Update on the Mangawhai Community Wastewater Scheme (MCWWS) Advisory Panel’s Recommendations – August 2017

Council received the Advisory Panel’s report in July 2015. In June 2016 Council responded to the Report through an open letter to the community.

This document provides an update on the Panel’s recommendations. As before the responses are clustered under theme headings.

# 1 MAINTAINING GOOD MANGAWHAI HARBOUR WATER QUALITY

Council remains committed to protecting the harbour water quality.

**Recommendation 06:** That KDC make connection to the MCWWS mandatory for all within the MCWWS drainage district – irrespective of the distance from the marine environment or the size of the section.

**Recommendation 09:** That KDC pass a bylaw requiring a six‑monthly Independent Inspection and Maintenance Certificate for all onsite systems, at the property owner’s cost.

**Recommendation 10:** That KDC develop and implement a Connections Policy by 1 July 2016.

Council Response:

While Council would like to make connection mandatory, legal advice suggests that this may not be possible if a property has an adequate on-site system.

Council adopted a Wastewater Drainage Policy and Wastewater Drainage Bylaw in September 2016. The Bylaw places obligations on persons using public and private wastewater systems and provides clarity on all steps to be taken to connect to public systems and to operate and maintain private systems. Owners of onsite wastewater treatment systems in the Kaipara district must ensure that private onsite wastewater disposal systems are installed, operated, repaired or extended, and is done so under the required standards of Council, and that they are assessed and maintained at regular intervals as required under the WOF programme.

Council has modified the Warrant of Fitness cycle period to three years believing that to be industry best practice.

Council is looking at options for connection as part of the 2018 Long Term Plan.

**Recommendation 13:** That prioritisation of extensions to the reticulation lines that permit connection of properties within 300m of the marine environment should occur.

*Council Response: Six options were originally considered; four of those options have been modelled for this current stage. The Ecological extension’ (all properties within 300m of the marine environment) included extending the disposal system, upgrading existing reticulation, extending reticulation over 8 years and upgrading the treatment plant. This would give capacity for 3,300 connections and the cost over 10 years is estimated at $16.35 million. The Ecological option has very high costs versus relative benefits and may not meet current demand for connections.*

The Wastewater Drainage Policy and Wastewater Drainage Bylaw will also apply to properties within 300m of Mangawhai Harbour and in the Drainage District but not connected to the scheme.

# 2 ENSURING DISPOSAL QUALITY AND CAPACITY IS SUFFICIENT

Council is well positioned to understand the wastewater infrastructure and how to optimise its use.

**Recommendation 03:** That all grinder pumps are vested in KDC ownership.

**Recommendation 04:** That all maintenance and repair costs reside with KDC other than for damage caused through misuse.

*Council Response: Council supports the principle and is in the draft stages of developing a Connections Policy which will outline responsibilities for private connection and maintenance costs. The Policy will form part of the 2018 Long Term Plan process.*

**Recommendation 14:** That alternative uses for the solid waste materials are investigated to see if a cost‑effective solution with enhanced environmental outcomes could be achieved.

Council Response: Council agrees, however a cost‑effective alternative has still not yet been identified. This is considered a lower priority at present and will be addressed once the higher priority issues have been addressed.

**Recommendation 16:** That KDC undertake a detailed geological assessment of both the Mangawhai Community Park and the golf course, and then update soakage estimates to determine the viability of these long term disposal options. This work to be completed in the next 12 months.

**Recommendation 17:** That, before progressing investigations for disposal of effluent on the golf course, KDC and the Club agree a terms of reference outlining who would be responsible for factors such as installation, maintenance and operating costs; liability for pollution of groundwater; who would operate the scheme; what would be the order of installation of the irrigation etcetera.

**Recommendation 18:** That further work on both the soakage capacity and a refined costing for Mangawhai Community Park and the Golf Course is required before further consultation occurs.

**Recommendation 20:** That, assuming irrigation is a viable option, the order to install over the following 5-20 years is:

* Mangawhai Community Park (surface trickle irrigation)
* Trees and similar off-course areas of the Golf Course (surface trickle irrigation)
* Driving Range of the Golf Course (sub surface irrigation)
* Fairways of the Golf Course (sub surface irrigation).

If irrigation is not viable in conjunction with the farm irrigation, then progress investigations around the Ocean Outfall, acknowledging Iwi objections to new disposal sites.

Council Response: Council has had the farm assessed and found that there is sufficient capacity for disposal for some years to come. This allows greater time to assess other options.

The preliminary assessment indicated that whilst the clean sands of the golf course are likely to provide sufficient infiltration capacity for irrigation, the presence of underlying lower permeable soils indicated the long term sustainability of an effluent irrigation scheme is likely to be limited more by the capacity of the broader groundwater system than by surface infiltration capacity.

Further details are set out in the attachment.

Alternative land based options around Mangawhai will also be investigated.

**Recommendation 21:** That the 65 ha of irrigable land at Lincoln Downs Farm be retained in KDC ownership for the foreseeable future – even if not all of it is needed for irrigation at present.

Council Response: Council agrees. The steeper native bush area on the upper reaches of the farm could be set aside for alternative uses, which may include recreational facilities.

# 3 ENSURING THERE IS CAPACITY FOR FUTURE GROWTH IN MANGAWHAI

*Council intends managing the investment in infrastructure assets to accommodate future growth.*

*Council projects that growth will be between 49 and 85 new dwellings per year. Dwelling growth in the catchment area, over the past 12 years, has been averaged at 68 properties per annum.*

**Recommendation 11**: That KDC confirm the industry norm and, if appropriate, complete a hydraulic model of the system to enable better prediction and management of potential bottlenecks.

Council Response: A basic hydraulic model has been done by AECOM; this model is considered appropriate (and affordable) for this size wastewater scheme. The hydraulic modelling defined capacity and identified bottlenecks in the reticulation system. Nine of the existing thirteen pump stations have sufficient capacity to accommodate full development of the drainage district while four will require upgrades. Six new pump stations would ultimately be required to service a fully developed drainage district. The phasing of these upgrades will be dictated by the pattern of development and the growth rates within the respective sub-catchments. One of these pump stations is programmed to be upgraded this financial year (2017/18).

**Recommendation 15:** That KDC commence the capacity upgrade for the plant in a staged manner that aligns to the expansion of the reticulation network and meets the selected disposal option for the treated effluent.

Council Response: Council agrees and is progressing towards an integrated strategy that: optimises disposal at the Browns Road farm by extending the irrigation area and modifying the disposal resource consent to match the actual land use (i.e. dry-stock grazing); accommodates the Christmas / New Year usage peak; funds the extension of the reticulation network; and upgrades the treatment plant when required in approximately 10 years’ time. The reticulation network is being increased on an ‘as needs’ basis in line with residential development. The financial modelling will provide extension options for the network and will be included in the Long Term Plan 2018/2028.

**Recommendation 19:** That primary disposal for the next 5‑10 years is through the expansion of irrigation on the existing farm – with a minimum of 5-10 ha of irrigation added to the farm within 5 years, and potentially 20 ha (if required).

Council Response: Council agrees; An expansion of the disposal network was undertaken in the 2016/2017 financial year increasing the irrigated area from 30 to 46ha (of a total 65ha available and consented). The next stage will require augmentation of the irrigation trunk infrastructure and control system.t. The appropriate matching of the disposal resource consent to the actual farmland usage will enable optimisation of the farm disposal capacity (currently under investigation).

# 4 ENSURING ALL PROPERTIES THAT CAN BE CONNECTED TO THE SCHEME ARE CONNECTED

Council is committed to the principle of connection to a community wastewater scheme and is actively managing exceptions where properties are not connected, yet could or should be connected.

**Recommendation 01:** That KDC proactively seeks advice from the community of potential non‑connections. This is particularly relevant should KDC exercise its discretionary powers around mandatory connection.

Council Response: An internal review was done in 2015 and reported in the Advisory Panel Report. Council also investigates whenever anomalies surface. As at June 2016 there were 28 properties that were not connected as part of the original scope of work (currently there are now 16 remaining properties not connected). Each of these properties has a strategy as to how they should be connected, some of which Council has partially funded extensions. Some have, or are in the process of connecting.

Council considers connecting them to be a priority.

**Recommendation 02:** That KDC review properties where there is the potential that ‘rentable units’ are not paying full fees as per the current KDC policy.

Council Response: It is very difficult to identify ‘rentable units’ that are not paying full fees; Council does investigate whenever additional SUIP’s are identified. Council has not allocated funds to look closely at this. The preferred option is to investigate as necessary.

**Recommendation 05:** That KDC actively engage with NRC to ensure better alignment of processes, objectives and physical outcomes by connection to the MCWWS.

Council Response: Northland Regional Council (NRC) understands the issue and has advised KDC to make a submission to the review of the Regional Water and Soil Plan and Regional Coastal Plan for Northland in 2017. The NRC has produced and sought feedback on its draft Regional Plan. The following is the NRC’s summary of KDC’s feedback in this regard:

“Kaipara District Council stated that on-site domestic wastewater discharges are a large area of concern for the council, particularly because local communities spend a large amount of money on on-site systems and when they fail, have to repair them, and install or connect to a reticulated wastewater network. The failure of on-site systems have the potential to cause significant adverse effects on the environment and Kaipara District Council would like a restrictive approach to on-site systems, in order to ensure they are functioning without failure. Kaipara District Council is concerned that by adopting the approach in the draft Regional Plan, NRC has not recognised the significance of cumulative effects of these failures. The council submitted that the importance of ensuring connection to reticulated networks, especially in areas of high density or high growth, is essential for regional development, and should therefore be encouraged through the Regional Plan. Kaipara District Council would like to see the inclusion of minimum lot sizes as a performance standard, to ensure on-site systems are not overloaded and subsequently fail. Kaipara District Council would prefer for the warrant of fitness scheme to be adopted, or per the designers specifications, rather than the manufacturer”.

The Northland Regional Council has advised that it will be formally notifying the Proposed Regional Plan for submissions in early September 2017, and that the submission period will close mid-November 2017.

**Recommendation 08:** That KDC make onsite systems a Restricted Discretionary activity within the District Plan or through a bylaw.

Council Response: Council agrees with the concept, however jurisdiction for a Restricted Discretionary activity in relation to wastewater belongs to Northland Regional Council. Council will make a submission to the NRC Regional Plan.

The introduction of the Wastewater Drainage Policy and Wastewater Drainage Bylaw with the warrant of fitness regime for on-site systems will help.

# 5 APPLYING A ‘USER PAYS’ PRINCIPLE

Council agrees with a ‘user pays’ principle.

**Recommendation 22:** That the following guiding principles to charging for the MCWWS should apply:

* Any further capital investment in the scheme should be funded solely by the drainage district ratepayers directly benefiting from the scheme;
* Dwellings in existence before 1 July 2006 within the 2009 reticulated area should be charged a rate reflecting the inflation adjusted cost (excluding subsidies) of those who connected in 2006;
* Communal schemes should be incorporated into the MCWWS as soon as practical (upon extension of the reticulation scheme) and pay the appropriate development contribution at the time.
* All other properties to pay the development contribution applicable at the time once they become connectable.

As a general principle the Panel supports a ‘user pays principle’. Therefore any discount offered to one or more properties (or groups of properties) will by default result in higher charges to all ratepayers within the MCWWS catchment.

Council Response: Council agrees with this principle and is formally considering this matter as part of the Long Term Plan 2018/2028. Council currently applies a ‘user pays’ principle by way of targeted rates and Development Contributions for those properties connected and connectable to the scheme.

# 6 ENSURING LONG TERM FINANCIAL AFFORDABILITY

Council intends using a staged approach to increasing capacity via staged capital investments.

**Recommendation 07:** That KDC make completion of the reticulation network to enable full connection a high priority, and that properties within 300m of the marine environment are prioritised for connection.

**Recommendation 12:** That full reticulation of the MCWWS catchment area is completed within 3 years to enable 100% of properties to fall within the LGA (Local Government Act) connection criteria of 30/60m.

Council Response: Four options will be put forward for consideration. They are:

1 *Do minimum - extend disposal system, upgrade existing reticulation, upgrade treatment plant, capacity 3,300 connections, cost over 10 years $4.35 million;*

*2 Reticulate pockets - extend disposal system, upgrade existing reticulation, extend reticulation (8 years), upgrade treatment plant, capacity 3,300 connections, cost over 10 years $7.65 million;*

*3 Ecological plus pockets - extend disposal system, upgrade existing reticulation, extend reticulation (8 years), upgrade treatment plant, capacity 3,300 connections, cost over 10 years $16.35 million;*

*4 Additional reticulation, treatment and disposal - extend (existing) disposal system, plus new land based disposal system, upgrade existing reticulation, extend reticulation (13 years), augment treatment plant, capacity 4,700 connections, cost over 22 years $34.78 million.*

The tentative approach at this stage is to begin with option 2 leading into option 4.