardening sites show significant depletion of the soil's organic resources. All pastoral and horticulture sites have adequate biological properties. Total nitrogen (N) and Total carbon (C) levels were elevated at one of the dairy farm sites. One horticulture site has depleted levels of Total C.

4.5.3 *Chemical properties*: The majority of sites sampled have adequate chemical properties; however two sites have Olsen P concentrations exceeding the recommended levels. A market gardening site, and a dairy farm site.

4.5.4 *Trace elements*: The 2009 and 2010 samplings found chromium, cadmium, lead and zinc levels at all sites fell well under the New Zealand Water and Waste Association limits for each heavy metal. Arsenic measured above guideline levels at two horticulture sites. Copper concentrations exceeded guideline levels at a site that was historically an orchard site, but is now being used as a wastewater disposal site for a processing plant. Nickel levels exceeded the guideline levels at four sites situated on the Waimea soils. Cadmium generally exceeded average concentrations for agricultural production in New Zealand.

4.5.5 *Physical properties*: At market garden sites, critical limits were exceeded for the majority of soil physical indicators. Twelve of the 21 pastoral sites had macroporosity levels ranging between low and critically low. All but one of these sites is used for dairying. Three horticulture sites also had low macroporosity.

4.5.6 Soil health in the District is generally good, but from these results it is apparent that there are a number of areas where improvement in soil health are needed. The depletion of soil organic resources and poor macroporosity and aggregate stability on market gardening sites is of concern. More monitoring sites will be established to gauge an understanding of the extent of this issue in collaboration with the industry. Under dairying, soil compaction is evident with monitoring indicating that soil macroporosity is at very low levels at the majority of monitored sites. This is a concern that has been highlighted through soil health monitoring programmes nationally, and the dairy industry is promoting farming practices that reduce pugging and compaction.



#### 4.6 Land use change in the Tasman District

4.6.1 National scale changes in land use are monitored at five yearly intervals using data collected through the New Zealand Land Cover Database (LCDB). The first dataset was collected in 1996. The latest data available is from LCDB4, which is derived from 2012 satellite photography (Figure 4).

4.6.2 From 1996 to 2012, the major changes in land cover have been:

- 4.4% increase in exotic forestry by 4,621 ha. Total area now 103,951 ha.
- 2.7% decrease in pasture by 3,365 ha. Total area now 125,964 ha.
- 4.2% increase in horticulture, viticulture and cropping by 396 ha. Total area is 9,409 ha.
- 25.0% increase in urban coverage by 764 ha. Total area now 3,056 ha.

4.6.3 Land use statistics from Statistics NZ and the LCDB indicate that in the last decade, the land surface area occupied by forestry, horticulture and urban occupation has increased, while pastoral farming has decreased. Livestock numbers have also dropped as a consequence of the reduction in the pastoral area in Tasman District. The increase in horticultural area indicates a more intensive use of the land from a traditional pastoral use. This intensification can impact the health of the soil, and the results of recent soil health monitoring (4.5) indicate that (in particular) the physical properties of the soil are degraded under these practices, due to frequent machinery compaction (e.g. row harvesting).

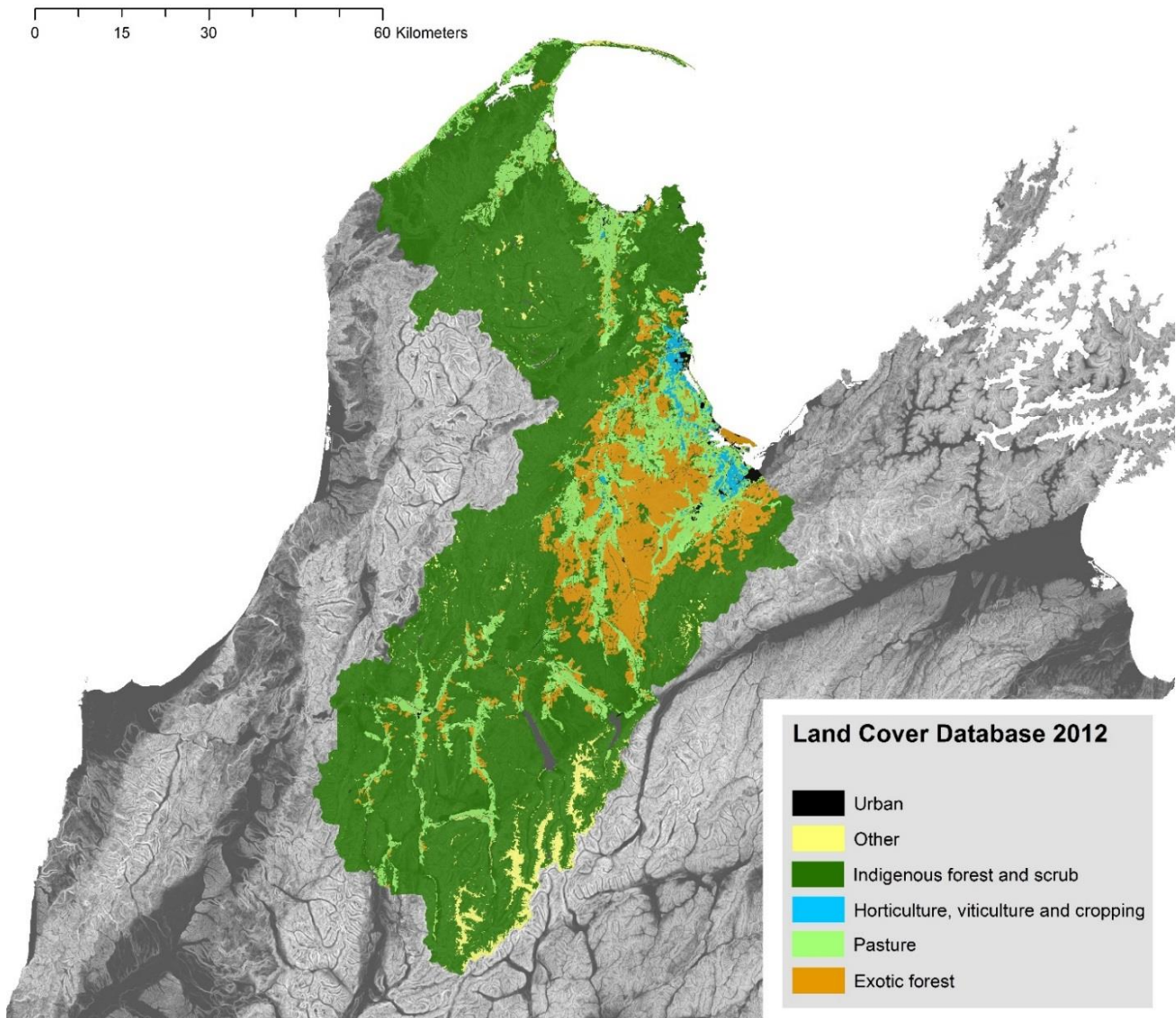


Figure 4: The current (2012) Land Cover Database.

## 5 Strategy and Risks

- 5.1 The quality of our land resource is important to the economic and environmental future of the district. Managing the impact of growth on the Tasman environment requires that State of the Environment reports contribute to the assessment of the impact of growth on, and risks to, the district's land resource.

## 6 Policy / Legal Requirements / Plan

- 6.1 Council has duty under section 35 of the Resource Management Act to monitor the "state of the Environment" to the extent "as is necessary to carry out effectively its functions". Under the Tasman Resource Management Plan there are specific objectives, policies and methods that require the investigation and monitoring of the actual or potential adverse effects of soil erosion, other soil damage, and changes in areas of land available for productive activities.

The Tasman Resource Management Plan requires the identification and monitoring of representative and indicator sites as well as soil movement in response to major storm events.

The information gathered to date on our soil and land resources has been essential for the Rural Land Use and Subdivision Policy Review, and the Waimea and Takaka Freshwater and Land Advisory Group needs. The new soil information is used regularly for irrigation water allocation assessments and is made available to landowners.

## **7 Consideration of Financial or Budgetary Implications**

- 7.1 Funding for the SOE programme is covered within the existing Environmental Information budget.

## **8 Significance and Engagement**

- 8.1 This report is not a decision report and is for your information only. Land management and monitoring is of interest to a large number of people.
- 8.2 The report will be placed on the Council website and will also be available for reading in hardcopy from our libraries and customer service centres. Additionally the presence of the report will be advertised through Newsline.

## **9 Conclusion**

- 9.1 This report demonstrates that the intensification of land use is occurring across the district, and is marked by decreases in livestock numbers and increases in the areal extent of forestry, horticulture and urban areas.

This intensification has real, measurable impacts on the health of the soil. Therefore it is essential that routine monitoring and targeted surveying like soil health and intactness monitoring, and soil and land versatility mapping continue to be a major focus of Council. By capturing these effects, our land and soil resources can be managed with an emphasis on sustainability and long-term stability.

Empowered community groups and individuals who take ownership of their local water and soil resources can lead to significant and positive outcomes, and often require little more than clear information and guidance from Council.

Therefore, the best outcome for the future of our soils and land will come from a combination of information gathering using SOE and targeted surveying, and the promotion of this information within community groups so that land users can adopt best land management practices and avoid unsustainable land practices.

## **10 Next Steps / Timeline**

- 10.1 The State of the Environment Report “Land and Soil 2016” will be placed on the Council Website and distributed to our libraries and service centers for public use. The next Soil and Land SOE report is planned for 2022.

<b>11 Attachments</b>
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Nil

**9.4 ENVIRONMENTAL POLICY MANAGER'S REPORT****Decision Required**

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
<b>Report Author:</b>	Barry Johnson, Environmental Policy Manager
<b>Report Number:</b>	REP17-08-08

**1 Summary**

- 1.1 The report outlines progress made with the environmental policy programme for the first six months of 2017 and invites the committee to review the programme outlook. Changes to legislation and new issues have caused delays to the timing of some projects.

**2 Draft Resolution****That the Environment and Planning Committee**

1. receives the Environmental Policy Manager's Report; and
2. approves the revised work programme as listed in Table 1 of the report and as part of the programme:
  - a. Approves the commencement of scoping an omnibus plan change to address a series of minor fixes and re-zonings

### 3 Purpose of the Report

- 3.1 This report outlines the current environmental policy work programme and progress over the previous six months. It recommends some amended timeframes and an addition to the programme of work agree by EPC on 9 February.

### 4 Background and Discussion

- 4.1 On 9 February 2017 the Environment and Planning Committee received a report that reviewed progress for the 2016 year, outlined the work programme for 2017 and included an outlook for the period 2017 to 2019. The February report included the wider programme of work including projects that are not yet activated.
- 4.2 Since February, key achievements in the plan change programme have been:
- a. Update 57 to the TRMP has made the Wakefield plan change (C58) operative, it notified the decisions version of the Brightwater plan change (C57), and it removed several listed trees from the TRMP that have either died or have been removed under a resource consent and corrected some minor errors.
  - b. Hearings completed and decisions released for the Brightwater plan change (C57) and private plan change C62 Progressive Enterprises. Appeals have been lodged on:
    - Plan Change 60: Rural Land Use and Subdivision Policy Review
    - Private Plan Change 61: Wainui Bay Spat catching
    - Appeals are expected on Private Plan Change 62 Progressive Enterprises.
  - c. Councillors have participated in workshops on:
    - Golden Bay landscapes plan change project
    - Richmond Housing Choice plan Change
    - Wakefield rezoning plan change project
    - Takaka FLAG update.
  - d. Takaka Flag has progressed to the point that staff are now drafting a plan change outline for FLAG to consider in October before making its recommendations to Council in December. Council has also agreed in principle to work collaboratively on the Takaka plan change with Golden Bay iwi (mana whenua ki mohua) following a hui attended by Mayor Kempthorne and Councillor Brown. The application for a Water Conservation Order over Te Waikoropupu has added additional complexity and workload to the Takaka water management plan change.
- 4.3 A raft of changes brought in by the passing of the Resource Legislation Amendment Act in April has significant implications for the policy work programme. The new plan change pathways means Council must now choose what process it wishes to use for each plan change. The new requirements to provide iwi with a draft of each plan change to provide comment on has meant current plan change projects have been delayed to allow adequate time for iwi to respond and for staff to consider the responses. Future plan changes will need to factor in this additional time requirement.

- 4.4 The delays have caused slippage in the timing of projects and there is now a large number of plan change milestones that will occur in the next six months. These are discussed further in Section 5 Options.
- 4.5 Alongside the programme of plan changes, other projects include the uplift of residential deferred zone status in several locations in Richmond providing further residentially zoned land for development with more to come. The Nelson Tasman Land Development Manual is progressing with a draft currently being finalised that includes practice notes relating to floor levels and stormwater management.
- 4.6 The Environmental Policy Team also has a series of new and emerging work streams that have developed over the last six months. A new Tasman Housing Accord (signed by the Mayor and Minister for Building and Construction on 19 May) resulted in the Council receiving a large number of requests for Special Housing Areas (SHAs). On 22 June the Council resolved to recommend to the Minister eight new SHAs that would deliver in excess of 1200 new houses over the next five years. New requests for SHAs continue to come in. Council will consider the next tranche of SHA requests in September.
- 4.7 The National Policy Statement for Urban Development Capacity (NPS) has brought with it a number of new monitoring and reporting requirements. There is an obligation under the NPS to work collaboratively with Nelson City to implement the NPS. This is happening, with the first joint, quarterly monitoring report published last week by both Tasman and Nelson City. The obligation under the NPS for a joint growth strategy with Nelson City has seen the first of what will likely be many joint workshops with Tasman and Nelson City Councillors.
- 4.8 The increasing growth pressures, the requirements to plan for and manage growth in a more coherent way, increased monitoring and reporting obligations from central government and increased workloads from Special Housing Areas has led to the creation of a new growth coordinator position to work across the council and with Nelson City to coordinate the council's response to high levels of urban growth.

## 5 Options

- 5.1 Looking forward, the key milestones for environmental policy and the key decisions for the Environment and Planning Committee over the next six months are:

The scope and process for:

- A review of the Tasman Regional Policy Statement.
- A programme of re-zoning arising from the growth model which will help give effect to the NPS for Urban Development Capacity.

Whether to consult on a draft plan change or go to public notification of a proposed plan change for:

- Wakefield rezoning
- Richmond Housing Choice
- Takaka Freshwater plan change
- Golden Bay landscapes

- Coastal moorings and occupation charges
- Electricity transmission lines.

Consideration of an issues and options paper on land disturbance.

Consideration of the draft Land Development Manual, practice notes and associated Plan Change options.

- 5.2 Table 1. Provides a complete list of the active plan change projects with dates for the next milestones. These projects were prioritised in January this year, based on an established set of criteria for assessing plan development project priorities. The relative priorities have not changed.
- 5.3 Additionally staff are proposing a new, omnibus type plan change to fix a variety of minor issues that individually don't rank as priority projects, but collectively have an impact on the workloads of consenting and compliance. The package would also look to fix some minor issues with the plan such as zoning anomalies. An additional component is a review of the management of signage on highstreets (sandwich boards) to coincide with the Richmond Queen Street upgrade. Staff are seeking agreement from the committee to scope up an omnibus plan change that can then be brought back to the committee for approval to proceed.

#### Table 1. Revised Work Programme timelines

Table 1. Contains the Environmental Policy work programme for 2017/18 with key milestones for each project. The dates in red indicate revised dates for the key milestones. Note: Milestones are subject to Council approval.

Title (plan change project)	Change No. (where notified)	Next milestones (Council decisions)	Expected timing of next milestone
Wakefield rezoning following Wakefield strategic review (C58)		Approval for public consultation on either draft change or proposed plan change	August 2017
Mooring management review Coastal occupation charges		Draft change approval (and draft bylaw amendment) for engagement	<b>September 2017</b> (April 2017)
Richmond residential density review (Richmond Housing Choice)		Approval for public consultation on either draft change or proposed plan change	<b>September 2017</b> (May 2017)
Land disturbance & slope instability area review		Consideration of issues and options paper; approval to	<b>September 2017</b> (July 2017)



		consult on good practice guidelines	
Review of Tasman Regional Policy Statement and combination with TRMP		Council approval to commence (appropriate scope and process)	<b>October 2017</b> (May 2017)
Programme of urban re-zonings arising from Tasman growth model and help give effect to NPS for Urban Development Capacity		Council approval to commence (appropriate scope and process)	<b>October 2017</b> (July 2017)
Golden Bay outstanding natural landscapes & features		Public consultation on either draft change or proposed plan change	<b>November 2017</b> (October 2017)
NPSET - electricity transmission lines		Draft change approval for engagement	<b>December 2017</b> (July 2017)
Takaka & coastal catchments water management (Takaka FLAG)		Public consultation on either draft change or proposed plan change	<b>Late 2017</b> (July 2017)
Richmond central business zone review		Public consultation on either draft change or proposed plan change	<b>Pause until 2018</b> (December 2017) Signage to be addressed via omnibus change
Waimea Plains water quality management (Waimea FLAG)		Public consultation on either draft change or proposed plan change	<b>Mid 2018</b> (November 2017)
Nelson-Tasman land development manual (NTLDM) for incorporation by reference.		Public consultation on Draft NTLDM and associated amendments to TRMP Joint with NCC	<b>Early 2018</b> (April 2017)
Programme of rural re-zonings (Rural 1, Rural 2, Rural Residential and Rural Industrial) arising from Change 60		Approval to commence Small sections may be addressed through omnibus change	October 2017

## Item 9.4

<b>Current plan changes</b>			
Richmond greenway	37	For reporting and hearing	August 2017
Rural land use and subdivision policy review	60	Under appeal Environment Court hearing	Uncertain
Private plan change – Progressive Enterprises	62	Appeal period closes	Late July 2017
Waimea water transition management	63	For further submissions and hearing (if needed)	August 2017
Brightwater strategic review	57	Decision notified – appeal period open until start of September.	September 2017
Private plan change - Wainui Bay spat catching	61	Under appeal Environment Court hearing	October 2017
<b>New work (not prioritized)</b>			
Brightwater rezoning following Brightwater strategic review (Change 57)		Council approval to commence (appropriate scope and process)	<i>Roll into urban rezonings</i>
Omnibus plan change Content to be finalised		Council approval to commence (appropriate scope and process)	September 2017

- 5.4 The Committee has a choice in what and how it may choose to prioritise the work programme. There is a significant number of projects that the Committee will be asked to consider over the next six months that will result in public consultation either informally through a draft plan change or formally through a proposed plan change under the Resource Management Act Schedule one process.
- 5.5 The projects could be bundled together and released as packages of plan changes or released separately. Given the wide range of topics covered by the various plan change projects, staff advice is to run the consultations separately. Most of the plan changes have very discrete audiences and packaging them together runs the risk of members of the public missing particular proposals of interest. It can also create additional procedural problems if individual projects begin to move at different speeds due to new information or differing levels of public interest.

**6 Strategy and Risks**

- 6.1 The recommended updated 2017 programme continues to deliver on the strategy of:
1. Continuing rolling review of the TRMP framework; and
  2. Responsiveness to national and legal policy directions as needed; and
  3. Giving effect to Council's strategic priorities, in particular enabling risk moderated decisions, digitization of services, improving service delivery to customers.
- 6.2 Timeliness with project priorities is reliant on straightforward processes and adequate resources. There is the internal risk of delays through constraints on the availability of other staff within Council who provide support on technical inputs. The 2017 year is a very busy year for staff across Council as the LTP and several major projects are under way. This requires active planning by project managers to ensure time and other internal resources are available to progress the programme and to manage the risks to delivery. The pace of demand for Council services through growth is a pressure on staff availability that has been mitigated through the creation of a Cross Council Growth Coordinator role.

**7 Policy / Legal Requirements / Plan**

- 7.1 Projects are at all stages of the plan change life-cycle. RMA Schedule One and good practice both prior to the formal legal process, as well as under it, require many process steps to deliver quality and timely policy proposals. The recent appointments to the team mean the very busy programme of work is realistic and achievable. It will also mean a corresponding increase in workload for the Committee through workshops and hearings over the next twelve months.

**8 Consideration of Financial or Budgetary Implications**

- 8.1 The recommended 2017 programme is within forecasted budget for staff time and direct costs. The proposed omnibus change may have budgetary implications once it is scoped. Any budgetary implications will be identified and included in the advice provided to the Committee once the scope and process for the plan change are further defined.

**9 Significance and Engagement**

- 9.1 The table following is a qualitative assessment of significance of the recommendations in the report. All legal duties together with good practices will be incorporated in the recommendations for the next stages of all policy projects.

## Item 9.4

Issue	Level of Significance	Explanation of Assessment
Is there a high level of public interest, or is decision likely to be controversial?	Medium	Some individual plan change projects may attract significant public attention.
Is there a significant impact arising from duration of the effects from the decision?	High	Some plan changes may have a significant impact on individual land owners.
Does the decision relate to a strategic asset? (refer Significance and Engagement Policy for list of strategic assets)	No	
Does the decision create a substantial change in the level of service provided by Council?	No	
Does the proposal, activity or decision substantially affect debt, rates or Council finances in any one year or more of the LTP?	No	
Does the decision involve the sale of a substantial proportion or controlling interest in a CCO or CCTO?	No	
Does the proposal or decision involve entry into a private sector partnership or contract to carry out the delivery of any Council group of activities?	No	
Does the proposal or decision involve Council exiting from or entering into a group of activities?	No	

## 10 Conclusion

- 10.1 Several factors outside the control of the policy team have necessitated revising the policy work programme. Previously agreed priorities remain essentially the same but timeframes have been pushed out to allow consideration of new issues and to meet new legislative requirements.
- 10.2 It is also proposed to scope up an omnibus type plan change to address a number of minor fixes that will improve the usability of the TRMP and potentially reduce resource consents in some areas. This will be brought back to the Committee for approval.

## 11 Next Steps / Timeline

- 11.1 Over the next six months the Committee will be asked to consider the content and process steps for approximately ten plan change projects ranging from discrete rezoning proposals to a wide ranging review of the regional policy statement. This will involve both workshops and reports for the Committee to consider.
- 11.2 Looking forward to 2018 there are a number of large projects that the committee will be asked to consider. The projects include:
- scoping a review of Part 2 of the TRMP (significant undertaking)
  - Natural Hazards

## 12 Attachments

Nil



**9.5 SUMMER RECREATIONAL BATHING WATER MONITORING PROGRAMME 2016-2017**

Information Only - No Decision Required

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
<b>Report Author:</b>	Trevor James, Resource Scientist; Jonathan McCallum, Environmental Monitoring Officer
<b>Report Number:</b>	REP17-08-06

**1 Summary**

- 1.1 Tasman District Council has monitored swimming holes and coastal beaches since the mid 1990s in accordance with national guidelines and responsibilities under section 35 of the Resource Management Act. Councils around New Zealand report these data along with recreation site grades annually to the Ministry for the Environment.
- 1.2 A total of 13 sites (seven freshwater and six marine) were sampled for faecal indicator bacteria between mid-November 2016 and early March 2017. All sites were sampled weekly, except during December to January when they were sampled twice weekly. Two sites, Anatoki at One Spec Road and Ligar Bay, were brought into the programme this year after a long absence due to public interest and concern.
- 1.3 There were a total of 16 exceedances of national microbiological water quality guidelines (nine “Alert/Amber” and seven “Alarm/Red”) at swimming sites. Over all weather conditions approximately 95% of samples meet guidelines. This rate of compliance is only slightly below the average dry weather compliance rate of 97% over the last 10 years, but is just below the Long Term Plan (stretch) target of 98%. When only dry weather conditions are considered, the rate of compliance for the summer past is over 98%.

2016-17 Bathing Season Statistics	
Total number of samples	286
Total number of exceedances	16
Overall rate of compliance with guidelines	94.4%
Exceedances – Freshwater (Tukurua 5, Lee 1, Roding 1)	7 (3 sites)
Exceedances – Coastal (Pohara 4, Ligar Bay 3, Kaiteriteri 1, Rabbit Island 1)	9 (4 sites)
Rate of compliance in dry weather (4 exceedances)	98.6%

- 1.4 Using the Ministry for the Environment “Suitability for Recreation Grade” criteria including rainfall-affected samples, Rabbit Island Main Beach continues to be graded “Very Good”, both Kaiteriteri Beach and Mapua Leisure Park Beach were graded “Good” and Pohara

Beach was graded “Poor” due to occasional very high faecal indicator bacteria results. For freshwater sites: Takaka at Paynes Ford and Lee River both were graded “Fair” when rain-affected samples were included. However, when only dry-weather results were used, these sites achieved a “Very Good” grade.

Exceedances of guidelines were recorded for Tukurua Stream, Lee River, Roding River, Pohara Beach, Ligar Bay, Kaiteriteri and Rabbit Island.

**Tukurua.** High levels of faecal indicator bacteria in Tukurua Stream has been an on-going problem many years and many investigations have been undertaken to determine the source. These high levels have nearly always occurred during/after rain, and often during dry weather. Prior to this season a third significant on-farm source was found in the form of a winter feed pad (identified in July 2016 and rectified prior to Christmas 2016). Even though the discharge from the pad occurred out of the bathing season, faecal bacteria are well known to be stored in the bed and bleed off into the water column over many months following removal of the source. Unlike previous years, the average faecal indicator bacteria concentration was much lower and only two alert exceedances (240-540 *E.coli*/100ml) occurred in dry weather. Signage warning about swimming in the stream was removed at the swimming hole within the campground near the stream mouth.

The alarm exceedances (540 *E.coli*/100ml) for the Lee and Roding rivers occurred after rain overnight (23mm) and the river could be described as physically unsafe for swimming (high water velocity and water level leading to drowning potential). Two dry weather alert exceedances at Ligar Bay were recorded. The exceedances at Pohara were mostly related to wet weather and a very high tide, with only one alarm exceedance during dry weather. The exceedance at Kaiteriteri (187 *Enterococci*/100ml) was only at alert level which is unusual for this site as it occurred during dry weather. However, there was a moderately high tide on the day of the exceedance (3.7m) and the sample was taken near the time of high tide. This phenomena of high faecal indicator bacteria loads in flotsam, such as woody debris, at the high tide mark is experienced around New Zealand. The alert exceedance at Rabbit Island occurred on a day with little rain (2mm), but sampling occurred near the time of a very high tide (4.5m, 15/12/16).

<b>2 Draft Resolution</b>
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**That the Environment and Planning Committee receives the Summer Recreational Bathing Water Monitoring Programme 2016-2017 report;**



### 3 Purpose of the Report

- 3.1 To present information from the regular Contact Recreation Water Quality Monitoring Programme over the past season, toxic algae issues and any other related investigations or issues.

### 4 Background and Discussion

- 4.1 This report outlines:
- Results of bathing water quality monitoring at Tasman's most popular contact recreation sites over the 2016/2017 season.
  - A project to predict faecal indicator bacteria concentrations in real time using a hydrodynamic model.
  - Results of monitoring of toxic algal coverage in the region.
  - Commentary on the implications of the Clean Water Package.

#### Sampling for Faecal Indicator Bacteria at Contact Recreation Sites

- 4.2 Water contaminated with human or animal faeces may contain a range of disease-causing organisms and when even small amounts are consumed by mouth, or through ears or nose, can cause gastro-enteritis and respiratory health effects, as well as a small chance of more serious diseases such as hepatitis A, cryptosporidiosis, campylobacteriosis and salmonellosis. The health risk from contact recreation in natural waters increases as the concentration of disease causing organisms increase. Guidelines used in New Zealand effectively allow for a low rate of illness risk (about 19 illnesses per 1000 contact recreation events). Contact recreation involves full immersion of a person's head and includes swimming, water skiing and whitewater kayaking.
- 4.3 Monitoring of waters used for contact recreation in Tasman District has been ongoing since the mid-1990s. During that time seven of the sampling sites in the programme have been sampled consistently and since 2000, with three of those sites being sampled every year (Mapua Leisure Park Beach, Kaiteriteri Beach and Rabbit Island at Main Beach). Another four sites have been sampled annually since 2010 (Takaka at Paynes Ford, Pohara Beach, Roding at Twin Bridges and Lee at Reserve). A further 60+ sites have been surveyed for short periods and then discontinued because of either consistently good water quality or relatively low popularity, or both. To ensure we get some water quality information at additional lesser-used sites or sites with lower risk of faecal pollution, additional short-term investigations have been carried out. The more popular swimming sites were visited more often: twice-weekly during December to January and weekly for the rest of the season. The locations of the contact recreation water quality monitoring sites sampled this season are shown in Figure 1. Where it is found that there are on-going issues, such as in the Tukurua catchment, those sites may then be brought into the programme until such time as the issue is resolved.

Item 9.5



**Figure 1:** Contact recreation water quality monitoring sites sampled in Tasman District.

4.4 The contact recreation water quality sampling season begins in November and ends in March. While generally few people swim in November, we start sampling then because knowing about faecal contamination a few weeks out from the Christmas holidays means that we are more likely to address the problem in time for this period of very high use of

swimming spots. During the 2016-17 season, a total of 13 sites were sampled (seven freshwater and six marine) at least once per week.

- 4.5 Next summer the sampling will occur at the larger suite of 20 bathing water quality sites. It is still hoped that an additional investigation at Pohara Beach can be undertaken to better understand the sources of faecal indicator bacteria and mechanisms that store and transport it at this beach. A partnership with Environmental Science and Research will be required to make this happen as this study is still in the realms of “research”, rather than “monitoring”.
- 4.6 Sampling follows accepted best practice guidelines and results of the contact recreation water quality sampling were posted on the Council website at <http://www.tasman.govt.nz/environment/water/swimming-water-quality/>. There is also information on this website about the sampling sites and background to the monitoring programme. To enable a swift response after an exceedance of the microbiological water quality guidelines, all staff involved in the sampling programme are sent a text message alert from the lab as soon as the data becomes available.
- 4.7 For most sites, particularly freshwater sites, an exceedance of the microbiological water quality guidelines is likely after more than 20mm of rainfall in 24 hours. For a few sites, more than 10mm of rainfall within 48 hours can be enough to produce an exceedance, particularly if there is intensive farming or urbanization in the upstream catchment (eg Pohara Beach). To keep the public aware of this risk, Council issues standard guidance for people to avoid swimming within 48 hours of rain. Standard warning signs are only installed after two consecutive samples are found over alarm levels, or at the instruction of the Public Health Office of the District Health Board. These signs are taken down as soon as there are two consecutive samples under alarm levels. Sampling frequency is very high in these situations.

From 2010 to March 2015 the Public Health Office (PHO) of the District Health Board advised Council to warn the public after each and every single sample result over 1000 *Enterococci*/100ml and over 2000 *E.coli*/100ml, regardless of whether a follow-up sample was over the alarm level or not. This led to several public warnings at Pohara. This policy was abandoned from November 2015 and since then we have returned to using the national guidelines that require two consecutive samples over guidelines before warning the public. This has resulted in no more warnings over the last two seasons, whereas there would have been three warnings under the single sample system.

#### **Predicting Faecal Indicator Bacteria Concentrations in Golden and Tasman Bays**

- 4.8 Sampling of floods in the Motueka/Riwaka River plume and affected beaches up the Kaiteriteri coast in an attempt to develop a statistical model, was put on hold this season pending the start of a hydrodynamic modelling project that officially got underway in April 2017. The aim of this project is to develop a model that will successfully predict faecal indicator bacteria in Golden and Tasman Bays and efficiently assist in aquaculture and beach water quality management. In particular, this would include being able to warn people of the risks of contact recreation at the time of the risk occurring and not two days later when the lab results are provided. We are lucky to have this model be developed for our region under the Sustainable Seas funded programme. It was noted some years ago that a complex hydrodynamic model would be required to successfully predict faecal indicator bacteria in the marine environment and this was rather expensive for a Council to afford on its own.

4.9 We are fortunate to have it funded by the Sustainable Seas research programme. However, we plan to fund extra sampling to better validate the model. The project is a collaboration between Cawthron, NIWA and MetOcean Solutions.

#### Toxic Algae (cyanobacteria)

4.10 In New Zealand, cyanobacteria have been implicated in numerous dog deaths.

Cyanobacteria in the genus *Phormidium* are the main toxin-producing algae in New Zealand rivers. The toxins produced by *Phormidium* are some of the most toxic in the natural world. The toxins produced are diverse and can cause liver, nerve and skin damage, as well as nausea, diarrhoea, gastroenteritis and possibly cancer. *Phormidium* is native and is found in many of our district's pristine rivers such as the upper Wangapeka. Fortunately, there have been very few reported health effects of *Phormidium* in humans in New Zealand, most likely because people rarely consume water directly from rivers. There remains, however, a reasonable risk for poorly-supervised toddlers due to their habit of exploring their environment by putting things in their mouth.

4.11 *Phormidium* is known to proliferate during periods of stable flow (about three weeks without flushing flows) during the growing season from October-April. During the rest of the year its growth is thought to be light limited. Rivers where it has been found at over 20% coverage include: Lower Wai-iti (downstream of Wakefield), Waimea, Lower Motupiko River (particularly upstream of the Motueka confluence) and Lower Sherry River have had coverage over guidelines for periods slightly beyond this period. On occasion it has been found in other rivers, particularly when there has been a release of fine sediment. Examples include:

- slips in Benge Creek after December 2011 caused high coverage of toxic algae in the Anatoki
- earthworks associated with farm development in the Dove River affecting the Motueka River in 2013

4.12 This season, we again sampled toxic algae percentage coverage at all freshwater contact recreation sites weekly from November to February. In addition, we regularly surveyed using the national protocol for assessing algal coverage in the lower Waimea River at River Road and Wai-iti River at Brightwater Bridge. These sites along with Motupiko River upstream of the Motueka confluence and Sherry River had the highest coverage and most prolonged periods of toxic algae of the sites monitored in previous seasons. Toxic algal coverage information was posted within three days of sampling on the following webpage:

<http://tasman.govt.nz/environment/water/rivers/river-water-quality/monitoring-toxic-algae/>

## 5 Results and Discussion

### Sampling for Faecal Indicator Bacteria at Contact Recreation Sites

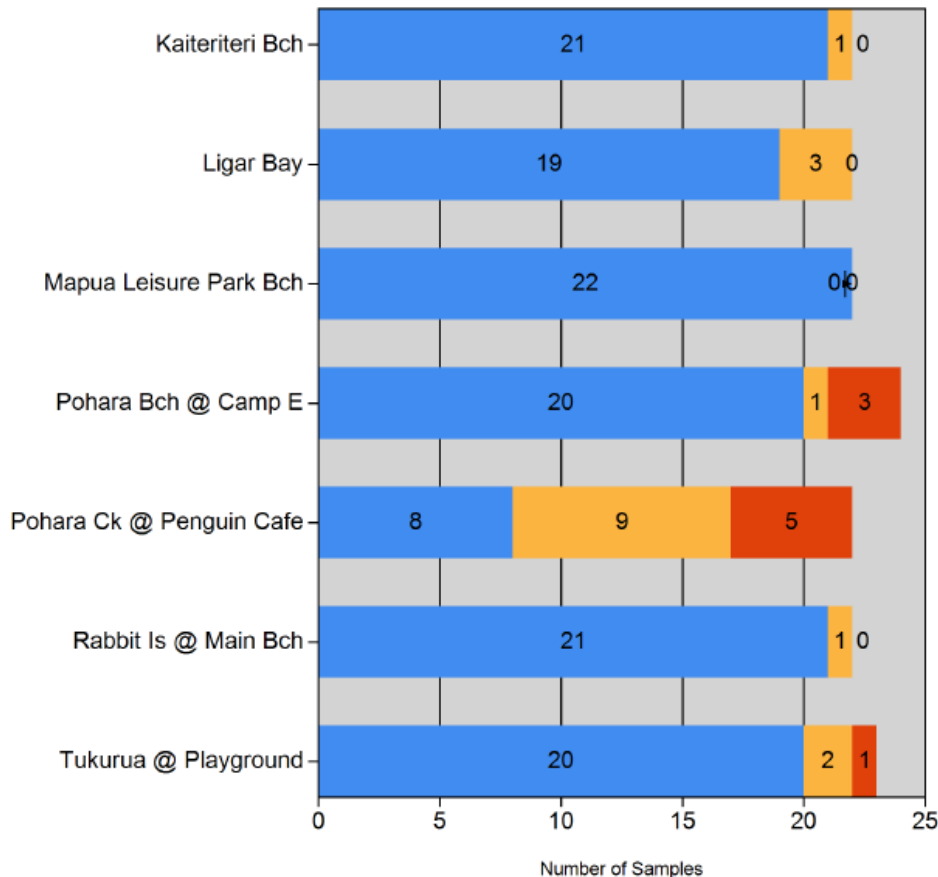
5.1 A total of 13 sites (seven freshwater and six marine) were sampled for faecal indicator bacteria between mid-November 2016 and early March 2017. All sites were sampled weekly, except during the peak season (December to January) when they were sampled twice weekly. Two sites (Anatoki at One Spec Road and Ligar Bay) were brought into the programme this year after a long absence due to public concern.

5.2 There were a total of 16 exceedances of national guidelines (9 “Alert/Amber” and 7 “Alarm/Red”) at swimming sites. Approximately 95% of samples meet microbiological guidelines. This rate of compliance is only slightly below the average dry weather compliance rate of 97% over the last 10 years, but is just below the Long Term Plan (stretch) target of 98%.

2016-17 Bathing Season Statistics	
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Exceedances – Coastal (Pohara 4, Ligar Bay 3, Kaiteriteri 1, Rabbit Island 1)	9 (4 sites)
Rate of compliance in dry weather (4 exceedances)	98.6%

These figures do not include the results from Pohara Creek at Penguin Café because it is not a swimming site but provides upstream information.

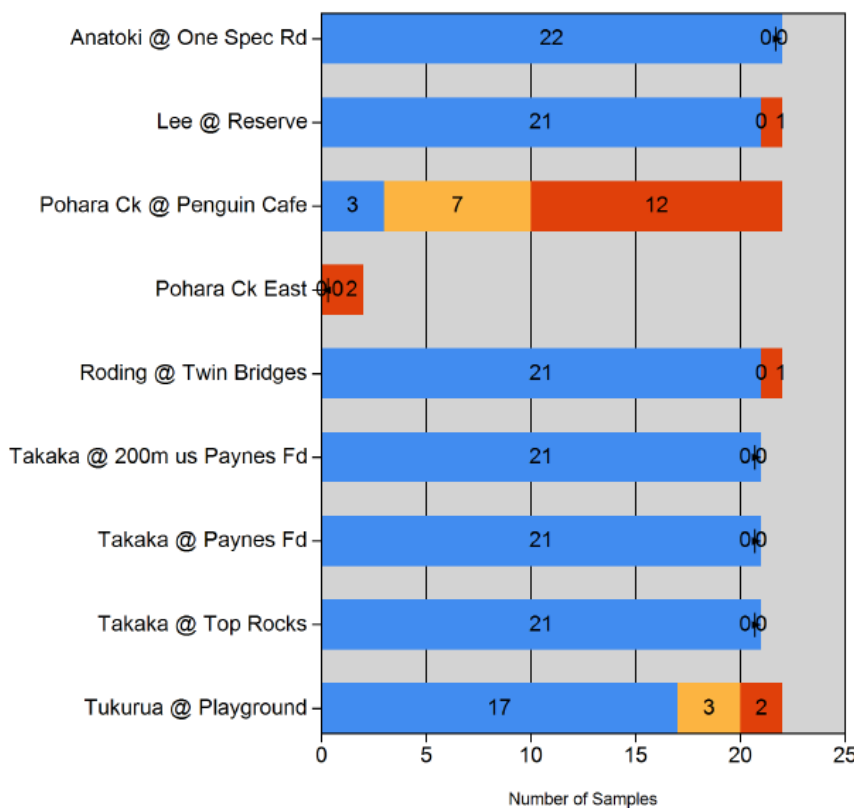
This season, the sites that were fully-compliant were: Mapua Leisure Park Beach (refer Figure 2), as well as Anatoki River site and the three sites near Payne’s Ford on the Takaka River (refer Figure 3).



**Figure 2: Number of samples exceeding national guidelines for contact recreation water quality at coastal beaches for the 2016-2017 season. Red results are over alarm levels (>280 *Enterococci*/100ml) and orange results are in the alert range (140-280 *Enterococci*/100ml).**

Note 1: Tukurua at Playground is shown in both coastal and marine as it is a brackish site for which we use both *E.coli* and *Enterococci*. We have only used *E.coli* for the assessment in this report.

Note 2: Pohara Creek is not regarded as a swimming site as base flows are very low (<100ml/sec). This site is included as it is an investigation site related to this monitoring programme.



**Figure 3: Number of samples exceeding national guidelines for contact recreation water quality at freshwater swimming holes for the 2016-2017 season. Red results are over alarm levels (>550 *E. coli*/100ml) and orange results are in the alert range (260-550 *E. coli*/100ml). Note: Pohara Ck at Penguin Café and Pohara Ck East are not swimming sites but are included for reference.**

5.3 At Pohara Beach the concentration of faecal indicator bacteria was very high on two occasions (1043 and 1119 *Enterococci*/100ml on 31/1/17 and 14/2/17). The former result was not attributed to rainfall but the latter was affected by 16mm of rain and a very high tide pushing up into the woody debris at the top of the beach (a situation known to produce higher levels of *Enterococci*). Follow-up samples, however, showed bacterial concentrations close to the lower detection limit (10 *Enterococci*/100ml) and well within safe levels so no

extra signs were erected. A permanent warning sign at the outfall of Pohara Creek onto Pohara Beach was washed away prior to Christmas and was replaced in mid-January.

- 5.4 It is interesting to note that local High School teacher Chris Stephenson has in May 2017 dye tested Pohara Creek to show where the water lost to ground flows to. Instead of flowing to Pohara Beach (the shortest and steepest route that fits with the surface contours), Pohara Creek flows to Winter Creek (enters in springs near Haile Lane). The flow in Pohara Creek where it enters the beach is only a trickle compared to the flow about 1km upstream.
- 5.5 Due to cost and a reasonable number of samples to date, no further microbial source tracking samples were taken at Pohara Creek over the 2016-17 season.

The faecal indicator bacteria may be replicating in the beach and creek sediments at Pohara, forming a naturalised and possibly non-disease-causing population. However, Environmental Science and Research (ESR, a Crown Research Institute) and NMDHB Public Health Service advise that we should continue using the faecal indicator bacteria as triggers for warning against swimming as per the national guidelines until we have proof that this is happening at Pohara. Another Council is applying for Envirolink funding for a project with ESR to research this issue at some of their sites, and we may be able to piggy-back on this. It would be relatively expensive to commission it all ourselves. Even internationally, research on faecal indicator bacteria replicating in the environment is still in its early days. It may be a few years until we get effective tools to answer the question whether or not the faecal indicator bacteria at Pohara is pathogenic or replicating in the creek or beach environment. There is increasingly more information coming out on this topic worldwide.

- 5.6 Across the sites this season, the exceedances that were unrelated to rainfall typically presented as a single spike then returning to low levels. Due to the lack of further samples in the catchment upstream on the day of the spike, it is not possible to determine the source. Such exceedances are more prevalent in intensively-farmed catchments. As we have experienced in the Aorere catchment, it is possible to improve water quality at base flow and to reduce the magnitude of the peaks during smaller rainfall events.
- 5.7 A positive for this season was that the warning sign at Tukurua Playground was removed due to the improved water quality. Due to regular and ongoing high faecal indicator bacteria concentrations in Pohara Creek a permanent warning sign will be maintained at this site. With the exception of the Pohara and Tukurua sites, warning signs have only been erected on four occasions (one at a freshwater site and three at marine sites) in the last 14 years. We have put out warnings more frequently since a result of  $>2000$  *Enterococci*/100ml was recorded for Kaiteriteri Beach on 27 December 2010. That event triggered a review of our response and Nelson-Marlborough District Health Board recommended that we put up signs in response to a very high ( $>1000$  *Enterococci*/100ml or  $>2000$  *E.coli*/100ml) faecal indicator bacteria concentrations without waiting for results from the follow-up sample. Since then Pohara Beach exceeded the guidelines, but each of the re samples showed *Enterococci* below detection.
- 5.8 Marine Sites: Using the Ministry for the Environment “Suitability for Recreation Grade” criteria including rainfall-affected samples, Rabbit Island Main Beach continues to be graded “Very Good”, both Kaiteriteri Beach and Mapua Leisure Park Beach were graded “Good” and Pohara Beach was graded “Poor” using all data (see Table 2a). For the other beach sites only interim gradings are available as there were fewer than the recommended 100 sample results collected over five years.

5.9 Freshwater sites: Takaka at Paynes Ford and Lee River both were graded “Fair” when rain-affected samples were included. However, when only dry-weather results were used these sites graded as “Very Good”. This shows how percentile statistics are sensitive to a single additional high result downgrading the site by several categories. The remaining sites have interim grades due to insufficient samples. Takaka River at Paynes Ford continues to have improving concentrations of *E.coli*. Despite much better results this season at Tukurua at Playground, it maintained its “Poor” grade and will only break out of this grade after a few years of much-improved water quality.

Site	From	To	N	Hazen 95th Percentile	Microbiological Assessment Category	Sanitary Inspection Category	Suitability for Recreation
Kaiteriteri Bch	2012-11-20	2017-03-07	119	228.75	B	Low	Good
Ligar Bay	2016-11-22	2017-03-07	22	210.60	B	Low	Good*
Mapua Leisure Park Bch	2012-11-20	2017-03-07	108	31.00	A	Moderate	Good
Pohara Bch @ Camp E	2012-11-27	2017-03-07	112	1027.30	D	Moderate	Poor
Rabbit Is @ Main Bch	2012-11-20	2017-03-07	108	20.00	A	Very Low	Very Good

**Table 2a.** Assessment of Suitability for Recreation Grade for the marine beach sites in the contact recreation bathing water quality programme - **all samples in all weather.**

\* Indicate interim gradings.

Site	From	To	N	Hazen 95th Percentile	Microbiological Assessment Category	Sanitary Inspection Category	Suitability for Recreation
Anatoki @ One Spec Rd	2016-11-22	2017-03-07	22	129.80	B	Low	Very Good*
Lee @ Reserve	2012-11-20	2017-03-07	108	309.60	C	Low	Fair
Roding @ Twin Bridges	2013-11-19	2017-03-07	86	171.20	B	Low	Good*
Takaka @ 200m us Paynes Fd	2014-11-25	2017-03-07	41	126.40	A	Low^	Very Good*
Takaka @ Paynes Fd	2012-11-27	2017-03-07	106	303.20	C	Low^	Fair
Takaka @ Top Rocks	2014-11-25	2017-03-07	36	319.70	C	Low^	Fair*
Tukurua @ Playground	2012-11-27	2017-03-07	83	2441.65	D	Moderate	Poor*



**Table 2b.** Assessment of Suitability for Recreation Grade (**all samples in all weather**) for the **Freshwater** in the contact recreation bathing water quality programme.

\* Indicate interim gradings.

^ With Public Health Service approval in 2016, the Sanitary Inspection Category was assigned “Low” resulting in a “Good” SFRG.

Hazen 95<sup>th</sup> percentiles for selected freshwater sites, dry weather samples (less than 5mm rain in previous day):

Site	From	To	N	Hazen 95th Percentile	Microbiological Assessment Category	Sanitary Inspection Category	Suitability for Recreation Grade
Lee at Reserve	2012-11-20	2017-03-07	98	112.80	A	Low	Very Good
Takaka at Paynes Ford	2012-11-27	2017-03-07	93	122.85	A	Low <sup>^</sup>	Very Good

**Table 2c.** Assessment of Suitability for Recreation Grade (**dry weather samples only**) for **Freshwater sites** with “Poor” grades in Table 2b.

### Proposed Changes to National Bathing Water Quality Policy

5.10 The proposed “Clean Water” provisions under the National Policy Statement for Freshwater Management (February, 2017) include new standards with which to assess rivers for “swimmability”. These are shown in Table 3 below (copied from Ministry for the Environment website, 10/07/2017). The provisions do not cover marine beaches.

CATEGORY	PERCENTAGE OF EXCEEDANCES OVER 540: E. COLI PER 100 ML	MEDIAN: E. COLI PER 100 ML	95 <sup>TH</sup> PERCENTILE: E. COLI PER 100 ML	PERCENTAGE OF SAMPLES ABOVE 260: E. COLI PER 100 ML
Blue	< 5 per cent	≤ 130	≤ 540	< 20 per cent
Green	5-10 per cent	≤ 130	≤ 1000	20-30 per cent
Yellow	10-20 per cent	≤ 130	≤ 1200	20-34 per cent
Orange	20-30 per cent	>130	>1200	>34 per cent
Red	> 30 per cent	>260	>1200	>50 per cent

Table 3: Ministry for the Environment proposed *E.coli* “swimming categories” (attribute states).

These statistics should be applied to waterways that are greater than fourth order (moderate size) and deeper than 400mm deep. First order streams are those right at the top of the catchment like the smallest twigs on the branch of a tree. Below the confluence of two first order waterways it becomes a second order, and downstream of the confluence of two second order streams it becomes third order and so on.

The government provisions also set a target to get 90% of rivers and lakes “swimmable” by 2040. Ministry for the Environment commissioned modelling suggests that “swimmability” in Tasman District (in space) is currently on 97% (which is the highest level in the country behind the West Coast). Coincidentally “swimmability” in both space and time are about 97%. All Councils will be compelled to improve “swimmability”, even those with very high levels. As it will be the model that is used to measure our performance against, it is very important that the model is accurate so as to produce a proper baseline. Ministry for the Environment is commissioning a revision to this model based on feedback from Councils including ourselves.

While there has been a slight “softening” of the “goalposts” compared to the NPS-FM 2014, Tasman District Council generally supported the approach taken in the ‘Clean Water’ proposals. The following issues were raised:

- The “swimmability” maps using modelled data for the whole of New Zealand had a few inaccuracies for Tasman. This includes the following rivers should be in the “excellent” or “Blue” category: Big, Anaweka, Anatori, Patarau, Aorere, Gorge (Takaka Valley). Stanley Brook, Moutere River and Wai-iti River were all shown as being unduly poor compared to our data records and should be considered “swimmable”. The Sherry River was shown as unduly good compared to Council data and should be in the “yellow” category. It is important that the model used to generate these maps is as accurate as possible as it will be used to assess improvement in “swimmability” as required under the proposed “Clean Water” provisions. The Kaituna and lower Aorere (downstream of Burton Ale Creek) are two rivers marked on the maps in the yellow category and are contenders for improvement. These are currently not monitored (due to relatively low popularity).
- There are a number of waterways that are actively used for swimming that are less than 4<sup>th</sup> order and deeper than 400mm. These should be included along with the other waterways over 4<sup>th</sup> order. These include (listed from north to south):
  - Tukuru Stream – 2<sup>nd</sup> order. Popular swimming hole associated with campground located near mouth.
  - Puremahia Stream (near Paton Rock, Golden Bay) – 2<sup>nd</sup> order. Swimming hole near mouth used by locals.
  - Motupipi - 3<sup>rd</sup> order – limit local use for swimming as the water temperature is cool and not a lot of public access. The presence of rope swings for playing in the river near some of the houses on Burnside Rd proves some contact recreational use.
  - Torrent River at Cleopatra’s Pool. 3<sup>rd</sup> order. Popular swimming hole. Very low risk of faecal contamination.
  - Numerous small (2<sup>nd</sup> and 3<sup>rd</sup> order) streams in Abel Tasman National Park. Most have bedrock and deep pools e.g. at Apple Tree Bay in Abel Tasman National Park. Some are moderately well-used for swimming. Very low risk of faecal contamination.
  - Wainui River at Falls – 3<sup>rd</sup> order. Used for swimming. Very low risk of faecal contamination.

- Riwaka Northbranch – 3<sup>rd</sup> order - not used a lot for swimming as the water temperature is cool
- Secondary contact (wading or touching the water with no immersion of the head in the water) provisions should be retained on smaller waterways as this is recognised internationally as an important health consideration. This is especially true for children playing in waterways and dogs that come in a domestic house and infect people after being in the waterway.
- Additional monitoring requirements outside of the bathing season are proposed under the NPS-FM. While this could have been useful for determining the faecal source at Tukurua sooner, we don't believe that such monitoring is necessary at sites that are consistently meeting requirements.

Using a national dataset for rivers, applying the *Clean Water* swimming threshold was more restrictive than applying the swimming thresholds in the EU guidelines ('Sufficient' and 'Good' categories) but was more permissive than applying the threshold criteria values in the USA or the swimming threshold in the *NPS 2014*.

Table 4 below shows analysis of Council's monitoring sites against the proposed Ministry for the Environment criteria. The 95<sup>th</sup> percentile is what is used currently for suitability for recreation grading and is the most likely statistic for a site to fail. Most of the other statistics are highly correlated and all have relevance to assessing suitability for swimming.

Site	From	To	N	Percentage of samples over 260	Percentage of samples over 540	Median E.coli/100ml	95 <sup>th</sup> percentile E.coli/100ml	Category
Lee @ Reserve	2012-11-20	2017-03-07	108	5.6	2.8	24.5	289.10	Blue
Motueka @ Alexanders Br	2013-11-19	2016-03-01	30	10.0	6.7	18.5	544.50	Green
Motueka @ SH60 bridge	2013-01-15	2016-03-24	38	34.2	28.9	72.0	3320.00	Orange
Roding @ Twin Bridges	2013-11-19	2017-03-07	86	2.3	1.2	42.0	162.00	Blue
Takaka @ 200m us Paynes Fd	2014-11-25	2017-03-07	41	0.0	0.0	33.0	112.00	Blue
Takaka @ Paynes Fd	2012-11-27	2017-03-07	106	5.7	0.9	20.0	278.00	Blue
Takaka @ Top Rocks	2014-11-25	2017-03-07	36	5.6	0.0	14.5	251.75	Blue
Tukurua @ Playground	2012-11-27	2017-03-07	83	33.7	19.3	173.0	1970.90	Orange
Waimea @ SH60 Appleby	2013-11-19	2016-03-01	44	4.5	0.0	28.0	179.70	Blue
Wairoa @ WEIS weir	2013-11-19	2016-03-01	31	9.7	3.2	41.0	469.50	Blue

**Table 4: Analysis of key swimming spots in Tasman against Ministry for the Environment proposed *E. coli* swimming categories. Yellow, orange and red attribute states highlighted showing the statistic that determines the final category.**

**Toxic Algae in Rivers**

- 5.11 In previous years, dog deaths linked to toxic algae have been reported to Council. Fortunately, there were no dog deaths this year, as far as we are aware. However, Council received a report of a dog that nearly died after consuming water from near the edge of the Waimea River in late February when the toxic algae cover was only 2% (the interim guidelines are 20% cover). The dog was administered with activated carbon to absorb the toxins in the gut and recovered overnight. This shows that dogs, and potentially humans, are at risk at any time. However, no dog deaths or near-deaths have been recorded outside the period from November to March, which is the time when sunshine hours are not so limiting on photosynthetic growth.
- 5.12 In most monitored waterways in the Tasman District, toxic algae remained at low levels (below the 20% amber level) during the 2016-17 season. Toxic algae remained at very low coverage (usually less than 1%) in the Roding River, Wairoa River and Lee River swimming holes throughout the season. However, the cover of toxic algae in the Wai-iti River below the Brightwater Bridge (Waimea West Rd) almost exceeded national guidelines during the last week of December 2016 and first weeks of January 2017 after several weeks of stable river flow. Warning signs were only erected for a brief period over this time at access points on both sides of the Brightwater Bridge and upstream at Arnold Lane. These high levels are partly attributable to the preceding low, stable flows. Permanent caution signs will be installed at the Brightwater bridge prior to next bathing season.
- 5.13 Two sites were monitored for toxic algae in the lower Waimea River; a downstream site at the state highway bridge and a site 500m upstream. Both areas are used for dog walking and swimming. In previous seasons, toxic algae coverage has risen above the alert level at the upstream site. This season, however, this site remained below 20% coverage for the full season and was typically at low levels (5% coverage or less). It is unclear which aspect of water quality is mediating toxic algae coverage in this part of the river.

<b>6 Strategic Challenges and Risks</b>
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- 6.1 State of the Environment reports provide an assessment and discussion about whether the impacts of that growth and environmental risks are being well managed.
- 6.2 There is the risk to people, particularly during rainfall events, of disease-causing organisms discharged to waterways including sewage discharges, particularly from unsewered settlements and dog faeces as people go about their work and recreation.
- 6.3 By way of building trust and confidence between Council and the community, we can work to improve the way our rivers and coasts are managed and the way in which environmental threats and risks are minimised.

<b>7 Policy / Legal Requirements / Plan</b>
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- 7.1 This report is one means of the Council meeting its duty under section 35 of the Resource Management Act (RMA) to monitor the state of the environment particularly in relation to the coastal and biodiversity management functions it has under the RMA.

**8 Consideration of Financial or Budgetary Implications**

- 8.1 There are no additional budgetary impacts forecast over the next year. Laboratory costs of around \$12,000 make up the vast majority of the annual budget apart from staff time and vehicle running costs. Summer student employees do most of the fieldwork required.

**9 Significance and Engagement**

- 9.1 This report is not a decision report but the monitoring and management of our waterways and coast for contact recreation is of interest to a large number of people. Whenever Council becomes aware of undue risk to contact recreation, other than associated with rainfall, signage is immediately erected, local businesses (eg campgrounds and accommodation) are informed as soon as possible and, if the risk continues, a notice is placed in the local newspaper.

**10 Conclusion**

- 10.1 Overall compliance of swimming holes and coastal beaches with the microbiological water quality (contact recreation) guideline during dry weather was better than in previous years (98.6% compared to 97%). Using the Ministry for the Environment “Suitability for Recreation Grade” criteria, both Kaiteriteri Beach and Rabbit Island Main Beach were graded “Very Good”, Mapua Leisure Park Beach was graded “Good” and Pohara Beach was graded “Fair” during all weather. For the river sites, Takaka at Paynes Ford and Lee River at Reserve were graded “Very Good” in dry weather and “Fair” during all weather.
- 10.2 A predictive (hydro-dynamic) model for faecal indicator bacteria at beaches in Tasman and Golden Bays is predicted to be completed by 2019.
- 10.3 Toxic algae has been found to be close to guideline levels in the lower Wai-iti river and is generally at very low coverage elsewhere.

**11 Next Steps / Timeline**

- 11.1 Next summer, sampling will only occur at the full suite of 20 bathing water quality sites.
- 11.2 Targeted flood-flow samples in key rivers will be taken as part of the Cawthron-led hydro-dynamic modelling project.
- 11.3 Survey of faecal indicator bacteria concentrations in beach sands along a transect of Pohara Beach.

**12 Attachments**

Nil



**9.6 DOG CONTROL ACT SECTION 10A REPORT**

Information Only - No Decision Required

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
<b>Report Author:</b>	Ross Connochie, Administration Officer - Regulatory
<b>Report Number:</b>	REP17-08-03

**1 Summary**

- 1.1 The Dog Control Act 1996 (DCA) Section 10A requires territorial authorities to publicly report on dog control policies and practices for each financial year. This report contains the information required under the DCA for the year 1 July 2016 to 30 June 2017. It is a requirement of the DCA that a copy of this report be made publicly available and be sent to the Secretary for Local Government.

**2 Draft Resolution**

**That the Environment and Planning Committee receives the Dog Control Act Section 10A Report REP17-08-03.**

**3 Purpose of the Report**

3.1 This report constitutes the annual report that the Council has to prepare in administering its obligations under the Dog Control Act 1996 (DCA).

**4 Dog Control Policy and Enforcement Practices**

4.1 The Council reviewed its Dog Control Policy and Bylaw in 2014 adopting the Dog Control Policy 2014 and Dog Control Bylaw 2014 on the 18 September 2014.

4.2 The objectives of the Dog Control Policy are:

- To promote responsible dog ownership
- To minimise any danger, distress or nuisance created by dogs
- To have regard to the welfare, exercise and recreational needs of dogs, and
- To identify required means of dog control in all public places.

4.3 Control Services (Nelson) Ltd is contracted to implement the Council’s dog control policy and bylaw. Compliance is achieved by:

- Responding to dog related incidents
- Targeted property visits and patrols of areas with specific issues
- Close liaison and cooperation with external agencies
- Conducting dog safety and bite prevention programs.

4.4 The Council uses various media to inform the public of dog-related issues. The Council’s website provides dog-related information, online forms, and links to relevant legislation and other websites of interest.

**5 Dog Registration and Enforcement Statistics for July 2016 to June 2017**

5.1	Number of dog owners in the district	7190
	• Probationary owners	1
	• Disqualified owners	0
5.2	Number of registered dogs in the district	10829
	• Rural dogs	5729
	• Urban dogs	5119



5.3	Number of dogs classified as Dangerous under DCA Section 31	
	• Sec 31 1(a) due to owner conviction	1
	• Sec 31 1(b) due to sworn evidence	18
	• Sec 31 1(c) due to owner admission	0
5.4	Number of dogs classified as Menacing under DCA Section 33	
	• Sec 33A (Observed or Reported Behavior)	39
	• Sec 33C (By Breed)	36
5.5	Infringement Notices Issued	
	• Failure to comply with effects of classification	2
	• Failing to register dog	121
	• Failure to keep dog under control	3
	• Failure to implant microchip transponder	82
5.6	Prosecutions. Dog attack person (Takaka). Defendant pled guilty. Discharged without conviction and \$750 reparation.	
5.7	Complaints	
	• Unregistered dog	7
	• Attack domestic pet	47
	• Attack stock	28
	• Attack human	28
	• Barking	419
	• Fouling	9
	• Rushing	51
	• Wandering/found	776
	• Welfare	72
	• Dog in restricted area	9
	• Dog not on leash	4
	• Dog not under control	24

## **6 Strategic Challenges / Risks**

- 6.1 The Dog Control activity is a function of high visibility to the public and providing for the care and control of dogs contributes to achieving the community outcomes which promote safe and healthy communities.

## **7 Policy / Legal Requirements / Plan**

- 7.1 This report achieves compliance with the DCA.

**8 Consideration of Financial or Budgetary Implications**

- 8.1 This report creates no financial burden that is not already covered under the Dog Control budget and which is separately reported on through the Annual Report. The Dog Control activity is entirely funded from user charges with no general rate contribution.

**9 Significance and Consultation**

- 9.1 This statistical report is of low significance and is prepared in accordance with an obligation under the DCA. There is no obligation to consult although the availability of the report must be publicly notified.

**10 Conclusion**

- 10.1 The Council's current level of enforcement meets the requirements of DCA and the expectations of the public.

**11 Next Steps / Timeline**

- 11.1 On adoption, give public notice of Report REP17-08-03
- 11.2 Within one month of adoption provide a copy of Report REP17-08-03 to the Secretary for Local Government.

**6 Attachments**

Nil

**9.7 RESOURCE CONSENT MANAGER'S REPORT FOR JANUARY – JUNE 2017**

Information Only - No Decision Required

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
<b>Report Author:</b>	Phil Doole, Resource Consents Manager
<b>Report Number:</b>	REP17-08-09

**1 Summary**

- 1.1 This report presents a summary of the performance of the Resource Consent Section regarding compliance with statutory timeframes for the full 12 months of the 2016-2017 financial year.
- 1.2 For the processing of 874 resource consent applications including variations to existing consents completed in the 12-month period, 95% compliance with statutory timeframes was achieved. The 5% completed out of time resulted in 27 discounts being applied to processing fees.
- 1.3 Two appeals to the Environment Court have been resolved by Consent Orders. There is currently one new appeal, which is expected to go to mediation.
- 1.4 This report also outlines current workloads and issues, and notable jobs that have been, or are being dealt with since my last report in March 2017.
- 1.5 Consents staff are currently preparing to implement the changes to the Resource Management Act 1991 that take effect from 18 October, particularly the “fast track” resource consenting, and consent exemptions for boundary infringements and deemed permitted activities. Major changes have also been made to notification requirements for subdivision and some residential consent applications and also for controlled activities. Staff will bring back delegation recommendations to a future meeting.

**2 Draft Resolution**

**That the Environment and Planning Committee receives the Resource Consent Manager's Report for January – June 2017 report REP17-08-09**

### 3 Purpose of the Report

- 3.1 This report presents a summary of the performance of the Resource Consent Section regarding compliance with statutory timeframes for the full 12 months of the 2016-2017 financial year. It also summarises the current workload and notable jobs that have been dealt with since my last report in March 2017, and provides a status update for appeals to the Environment Court on decisions made by hearing panels.

### 4 Summary of Resource Consent Processing for 2016-2017 Financial Year

- 4.1 Table 1 below presents a summary of the various types of resource consent applications including changes to existing consents, and other applications that were lodged during the 2016-2017 year, compared with previous years.

**Table 1: Applications Lodged During 2016-2017 Year**

Category	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Coastal	16	55	36	17	27	22
Discharge	133	152	171	231	184	197
Water	134	173	189	349	258	336
Land Use District	548	474	438	480	540	601
Consent Notice Variation						30
Land Use Regional	42	35	36	39	26	35
Subdivision	151	120	130	131	126	133
Certificate of Compliance	6	4	7	3	4	3
Designation	0	2	0	5	1	0
Outline Plan	14	6	8	15	16	12
Right of Way	8	6	12	12	15	23
<b>Totals</b>	<b>1052</b>	<b>1027</b>	<b>1027</b>	<b>1319</b>	<b>1197</b>	<b>1392</b>

**Notes to Table 1:**

*The numbers of applications listed include variations to existing resource consents. Consent notice variations are now listed separately from Land Use consents.*

*To date over 60 of the applications lodged during the 2016-2017 year have been withdrawn, cancelled, or replaced.*

*Sixty-four applications had to be returned because they were incomplete (there was a similar number of returns in the 2015-16 year). Most of the returned applications are eventually re-lodged and completed.*

- 4.2 The number of applications received in the 2016-17 year was much higher than previous years. There was a significant increase in District Land Use applications throughout the 12 month period. The major driver is the current surge in residential growth around the District, with many applications for dispensations for dwellings in new subdivisions, as well as an

increased number in applications for second dwellings and other in-fill developments on existing residential properties.

- 4.3 The other main influence on the overall number of applications received was the “renewal” process for water permits on the Waimea Plains, involving 258 applications. Another 78 applications were received for other water zones within the District.
- 4.4 Other work related to resource consents includes the two subsequent approval steps for subdivisions, known as section 223 and section 224 approvals. During the 2016-2017 year, 81 title plans were approved; and 87 certificates were issued for completed subdivisions. These figures are similar to the previous year. They included several large residential developments involving stages, confirming the continuing surge in subdivision development around the District.
- 4.5 Several applications to extend the lapse date for existing consents have also been received - the usual default lapse period is five years. All of these applications have been granted. [Refer Section 9 of this report, regarding High Court Review]
- 4.6 Tables 2 and 3 present summaries of the various types of consent applications for which processing was completed (ie decisions made) during the 2016-2017 year, showing average and median processing days, and degree of compliance with statutory timeframes. The previous year’s results are also shown.

**Table 2: Timeliness of Non-notified Applications**

Non-Notified	1 July 2015 – 30 June 2016				1 July 2016 – 30 June 2017			
	Total	% On Time	Avg Days	Median Days	Total	% On Time	Avg Days	Median Days
District Land Use Consent Notice Var'n	459	99.5%	16	14	487	97.5%	18	16
Subdivision	111	96%	29	22	104	79%	37	30
Coastal	13	100%	18	13	13	100%	22	23
Discharge	143	99.3%	32	24	106	94.5%	28	24
Regional Land	34	97%	33	20	28	93%	30	20
Water Permits	230	99.6%	20**	19**	61	98.5%	32.5	19
<b>Summary Consents</b>	<b>990</b>	<b>99%</b>	<b>19</b>	<b>19</b>	<b>826</b>	<b>95%</b>	<b>23</b>	<b>19</b>
NOR/OP/CofC	19	-	-	-	13	-	-	-

**Notes to Table 2:**

*The numbers of applications shown include variations to existing consents which comprise 11.5% of the total (similar to previous years).*

*Variations to consent notices on titles are now shown separately; they were previously included in the District land use figures.*

*Right of way applications under the Local Government Act 1974 are excluded from this list – 16 were completed in 2016-2017 (compared to 15 in the previous year).*

*Days shown are working days excluding all clock stops when processing is put on hold.*

*Thirty-five percent of non-notified applications had time extensions applied in the 2015-2016 year (compared with 43% in 2015-2016). The lesser number of extensions is partly due to*

*deferral of the Waimea water permit renewals – water zone renewals are usually processed in bulk with the applicants' agreement.*

*\*\* Time extensions are included in the count of working days shown in Table 2, **except for** the bulk “renewals” of water take permits in the previous year - the average and median times shown in the table for the water consents in 2015-16 **exclude** those applications.*

**Table 3: Timeliness of Public and Limited Notified Applications**

Notified	1 July 2015 - 30 June 2016			1 July 2016 - 30 June 2017		
Consent Type	Total	% On Time	Avg Days	Total	% On Time	Avg Days
District Land Use	7	100%	150	15	100%	238
Subdivision	1	100%	312	6	100%	170
Coastal	3	100%	203	0	-	-
Discharge	11	100%	212	23	100%	232
Regional Land	2	100%	173	1	100%	287
Water Permits	4	100%	216	3	100%	287
Designations	0	-	-	0	-	-
	<b>28</b>	<b>100%</b>	<b>197</b>	<b>48</b>	<b>100%</b>	<b>207</b>

**Notes to Table 3:**

*Days shown are working days excluding all clock stops when processing is on hold.*

*Ninety-four percent of the notified applications completed during 2016-2017 had time extensions applied, compared with 86% in 2015-2016. All time extensions are included in the count of working days.*

*The average working days are distorted by the Harakeke Ltd Rural 3 subdivision application (involving a suite of 15 consents) which required two hearings and took 18 months to complete, including a period when the process was suspended by the applicant.*

- 4.7 Thirty-eight percent (335) of all resource consent applications completed had time extensions applied, 37% of those at the request of, or with agreement from the applicants.
- 4.8 Thirty-two percent of all applications required a further information request (22% in 2015-2016).
- 4.9 Twenty-five percent of the District land use consents were completed within 10 working days (compared to 30% the previous year). The overall increase in working days taken for the land use consents is attributable to the 17% increase in those applications.
- 4.10 The increases in processing times for subdivision consents is attributable to staff gaps over nine months of the year.
- 4.11 Table 4 presents a summary of the decisions made on the 874 consent applications completed in 2016-2017 (as listed in Tables 2 and 3). Four hearings were required. Of the 48 publicly or limited notified applications, 27 were able to be granted without a hearing because all issues were resolved.

**Table 4: Summary of Decisions**

Decision makers	Number
Granted by Mixed Panels	16
Granted by Independent Commissioners	3
Declined by Independent Commissioners	2
Granted under Delegated Authority	853

## 5 Discount Regulations

- 5.1 The discount regulations that apply to Council's charges for processing resource consent applications require a "sliding scale percentage discount" of 1% for each day that processing goes over time, rising to a maximum 50% discount.
- 5.2 For the 2016-2017 year, there were 27 non-notified applications involving 43 consents that were completed out of time, resulting in 27 fee discounts ranging from 2% to 19%. These discounts totalled **\$10,000** excluding GST (compared with \$4,000 in the previous year).
- 5.3 The majority of these discounts involved subdivision consents, caused by unexpected staff gaps in the subdivision consents team which could not be covered by temporary contracts.

## 6 National Monitoring System

- 6.1 Details of our resource consent processing are now required to be sent annually to the Ministry for the Environment (MfE) as part of the National Monitoring System. The data is verified by MfE. The 2014-2015 results were made publicly available on the MfE website in May 2016. The 2015-2016 information is not yet available. We are currently checking our returns for the 2016-17 year, which are due to be sent to MfE by the end of July.

## 7 Objections to Decisions made under Delegated Authority

- 7.1 One Objection carries over from 2014: it relates to a condition imposed on a subdivision proposal on Mapua Drive requiring upgrade of the road frontage in accordance with provisions of the Tasman Resource Management Plan (TRMP). That Objection is yet to be resolved.
- 7.2 An Objection was received in November 2016 regarding the subdivision consent granted in November for the Arizona Block at the intersection of Wensley and Paton roads in Richmond. Three matters were raised, relating to esplanade reserve requirements for the watercourse through the block; the basis of valuation for land required for stormwater detention purposes; and cost share for providing extra flood flow capacity in the new stream channel. These matters were heard by an independent Hearing Commissioner. The Commissioner accepted Council staff evidence regarding the esplanade reserve and dismissed that item of Objection. The Objection regarding the land valuation matter was upheld, although the Commissioner accepted the valuer's evidence. The decision on the third matter enables the dollar quantum of the cost share arrangement to be determined when the cost of the works are known.

- 7.3 An Objection was lodged in February regarding the construction standards for a proposed private way (right of way) for multiple residential properties at Ligar Bay. This matter is being further considered by the consent holder regarding the long-term use of the access.
- 7.4 An Objection was lodged in April regarding a 130 lot subdivision consent in the Richmond West Development Area, the issues raised relating to roading standards and the requirement to install pressurized wastewater systems (as required by the Deed of Agreement for uplifting the deferred residential zoning). This objection may be resolved by the Special Housing Area proposed for that locality.
- 7.5 An Objection was lodged in May regarding a residential subdivision consent which allows downslope road batters to be within the new allotments, rather than within the road reserve (as required by Council's engineering standards), thereby allowing a narrower road. The issue for the consent holder is that the consent imposes an easement over those batters to ensure that Council can take action to maintain them if necessary, thereby minimising Council's future risk.

## 8 Current Appeals

- 8.1 Both of the appeals that were live six months ago, have been resolved without need for Court hearings. There has been one new appeal lodged recently, as listed in Table 4 below.

**Table 4: Appeals**

Appellant	Matter	Status
AN & MD Baigent <b>Other parties:</b> Roberts Eder	Consents granted in January 2014 with 20-year term to allow continued gravel extraction for enlarging water storage ponds off River Terrace Road, Brightwater.  <b>Consents cancelled on review by Independent Commissioner.</b>	Environment Court mediation held in August.  <b>Resolved by Consent Order May 2017 – the consents have been reinstated with a reduced 5-year term.</b>
K Riddle	Consent granted to Ecology Limited for a 9-lot Rural 3 subdivision between Maisey and Ridgeview Roads.	Appeal withdrawn after minor corrections were made to the consents by agreement with the consent holder.
Lee Valley Limestone Ltd <b>Other parties:</b> Alt Hug Moore Murray NZ Transport Agency Price Van Megan	Consents <b>declined</b> for a new hardrock quarry in Takaka valley.	Environment Court mediation is expected.



## 9 High Court Proceedings Regarding Extension of Lapse Date

- 9.1 In February 2016, I granted a further lapse extension for a water permit granted in 2005 for a proposed water bottling venture in Golden Bay. The site of the water take is close to Te Waikoropupu Springs. That decision was challenged by Ngati Tama ki te Waipounamu Trust by them seeking a judicial review. The matter was heard by a High Court judge on 13-14 March.
- 9.2 The judgement released in May found that my decision contained two errors that could be regarded as causing errors of law in the decision-making procedure I had followed, hence my decision was overturned. The matter was referred back to Council for reconsideration.

## 10 Waimea Water Zone Permit Renewals

- 10.1 Work has been progressing with the bona fide assessments required for the approximately 300 applications for replacement water permits for the seven water zones across the Waimea Plains: the Lower Confined Aquifer (LCA) Zone, Upper Confined Zone, Hope and Eastern Hills (HEH) Zone, Delta Zone, Golden Hills Zone, Waimea West Zone, and Reservoir Zone.
- 10.2 The Bona Fide assessments are almost completed and should be able to be sent out to all the individual applicants by early August.

## 11 Notable Application Work Since January 2017

- 11.1 Notable applications and proposals dealt with over the past six months are:
- **Richmond West Development Area (RWDA):** a second application for a large residential subdivision in the RWDA has been granted consent, following uplift of the deferred zoning. The first proposal was for a 60 lot subdivision off Lower Queen Street. The second proposal comprises 130 allotments. Other proposals for residential development in the RWDA have now been taken up into Special Housing Area proposals.
  - **Richmond South Development Area (RSDA):** the first stages of residential development on the “Arizona” Block are nearing completion. An application has been received for development of the adjacent Paton Rise block, which will involve re-alignment of the “Bateup Drain” watercourse.
  - **Proposed Quarry:** an application for a new quarry in the Takaka Valley with access from State Highway 60 was limited notified to adjacent landowners and the New Zealand Transport Agency and attracted nine submissions. A hearing was held by Commissioners in February. They declined consent. An appeal has been lodged by the applicant (refer Section 8 of this report, above).
  - **Rural Workers Campsite:** an application lodged in January 2013 to authorise a workers campground in Williams Road, Tasman, was limited notified to neighbours in 2015. It was heard by a Mixed Panel in February this year. Consent was granted.
  - **Rural 3 Subdivision, Moutere Highway:** an application for a subdivision to create 135 residential lots on the area of the Rural 3 zone bounded by the Moutere Highway,

Stringer Road and Eban Road, was publicly notified May and attracted 22 submissions. A hearing is scheduled for August with Commissioners.

- **Other Rural 3 Subdivisions:** three other subdivision proposals for smaller blocks of land in the Ruby Bay/Tasman area have progressed to consenting stage. One was publicly notified in its original form, but was subsequently scaled down; and another was scaled down to avoid notification.
- **Commercial Packhouse and Cool Store Facility, Motueka:** an application for a large facility on a site bounding Queen Victoria Street and Green Lane on land zoned Rural 1/Deferred Industrial, was limited notified in March and attracted seven submissions. A hearing was held in the last week of July by Commissioners.
- **Talleys Discharges, Motueka Wharf:** these publicly notified applications for replacement air and water discharge consents attracted 36 submissions. A hearing by Commissioners was held in late May. The Commissioners have directed that a revised set of draft conditions be submitted.
- **Proposed Motor Caravan Park:** an application lodged by the New Zealand Motor Caravan Association to establish a motorhome park with up to 70 spaces on Council owned land off Old Wharf Road, Motueka, was publicly notified in May and attracted 95 submissions – 92 in support. The site adjoins an industrial zone occupied by Motueka Cold Storage Ltd who have concerns that the proposed activity could restrict their operations. A hearing is scheduled for the end of August with an independent Commissioner.
- **Comprehensive Residential Development proposal:** an application received in December for a site on the corner of Salisbury Road and Arbor-Lea Avenue, Richmond, involving several non-compliances with the TRMP rules, has been limited notified to adjacent landowners and attracted 13 submissions. A bid for this site to be made a Special Housing Area proposal was unsuccessful. A hearing is expected to be scheduled for mid-October.
- **Early Childhood Centre:** an application to convert a site on the corner of High Street (SH 60) and Courtney Street East, Motueka, from café to an early childhood centre was limited notified to neighbours who had not given written approvals. It attracted two submissions. A Councillor subcommittee heard this application in early July. Decision pending.

## 12 Resource Management Act Amendments October 2017

- 12.1 The recent Resource Management Act amendments that affect our resource consenting work will take effect from 18 October, three months away. The amendments create “deemed permitted activities” and “boundary activities” which are new categories of decision-making.
- 12.2 The amendments will also bring changes to the notification procedures for resource consents. Several categories of applications will be exempt from notification unless special circumstances are deemed to apply. Of note, is that “occupiers” of land adjoining an application site will no longer have any status as affected persons – just the landowners, unless there are special circumstances. It is unclear what this will mean in practice for leased land.

- 12.3 These proposed changes will add complexity and require reviews of our systems, procedures and staff delegations, which are underway. Staff will bring back delegation recommendations to a future meeting.

### **13 Current Staffing and Workloads**

- 13.1 The Subdivision Consents team has been short staffed for much of the reporting period, following a similar situation in the latter months of 2016 when a replacement appointee did not start in the job, causing a gap for three months before Erin Hawke took up her position (based in the Motueka and Takaka offices) in late January.
- 13.2 Mark Morris resigned from his role as Coordinator (team leader) of Subdivision Consents, effective 31 March, after 21 years with Council, to take on a position in the private sector. That has caused another gap in our staff resources, and we have had another two false starts filling that position. The position has been re-advertised and recruitment is happening now.
- 13.3 Annie Reed also resigned from the subdivision team in May, although she is continuing to assist us on a part-time basis. Her position has been filled from the start of July by Alistair Sharp who has moved from Christchurch City.
- 13.4 As mentioned in Section 4 above, the circumstances over the past 9 months have caused delays in processing many of the subdivision applications (and related consents). We have attempted to fill the staff gaps or otherwise re-allocate work or contract experienced practitioners. However, it is not necessarily straightforward or efficient to contract out subdivision processing which effectively entails appraising or auditing of local competitors work. Bob Askew is assisting us part-time with the duty planner roster, based at the Motueka office.
- 13.5 I acknowledge the extra workloads that Annie Reed and Wayne Horner have dealt with over the past year, as well as other consents staff who are assisting where they can until we can fill the subdivision team leader position.
- 13.6 As shown in Table 1 above, the consents workload for the Land Use team has been 17% higher over the past 12 months, compared to the previous year. And the overall workload for the Consents section also continues to be influenced by increases in demands on the time of duty planners and other enquiries, as well as with pre-application work generally. The number of LIMs and PIMs has also steadily increased.
- 13.7 On the plus side, Sam Niven joined us in April, replacing Emily Gray, to assist with the Waimea water permit renewal programme (see Section 10 Above), to be followed by the Takaka renewals in 2018-9. And Bryan Scoles has taken on the joint Consents/ Environmental Information position, which will alleviate pressures on the Natural Resource consents team, including the PIM checking workload.
- 13.8 As well as the RMA amendments, we are also preparing to receive the first consent applications to be lodged for the Special Housing Areas, once they are gazetted and any agreements required with Council relating to infrastructure, are finalized.
- 13.9 A review of the Consents Section's operations has been initiated, involving two external consultants, one with consenting experience. They have confirmed that we have a very cost and time efficient operation, while acknowledging the continuing work pressures that staff have experienced over the past 18 months. They have identified several aspects where we

could enhance our service provision, and we will work on those over the next few months along with implementing the RMA changes and preparing for the Special Housing Area applications.

13.10I thank the Consents staff and other Council staff who regularly assist us in our work for their efforts in dealing with several complex applications and achieving what I consider are good timeliness results over the past 12 months, despite the staffing gaps.

<b>14 Attachments</b>
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Nil

## 9.8 ENVIRONMENT & PLANNING MANAGER'S REPORT

Decision Required

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
<b>Report Author:</b>	Dennis Bush-King, Environment and Planning Manager
<b>Report Number:</b>	REP17-08-04

### 1 Summary

- 1.1 This report covers a number of general matters concerning the activities of the Environment and Planning Department since our last meeting on 1 June 2017.

Draft Resolution

**That the Environment and Planning Committee:**

- 1. receives the Environment & Planning Manager's Report REP17-08-04**

## 2 Customer Survey Results – Annual Results

- 2.1 In addition to the Communitrak™ Residents Survey, the National Research Bureau also surveys customers who in the previous year have sought from Council a building or resource consent, a dog registration, or an environmental health or other regulatory permit or license. Respondents are chosen from a randomised list of 400 applicants and asked questions about the helpfulness of staff, the reasonableness of costs, the time taken to obtain a decision, the usefulness and ease of council forms and brochures, and the ease of understanding an applicant's on-going obligations. Respondents are also asked to give an overall level of satisfaction with Council service.
- 2.2 The last survey covering July to December 2016 was conducted following a drop in satisfaction levels for some of the building and resource consent measures. This round of surveying returns to the normal annual timing.
- 2.3 The summary results presented in the table below show good results. Overall satisfaction levels get dragged down by people's dissatisfaction with cost of process and timeliness for resource consents dropped, affected in part, by the fact that we have been short staffed over the last 18 months, despite trying to recruit. Staff courtesy and helpfulness continues to be high. Historical trends are shown in the graphs in Attachment 1.

Question	Score - showing proportion of respondents who agree or strongly agree				
	Total	Building	Resource Consents	Dogs	Environmental Health
Staff were helpful and courteous	94 (92.5)	94.0 (94.0)	88.0 (90.0)	100.0 (88.0)	94.0 (98.0)
Costs were reasonable	62.0 (62.0)	56.0 (60.0)	40.0 (48.0)	82.0 (84.0)	70.0 (58.0)
Time taken was reasonable	77.5 (80.5)	76.0 (72.0)	52.0 (70.0)	98.0 (98.0)	84.0 (82.0)
Overall level of satisfaction with Council service	85.0 (85.5)	78.0 (84.0)	68.0 (74.0)	100.0 (88.0)	94.0 (96.0)

Bracketed figures are those applying to the last survey in 2016

- 2.4 Broken down by Ward, the overall satisfaction levels have shifted considerably from the last survey - Golden Bay 88.2% (89.7%), Lakes Murchison 90.0% (85.0%), Richmond 77.6% (83.9%), Waimea Moutere 84.0% (82.7%), and Motueka 89.4% (92.1%).

## 3 Water Conservation Order: Te Waikoropupu

- 3.1 The Minister for the Environment Dr. Nick Smith announced the appointment of a Special Tribunal to consider the application for a Water Conservation Order (WCO) over Te Waikoropupu Springs. The five-member panel are; Nelson barrister Camilla Owen, former Tasman District Council Chief Executive Bob Dickinson, Agricultural Advisor Lewis Metcalfe,

former Chief Negotiator for the Ngati Rangi Trust Che Wilson and Professor Jon Harding. Harding is the Dean of Postgraduate Research for Stream Ecology at Canterbury University.

- 3.2 The process from here is the tribunal will convene and then make a decision on how it will proceed. This will involve when to notify the application and call for submissions. It will then hear submissions and ultimately make a recommendation to the Minister regarding whether a WCO should be made. Submitters have a right of appeal to the Environment Court on the Tribunal's decision.
- 3.3 The Minister has indicated that he hopes the special tribunal will convene and then notify the application, with hearings to start before Christmas and a final decision in Autumn 2018. This timeline is very optimistic. A more realistic timeframe given past WCO processes is a WCO in two to three years. We will come back to the Committee with advice on the Tribunal's approach and timelines, and how the Council can engage in the WCO process once further information is available.

#### **4 Tasman Pest Management Plan**

- 4.1 The Regional Pest Management Joint Committee met on 2 August to review the Draft Proposal for the new Regional Pest Management Plan (RPMP). A joint council workshop is planned for the morning of Tuesday 29 August in the Nelson City Council chambers to provide all Councillors (both councils) with the opportunity to familiarise themselves with the Draft Proposal before they are asked to approve it for public notification and consultation during the September/October Council meetings.
- 4.2 The current proposal carries forward most of the pest management programmes from the current Strategy. However the Biosecurity Act reform of 2012 and its associated National Policy Direction issued in August 2015 has reduced the range of programmes possible under the Biosecurity Act. It has also introduced the requirement for cost – benefit assessments of each pest declared through the RPMP. These changes have resulted in activities such as surveillance and biocontrol being removed from the Draft Proposal along with some of the programmes for management of widespread pests (such as ants) which cannot meet economic criteria. If the two councils wish to retain some or all of these excluded programmes they will need to do so outside the RPMP and without using Biosecurity Act powers.

#### **5 Sabella (Mediterranean fanworm) Small Scale Management Plan**

- 5.1 The three Top of the South councils all declared Small Scale Management Plan's (SSMP's) for Sabella under the provisions of the Biosecurity Act 1993 at the beginning of July 2017. A draft joint Operational Plan has now been developed which partially builds on the capability created by the existing Top of the South Marine Biosecurity Partnership comprising the Top of the South councils, Ministry for Primary Industries and iwi. As part of that Operational Plan, Port Tarkohe has now been dive surveyed and cleared of all Sabella found (approx. 25).



- 5.2 At the completion of that survey the divers also checked the hulls of the Heron Construction barge and tug which are currently transporting rock from Tarakohe to Wellington for the Transmission Gully project. The Heron vessels have up to date antifouling certificates and were dive checked for Sabella prior to their departure from Auckland, however both were found to have Sabella present on their hulls. In the case of the barge (WH761) the Sabella found were approaching maturity and must have been present when the barge departed from Auckland.
- 5.3 The existence of the SSMP has given Tasman District Council legal powers to require the removal of these vessels from Tasman waters or to require their treatment for Sabella. It has not been necessary to use these powers as Heron Construction have volunteered to have their barge treated for Sabella by plastic wrapping with the inclusion of biocide (pool chlorine) inside the wrap. They also volunteered to commission a dive survey of the Tarakohe berth area used to ensure that Sabella had not been transferred from the barge onto adjoining structures or seabed. That work has now been successfully completed with the barge's hull sterilised and the structures and seabed surveyed and clear of Sabella. All the work initiated by Heron Construction has been at their own expense.

## **6 Myrtle Rust National Response**

- 6.1 Myrtle Rust was identified on the New Zealand mainland on 3 May 2017 at a plant nursery in Kerikeri. Myrtle rust is a serious fungal disease that affects plants in the myrtle family. Plants in the myrtle family include the iconic pohutukawa and Manuka as well as introduced species such as Eucalyptus, feijoa and guava. The impact of myrtle rust on impacted plants varies from a loss of vigour through to rapid death of the plant. Myrtle rust spores are wind spread or transferred on infected material.
- 6.2 Ministry for Primary Industries have been leading a national response by visiting all infected sites and destroying or treating all risk materials. However despite the response effort the number of infested sites and their distribution has rapidly increased from the original single site in Northland to 93 sites (21/07/2017) spread throughout the North Island in Northland (23), Bay of Plenty (23), Taranaki (64) and the Waikato (2). It appears these infections are not interrelated and may be associated with long range wind spread possibly from Queensland.
- 6.3 Recognising that the current response may not be sustainable MPI have started to develop a business case to move to a Long Term Management Programme. Their initial assessment of costs and benefits favours an approach of adaptive management and slowing the spread. Along with seed banking and treatment of individual iconic trees, the programme would include a range of measures including movement control to prevent risk goods (plant material, bee hives etc.) being moved from infected areas to free areas and targeted response to isolated outlier infections. This management approach is estimated to cost between eighteen and fifty million dollars per annum with potential benefits of between seventy and five hundred million dollars per annum mainly based on reduced impact on Manuka honey production.

- 6.4 To deliver this programme MPI have identified regional councils as being key players involved with governance and coordination. What form that relationship would take has yet to be determined although MPI has initiated conversations with regional councils related to charge out rates.

## **7 Managing Wetlands Project**

- 7.1 Good progress is being made with on-the-ground mapping of wetlands in the Buller and Golden Bay. All the wetland owners who have requested visits in the Buller have been visited and accurate on-ground mapping completed. This includes most of the wetlands on land managed by Nelson Forests Ltd, which has amounted to almost a month of work all up. Nearly all the more urgent visits to wetland owners in Golden Bay have been completed. Note that “urgency” is usually related to the landowner’s plans for developing the land where wetlands are very likely to exist or pre-sale arrangements. It is still expected that it will take about two years to complete wetland site visits in Golden Bay and maybe longer if the work on assessing wetland significance proves to be a major piece of work.
- 7.2 The recent availability of two new tools for wetland mapping has made a huge improvement to wetland map accuracy:
- High-resolution aerial photos for all of the Buller (this became available in April 2017).
  - Satellite imagery of specific spectral bands (near infra-red) that produce different colours for the majority of wetland vegetation types. While we have used static pictures of our region, this imagery is soon to be available on our GIS system for the whole of our region at low or no cost (thanks to Landcare Research).
- 7.3 This has resulted in the identification of some additional wetlands that were not included in maps sent out to wetland owners. Staff plan to contact all the owners of these newly-identified wetlands pointing out that the wetland rules apply to these areas also (we have always pointed out to wetland owners that a wetland is a wetland, even if we have missed it with our mapping using remote sensing methods). In addition, staff plan to contact wetland owners who have not had on-ground mapping to reiterate the offer and the benefits thereof. On-ground mapping of particularly significant wetlands may be undertaken, even if the landowner has refused access.
- 7.4 While progress on determining the methods for wetlands Significance Assessment is being made, it is likely to be delayed due to the need to sort out several shortcomings in the Native Habitats Tasman (NHT) significance criteria they are based on. There appear to be several inconsistencies between the NHT system and recent case law and national common practice. This has developed since the NHT Significance Assessment document was completed. Issues in the NHT document include reference to ‘condition’ which is not supported by recent case law, a definition of representativeness which is now less commonly used, an evaluation system and some thresholds which appear to exclude more wetlands than those of a number of regional councils, and a lack of reference to wetlands’ buffering influence on water quality and quantity. The overall effect of these inconsistencies poses a challenge given the requirements of the NPS on Freshwater. Additionally some degraded examples of rare wetland classes with regenerating vegetation may continue to be lost as they wouldn’t presently rate as significant. This will occur mainly in highly developed lowland

ecological districts, eg swamp remnants on the Waimea, Motueka and Golden Bay plains. Staff are assessing options for addressing these issues, ranging from accepting the shortcomings, to recommending changes to the NHT significance criteria for use on wetlands.

## **8 National Environmental Standard for Marine Aquaculture**

- 8.1 The Ministry for Primary Industries in partnership with the Ministry for the Environment and the Department of Conservation is proposing a National Environmental Standard for Marine Aquaculture (NES).
- 8.2 The proposal aims to:
- address variations and regional inconsistencies in processing replacement permit applications for existing marine farms
  - reduce New Zealand's exposure to biosecurity risks
  - enable better use of space within existing marine farms
  - improve environmental outcomes.
- 8.3 Specifically the proposed NES would:
- provide for most replacement consents (which may include species changes) to be non-notified, restricted discretionary activities with a confined list of matters of discretion while still allowing management of existing marine farming within environmental limits
  - provide for small scale realignments of existing marine farms, particularly where realignments can reduce adverse effects
  - require all marine farms (existing and new) to prepare, implement and keep up to date biosecurity management plans.
- 8.4 The discussion document seeks feedback on whether there should be special provision for replacement consents for particular sites of strategic importance to aquaculture. For instance, the Wainui Bay spat catching farms in Golden Bay are of national importance to the mussel farming industry and are located in an area where outstanding values are contested.
- 8.5 Areas specifically zoned for aquaculture in Tasman and Waikato would be exempted from the replacement consent rules. These areas are specifically zoned for aquaculture and have an overall planning and consenting structure that aims to manage cumulative effects, so it is not seen as appropriate or necessary to alter the rules through the NES: Marine Aquaculture.
- 8.6 A proposed submission will be circulated before the meeting. The closing date is 8 August 2017. It will be recommended that the Committee endorse the submission.

**9 Air Quality Exceedences**

- 9.1 So far this year we have had three exceedences of the National Environmental Standards relating to Air Quality. You may have noticed the table below in Newslines as we are required to publicly notify any exceedences. The total for last winter was five.
- 9.2 As a heads up, we are expecting the NES to be changed soon as it is presently under review. This is to take account of the prevailing view that it is the annual value for particulate matter 2.5 micrometres or less in diameter (PM<sub>2.5</sub>) that is more important from a health point of view than the present standard of 24hr average PM<sub>10</sub>. Staff will report on this when they deliver the annual monitoring report later in the year.
- 9.3 Our present primary monitoring unit is due to be replaced this year (the present unit being no longer able to be maintained) and when we do find a suitable replacement unit we will make sure that replacement equipment can manage either standard when it is purchased. More information is available online: <http://www.tasman.govt.nz/environment/air/air-quality>
- 9.4 The Richmond Airshed PM<sub>10</sub> concentrations exceeded an average 24-hour concentration of 50 micrograms per cubic metre (µg/m<sup>3</sup>) on the following dates:

Day	PM10 Concentration measured (µg/m <sup>3</sup> )	Extent of PM10 Exceedence (µg/m <sup>3</sup> )	Location at which Exceedence was Measured
11 June 2017	59	9	Richmond Central
27 June 2017	60	10	Richmond Central
9 July 2017	55	5	Richmond Central

**10 2016 Takaka Valley Groundwater Nitrate Monitoring**

- 10.1 A copy of the 2016 groundwater monitoring result for Takaka Valley is attached as Attachment 2.

**11 New Zealand Energy Efficiency Conservation Strategy 2017-2022**

- 11.1 The Energy Efficiency and Conservation Authority has released its latest Conservation Strategy 2017-2022 'Unlocking our energy productivity and renewable potential'. It focuses on what it sees as the three biggest cost-effective opportunities for New Zealand:
- Renewable use of process heat;
  - low-emissions transport; and
  - Innovative use of electricity.
- 11.2 The Strategy can be viewed [here](#). The local government sector, (the strategy says), can play a leadership role by directly reducing energy use and emissions, and incentivising wider action. Examples of actions that we could take include using renewable energy to heat buildings, using

municipal solid waste and gas as energy sources, or improving energy performance by retrofitting existing buildings, using the All-of-Government (AoG) Vehicles contract to improve use of electric vehicles.

- 11.3 We still have an outstanding item of policy work looking at improving the process for installing micro-hydro and photovoltaic energy systems.

## **12 Financial Accounts**

- 11.1 There are no financial accounts as these are being collated as part of the year-end process. Overall Environment and Planning was about \$300,000 in surplus.

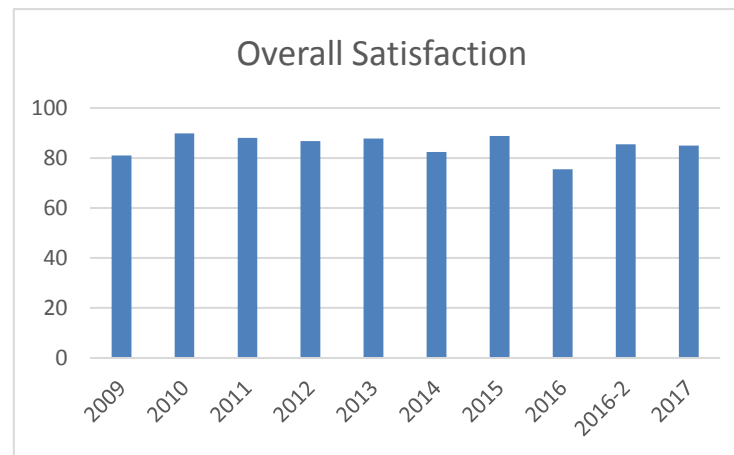
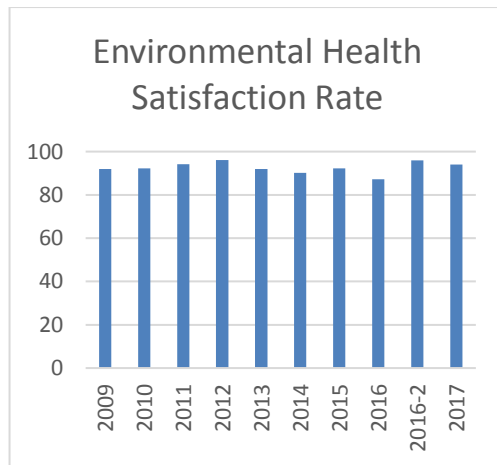
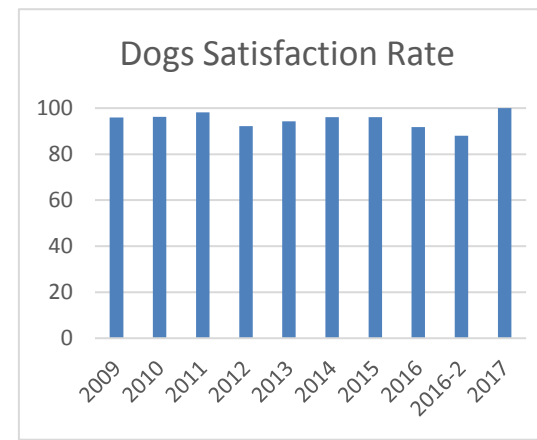
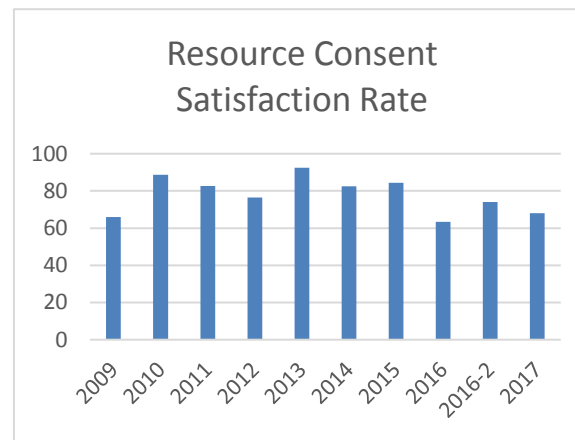
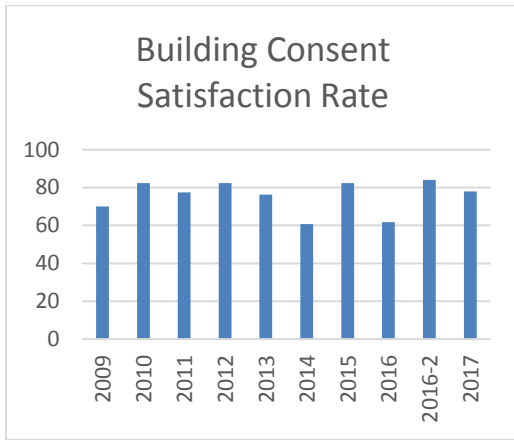
## **13 Action Items**

- 13.1 Attachment 3 updates Councillors on actions items from previous Environment & Planning Committee meetings.

## **14 Attachments**

- |    |  |    |
|----|--|----|
| 1. | Attachment 1 - Customer Survey Trends        | 87 |
| 2. | Attachment 2 - Takaka Groundwater Monitoring | 89 |
| 3. | Attachment 3 - Action Sheet                  | 93 |









## MEMORANDUM

**TO:**

**FROM:** Glenn Stevens

**DATE:** 14 July 2017

**FILE NO:**

**RE:** **2016 Takaka Valley Groundwater Nitrate Monitoring**

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### 2016 Groundwater Nitrate Monitoring

Monitoring of groundwater nitrate concentrations in the aquifers of the Takaka valley was undertaken during February 2016. A total of 48 samples were collected by summer student staff and sent to Hills Laboratories Ltd for analysis. The 2016 survey was a repeat of the similar nitrate survey undertaken in January 2006.

The nitrate monitoring targeted shallow groundwater, as this is more vulnerable to nitrate contamination from surface land use. Majority (80%) of the sampling sites were in the Takaka Gravel Aquifer (TGA). The remaining sites were from the Takaka Limestone Aquifer (TLA) and Arthur Marble Aquifer (AMA). The TGA is an alluvial gravel aquifer system and is typically unconfined. It is present across much of the Takaka valley. The TLA and AMA are both karst aquifers with complex flow paths and recharge areas. Parts of the TLA and AMA are overlain by the TGA but separated by impermeable strata.

Land use on the Takaka valley plains is predominantly intensive dairy farming, although there are minor areas sheep and beef and some horticulture (including kiwi fruit). In places around the periphery of the plains, particularly in the Motupipi and Clifton area, there is rural-residential land use.

### Measured Nitrate Concentrations

Majority of the sampled Takaka groundwater encountered low nitrate concentrations, with 80% of the 2016 samples having concentrations below 2.5 g/m<sup>3</sup>-N. There were only four sites with nitrates above 5.0 g/m<sup>3</sup>-N, with three of these in the TGA (9.1, 8.9 and 7.6 g/m<sup>3</sup>-N) and one in the TLA (7.5 g/m<sup>3</sup>-N). The four samples collected from the AMA all had very low nitrate concentrations (<1 g/m<sup>3</sup>-N). All sampled groundwaters were below the NZ drinking water standard of 11.3 g/m<sup>3</sup>-N.

In New Zealand nitrate concentrations over 1.6 g/m<sup>3</sup>-N are probably indicative of human influence and concentrations above 3.5 g/m<sup>3</sup>-N are almost certainly indicative of human impact<sup>1</sup>. The New

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<sup>1</sup> Daughney, C.J. and Reeves, R.R. 2005. Definition of Hydrochemical Facies in the New Zealand Groundwater Monitoring Programme. In Journal of Hydrology (NZ) 44(2), New Zealand Hydrological Society.

Zealand Ministry of Health publishes standards for drinking water<sup>2</sup>. This standard requires that potable water to have a nitrate concentration of 11.3 g/m<sup>3</sup>-N or less. Nitrates at lesser concentrations in surface waters can be toxic to aquatic life and/or result in adverse algal and plant growth. The nitrate concentrations for ecosystem toxicity are variable and dependant on the hardness of the water. They are much higher than nitrate limits to avoid excessive algal and plant growth.

### **Spatial extent**

Figure 1 shows the location and respective nitrate concentrations of the sampled sites across the Takaka valley. The low nitrate concentrations encountered in majority of the sampled sites result in limited spatial variability across the valley.

The locations of the four sites with the highest nitrate concentrations (ranging 7.5 to 9.1 g/m<sup>3</sup>-N) are not related to each other and are found in three separate locations. These four sampling sites are considered to reflect localised conditions close to the bore/well rather than the groundwater nitrate concentrations across the wider area.

### **Changes over time**

Both surveys (2006 and 2016) show similar nitrate concentrations and distribution. A total of 38 sites were sampled in both 2006 and 2016. Nitrate concentrations at a majority of these sites (80% - 31 sites) show either little change (less than 0.5 g/m<sup>3</sup>-N) or a decrease in nitrate concentrations since 2006.

Of the sites that increased, only four showed an increase of greater than 1.0 g/m<sup>3</sup>-N. Three of these are located near the Rototai coastline where groundwater is present at very shallow depths (less than 2 m below ground level).

In addition to the 2006 and 2016 survey nitrate data, there are a number of sites where additional nitrate data is available allowing trends over time to be delineated. This includes Council's quarterly monitored State of the Environment groundwater monitoring sites. A representative selection of these are shown in Figure 1.

These sites show relatively stable nitrate concentrations overtime with no obviously discernible trends (increasing or decreasing).

### **Conclusion**

Sampled groundwater nitrate concentrations are generally low and stable across the Takaka valley. The predominant land use is intensive dairy farming, which does have the potential to result in leeching of excess nutrients (nitrates) to groundwater. The groundwater quality monitoring to date indicates that dairying is not having any significant widespread impacts to groundwater.

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<sup>2</sup> Ministry of Health. 2008. Drinking-water Standards for New Zealand 2005 (Revised 2008). Wellington: Ministry of Health.

Recent years has seen an increase in irrigation of dairy pastures in the Takaka valley. Increased irrigation is often associated with an increase in land use intensity (increased stocking rates and/or increased nutrient use). Care needs to be taken to ensure that land use practises and nutrient management are appropriate for the farming intensity and are sufficient to ensure groundwater quality is not adversely effected.

The management of the Takaka valley water resources and the associated TRMP provisions are in the process of being reviewed. Land use and nutrient management is one of the matters that the Takaka Freshwater and Land Advisory Group (FLAG) are presently considering. The recommendations of the Takaka FLAG will form the basis of a formal TRMP plan change.

The current level of monitoring, both quarterly SOE monitoring and periodic plains wide nitrate surveys are budgeted for will continue. The next plains wide survey will be written up as a standalone report as it will contain much more survey and quarterly data. The level of monitoring should be reviewed following the completion of the FLAG process and subsequent TRMP plan change.

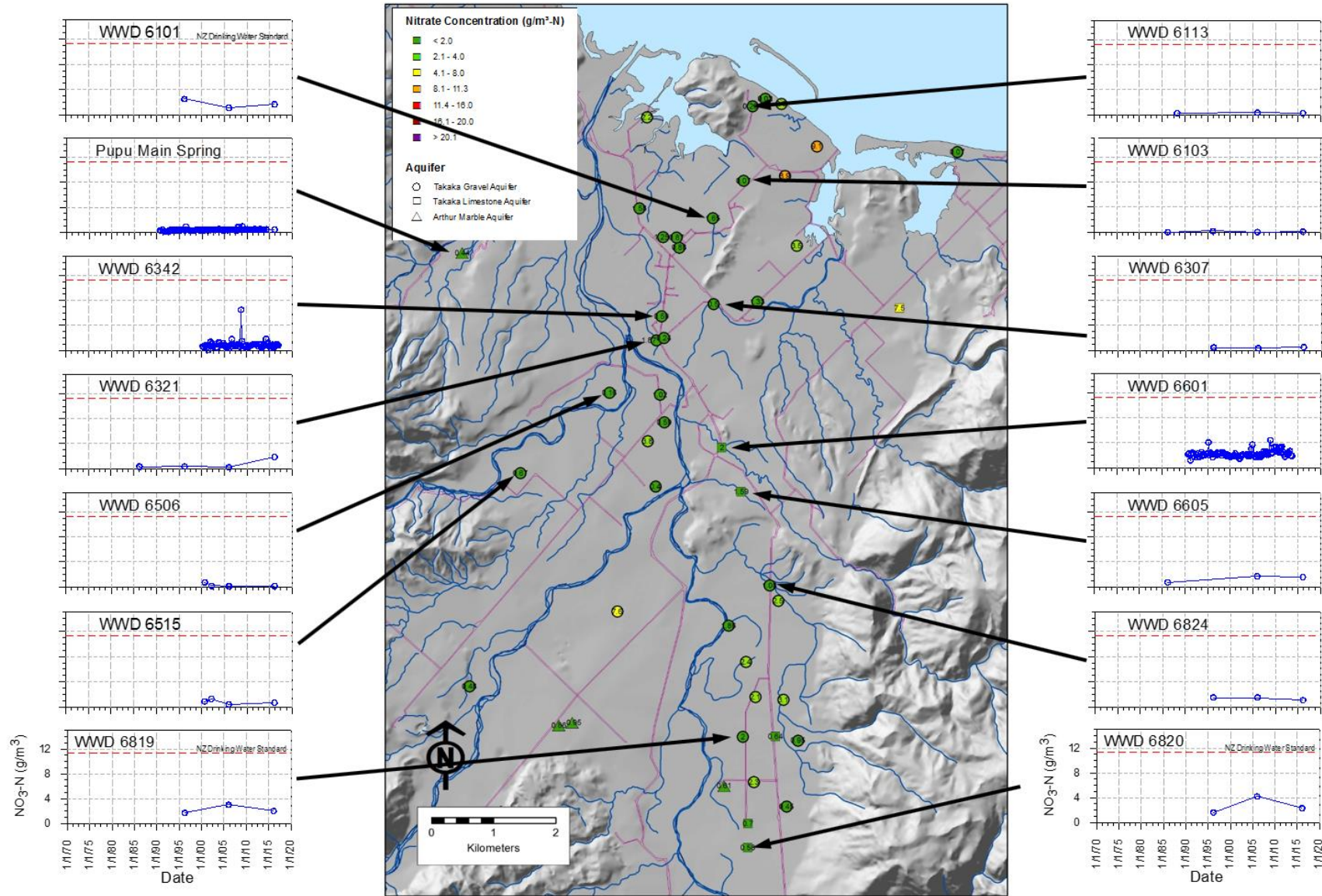


Figure 1 2016 Groundwater nitrate sampling, Takaka valley

**Action Sheet - Environment & Planning Committee**

Meeting Date:	Minute/Action	Minute or CSR or Email request	Accountable Officer	Status
1 November 2012	REP12-11-06 NPS on Renewable Electricity Generation	Requests staff to identify opportunities to amend the TRMP to improve the process for installing mini and micro hydro and photovoltaic energy systems	Steve Markham	No action yet. Programmed for 2018
27 April	EP17-04-04	Takaka Freshwater Management - Council commitment to work with Manawhenua ki Mohua - staff to report back on times frames and resourcing implications of supporting Manawhenua ki Mohua in contributing to the development of the freshwater plan for the Takaka catchments	Barry Johnson	Underway
1 June	EP17-06-08	Wetlands Tool - Councillors requested that staff report back to the Committee on where Council is currently with regard to assessing the significance of identified wetland regions	Dennis Bush-King	In progress



**9.9 ENVIRONMENT AND PLANNING CHAIR'S REPORT**

Information Only - No Decision Required

**Report To:** Environment and Planning Committee  
**Meeting Date:** 3 August 2017  
**Report Author:** Tim King, Environment & Planning Committee Chair  
**Report Number:** REP17-08-14

**1 Chair's Report**

1.1 A verbal report will be provided by the Chair.

**2 Draft Resolution**

**That the Environment and Planning Committee**

1. receives the Environment and Planning Chair's Report report; and
2. <approves> or <requests> or <instructs> or <acknowledges>

**3 Attachments**

Nil