BEFORE THE SOUTHLAND REGIONAL COUNCIL

IN THE MATTER OF	The Resource Management Act 1991 (**Act**)
and	
IN THE MATTER OF	An Application by **INVERCARGILL CITY COUNCIL** for a discharge permit to replace five existing discharge permits authorising the discharge of water and contaminants into surface water bodies from the Invercargill City Council's reticulated water stormwater system **APP-20168843**
By	**INVERCARGILL CITY COUNCIL** Applicant

DECISION OF HEARING COMMISSIONERS DAVID CALDWELL, HUGH LEERSNYDER AND CRAIG PAULING

Contents

Representation and Appearances

Applicant

Mr Michael Morris - Counsel

Mr Malcolm Loan – Wastewater / Stormwater Manager, Invercargill City Council (**ICC**)

Mr Adrian Cocker, Laboratory Manager of ICC

Mr Allan Leahy – Engineer

Mr Brian Stewart – Environmental Scientist

Ms Sue Bennett – Environmental Scientist

Mr Janan Dunning – Planner

Submitters

Mr WD Smellie (Neutral)

Mr Jacob James Smyth – Resource Management Officer, Fish & Game New Zealand – Southland Region (in Opposition)

Mr Alan Richard Flett – in Opposition

Ms Rosemary Hamilton for Roger and Rosemary Hamilton (in Opposition)

Mr W Kent (in Opposition)

Mr Darryl Sycamore – Senior Regional Policy Advisor, Federated Farmers (in Opposition)

Mr David Rose – Federated Farmers (in Opposition)

Ms Stevie-Rae Blair – Environmental Advisor, Te Ao Marama on behalf of Te Rūnanga o Waihōpai (in Opposition)

Mr Dean Whaanga (Te Ao Marama)

Ms Kate Marshall – Health Protection Officer for Public Health South (Neutral)

Mr Andrew Shand – Public Health (Dunedin)

S42A Reporting Officers

Ms Michele Melhopt – Counsel

Mr Stephen West – Principal Consents Officer, Southland Regional Council

Background and Procedural Matters

1 This is the decision of Independent Hearing Commissioners Mr David Caldwell (Chair), Mr Hugh Leersnyder and Mr Craig Pauling. We were appointed by the Southland Regional Council (**ES**) to hear and determine an application by Invercargill City Council to discharge water and contaminants from the Invercargill City reticulated stormwater network, to water.

2 The application was lodged in September 2016. Further information was sought and provided on 25 October 2016 and the application was publicly notified on 3 October 2016.

3 11 submissions were received. These are summarised in a table on pages 12 to 16 of the s42A report and we adopt that as an accurate summary of the submissions.

4 Prior to the hearing, a s42A report was produced by ES's Reporting Officer, Mr Stephen West. The report provided detailed information and advice in relation to the application, and helpfully summarised the consent sought.

5 Expert evidence was pre-circulated prior to the hearing and taken as read. Witnesses were requested to, and did, provide a summary of their evidence at the hearing and responded to questions.

6 The hearing commenced at 9.30am on Wednesday 9 August 2017 and continued through to the afternoon of Friday 11 August 2017.

7 Prior to the commencement of the hearing, we issued a number of Minutes in relation to timetabling and procedural matters.

8 Our first Minute outlined the timetable in accordance with s103B of the RMA. It also identified our intention to undertake a site visit on the afternoon of 8 August 2017 and requested advice of any particular areas which the parties considered would be useful for us to visit.

9 We also granted a waiver to allow the late filing of the evidence of Mr Allan Leahy an expert for the applicant. We also granted leave for Ms Marshall, representing Public Health South, to present her evidence out of order.

10 Out of an abundance of caution, Commissioner Pauling identified that he knew a number of the staff and representatives of Te Ao Marama / Te Rūnanga o Waihōpai. Commissioner Pauling noted that he had worked with them previously in his role as Environmental Adviser with Te Rūnanga o Ngāi Tahu (**TRONT**) and that he had assisted the Papatipu Rūnanga during the development of the local Iwi Management Plan, Te Tangi a Tauira, prior to 2008. Commissioner Pauling also identified that he has whakapapa

connections to both Awarua and Waihōpai Rūnanga. No issues were raised by any submitter.

11 A pre-hearing meeting was held pursuant to s99 of the RMA. We received a report of that meeting dated 23 June 2017 which records the meeting concluded without agreement. It helpfully identifies a number of matters remaining in dispute. We have had regard to that report in considering the application.

Site Visit

12 On the afternoon of 8 August 2017 the Panel undertook an extensive site visit. We were accompanied by Ms Maciaszek, the Hearings Officer. We are grateful for her assistance. Ms Maciaszek had prepared a map which we followed during the course of our site visit. We commenced at Kingswell, walked the length of the stream through the Reserve to Elen and Ball Streets, walked towards where it became residential to Chesney Street, visited the Clifton Channel and visited an area located near to the ICC wastewater treatment plant. We then went to an estuary lookout, then to Bond Street and the Otepuni Creek, before moving back into town and viewing it opposite the Southland Country Music Association Centre. We then walked through the parkway, then drove to a retention storage pond near Alsco, then to Racecourse Road to the upstream end of the Waihōpai.

13 We then drove down to Thompson Bush and spend some time walking around the area. We also walked along the river bank, coming to an area which we understand is known as the Prestonville Pond which was pumping stormwater into the Waihōpai. We then went out on West Plains Road and visited the Waikiwi Stream. We also visited the flood retention / dam before returning to the Waihōpai River and Invercargill City.

14 The hearing was closed on 25 August 2017 following receipt of the applicant's written right of reply and associated documents, including consent conditions as agreed between the applicant and ES staff.

The Proposal

15 The application and proposal is addressed at some length in the original application documents, the s42A report, and the evidence on behalf of ICC.

16 Very much in summary, ICC seeks consent to authorise the discharge from its reticulated stormwater network which contains multiple discharge points into the Waikiwi Stream, the Waihōpai River, the Otepuni Stream, Kingswell Creek and Clifton Channel. The discharges include stormwater from roads, hard stand areas, roofs and permeable surfaces, as well as drainage water.

17 The discharges are currently authorised under five separate resource consents, being one for each catchment. Those consents were granted in 2011 for a term of five years. The application before us relates only to discharges for that part of the Invercargill City stormwater network which (ultimately) discharges into the streams addressed above. It does not relate to discharges to the coastal marine area.

The Environment

18 The receiving environment was again fully described in the application, Mr West's s42A report, and in the evidence. Mr West described the receiving environment in section 2.2 of the s42A report and we adopt that as an accurate description.

19 In terms of the receiving environment, there appears to be no dispute that in the context of a s124 re-consenting application the effects of the existing activity do not form part of the existing environment upon which the activity is to be assessed. There was an apparent disagreement as to whether the existing environment should be assessed on the basis that the stormwater discharges have never in fact occurred. As it transpired, it was not in fact a matter in dispute. Counsel for ES acknowledged in her legal submissions that the "legacy effects" of past lawful discharges may form part of the existing environment.[1]

20 We agree with that position. To do otherwise would be artificial and would place an almost insurmountable burden on ICC. The existing environment is not pristine. It has been modified by many years of stormwater discharge, discharges from other sources, and physical modification.

The Hearing / Summary of Evidence and Submissions

Applicant's Case

21 **Mr Michael Morris**, as Counsel, introduced the application and the background to it. He expressly recorded that the applicant was not, and indeed could not, apply for resource consent to authorise the discharge of wastewater (sewage). He explained that the application was solely for stormwater and that the conditions proposed a process to identify and eliminate the contamination by wastewater. He addressed the approach to be taken to this issue, placing some emphasis on the fact that it was only stormwater and its contaminants which were to be discharged, not wastewater. He emphasised that the effects of stormwater discharges (even with wastewater) are not significant, albeit more

[1] Legal submissions on behalf of Southland Regional Council, 10 August 2017, at para 15

than minor. He briefly discussed the engineered overflows and addressed the gateway s104D test. He addressed the application of the Davidson case[2], submitting that we were able to consider Part 2 matters primarily because the provisions of the plans themselves invite us to do so. Overall, he submitted that the application was not contrary / repugnant to the objectives and policies of the plans, we were entitled to consider Part 2 of the Act because the plans invited us to do so, and that the exceptional circumstances test of s107 was made out.

22 **Mr Malcolm Loan**, the applicant's Asset Manager who has overall responsibility for the applicant's stormwater and wastewater networks, provided evidence. He detailed the drainage infrastructure, its age and renewal. He addressed the management of the drainage infrastructure, the issues relating to sewage contamination of stormwater, the procedures adopted by ICC to protect the quality of stormwater, the stormwater maintenance and monitoring procedures and the legal remedies available to deal with on-site contamination issues.

23 **Mr Adrian Cocker**, the Three Water Operations Technologist for ICC, addressed the monitoring programme and the design of the programme since 2011, provided a detailed description of the individual sampling sites, and a brief synopsis of routine sampling of discharge consents. He also addressed the procedure and findings of industrial audits conducted over the previous five years, and investigations into sewage contamination. He then addressed the proposed methodology for identifying sewage under the consent sought, and how the proposed conditions would address that. He introduced what he described as "a new and vital condition", being the introduction of a Working Party to provide a formal platform for problems and issues to be raised. Mr Cocker's evidence provided considerable information and detail.

24 **Mr Allan Leahy**, a Principal Technical Specialist in Stormwater Management at Stantec New Zealand Limited, outlined his qualifications and experience and involvement in the application. He addressed the lifetime costs associated with stormwater treatment, discussed stormwater treatment devices and identified issues around retrofitting stormwater treatment into existing areas, focusing particularly on the Invercargill situation. He summarised the outcomes of a report titled "Nutrient and Bacterial Loads in Urban Stormwater" produced by Stantec for the Southland District Council in November 2016. He also addressed the nature of the catchments with respect to the non-point source contamination generated from other activities in the catchments, addressed alternatives, and provided his conclusion on the practicable options available.

[2] R J Davidson Family Trust v Marlborough District Council [2017] NZHC 52

25 Mr Leahy noted that an assessment and opportunities to retrofit stormwater treatment options had been carried out, concluding that there were very limited opportunities to retrofit stormwater treatment by way of public devices into an existing stormwater system. He noted that the stormwater discharges of total nitrogen and total phosphorus loads were in the region of 3-5% of that generated by the Clifton Wastewater Treatment Plant, and that the faecal coliform loads from the Invercargill stormwater were in the region of 12% of that generated by Invercargill's wastewater discharges. He concluded that the stormwater discharges were, in terms of nutrient and faecal coliform loads, considerably less (in order of magnitude less) than its wastewater discharges.

26 **Dr Brian Stewart**, a Marine Biologist employed as a Senior Environmental Scientist with Ryder Consulting Limited, provided expert evidence outlining the surveys which had been undertaken using macroinvertebrate community indices, described the environment, noted the abundance of amphipods and ostracods, and absence or rarity of Ephemeroptera, Plecoptera and Tricoptera (EPT). He concluded that the results were consistent with the possibility of pollution throughout the ICC stormwater catchment. He did however note that an analysis of macroinvertebrate communities indicated that at Kingswell there were no significant differences between upstream and downstream sites, and that for all other sites, although there were some differences, there was no clear evidence that stormwater discharges were adversely affecting macroinvertebrate communities or causing nuisance algal growths. He noted, while there may well have been adverse effects on the quality of the receiving environment as a result of contaminants introduced with stormwater, ingress of fine sediments and nutrients from the wider rural catchment was likely to have a far more significant effect on the Ōreti/New River Estuary. It was however difficult to demonstrate. He noted that while not pristine, the Ōreti/New River Estuary and communities associated with the inter-tidal areas adjacent to major stormwater inputs did not appear to be undergoing any significant further degradation as a result of stormwater discharge over the past three decades.

27 **Ms Susan Bennett**, a Principal Environmental Scientist employed by Stantec, provided evidence in her area of expertise. Ms Bennett outlined her qualifications and experience, addressed the nature of the discharges, and expressed her opinion that the five streams which are the immediate receiving environment are of relatively low sensitivity to the impact of the stormwater discharge for reasons which she then addressed. In summary, it was the degree of modification of each of the catchments.

28 Her view was that the Ōreti/New River Estuary, and in particular the Waihōpai Arm, was more sensitive than the streams. She noted that the estuary is

experiencing environmental effects but that the stormwater discharges would contribute a small load for the relevant parameters, in comparison with the loads from the rest of the catchment of the estuary. Ms Bennett addressed the effects of the existing activity, the beneficial effects (primarily the economic benefits) of the network by enabling land use, and that the contamination of the stormwater that would also have negative economic effect. She provided further evidence in relation to the positive effects, including the removal of shallow groundwater, the avoidance of prolonged flooding of unsealed areas, the avoidance of increased flooding and standing water and the subsequent increased flow rates and rubbish which could lead to a substantially higher rate of surcharging and blockages, which again would in turn result in a much higher incidence of sewer overflows.

29 She addressed the zone of reasonable mixing and expressed concerns in relation to the comments of Mr West in particular in that regard. Ms Bennett also addressed visual and amenity effects, effects on aquatic habitat, effects on public health, nutrient effects, effects from persistent and bio-accumulative contaminants, health risk from fish consumption, cumulative effects, issues with stock drinking water, an assessment against s107, and addressed the development and operation of the proposed conditions.

30 **Mr Janan Dunning**, a Senior Planner with Stantec, provided evidence describing the application process to date, and the background to the activity for which the consent was sought. He addressed the nature of discharges in the receiving environment, and the effects of the same. Mr Dunning also addressed the relevant planning documents, the submissions and the conditions of consent. Mr Dunning addressed Part 2 of the RMA, particularly s5, s6, s7 and s8. He assessed the provisions of the proposed Southland Water and Land Plan, largely agreeing with Mr West's view in relation to weighting. He addressed the key provisions of the Regional Coastal Plan for Southland, the Southland Regional Policy Statement, the Proposed Southland Regional Policy Statement, the National Policy Statement for Fresh Water Management 2014 (**NPSFWM**), the New Zealand Coastal Policy Statement, and the provisions of Te Tangi a Tauira. Mr Dunning also addressed the provisions of s104(2)A and the value of the applicant's investment.

31 In terms of s105 of the RMA, Mr Dunning considered that the applicant was proposing the best practicable option as defined in s2 of the Act. He was of the opinion that the current discharges do not result in significant adverse environment effects, there are significant adverse financial implications for the applicant and therefore the wider Invercargill community in needing to substantially modify its stormwater network. He considered that the proposed

options were technically feasible, and could be readily and rapidly applied, resulting in a measurable improvement in stormwater quality.

32 In terms of s107, it was Mr Dunning's opinion that, provided the effects identified in s107(1)(C)-(G) are avoided beyond the zone of reasonable mixing, the Hearing Panel may grant the application.

33 Mr Dunning went on to address the submissions, the proposed conditions, the term of consent and concluded that the granting of the application would be a pragmatic approach to enabling progressive improvements to be made.

The Submitters

34 **Mr WD Smellie** spoke to his (neutral) submission. Mr Smellie owns a farm on the estuary surrounded by water on three sides. He had real concerns about the 35 year term. He suggested a 10 year term with targeted and staged upgrades. He was also concerned that rates were targeted and that ICC employees should be personally responsible for breaches and failures. He considered that a 12 year term would be okay with specific upgrades. He noted in response to questioning that the water quality had improved over the last 26 years. Mr Smellie was also concerned about possible effects as far as the limit setting.

35 **Mr Jacob Smyth**, the Resource Management Officer for Fish & Game, appeared. Mr Smyth had prepared the submissions for Fish & Game and had provided a pre-circulated Brief of Evidence. That Brief of Evidence identified the key issues as: sewage contamination of the stormwater network; the long consent duration of 35 years; and the lack of in-river limits of discharge downstream of the zone of reasonable mixing, including meeting 'bottom lines'. He suggested an alignment of the term of the stormwater discharge consent to the expiry of the wastewater discharge consents on 30 June 2029.

36 Mr Smyth provided a useful description of the location of the application sites, the values of the Waihōpai River, the Clifton Channel and Otepuni Stream, the Waikiwi Stream, Kingswell Creek, lower Ōreti River and Ōreti/New River Estuary, and angler usage of the Waikiwi Stream and Waihōpai and Ōreti Rivers.

37 **Mr AR Flett** (neutral) spoke to his submission. Mr Flett is a mixed farmer. He holds consents from ES relating to his farming activities, which are for 10 year terms. He was particularly concerned about the length of term. He noted this was a non-complying activity, and the numerous outfalls within Invercargill were causing difficulties. He considered that public health signs should be placed on waterways so that people know what is happening. He was also concerned

that the trigger levels were too high. Mr Flett was also concerned about moving from the catchment based individual consents.

38 **Ms Rosemary Hamilton** spoke to her submission. She is involved in agribusiness, farming in Winton, with a second property on the banks of the Ōreti near Lumsden. Her submission was that the 25 year term was completely inappropriate. She was also concerned about the monitoring proposal, which she considered was entirely inadequate. In terms of attending sites over a five year period, again she considered that was unacceptable. Her submission was that it needed to be 100% of those properties each year to ensure more accurate information is provided. She noted that, on the basis of her understanding of the evidence, there were approximately 169 blockages, averaging almost one every two days. She did not accept that the effects were minor, noting that the zinc and copper levels were already in breach. She expressed a concern about the need for ratepayers to be made aware of the serious state of the network and its age. She considered that there needed to be better plans and prioritising of upgrade immediately. She noted that the rural community needed to be 100% compliant and that the same should apply to the applicant. Ms Hamilton considered that, until the drainage network system was legal and fully compliant, a much shorter term, such as five years, should be granted with strict guidelines.

39 When then heard from **Mr W Kent**. Mr Kent is a Dairy Farmer. He considered that a more aggressive plan to upgrade the infrastructure was required. He opposed the 35 year term. He suggested putting the application on hold while the limits are set for the catchments, or a one year extension to enable collection of data. He supported much greater monitoring, the need to have signed off and completed tasks towards the improvement and discussed the obligations on those in the rural catchment. Mr Kent was also opposed to one consent as opposed to the five catchment specific consents held. Mr Ken was very concerned about funding for the infrastructural upgrade which was needed.

40 We then heard from **Mr Darryl Sycamore**, a Senior Policy Adviser for Federated Farmers. Again Mr Sycamore had provided evidence in chief and spoke to that and the submission. He noted the submission was on behalf of the membership. He noted that Federated Farmers accepted that there must be a discharge and was very concerned with the age of the infrastructure and the fact that 102kg per year per hectare was being discharged. He noted what he considered to be a poor compliance history, suggested a five year term only. He also addressed potential offsetting. He noted the difference between the term sought in the 10 year consent period from most dairy farms. He discussed the need for wet weather monitoring. He advised that he saw some benefits

with a working party process and discussed the need to be able to review when the limits are set.

41 **Mr David Rose**, the past Provincial President, spoke about the state of the ICC infrastructure, describing it as a 'dirty little secret'. He addressed the term of the consent, advising that a 35 or 25 year consent was essentially seeking a free pass to pollute until 2042. Mr Rose outlined matters he had identified in his review of the MWH report and spoke in more detail about the existing infrastructure.

42 We then heard from **Ms Stevie-Rae Blair**, Environmental Advisor for Te Ao Marama and appearing on behalf of Te Rūnanga o Waihōpai. Ms Blair was accompanied by **Mr Dean Whaanga,** General Manager of Te Ao Marama. Ms Blair focused on the Ngāi Tahu values in relation to the area and the significance the area has. Ms Blair had also provided a written Brief of Evidence. She addressed the concerns in relation to contaminants entering the sediments in the estuarine environments and ultimately impacts on Mahinga Kai. She addressed the concern relating to the length of consent. She acknowledged the change by ICC to a 25 year term, but also noted that this was a non-complying activity and ultimately the duration of the consent needed to be decided on the evidence. She considered that the concerns expressed on behalf of iwi had not been addressed by the applicant. She noted that manawhenua remained deeply concerned with the present condition of the estuary and the contribution to it from stormwater and rivers. In essence, improvements are needed with the receiving environment already under stress. She addressed cross-contamination of networks, acknowledged that the stormwater network was critical infrastructure and queried why the applicant did not include monitoring of taonga species and the effects of toxins in the receiving environment and downstream estuary effects. Ms Blair and Mr Whaanga noted that the relationship with ICC was positive.

43 Finally, in terms of submitters, we heard from **Ms Marshall**, the Health Protection Officer for Public Health South. She appeared with **Mr Shand**.

44 Ms Marshall provided an oral opening (summarised in writing) where she made it clear that, notwithstanding the fact that she had professional qualifications including a Bachelor of Environmental Science, a Bachelor of Nursing, and was completing a post-graduate Diploma in Environmental Health, she was not providing evidence as an independent expert. Ms Marshall summarised the submission. She identified the need for a recreational survey, better communication with the public regarding contaminants, and a regular updating as to the content of the stormwater discharges and the impact on the receiving environment.

45 She addressed the health issues relating to stormwater contaminants, noting that clean surface water in urban settings should be the goal for any modern city. She summarised the potential health risks from raw sewage and the build up of certain heavy metals and polycyclic aromatic hydrocarbons in the sediment of Invercargill's waterways. She noted the faecal coliform bacteria in urban surface waterways commonly exceeded WHO standards for recreation. Various forms of recreation such as wading, swimming and fishing could result in respiratory and gastrointestinal illnesses, along with eye and ear discharges and skin rashes. She noted that the annual M.A.D Day Out Run was prevented due to the highlighting of the potential health risks. Overall she suggested additions to the proposed consent conditions, including the reference to a recreational survey. She also outlined a need for greater communication and transparency. She considered the trigger level of 10,000 E.coli per 100mL to be a very high limit. She recommended that the public be notified by signage when E.coli levels are above 550/100mL during whitebait and summer bathing season. She also would like to see a greater understanding and education of residents. She acknowledged the importance of the network and generally supported a number of the conditions proposed.

S42A Reporting Officers

46 **Ms Michelle Melhopt** provided legal submissions on behalf of ES. Prior to receiving those submissions, I raised the issue with Mr Morris as to whether he was happy for those submissions to be provided. I noted that the Panel had not requested them, nor had they been circulated at the same time as the s42A report. We indicated that we may find them helpful and Mr Morris advised that he had no opposition to them being presented. We appreciate Mr Morris' co-operative attitude and we benefitted from having Ms Melhopt's submissions before us.

47 Ms Melhopt's submissions addressed the effects of the wastewater component of the discharge. She noted that it was acknowledged that wastewater does enter stormwater networks and that the applicant could not apply for a resource consent to authorise this discharge. She submitted it would be artificial to separate out the effects of the wastewater component of the discharge so that it was not considered. She submitted that, when assessing the effects of an activity on the environment, the activity as a whole must be assessed. Her submission was that, even though the discharge of raw sewage is a prohibited activity, the Panel was able to have regard to the effects of the discharge of raw sewage when assessing the effects of the activity.

48 In terms of the existing environment, she submitted that the environment cannot be assessed as if the activity was continuing to occur, but that legacy effects of

past lawful discharges may form part of the existing environment. Ms Melhopt also addressed whether the application was 'contrary' to objectives and policies, noting that in the event of conflict in objectives and policies, more specific objectives and policies should be preferred over the more general. Ms Melhopt also addressed the relevance of Part 2 in light of the Davidson Family Trust decision. Her submission was that Part 2 should not be used to subvert the relevant provisions as articulated in the lower order instrument. In terms of a reference in the planning documents to Part 2 of the RMA, she submitted that that incorporated Part 2 matters into the specific policies but did not invite the Panel to resort to Part 2 to take an overall broad judgment of the application under s104. Ms Melhopt also addressed s107 exceptional circumstances.

49 We then heard from **Mr West**. Mr West had provided a very thorough and detailed s42A report. Having considered the evidence and submissions presented during the hearing, his recommendation remained that the application be refused. Mr West addressed the possible approaches to be taken to the sewage component. He referenced an earlier legal opinion provided by Mr Slowley in October 2011, and considered that it was appropriate to take an approach of dealing with the discharge, including the sewage component, as a non-complying activity. In terms of the gateway test, he noted the agreement that the effects on the environment were more than minor. He therefore focused on whether the discharge was contrary to the objectives and policies of the relevant plan. His view was that it was contrary to the objectives and policies that were specific to water quality effects. Overall, while he accepted the discharge was important to the social and economic wellbeing of the Invercargill community, he had difficulties with allowing discharges from the stormwater network that contained sewage, with very high dry weather E.coli concentrations. Mr West provided some helpful comments on the proposed conditions, and particularly expressed his concerns in relation to the lack of enforceable limits, other than narrative limits, and Conditions 14 to 16, which he described as 'coarse'.

Reply

50 Mr Morris provided an oral reply and sought, and was granted, leave to file a more formal written reply. In his oral reply, he responded to Federated Farmers and the other farming witnesses and their concerns in relation to apparent inconsistencies and trigger levels, and impacts on limit setting. He noted ICC's position that this was not a case of rural versus urban interest. All need to work together to improve water quality. He addressed upstream effects and noted that ICC can only manage the effects of its discharge. He discussed the capital

expenditure on infrastructure and noted that ICC had not been sitting on its hands. It was conducting a series of battles in relation to sewage contamination and remained committed to address that issue.

51 He identified that the controlled overflows were a problem and briefly addressed further conditions, including cultural monitoring. He confirmed that ICC sought a 25 year term and was opposed to tying the term to the wastewater treatment plant consent as the re-consenting cost would be massive. He addressed the suite of remedies available to ICC under the various legislative provisions.

52 In terms of the written reply, we granted Mr Morris' request for a two week period for that to be provided. We considered that request, which required an extension to the period for closing the hearing, and the relevant matters under s37 before granting that leave. This was particularly due to the working day requirements. We extended the date for closing the hearing to 5pm 25 August 2017 and confirmed that the hearing would close at that time without further formality.

53 We also discussed Mr West and Mr Dunning working on an agreed set of conditions, in the event we were minded to grant consent.

54 In the period prior to the reply being provided, we were made aware by Mr West that the changes to the NPS-FW would take effect from 6 September 2017. Mr West provided a brief summary of the changes.

55 In fairness, we enabled submitters, and of course the applicant, an opportunity to comment on the changes to the NPS-FW. Federated Farmers and the applicant took that opportunity.

56 A detailed written reply and 'agreed' conditions of consent were provided in accordance with the timetabling specified. We will address that reply and agreed conditions where appropriate.

Assessment

57 In assessing the application, we have considered the application documentation and assessment of environmental effects, the s42A report, the further information provided by the applicant, the report from the pre-hearing meeting, and all of the matters raised in the submissions. We have also carefully considered the evidence provided prior to and during the hearing, the legal submissions, and the agreed set of conditions provided.

58 Given the nature of the application and its level of complexity, and to avoid having to repeat large parts of the evidence where it is referenced in our assessment, we have included a reasonably detailed summary of the evidence

presented by the parties, and the legal submissions made. While our assessment does not specifically address each and every point raised, we confirm that we have carefully considered all matters raised in reaching our decision.

Status of the Application

59 The starting point for the assessment of the application is to determine the status of the activity. All parties accept that it is to be assessed as a non-complying activity under s104D.

Statutory Considerations

S104, s104B and s104D RMA

60 S104(1) RMA sets out the matters which we must have regard to in our consideration of the Application. The relevant matters are as follows:

"(a) any actual and potential effects on the environment of allowing the activity; and

(b) any relevant provisions of –

(i) a national environmental standard;

(ii) other regulations;

(iii) a national policy statement;

(iv) a New Zealand coastal policy statement;

(v) a regional policy statement or proposed regional policy statement;

(vi) a plan or proposed plan; and

(c) any other matter the consent authority considers relevant or reasonably necessary to determine the application."

61 S104(1) RMA provides the matters listed are subject to Part 2, which includes ss5 through to 8. We address Part 2 RMA matters, and the approach taken to that analysis, subsequently.

62 For non-complying activities, in addition to the s104(1) matters listed above, s104D RMA contains particular restrictions – the gateway test.

63 In summary, we may grant a resource consent for non-comply activity only if we are satisfied that either:

"(a) adverse effects of the activity on the environment … will be minor; or

(b) the application is for an activity that will not be contrary to the objectives and policies of –

(i) the relevant plan, if there is a plan but no proposed plan in respect of the activity; or

(ii) the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or

(iii) both the relevant plan and the relevant proposed plan, if there is a plan and a proposed plan in respective of the activity."

64 The issue of whether an effect will be or will not be minor is one which is to be made considering the adverse effects as a whole. "Minor" means lesser or comparatively smaller in overall size or importance.

65 In relation to the second part of the threshold test, the word "contrary" means: opposed to in nature, different to or opposite.

66 Pursuant to s104B, if one limb of the gateway test is met, we may grant or decline consent.

67 Pursuant to s108 if we grant the application, we may impose conditions.

Part 2 RMA

68 The application of the words "subject to Part 2" in a s104 context was addressed by the Environment Court in AJ Davidson Family Trust v Marlborough District Council [2016] NZEnvC 81. The Environment Court noted that "subject to Part 2" does not give a specific direction to apply Part 2 in all cases but only in certain circumstances. The court found that, in addition to where there is a conflict between provisions, Part 2 may be relevant where there is invalidity, incomplete coverage or uncertainty of meaning in the relevant planning documents. The Environment Court's approach was confirmed by the High Court in RJ Davidson Family Trust v Marlborough District Council [2017] NZHC 52.

69 While the High Court decision is subject to appeal, that approach remains relevant.

70 Overall, we consider that the Regional Water Plan for Southland (**RWP**), and to a lesser degree (due to its early stage) the proposed Southland Water and Land Plan (**pSWLP**), address the relevant Part 2 matters and it is not necessary for us to undertake a clause by clause analysis of Part 2.

71 Nevertheless, for the sake of completeness, and by way of a check on our analysis, we will identify what we consider are the relevant Part 2 matters, and the relevant provisions of the higher order documents where appropriate.

Principal Issues to be Determined

72 The principal issues requiring determination were, in our view, as follows:

- whether we can grant consent when one of the contaminants is raw sewage, the discharge of which to surface waterways is a prohibited activity under the operative Regional Water Plan for Southland (**RWP**);
- effects on the environment, including the level of effects – noting agreement that the effects, including contamination of raw sewage, will be more than minor at the time of granting of consent;
- sufficiency of monitoring / lack of instream limits;
- whether the application is contrary to the objectives and policies;
- the approach to be taken to Part 2;
- s105 matters;
- s107 matters;
- term of consent.

Can we grant consent for a stormwater discharge when that discharge at times contains raw sewage?

73 As noted above, pursuant to Rule 14 of the Regional Water Plan, the discharge of raw sewage is a prohibited activity. Likewise the discharge of raw sewage into surface or groundwater is a prohibited activity under Rule 26(f) of the Proposed Southland Water & Land Plan (**pSWLP**).

74 As identified by Mr West, the sewage contamination of the stormwater system presents a conundrum. The applicant addressed this conundrum by expressly excluding raw sewage from the consent application. There was some brief discussion about whether contamination of the stormwater by untreated sewage could be said not to be captured by the prohibited activity status, given the degree of dilution by water within the drainage network. We do not need to determine that issue for the purposes of this decision, given the applicant has expressly excluded the sewage component from the consent sought.

75 While the sewage component is expressly excluded from the consent application, it is clear that it is arguably the most significant of the contaminants entrained in the stormwater discharge in terms of effects. In assessing effects, we consider, notwithstanding its express exclusion, that it would be unrealistic to simply ignore the effects of that sewage component. We agree with the submissions of Ms Melhopt on this issue where she submitted that, whilst the discharge of sewage directly to water cannot be consented, it would be artificial to separate out the effects of the wastewater component of the discharge such

that the stormwater discharge was to be considered as if the wastewater contaminants did not exist.[3] We agree that the effects of stormwater contamination are reasonably foreseeable effects of the discharge of stormwater for which consent is sought. We agree that approach is appropriate.

76 Mr Morris submitted that the appropriate way to deal with this issue was that the application is for the discharge of stormwater and that the stormwater is sometimes subject to contamination from sewage. He submitted that the explanation in Rule 14 RWP makes it clear that the target of the rule is to stop the deliberate discharge of raw sewage to waterways as a means of disposing of that or otherwise cleansing it. He noted that was not what the applicant was seeking to do.[4] That approach enabled us to properly consider the steps the applicant proposes to address that component as a mitigating factor.

77 We therefore conclude that we are able, subject to our evaluation, to grant consent, notwithstanding that the stormwater will, from time to time, contain sewage, the discharge of which is not consented.

The Level of Effects on the Environment

78 Before identifying and evaluating the identified effects, we record agreement between the Reporting Officer and the applicant, that the adverse effects of the discharges are currently more than minor. The applicant's position is that, excluding the sewage contaminant, the effects are minor to moderate on water quality, minor on aquatic ecosystems, minor on groundwater quality, and moderate on visual and amenity values. We agree that overall the adverse effects of the discharges are more than minor. The issue for us is whether that level of effects will be appropriately avoided, remedied or mitigated should consent be granted.

Visual and Amenity Effects

79 Visual and amenity effects were addressed by Mr West at page 18 of the S42A Report, focusing largely on the identification of conspicuous discolouration and rubbish accumulation, particularly with suspended solid concentrations, particularly dry weather concentrations.

80 Ms Bennett addressed this aspect in paragraphs 41 – 47 of her Brief of Evidence, again focusing on the issue of conspicuous colour change. She noted that during her regular visits to the streams, she had not noticed any

[3] Legal Submissions on behalf of Southland Regional Council, 10 August 2017 at para 8
[4] Written right of reply of the applicant dated 25 August 2017 at paras 13-14

conspicuous discharges from the stormwater outfalls beyond a short distance from the outfall. Her expectation was that there will not be conspicuous change in clarity or colour beyond the 50m zone of reasonable mixing. We consider that is correct.

81 In our view however, amenity effects go much wider than what might be termed the visual effects. It particularly impacts on recreational values which contribute to the amenity of the community.

82 We received helpful evidence from Mr Smyth on behalf of Fish & Game on this issue. He identified the various streams and creeks and their values. While focusing on angling, Mr Smyth also addressed the value of the various streams for recreational whitebait fishing, and identified, particularly in terms of the Waihōpai embankment, its popularity for recreational walking, running and cycling, including sporting events. He noted that the Waihōpai River was valued for anglers, particularly junior anglers, due to its accessibility and its proximity to Invercargill. Mr Smyth also addressed the Otepuni Stream and Kingswell Creek, noting that they were not recognised as sports fisheries, but that the Otepuni Stream did provide habitat for indigenous freshwater species. In terms of the Waikiwi Stream, he again noted its value for anglers due to its accessibility, and the proximity of its lower reaches to Invercargill. In terms of Kingswell Creek, he noted again that this was not recognised as a sports fishery but did provide habitat for a range of indigenous freshwater fish species and was utilised for whitebait fishing.

83 In terms of the Ōreti River and Ōreti/New River Estuary, he noted that the tidal reaches of the lower Ōreti and its estuarine waters had significant fish and game values in terms of water fowl and sports fish values.

84 Ms Marshall, on behalf of Public Health South, specifically requested a recreational survey to enable a thorough assessment as to how Invercargill residents used the waterways. She noted that the Waihōpai River and the Waikiwi Stream were generally known to be used by residents for recreational activities such as fishing, whitebaiting, kayaking and for school field trip excursions.

85 Overall, we consider, on the basis of the evidence we have received, and the use of the banks of the various streams for recreational activities observed on our site visit, that amenity values are moderately high, although there is a lack of firm information in that regard. We consider a recreational survey is appropriate so that the recreational values can be more properly recorded and better understood.

86 Overall, we consider that the visual and amenity effects, without further action on the part of the applicant, are moderate. With appropriate conditions, we consider the level of effects could be reduced to less than minor.

Effects on Aquatic Ecological Values

87 Mr West identified that macroinvertebrate monitoring indicated poor habitat quality and the possibility of degraded water quality within the streams. He however noted that upstream sites were of similar quality and also noted the degree of modification of the streams within the city area. He concluded there was no clear evidence that stormwater was adversely affecting aquatic communities in the receiving environment.

88 Dr Stewart provided expert evidence on this issue. He had carried out a number of surveys using macroinvertebrate community indices in April 2016. He concluded that the sites were all modified to a greater or lesser degree; substrate ranged from deep fine silts to gravels and cobbles; snails, oligochaete worms and crustaceans were numerically the most abundant taxa at all sites. He considered that, combined with the fact that the EPTs were absent and overall the Macroinvertebrate Community Index (MCI) and Semi-Quantitative MCI (SQMCI) scores were low at all sampled sites, this indicated poor habitat quality and the possibility of pollution throughout the Invercargill City stormwater catchment. He did however note that the statistical analysis indicated that at Kingswell there are no significant differences between upstream and downstream sites, although macroinvertebrate community structure improved with distance downstream, rather than degraded. In the other sub-catchments, being the Otepuni, the Waikiwi and the Waihōpai, although there were some differences amongst upstream and downstream locations, there was no clear evidence that stormwater discharges were adversely affecting the benthic communities or causing nuisance algal growths.

89 In terms of the Ōreti/New River Estuary, he noted that excessive sedimentation was a key issue for the Waihōpai Arm, and indeed for the wider Ōreti/New River Estuary. He noted that contaminants within the sediment of the wider estuary remain below the ANZECC ISQG low trigger sediment quality guidelines. He concluded that the Ōreti/New River Estuary and the communities associated with the inter-tidal areas adjacent to the main stormwater inputs did not appear to have undergone any significant further degradation as a result of stormwater discharge over the last three decades.

90 Both Fish & Game and Dairy NZ identified the poor water quality based on the macroinvertebrate indices. Dr Stewart's primary response to that was that the quality at upstream sites was equally poor and that the effects of stormwater

discharges from ICC's network were not discernible from other sources of contamination.

91 Te Ao Marama Inc raised concerns at the Ōreti Estuary as being under extreme pressure from contaminants entering the waterways, including from stormwater. Dr Stewart did not disagree with that overall assumption, but noted that the State Of the Environment monitoring suggests that, although degradation of the estuary habitats continues (largely as a result of increased sedimentation and loss of sea grass and perimeter habitat) continued discharge of stormwater resulted in very low contamination was likely having a less than minor effect on the wider estuary.

92 Overall, we conclude that the continued discharge of stormwater is impacting on aquatic ecological values of the receiving water bodies. We accept the contribution to the impacts on aquatic ecological values of the discharge may be minor, but it is a contribution nevertheless.

Public Health Risk Effects

93 Mr West addressed the E.coli counts, a faecal coliform bacterium, with the presence of high counts indicating an elevated risk of human health consumption or contact with water.

94 Ms Bennett identified that the primary adverse effects on the public health arose from the discharge of sewage from the network, and identified the lack of awareness of sewage being present in the receiving waterways. She considered that this would be addressed by notification requirements in the proposed conditions and that the implementation of the surveillance programme proposed would ensure that the sources of sewage would be identified and addressed. This would reduce the risk to public health sewage and the discharges over the term of the consent.

95 Ms Marshall for Public Health South addressed the health issues associated with urban stormwater contaminants, noting that access to and enjoyment of fresh, clean surface water in urban settings should be a goal for any modern city. Ms Marshall identified that there was a potential health risk posed from the raw sewage found in the waterways, the build up of certain heavy metals and polycyclic aromatic hydrocarbons in the sediment of Invercargill's waterways. She also noted the faecal coliform bacteria in urban surface waters commonly exceeded the WHO standards for recreation.

96 While the current climate in Invercargill was, in her view, rarely conducive to 'having a quick dip', it was critical that there was adequate public

communication and public signage to avoid potential public health issues arising.

97 Overall, we consider that there is a risk to public health from the discharge of stormwater, particularly the associated discharge of sewage. We consider this issue needs to be addressed through a "best practicable option" approach of monitoring, alerting the public to elevated levels of contamination and implementing a sustained and deliberate programme to eliminate sewage discharges as soon as is practicable.

Nutrient Effects

98 Mr West identified nitrogen and phosphorus as key nutrients for plant growth and that high concentration of nutrients, for example ammoniacal nitrogen, can also have toxic effects. Mr West again noted that the monitoring of the receiving waters indicated that nutrient concentrations in the stream were generally higher upstream of the stormwater discharges, but noted that phosphorus concentrations did increase in the Otepuni Stream as it passed through the city.

99 Ms Bennett identified Figure 3-15 of the application, which presented the available data on Dissolved Reactive Phosphorus (DRP) concentration in the streams. She noted that for the bulk of the dataset there was no increase in trend in DRP concentrations in the Otepuni Stream.

100 Dr Stewart noted that the ingress of fine sediment and nutrients appeared to be far more widespread than the comparatively localised effects of metal and hydrocarbon contamination. He considered that the input of such contaminants is much more likely to be as a result of runoff from rural areas, and, while some of this load will be carried by stormwater, there are also likely to be a multitude of small water courses and non-point discharges that contribute runoff from the rural land around the shores of the estuary. Dr Stewart concluded that the continued input of sediment and nutrients, largely from rural runoff, and contamination by sewage, continues to be of concern.

101 We will return to this issue in our discussion of cumulative effects.

Effects from Persistent and Bio-Accumulative Contaminants

102 This was addressed by Mr West, particularly at pages 20-21 of his report, where he stated that monitoring indicated that the stormwater discharges were contributing to the metal concentrations in the water columns of the receiving waters. He noted that zinc concentrations increased downstream of the stormwater discharges in each catchment (significantly the Otepuni and Clifton catchments). Copper concentrations increased downstream of the stormwater

discharges in the Otepuni Stream. He also noted that zinc, nickel, lead and polycyclic aromatic hydrocarbons in sediments in the Otepuni Stream exceeded the ANZECC interim sediment quality guideline (ISQG) low sediment quality guidelines. Nickel and polycyclic aromatic hydrocarbons in sediments in the Waihōpai River also exceeded those guidelines. Zinc was also elevated above the ANZECC ISQG low sediment quality guidelines in the Clifton Creek.

103 Ms Bennett noted that the water samples collected over the last five years were analysed for total concentrations and were therefore a conservative indication of potential toxicity effects. She noted that, in order to exert a toxicity effect, the compound must be available to the organism and metals attaching to particulates were not particularly bio-available. She noted that for metals other than zinc and copper, the concentrations were less than the 80% trigger level. Zinc and copper were elevated over the 80% trigger level in 25% of the samples in most locations, except the lower Otepuni Creek and Clifton Creek, which had greater number of elevated samples.

104 She acknowledged that this indicated a risk of toxicity effects from metals in the water column, but that over the last five years the monitoring undertaken had been conservative as the concentrations for metals were total concentrations. Ms Bennett explained that the "total" concentration of metals was a combination of those in a dissolved and particulate form. In response to questions from the panel Ms Bennett explained that it is typically the dissolved fraction which is bio-available and able to exert a toxic effect. We note that an Environment Southland report prepared by NIWA[5] and provided with Mr West's s42A report recommends the metal analytes for stormwater quality monitoring to include both the total and dissolved fractions. This recommendation has been accepted by the applicant and included in their proposed conditions.

105 Ms Bennett also noted that some of the measured concentrations of metals and PAHs in sediment collected from the streams exceeded the ANZECC interim sediment quality guidelines, were low in downstream locations in the Otepuni Creek, Waihōpai River and Clifton Creek. This suggested adverse effects on organisms may occur, but that elevated concentrations were not observed in the wider estuary so the effect was constrained to a localised area around the mouths of the streams. She also noted that no sites exceeded the ISQG-high sediment quality guidelines above which effects are likely to occur, indicating a moderate level of contaminants in localised areas. Her evidence was that the observed localised increase in contaminated sediment concentrations was not in itself an adverse effect. The effect could result in a toxicity effect, but she

[5] Design of Stormwater Monitoring Programmes, Technical Report, February 2014. Prepared by NIWA for Environment Southland. Refer to Table 7-1, page 22.

considered that the increase in contaminated sediment concentration was a minor adverse effect.

106 Ms Bennett noted that the load of metals and organics from stormwater discharges would be reduced through the inspection of industrial and commercial premises and the proposed conditions, together with the removal of sewage from the discharge, and the implementation of reduction measures identified for the critical sources of metals.

107 Mr Leahy and Mr Dunning also agreed that there is a need to manage the discharge of contaminants from high risk sites to the ICC network and that many of the persistent and bio-accumulative contaminants such as metals and PAHs will be reduced as a consequence of a targeted industrial inspection programme. Furthermore, Mr Dunning opines that the applicant is adopting a best practicable option approach[6]. We agree that there is a need to manage the discharge of contaminants and that the targeted industrial inspection programme is, in the balance of probabilities, likely to reduce the levels of persistent and bio-accumulative contaminants. We consider an express best practicable option condition is required.

Health Risks from Fish Consumption

108 The information provided to us, and summarised by Mr West in his S42A Report, indicated low concentrations in fish flesh, less than the relevant guidelines, and that there was minimal risk to public health as a result of fish consumption.

Cumulative Effects

109 Cumulative effects, as described in s3 RMA, arise over time or in combination with other effects. The evidence of Mr Loan and Mr Cocker describe the incremental development of the stormwater system over time. Mr Loan[7] points out that the oldest parts of the piped network have now reached their anticipated asset life of 100 years. Mr Loan recognises that the degradation of urban stormwater quality in Invercargill has been incremental and cumulative as the city has grown over decades. In response to questions from the panel he

---

[6] s2 RMA defines "best practicable option", in relation to a discharge of a contaminant or an emission of noise, to mean the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to (a) the nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and (b) the financial implications, and the effects on the environment, of that option when compared with other options; and(c) the current state of technical knowledge and the likelihood that the option can be successfully applied

[7] Paragraph 22 of his Evidence.

acknowledged that the solution to reversing this trend is multi-faceted with a range of approaches which may involve treatment where this is practicable. However, other methods to reduce contaminants entering the city's stormwater system may be more effective. Mr Loan described a process of industrial site audits to identify sites which may generate contaminants which subsequently enter the city's network.

110 This was further addressed in the evidence and questioning of Mr Leahy. He reiterated the point that reducing contaminants entering the system through methods of source control was likely to be the best practicable option. He noted the flat terrain and flood prone areas of the city constrained the ability to retrofit stormwater quality treatment systems at the network's discharge points.

111 Questions from the panel of Mr Loan sought to understand the degree to which the ICC's various departments, such as the road maintenance and parks departments, were engaged in an integrated approach to manage stormwater quality within the city's network. Specifically, whether or not the road sweeping or cesspit cleaning routine was considered as a means of source control by the road maintenance department, or painting signs on stormwater cess pits alerting people to the fact that they drain to a stream. In a similar vein is the management of riparian vegetation by the parks department to increase shading in streams, thereby lowering water temperatures with the consequential effect of improving water quality by increasing dissolved oxygen. The principle seemed acceptable and complementary to the evidence from Mr Leahy, Ms Bennett and Mr Dunning as a further mechanism for incremental improvement of stormwater quality.

112 In terms of catchment loads, this was addressed by Mr Leahy on behalf of the applicant. Mr Leahy addressed a report prepared for the Southland District Council to determine the stormwater load relative to that of treated wastewater. Mr Leahy considered that efforts should be focused on treated wastewater rather than stormwater, given that the stormwater load is estimated to represent 3-5% of the nutrient load from treated wastewater. We found that information interesting but do not find that it is necessarily helpful, given that we are not in a position to address the disposal of treated wastewater as part of this application. The onus is on the applicant here to reduce its contribution to the cumulative catchment loads.

113 The applicant walks something of a fine line in relation to cumulative effects. A significant plank of its case is that the stormwater contribution to the degraded water quality is only minor comparative to the other contributors, particularly the rural catchments upstream. While that may be so, the fact that water quality may be degraded by other users does not mean that we can in essence dismiss

the contribution of stormwater. Its effect is clearly measurable, and clearly contributes, in a cumulative way, to the overall water quality.

114 It is our view that to reverse the degradation of stormwater quality will require an integrated, incremental and cumulative approach employing a range of tools, including source control, treatment where practicable, education and refinement of the development and implementation of policy and regulation which is founded on robust science. We consider there is benefit in developing an overarching plan which draws together a range of measures aimed at improving stormwater quality. This plan, with input from a Technical Review Group, will include time bound actions aimed to make demonstrable improvements to stormwater quality by adopting a "best practicable option" approach.

Effects on Cultural Values

115 The application and supporting AEE provided a brief assessment of effects on cultural values, referencing Te Tangi a Tauira as the local IwiManagement Plan and noting key manawhenua issues relating to water being a taonga, the maintenance of water quality and quantity, protection of rivers, lakes and wetlands, enhancing waterways and managing direct and indirect discharges to water. The application noted that the Waikiwi Stream, being a tributary of the Ōreti River was the subject of a statutory acknowledgement under the Ngāi Tahu Claims Settlement Act 1998 and the wider values of the Ōreti River as an important mahanga kai and as a place of important settlement sites. The application also outlined the engagement with Te Ao Marama undertaken, including pre-hearing meetings and the need to have Te Ao Marama involved in the implementation of the consent.

116 The application concluded that the effects of the stormwater discharges on cultural values were minor, when considered in the context of the current degraded state of the receiving water courses due to agricultural runoff in the catchments upstream of Invercargill and modification due to loss of riparian cover and channelization. It noted that the proposed mitigation measures in particular would reduce the adverse effects of the stormwater discharges on the receiving environments and the effects on cultural and spiritual values, particularly as a result of removal of sewage from the discharge. No cultural impact assessment was prepared.

<u>ICC Evidence</u>

117 Both Ms Bennett[8] and Mr Dunning[9] provided evidence and were questioned about cultural effects.

118 Ms Bennett's evidence, while acknowledging that she was not qualified to discuss impacts on Ngāi Tahu cultural values, noted that the Landcare Research Report identified minimal risk from the consumption of fish due to metals and organic compounds that would be present in the discharges. Her evidence was that the actions and the proposed conditions would reduce the loads of these parameters.[10]

119 Mr Dunning provided a summary of his assessment of Te Tangi a Tauira and concluded:

"While there are practicable, technical and operational limitations to achieving the direction of policies such as Policies 3.5.13.5 and 3.5.13.9 which refer to discharges to land, and Policy 3.6.7.5 which promotes the avoidance of discharges to streams upstream of coastal water, the progressive improvements to the stormwater quality proposed by the applicant are generally consistent with most other relevant policies."[11]

120 Both Ms Bennett and Mr Dunning discussed the assessment of cultural effects contained in the application. Both acknowledged, in response to questions, that the conclusion drawn in the AEE that the effects on cultural values would be less than minor was not correct.

121 Mr Dunning acknowledged that a formal CIA would have been helpful and advised that he had undertaken an analysis of the relevant policies and Te Tangi a Tauira, but through error left that out of his evidence in chief. We note this was later provided as part of the legal reply. Ms Bennett acknowledged that cultural monitoring of the activity would be helpful in understanding cultural effects as part of the consent implementation.

S42A Report in Evidence

122 Mr West concluded that in respect of cultural values, despite the upstream water quality, sewage contamination by the stormwater drains potentially has an adverse effect on cultural and spiritual values that is more than minor.

123 Mr West undertook an assessment against the relevant policies and we have found that helpful. He also noted in response to questioning that while he did consider requesting a cultural impact assessment, his assessment of Te Tangi a Tauira led him to believe this would not reveal anything that wasn't already

[8] p62 Minute of Hearing
[9] p79 Minute of Hearing
[10] EIC Ms S Bennett para 104
[11] EIC J Dunning at paras 113-115

apparent – that the discharge of sewage contaminated stormwater was opposed by manawhenua.

Submitter Evidence

124 The submission and evidence on behalf of Te Ao Marama on behalf of Te Rūnanga o Waihōpai opposed the application, with the principal issues being:

- the ongoing cumulative effects of stormwater discharge on the receiving environment, particularly the Ōreti Estuary;
- the inability to safely undertake mahingakai;
- a lack of assessment of the cultural values and/or cultural monitoring to understand effects; and
- the inappropriateness of a 35 year consent duration.

125 Ms Blair's evidence disputed the applicant's minor assessment of cultural effects and highlighted the manawhenua view that the receiving environment should be measured against the condition it should be in, as well as the need for continuing improvement of water quality.

126 Ms Blair identified the relevant policies in Te Tangi a Tauira, as well as the Ngāi Tahu fresh water policy, which seek the avoidance of direct discharge of contaminants to water, and that promote the use of land based discharge and treatment.

127 Ms Blair supported cultural monitoring if the consent were to be granted, particularly targeted at taonga species, as a condition of consent. She considered this was necessary to provide a way of understanding and managing cultural values and effects. Ms Blair supported a consent duration of less than 25 years, recognising the non-complying status, providing for changes in technology and enabling continual improvement. Ms Blair also acknowledged the importance of the stormwater network, but submitted that measurable work must be done on removal of sewage contamination and improving the network in a timely manner.

128 The key issues that we see in relation to these effects is the impact that direct discharge of sewage (albeit not consented as part of this application) and other contaminants to water impact on the ability to safely undertake mahinga kai. The steps proposed by the applicant, particularly surveillance and network upgrade, and addressing constructed sewage overflows through an alarm and remove process are helpful, but do not of themselves go far enough. At the least, a best practicable option approach that comprehensively manages and seeks continual improvement in the network must be undertaken.

129 In terms of the lack of cultural assessment, the applicant has now proposed conditions for cultural monitoring, shellfish and fish flesh contamination surveys, recreational use assessment, recreational water quality monitoring and signage, as well as forming Technical Review Group to input to the above and to include manawhenua representatives.

130 We consider the conditions proposed will assist in addressing effects on cultural values.

Effects on Other Users – Pre-Empting of Nutrient Allocation

131 A number of the farming witnesses, and Mr Sycamore on behalf of Federated Farmers, raised a concern in relation to the impact the granting of this consent may have on the proposed Water and Land Plan process, particularly limit setting. This is perhaps best expressed by Mr Sycamore, where he stated:

"We acknowledge that Invercargill City must discharge storm-water. However, we cannot support the application as notified. The proposed Water and Land Plan process is not yet complete and Southland is soon to commence the limit-setting process. As such, we consider it inappropriate for Environment Southland to approve a discharge consent with a 35-year term prior to the completion of the significant processes."[12]

132 In summary, the concern is that the catchment may be found to be over-allocated and therefore limits established requiring discharges to either reduce contaminant levels or employ mitigation options to reduce the adverse effects of discharges.

133 We acknowledge and have considered those concerns. We consider they can be addressed by way of review conditions.

Positive Effects

134 The applicant points to the positive effects derived from the city's reticulated stormwater system[13]. These primarily relate to minimising the public health and environmental effects of flooding and allowing for land development that would otherwise be subject to flooding. Mr West considers the stormwater network has a positive economic effect on Invercargill City by enabling land use.

135 Mr Loan addressed the benefits and ongoing need for drainage infrastructure in paragraphs 14-20 of his evidence. In paragraph 18 he noted the drainage of stormwater provides health benefits to the community and protects properties

[12] EIC DA Sycamore at para 12
[13] Section 4.1 of ICC's application for resource consent

from damage due to flooding. He stated that the drainage infrastructure would continue to be required as long as the city is inhabited. There was considerable evidence on the cost of the system and necessary upgrades, but little in terms of actual economic evidence relating to the benefits.

136 Ms Bennett addressed beneficial effects in paragraphs 23-30 of her evidence. She contemplates the hypothetical situation of there being no stormwater network, highlighting the public health and safety effects of uncontrolled surface water, the direct effects on water quality of increased sediment discharges and the indirect impact leading to further over burdening of the sewerage system resulting to increased sewer overflows.

137 We accept that there are significant social, environmental and economic benefits of an appropriately designed, installed and maintained stormwater system.

Conclusion on Effects

138 Overall, we consider that the effects of the discharge from the stormwater network are, overall, more than minor. The discharge does not meet a number of the Regional Water Plan standards and the overall water quality in the streams does also not comply with a number of plan standards. The discharge creates a risk to public health and amenity values, as well as acknowledged adverse effects on cultural values. There is also a measurable cumulative effect. The applicant's position is essentially that is a result of the upstream water quality or the highly modified nature of the streams as they pass through Invercargill. Ms Bennett confirmed that what she described as the only standard which was not complied with which were contributed to by the stormwater discharges was the standard in relation to faecal coliforms, which is a maximum of 1000MPN/100 mL. She confirmed that both the ICC and ES monitoring indicated that the standard was not complied with for a significant number of events at all monitored locations, both upstream and downstream of the stormwater network.

139 The adverse effects must be appropriately avoided, remedied or mitigated.

Other Matters Raised

140 Again, a number of the farming submitters raised concerns about what was seen to be a disparity of treatment between the farming community and the regulatory authorities. Again, this was expressed by Mr Sycamore as:

"Many farmers are concerned about the inequitable way Environment Southland requires rural dischargers to continually 'up their game' with regard to farm infrastructure irrespective of cost, whereas urban storm-water and sewerage systems are allowed to deteriorate and become out-dated such that they can discharge untreated human wastewater to water with perceived impunity."[14]

141 Mr Sycamore went on to note, despite that inconsistency, the Federated Farmers members recognised the scale and timeframes involved in the pipe renewal process to be enormous, acknowledged that this was in part a legacy issue and that a pragmatic approach that assisted the City in addressing the problem was supported.

142 We can to a degree understand the concern expressed. It is a commonly held view. There is nothing that we are aware of which in any way indicates any 'impunity' or lack of even-handedness. In any event, that is not relevant to our decision making, and we address it no further.

Water and Sediment Quality Monitoring

143 The current consents specify a monitoring programme which has been implemented by ICC since 2011. This programme has included monitoring of the stormwater discharges themselves and the water and sediment quality of the receiving environments.

144 Sampling of the stormwater discharges was carried out with manual grab samples and some automatic sampler collections, without flow data, taken during rainfall events. This sampling regime has not allowed for the calculation of Event Mean Concentrations (EMC) which can be combined with flow data to estimate a contaminant load. While providing some useful data in terms of instantaneous water quality at the time of sampling, the water quality of the discharge can be highly variable within a rain event's storm hydrograph and between rain events.

145 Mr West's s42A report references a technical report[15] which describes a range of practices and procedures recommended for effective stormwater quality monitoring. This includes the suite of analytes and sampling methodologies to best characterise the quality of stormwater arising from differing land-uses.

146 Mr Leahy presented on the use of a contaminant load model to help determine catchments and land-uses for priority attention to improve their stormwater

[14] EIC DA Sycamore at para 23
[15] Design of Stormwater Monitoring Programmes; Technical Report, February 2014. Prepared by NIWA for Environment Southland

quality. While he considered the models were useful he also raised some constraints, even with additional data from monitoring to calibrate the contaminant load model. Mr Leahy expressed concern that the cost of data collection is significant and that the collection of data needs to be optimised and complement the outputs from predictive contaminant load models.

147 In response to questions from the panel Ms Bennett reiterated this sentiment expressing that monitoring should be targeted and not "monitoring for monitoring's sake". She considered there would be more benefit from monitoring the quality of the receiving environment than monitoring the quality of the stormwater discharges themselves.

148 Ms Bennett was also questioned on the merits of specifying contaminant concentration limits on the discharges. She highlighted a number of challenges with respect to setting appropriate limits and then establishing a robust monitoring programme to measure compliance with the limits set. These challenges centred on the inherent variability of stormwater quality within and between discharge events. It was her view that the resources spent on monitoring to this extent could be more beneficially applied to implementing practices to improve the stormwater quality. Further, she considered the Water Quality Guidelines specified in Appendix 3 and Sediment Quality Standards in appendix 4 of the draft conditions are appropriate as targets over time, but not as compliance limits.

149 At the hearing the panel was provided with a review of the draft conditions dated 2 August 2017 requested by the applicant from NIWA. The review was undertaken by Dr Jennifer Gadd, an Aquatic Chemist and principal author of the 2014 technical report, Design of Stormwater Monitoring Programmes prepared by NIWA for Environment Southland. Dr Gadd's review identified a suite of recommendations to the draft conditions on the stormwater monitoring programme.

150 Having considered the evidence on monitoring presented we accept that the monitoring proposed in the draft conditions represents a robust and appropriate regime. Coupled with the opportunity for input through the Technical Review Group, the development of a Stormwater Quality Management Plan and the processes available for review of the consent we accept the monitoring programme as suitable.

151 We acknowledge the concern in relation to an absence of instream limits. In the circumstances of this case, given the nature of the discharge and the nature of the environment, we consider that the approach suggested, with additional requirements, is acceptable.

Relevant Statutory Documents

152 The planning framework is not overly complex. It is to a degree dynamic, particularly given the early stages of the pSWLP.

153 Mr West and Mr Dunning identified similar objectives and policies of the RWP and pSWLP and both provided helpful analysis of those provisions. Mr Sycamore for Federated Farmers noted that Federated Farmers generally accepted the objectives and policy analysis by Mr West, and generally his conclusions.

Regional Water Plan

154 Mr West identified the relevant objectives, policies and rules of the RWP as Objectives 2, 3, 4 and 10 and Policies A4, 1A, 3, 4, 5, 7, 8, 9, 11 and 13. He identified Policies 3, 4 and 11 as important policies. Policy 3 provides:

"Allow no discharges to surface water bodies that will result in a reduction of water quality beyond the zone of reasonable mixing, unless it is consistent with the promotion of the sustainable management of natural and physical resources, as set out in Part 2 of the Resource Management Act 1991, to do so."

155 Policy 4 provides:

"The surface water bodies outside Natural State Waters, management point source and non-point source discharges to meet or exceed the Water Quality Standards referred to in Rule 1 and specified in Appendix G 'Water Quality Standards' unless it is consistent with the promotion of the sustainable management of natural and physical resources, as set out in Part 2 of the Resource Management Act 1991, to do so and so avoid levels of contaminants in water and sediments that could harm the health of humans, domestic animals including stock and/or aquatic life."

156 Policy 11 requires consent to discharges of stormwater to meet both the ANZECC Sediment Guidelines and the relevant water quality standards following reasonable mixing. The policy applies those standards to all resource consents for new stormwater discharges and all new resource consents for existing stormwater discharges. In the latter case, unless it is consistent with the purpose of the Act to allow further time, existing discharges will be required to meet the standards and guidelines by 2010 or the date the resource consent commences, whichever is the latter.

157 Both Polices 3 and 4, and indeed 11, reference Part 2 of the Act and its sustainable management purpose. As identified by Mr West, this raises issues as to whether we must now consider approval in terms of direct consistency with Part 2, or whether it is consistency with the provisions of the Regional Policy Statement and Proposed Regional Policy Statement, given that they are the next level in the hierarchy and particularise the matters in Part 2.

158 Mr Dunning also identified Policy 4, finding that for the most part, other than in respect of the sewage which is not part of the application, the standards were met.[16] Mr Dunning's view was based on the evidence of Ms Bennett and Dr Stewart that the adverse effects on aquatic life were minor, with negligible potential for effects on human health as a result of consumption. He noted that there were potentially issues in relation to stock drinking water. He noted that the measures proposed to substantially reduce the concentration of pathogens in the stormwater by addressing human sewage would take time to achieve, but this was acknowledged by Objectives 3 and 4. His view was that it was consistent with Policy 4 and not contrary to it.

159 In terms of Policy 11, again Mr Dunning considered that Objectives 3 and 4 incorporated an expectation of gradual improvement in the water quality over time and that the explanation to Policy 11 anticipates that. This provides:

"It is expected that the prime means of achieving these standards will be through adopting best management practices (or the best practicable option where it is not possible to adopt best management practices) to prevent contaminants entering the stormwater system. This could occur immediately on all new developments and could occur in other areas as upgrades take place. In some cases, it may be necessary to install some form of settling system that captures the first flush of stormwater in a rain event, before it enters a surface water body."

160 Mr Dunning concluded that the proposal was consistent with Policy 11. In terms of Policy 13, Mr Dunning did not accept Mr West's opinion that this was relevant as the discharge of untreated effluent (sewage) was not part of the application.

Proposed Southland Water and Land Plan

161 Mr West and Mr Dunning both agreed that the same weight cannot be afforded to the objectives and policies of the pSWLP as the operative RWP. Mr Dunning's view was that very little weight could be put on the provisions given the relative state of the flux while it progresses through the hearing process. Mr

[16] JS Dunning Statement of Evidence, para 52

West identified the key provisions as Objective 6, Policy 13 and Policy 40. Mr Dunning largely agreed, but also identified Objective 13 *"to be key"*.

162 Mr Dunning considered that the aim of Objective 6 is to ensure the water quality of fresh water bodies and estuaries is either maintained if not degraded, or improved where degradation due to human activity has occurred. His opinion was that the underlying premise of the application is to achieve progressive and measurable improvements of stormwater quality over time, with a corresponding improvement in the quality of the receiving water bodies as a result. Mr West, in response to questioning, was of the opinion that the objective, and other similar objectives, anticipated an improvement in the quality of water at the time of the granting of consent.

163 Overall, it is our view that 'improving' does not require a resource consent granted in the circumstances of this application to achieve immediate improvement in the quality of water. 'Improving' connotes in our view something which is not necessarily immediate.

164 In terms of Policy 13, Mr West was of the view that that policy, which relates to the protection of water quality and the health of humans, domestic animals and aquatic life, required the applicant to manage its land use activities and discharges to protect water quality. Mr West considered the policy was worded in the present tense. Mr Dunning, in his appendix, considered that the proposal was consistent with Policy 13 on the basis that the contaminants were sufficiently low as to avoid harm to human and animal health and aquatic life. We consider Mr West's assessment of the policy is more accurate. Mr Dunning does not assess the water quality component of the matters which are to be protected.

165 We will return to the issue of whether the application is contrary to the relevant objectives and policies in our s104D assessment.

166 As part of the reply, Mr Morris provided a table prepared by Mr Dunning which undertook an assessment of the RWP, the pSWLP, the Southland Regional Policy Statement, the Proposed Southland Regional Policy Statement, Te Tangi a Tauira, NPS-FW 2014, and the New Zealand Coastal Policy Statement. That is a very thorough record of the relevant objectives and policies. We confirm that we have considered the objectives and policies identified by Mr West and Mr Dunning. We do not propose to lengthen this decision by repeating each and every relevant objective and policy.

167 For completeness, we address the other statutory documents referred to by Mr West and Mr Dunning.

Regional Coastal Plan

168 The discharges occur outside the coastal marine area. Mr West considered that the Regional Coastal Plan for Southland was relevant in that it contains specific provisions relating to the Ōreti/New River Estuary that are relevant and reasonably necessary to the determination of the application given that the discharges occur a short distance above the estuary and will contribute to cumulative effects, particularly within the Waihōpai Arm of the estuary.

169 Mr Dunning also addressed the Regional Coastal Plan for Southland in paragraphs 80-83 of his evidence. Both Mr West and Mr Dunning identified Objective 6.2.1, which seeks to maintain and enhance the values of the Ōreti/New River Estuary. Policy 6.2.1 seeks to maintain and enhance the natural character of the Ōreti/New River Estuary.

170 We agree it is appropriate that we consider the provisions, notwithstanding the discharges are not directly into the estuary, given that the estuary is clearly of significance, and is immediately downstream of the discharges.

Southland Regional Policy Statement

171 Mr West identified Objective 1.2, which seeks to recognise the importance of Wāhi Tapu, Wāhi Taoka, Mahika Kai and the customary use of water to Kāi Tahu, Objective 1.4 – to have particular regard to the concept of Kaitiakitanga, the water quality Objectives 5.1, 5.2, 5.3 and 5.4 and supporting policies. We agree with Mr West's assessment of the relevance of the water quality objectives contained on page 41 of his S42A Report.

172 Mr West identified the objectives and policies relating to the coast and again we have considered those.

173 Mr West and Mr Dunning assessed the Proposed Southland Regional Policy Statement. Policies WQUAL8 and WQUAL11 are, we understand from Mr Dunning's evidence, to be treated as operative. We have considered the objectives and policies outlined on pages 43-48 of Mr West's S42A Report and by Mr Dunning in his evidence, attachment and subsequent assessment document provided as part of the reply.

174 In terms of our assessment of the proposal, in our view the operative and proposed Regional Policy Statements do not add greatly to the matters contained in the operative and proposed Regional Plans. The infrastructure objectives and policies are relevant. They identify the need to appropriately integrate regionally significant, nationally significant and critical infrastructure with land use activities in the environment. Policy INF.1 is to recognise the

benefits derived from such infrastructure. Policy INF.2 seeks, where practicable, to avoid, remedy or mitigate the adverse effects of the infrastructure on the environment and lists a number of matters which should be taken into account in determining the practicality of avoiding, remedying or mitigating adverse effects. These are:

- any functional, operational or technical constraints that require the infrastructure to be located or designed in the manner proposed;
- reasonably practicable alternative designs or locations;
- whether good practice approaches and design and construction are being adopted;
- where appropriate, and such measures are volunteered, whether any significant residual adverse effects can be offset or compensated for.

171. We have carefully considered the infrastructure objectives and policies in reaching our decision.

National Policy Statement for Freshwater Management 2014

175 Again, both Mr West and Mr Dunning addressed the relevant provisions of the NPS-FW2014. Following the hearing, it came to our attention that the amendments to the NPS-FW would take effect on 6 September. They are therefore relevant to our consideration.

176 Both Mr West and Mr Dunning addressed these changes, as did Mr Sycamore on behalf of Federated Farmers.

177 As may be expected, there was a dispute as to whether the amendments supported decline or grant. Mr West noted the effect of Objective A4 in supporting Policy A7 and the applicant, in its reply, agreed they were key. Mr Morris' submission was that the additions to the NPS moved the emphasis away from the *"maintain or enhance water quality at all costs"* philosophy of the original provisions of the NPS to an acknowledgement that improvements in water quality must take into account the economic wellbeing of the communities.

178 Overall, we tend to agree with Mr Morris that the changes are perhaps more supportive of the application, particularly the recognition of the economic issues. It is not however decisive in our decision making process.

New Zealand Coastal Policy Statement

179 Again this was addressed by Mr West and Mr Dunning. We have considered it, but do not consider it is overly relevant to the application before us. The relevant policies relate to managing discharges to water in the coastal environment. Policy 23(4) addresses stormwater particularly. It provides that in managing discharges of stormwater, steps are to be taken to avoid adverse effects of stormwater discharge to water in the coastal environment, on a catchment by catchment basis, by avoiding, where practicable, and otherwise remedying, cross-contamination of sewage and stormwater systems.

Te Tangi a Tauira

180 This was addressed by Mr West, particularly from pages 57-61 of his S42A Report. Mr Dunning had not assessed this in his evidence. That was in error. He provided an assessment as part of the written reply, particularly from pages 22-25. Both noted policies that were inconsistent or contrary in relation to application, in particular around the discharge of contaminants to water. We have considered the Iwi Management Plan and the assessments of Mr West and Mr Dunning in our overall assessment.

S104(2)A of the Resource Management Act 1991

181 S104(2)A directs that, when considering an application affected by s124, we must have regard to the value of the investment of the existing consent holder.

182 Mr Loan provided evidence on this issue. At paragraph 18 he gave evidence that in June 2014 the stormwater activity had an Optimised Replacement Value of $206m with an operational budget of $3.3m, and a current renewal budget of $1.8m. We accept that is a significant investment in community infrastructure and have had regard to it in our decision.

S105 of the RMA

183 S105 provides:

"If an application for a discharge permit or coastal permit is to do something that would contravene s15 or s15B, the consent authority must, in addition to the matters in s104(1), have regard to –

(a) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and

(b) the applicant's reasons for the proposed choice; and

(c) any possible alternative methods of discharge, including discharge into any other receiving environment."

184 Mr Dunning addressed this issue in paragraphs 119-122 of his evidence. In terms of the nature of the discharge and the sensitivity of the receiving environment, he noted that this had been thoroughly examined by Ms Bennett and Dr Stewart, and by Mr West in his S42A Report. He went further to say that Ms Bennett and Dr Stewart concluded that both the fresh water and coastal receiving environments are of low and relatively low sensitivity respectively to the effects of the discharge.

185 Ms Bennett's evidence at paragraph 16 states the five streams which are the immediate receiving environments are of relatively low sensitivity to the impact of stormwater discharges, given the Waikiwi Stream and Waihōpai River catchments were large in comparison to that of the stormwater network and with substantial flows. She also noted that the catchments have been subject to significant modification, which had impacted on water quality in those bodies. In terms of the Otepuni Stream, Kingswell Creek and Clifton Channel, she noted they were all highly modified with a large proportion of their catchment being urban development. She again noted that the upper catchment of the streams above the stormwater network has reduced their water quality prior to the discharges from the network.

186 Ms Bennett assessed the Ōreti/New River Estuary, and in particular the Waihōpai Arm, to be more sensitive than the streams. She noted that the estuary is experiencing environmental effects, which were identified by Mr West and Dr Stewart as resulting from eutrophication and sedimentation.

187 We do not accept that any of the immediate receiving environments, or the Ōreti/New River Estuary, are insensitive or relatively insensitive respectively. In our view, the sensitivity of the receiving environment to adverse effects should be assessed by taking into account the cumulative effects of this proposal. Because the water quality may have been reduced by upstream discharge, that does not equate to a finding that the receiving environment is of low sensitivity.

188 We have had regard to the applicant's reasons for the proposed choice, which are addressed throughout the evidence and submissions. We accept of course that this is an existing stormwater network. The application in Parts 1 and 2 set out the reasons for the discharge, including the need to continue discharges in order to manage stormwater for the Invercargill community in a way which maintains public health and wellbeing.

189 In terms of the assessment of alternatives, s8 of the application addresses treatment alternatives. They are also fully assessed in the evidence of Mr Leahy. Mr Leahy also addressed alternatives through existing stormwater

discharges from an engineering perspective, and in particular whether there were alternative discharge techniques that could avoid some of the constraints imposed by the existing system and provide further treatment options. He noted the existing stormwater system was predominantly a gravity based system, or vented by pumping during high flow. He also noted the drainage system relies on infrastructure which has been installed over generations, before identifying alternative systems as including soakage, land disposal and infiltration or discharge to alternative outfalls.

190 Mr Leahy referenced the NZWERF "On-Site Stormwater Management Guidelines", which recommended soaking systems be at least 1.5m above groundwater levels. He also identified the NZTA "Stormwater Treatment Standard for State Highway Infrastructure", which recommended a 3m separation. Relying on advice, Mr Leahy's understanding was in the majority of Invercargill, the soil types and groundwater levels precluded that method of disposal. Mr Leahy also addressed the possibility of constructing an interceptor cistern immediately prior to the existing outfalls to divert stormwater discharges to an alternative discharge point. He noted that this may be technically feasible, but would require further piped infrastructure and pumping systems. In light of the catchment areas, flows and volumes of discharges, he considered that alternative was not practically affordable to the community. Overall Mr Leahy did not consider there was a practically feasible and affordable alternative discharge method for Invercargill that would achieve significant improvements in water quality. Under questioning, Mr Leahy did however acknowledge that one option for treatment that could be considered seriously is treatment swales along high use roads. He also acknowledged that treatment wetlands may be able to play a role in the Invercargill context.

S107 RMA

191 S107 provides for restrictions on certain discharge consents. In summary, consent authorities are unable to grant a discharge consent if, after reasonable mixing, the contaminated water discharges (either by itself or in combination of the same, similar or other contaminants or water), is likely to give rise to all or any of the following effects in the receiving waters:

"(c) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material;

(d) any conspicuous change in the colour or visual clarity;

(e) any emission of objectionable odour;

(f) the rendering of fresh water unsuitable for consumption by farm animals;

(g) any significant adverse effects on aquatic life."

192 S107(2) provides that a consent authority may grant a discharge permit to do something that would otherwise contravene s15 that may allow any of the effects described above if it is satisfied:

"(a) that exceptional circumstances justify the granting of the permit; or

(b) that the discharge is of a temporary nature; or

(c) that the discharge is associated with necessary maintenance works – and it is consistent with the purpose of this Act to do so."

193 The evidence of the applicant was that the discharge would avoid the effects identified in s107(1)(c)-(g) beyond the zone of reasonable mixing. Mr Dunning's evidence is that, insofar as addressing the sewage component of the discharge, is not suitable for farm animals to consume because of upstream water quality, it would be appropriate for us to rely on the exception provided in s107(2)(a). Mr West noted in his S42A Report that the application at 7.6.3 stated that no such adverse effects would arise. He noted an apparent conflict with s4.7 of the application which refers to discolouration of the receiving waters due to discharge of sediment during wet weather. In our view, such an effect would not be conspicuous.

194 In terms of sewage contamination potentially making the receiving waters unsuitable for consumption by farm animals, Mr West noted that even though farm animals are unlikely to have access to rivers in the vicinity of the discharge, the ANZECC Australia and New Zealand Guidelines for Fresh and Marine Water Quality 2000, at s4.3.2.2 provided the drinking water for livestock should contain less than 100 thermotolerant coliforms. Ms Bennett's evidence was that it was unlikely in the locations where water may be taken from the streams for stock drinking. If the upstream quality improved sufficiently she considered it likely that the relevant reaches of the streams could comply with the ANZECC stock drinking guideline and hence the discharges from stormwater networks do not render the water unsuitable for stock drinking water.

195 In our view, there are exceptional circumstances in the present case. Exceptional circumstances require something out of the ordinary, both in terms of the significance and historical generation of the activity for which consent is sought and the consequences of refusing consent.

196 In Te Rangatiratanga o Ngati Rangitihi Inc v Bay of Plenty RC (2010) 16 ELRNZ 312 the High Court found the test of exceptional circumstances was met having regard to the fact that the pulp and paper mill had long been of positive economic and social importance in the region and nationally, there was

significant capital outlay in the industry, that the initial setting up of the industry on that site had been under a special enabling Act of Parliament, and that the industry was wholly dependent on the river for water and as a discharge medium.

197 While obviously the present fact situation is quite different in some ways from the above case, we note that the High Court considered it was appropriate that historical factors should inform the analysis. Overall, considering all of the relevant matters, it is our view that there are exceptional circumstances.

198 Overall, we conclude there is nothing in s107 which forbids us from granting consent.

The Gateway Test

199 Having carried out our overall assessment, we must still ask ourselves whether we are able to grant consent pursuant to s104D.

200 As addressed earlier, the applicant accepted that the effects were more than minor. The issue then is whether the application is contrary to the objectives and policies of the RWP and pSWLP. We accept that as a non-complying activity the application is unlikely to find support for the application. We have addressed the objectives and policies earlier in this decision. In terms of the relevant objectives and policies, that is the objectives and policies of the RWP and pSWLP, Mr Dunning and Mr Morris identified Objective 18 of the pSWLP.

201 Objective 18 provides:

"All activities operate at 'good (environmental) management practice' or better to optimise efficient resource use and protect the region's land, soils and water from quality and quantity degradation."

202 Mr Dunning's opinion was that, taking into account the practical, technical and physical constraints, while the activity was consistent with the best practicable option, it is not considered to meet *"good environmental practice"* as would be expected from a new system, (for example versus discharges from an established legacy system as in this case).

203 Mr West at page 65 of his S42A Report stated his opinion that the discharges were contrary to Objectives 2, 3 and 4 and Policies 3, 4 and 13 of the RWP, and Objectives 14 and 18 and Policy 13 of the pSWLP. These have been addressed earlier in this decision.

204 Having carefully considered that evidence and the submissions of Mr Morris and Ms Melhopt on this issue, we conclude that overall the activity is not

contrary, as that is properly understood, to the relevant objectives and policies. The main reason we so find is that we conclude, subject to appropriate conditions, the granting of this consent will achieve an improvement, albeit not immediate, in the overall water quality. That finding is a fine one.

Part 2 RMA and Overall Evaluation

205 As identified earlier in this decision, we consider that the RWP, and to a lesser degree the pSWLP, address the relevant Part 2 matters.

206 In Envirofume Limited v Bay of Plenty Regional Council [2017] NZEnvC12, the Environment Court, after considering the King Salmon and RJ Davidson cases, concluded that Part 2 was still relevant to resource consents for the following reasons:

(a) as an overview or check that the purpose of the Act and that Part 2 issues are properly covered and clear;

(b) to focus the court or decision makers on the overall purpose of the consent in question; and

(c) as a check that the various documents have recognised and provided for or given effect to the Act and other documents in the Hierarchy.

207 In this particular case, given that some of the operative policies expressly refer to Part 2 of the Act and sustainable management, we consider that overall 'overview or check' is appropriate.

208 Mr West at pages 56 and 57 of his S42A Report identified the purpose of the Act, listed the s6 matters that must be recognised and provided for, and s7 matters to which we must have particular regard. Mr West also identified s8.

209 Mr West identified relevant matters in paragraph 64-65 of his evidence. In terms of s5, he identified the Invercargill City as a physical resource of substantial social, economic and cultural value and that the stormwater network is a critical part of the overall use and development of the land in city in protecting it as a physical resource for the benefit of the community. He also stated that it was critical in providing for the health and safety of the community and social, cultural and economic wellbeing. Mr Dunning went on to state that providing an effective drainage system is a fundamental part of sustaining the potential of the city as a physical resource and to meet the reasonably foreseeable needs of future generations. He noted that did not override the need to take into account the effects of the activity and the needs of future generations with regard to natural resources, but it was a valid consideration.

210 He went further in his evidence to conclude that the stormwater network enabled the applicant to undertake its duties to safeguard the life support and capacity of the city's water, soil and ecosystems, including prevention of flooding. On this topic, while he described that as fanciful, he stated it was useful to acknowledge the substantial community benefit that the stormwater network brings in avoiding significant adverse effects on the receiving water bodies from flooding and uncontrolled overland flow in the Invercargill urban area. He described the stormwater network as fundamentally a significant mitigation measure of considerable economic value.

211 In terms of s6, he identified s6(a), (c)-(e), (g) and (h).

212 He noted the underlying principle of the application was that the effects of the current activity were minor (excluding sewage), would be maintained in the short term and with the actions and mitigation measure proposed would be progressively reduced to better provide for the matters of national importance. On that basis he concluded it was consistent with the requirement of s6 to recognise and provide for: natural character beyond the mixing zone: significant indigenous vegetation: significant habitats of indigenous fauna such as the Ōreti/New River Estuary; and public access to the estuary, rivers and coastal area. His evidence was that the relationship of Māori and their culture and traditions and associated protected customary rights would be enhanced over time when mitigation measures show measurable improvement, particularly from the removal of human sewage from the discharge. He placed some importance on his view that the stormwater network and discharges were a fundamental part of the measures necessary to protect the Invercargill community from the risk of significant flooding during natural hazard events.

213 Again Mr Dunning assessed the s7 matters which he considered relevant, particularly s7(a), (b) and (c)-(i). He considered that as a result of the proposed improvements of the quality of the discharges and the corresponding improvements as to the overall receiving water quality, the maintenance and enhancement of amenity values, the intrinsic values of the ecosystems, and the overall quality of the environment would be enhanced, as would the habitat of trout and salmon.

214 Overall, and largely on the basis that water quality will, on the balance of probabilities, improve, we consider granting of the consent, on appropriate conditions, will meet Part 2.

Term of Consent

215 A number of submitters expressed real concern in relation to the proposed 35 year term. The applicant amended its request in that regard and proposed a term of 25 years.

216 A number of alternative terms were suggested, ranging from a 5 year period.

217 Mr Morris addressed this issue, particularly in his reply. He recorded express opposition to the merging of the consent expiry date with that of the applicant's wastewater treatment plan at Clifton consent, which is due to expire on 30 June 2029.

218 While he acknowledged that there was some merit in having two discharges linked in terms of the overall impact of the discharges, including the ability to look at off-sets and other mitigation measures, the applicant considered that having two significant resource consents due for renewal at the same time would create a significant amount of work, for both the applicant and the consent authority, and contain the risk of confusing the public regarding what was being consented, potentially diminishing the effectiveness of the public consultation process.

219 Mr Morris went on to note that the scientific and technical work would be enormous and that would put a significant strain on the applicant to resource at both a technical and financial level.

220 Mr West in his S42A Report again helpfully discussed this issue, noting Policy 40 of the Proposed Southland Water and Land Plan, the comment in Te Tangi a Tauira that:

"Ngāi Tahu ki Murihiku do not believe we should be granting consents for activities where we do not know what the effects may be over the long term. Anything over 25 years is essentially making decisions for the next generation."

This was further reinforced by Ms Blair in her evidence, who also noted the need to consider technological changes as well as continual improvement.

221 Mr West also referenced the case law regarding consent duration, particularly PVL Proteins Limited v Auckland Regional Council, A61/201, paragraphs 27-33; and s104(2A) of the Resource Management Act.

222 In terms of Policy 40, he noted that it carried little weight. He noted that at the time of the drafting of the report the Proposed Plan had been notified, and a large number of submissions made, and hearings commenced.

223 In terms of the matters identified in PVL Proteins Limited, Mr West considered that a 35 year term was too long. He suggested a term expiring on 30 June 2029 to align the expiry dates with the Invercargill City Stormwater and

Discharge consents was an option, but still considered that appeared to be a long duration in the circumstances and would need to be supported by specified stages of improvements to the stormwater system.

224 He again took into account that the discharge was an existing and long term activity, representing significant investment and that the stormwater drainage was essential to Invercargill.

225 He did not consider that a shorter term would create an issue for the applicant regarding the security of their investment, particularly given s104(2A). His opinion was that this provided greater security for consent holders regarding investment as it lent more weight to approving the resource consents for that activity, reducing the weighting towards longer consent duration expressed in the PVL Proteins Limited decision.

226 Having considered all of the matters raised by the submitters, Mr West and the applicant, we consider that a term of 25 years is not appropriate. Given the nature of this environment, the dynamic water quality planning framework and the acknowledged effects on the environment, that term is simply too long. While review provisions would enable something of a check on the progress being made by the applicant, we consider that a shorter timeframe will ensure that the focus remains.

227 Conversely, we do not accept that a period as short of 5 years is appropriate. That would not enable implementation of the various steps that the applicant now proposes. It would certainly not enable an assessment to be made as to the success or otherwise of those proposals on any re-consenting. Nor would such a term properly recognise the applicant's investment.

228 We have carefully considered the option of a 12 year term to align the expiry date with the applicant's treated wastewater discharge permit. While that has some real benefits, particularly in terms of the ability to offset, we consider that would place considerable strain on the resources, not only of the applicant, but also Environment Southland, and other potential submitters.

229 Having considered all the relevant factors, it is our view that a term of 15 years is appropriate. This recognises the level of investment, will enable the applicant to progress with the renewal and improvement programme, avoids unnecessary reconsenting costs on the applicant, ES and the community and enables clear and measurable improvement in water quality to be properly assessed.

Conditions

230 The applicant and Mr West, spent some time working on the proposed Conditions of Consent. The applicant's proposed conditions were peer reviewed by Dr Gadd of NIWA. An 'agreed' set was provided with the reply. We appreciate the effort that has gone in those proposed conditions.

231 In general terms, we consider the agreed conditions are appropriate. However, after having considered all of the evidence, we consider that it is appropriate, and in our view necessary, that a Stormwater Quality Management Plan is prepared which clearly identifies the objectives and incorporates some clear and prioritised scheduling for upgrades and improvements, operational procedures, management and implementation. The applicant's case was founded on an improvement of water quality over the period of the term of the consent. The SQMP will help ensure that is so.

232 We also consider that it is appropriate to include a best practicable option condition. We note that the applicant had volunteered that in relation to 'new' discharges. We consider the same is appropriate in terms of the discharge for which this consent is sought. We have included that condition as Condition 4. It is to be informed by the Annual Report required by Condition 33 and implemented through the Stormwater Quality Management Plan now required by Condition 3 of the consent.

233 Other changes made to the agreed conditions are either consequential or minor.

Overall Decision

234 Having considered all of the above matters, and carefully considered the evidence, submissions and the application documents, it is our finding that the purpose of the Act is better met by the granting of consent on the attached conditions. Our decision is therefore to grant stormwater discharge permit APP-20168843 for a term of 15 years on the conditions attached to this decision.

Conclusion

235 In conclusion, this hearing has raised issues of some complexity. The application is of course for a non-complying activity. While the initial effects may be more than minor, we consider that the conditions imposed will result in improved water quality. We wish to express our thanks to all of those who have participated in the hearing process, for their input and assistance.

_____

David Caldwell
Chair
Date: 14 September 2017

_____

Hugh Leersnyder
Commissioner
Date: 14 September 2017

_____

Craig Pauling
Commissioner
Date: 14 September 2017