

# **Appendix M**

# **Capital Works Project Sheet**

Project sheet completed by: Michael Cordell

**Position:** Wastewater Asset Manager

**Proposed Start Date:** 2022/23 **Proposed Investment:** \$1,000,000

Project Name: Turangi Pond Remediation

**Asset Location:** Turangi WWTP

Significant Decision: Yes

### **Reason for the Project:**

There existing resource consent requires that the old pond sites are rehabilitated when they are no longer in use.

### **Links to Levels of Service – as per AMP document**

Discharge compliance; we manage the environmental impacts of our wastewater treatment and discharges.

### **Project Scope:**

The scope of the project is to dewater the ponds, remove and/or adequately treat residual pond sludge, remove concrete wavebands, level the site back to natural contours, prepare the surface and plant as appropriate.

### **Relationship with other Projects:**

Turangi Wastewater Buffer Storage - 2018/19 projects.

### **Outcomes - Alignment with Council Policy/Plans:**

Long Term Plan (managing nitrogen discharges from wastewater WRC Variation 5, protecting lakes rivers and mountains).

### **Options and Analysis:**

1. Remediate the site

# Financial Considerations Cost Benefit Analysis

### **Recommended Option:**

# **Legal Considerations:**

## **Policy Considerations:**

### Risks:

Cost risk, the project could cost more than anticipated. The required works will be thoroughly scoped and priced during development of the project to reduce uncertainties and provided firmer price expectation.

# Option Lifecycle Analysis:

**Consultation:** 

### **Funding Sources:**

Funded by loan.

### **Consent Requirements:**

Consent for earthworks may be required.

# **Land Purchase / Land Designation Requirements:**

Not required.

### **Renewal Component of Project:**

Nil

### **Growth Component of Project:**

Nil

### **Communication Requirements:**

# **Project Implementation Considerations:**

Environmental and cultural considerations.

### **Significant Assumptions:**

The buffer pond construction are completed

## Time lines and costs for proposed project phases:

The total project cost is \$1,00,000

Task	Year	Cost
Turangi oxidation pond rehabilitation	2022/23	1,000,000

### **Local Government Act Funding Consideration Requirements.**

s101 (3) the funding needs of the local authority must be met from those sources that the local authority determines to be appropriate, following consideration of,(a) in relation to each activity to be funded,

# s101(3)(a)(i) community outcomes to which the activity primarily contributes

### Economy

Our communities prosper in thriving local economy with a diverse range of rewarding employment opportunities.

### Environment

A shared responsibility for places we are proud of

### Engagement

Council is connected with its communities, advocating for their social and

cultural well being.

Community Outcomes are taken into account when determining life cycle strategies, levels of service, etc.

Council's response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years, and in June 2006 published TD2050.

# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefits are to the local community and to the wider community as the project relates to environmental improvement.

s101(3)(a)(iii) period in or over which those benefits are expected to occur

s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity

s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

# s101(3)(b) the overall impact of any allocation of liability for revenue needs on the community

"to meet the current and future needs of communities for good-quality local infrastructure, local public services and regulatory functions in a manner that is most cost effective for households and businesses"

Good quality = effective, efficient and appropriate to the present and future anticipated circumstances

Effective – producing the desired or intended result<sup>1</sup>

Efficient – working productively with minimum wasted effort or expense<sup>1</sup>

Approval s	sign off	from	Group	Manager:
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Name:	Kevin Strongman
Division:	Head of Operations
Signature	::
Date:	

Date	Description of Change	Changed by	Approved by

Project sheet completed by: Michael Cordell

**Position: Asset Engineer** 

**Proposed Start Date:** 2022/23 **Proposed Investment:** \$ 1,000,000

**Project Name:** Turangi wastewater disposal system improvements

**Asset Location:** Te Awamate Road, Turangi WWTP

Significant Decision: Yes

### **Reason for the Project:**

A consent application has been lodged for a new discharge consent. Consultation is not yet complete and the outcome of consultation and the consent process will determine the scope of this project.

### **Links to Levels of Service – as per AMP document**

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

Discharge compliance; we manage the environmental impacts of our wastewater treatment and discharges.

### **Project Scope:**

TBC

### **Relationship with other Projects:**

### **Outcomes - Alignment with Council Policy/Plans:**

Long Term Plan (managing nitrogen discharges from wastewater WRC Variation 5, protecting lakes rivers and mountains).

### **Options and Analysis:**

# Financial Considerations Cost Benefit Analysis

### **Recommended Option:**

### **Legal Considerations:**

Resource consent conditions for discharge of wastewater must be complied with.

### **Policy Considerations:**

#### Risks:

Consent outcome is uncertain

### **Option Lifecycle Analysis:**

### **Consultation:**

Being undertaken as part of the consent process

### **Funding Sources:**

New capital works funded by loan.

### **Consent Requirements:**

A discharge consent from WRC has been applied for and will inform the direction of this project.

### Land Purchase / Land Designation Requirements:

### **Renewal Component of Project:**

0%

### **Growth Component of Project:**

0%

### **Communication Requirements:**

### **Project Implementation Considerations:**

Wider discussion on waterwater treatment and disposal for Turangi WWTP.

### **Significant Assumptions:**

Consent application for TDC to remain on site will be granted.

### Time lines and costs for proposed project phases:

The total project cost is \$1,000,000

Task	Year	Cost
Turangi Balance Pond	2022/23	1,000,000

# **Local Government Act Funding Consideration Requirements.**

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s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefits to Taupo district and local community; improved environmental outcome.

s101(3)(a)(iii) period in or over which those benefits are expected to occur

s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity

# s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

Benefit of treatment plant performance improvements are increased environmental outcome.

# s101(3)(b) the overall impact of any allocation of liability for revenue needs on the community

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Approval sign off from Group Manager:	
Name: Kevin Strongman	
Division: Operational Services	
Signature:	
Date:	

Date	Description of Change	Changed by	Approved by
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Project sheet completed by: Michael Cordell

**Position: Asset Engineer** 

**Proposed Start Date:** 2018/19 **Proposed Investment:** \$ 2,200,000

Project Name: Turangi wastewater balance pond

Asset Location: Te Awamate Road, Turangi WWTP

**Significant Decision:** Yes

### **Reason for the Project:**

When the wastewater MBR was constructed the existing oxidation ponds where continued to be used as storage during wet periods or when maintenance at the plant is necessary. Use of the pond causes operational issues with the plant. A lined balance pond will provide the storage required, end the use of the oxidation pond, and improve plant performance.

## Links to Levels of Service - as per AMP document

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

Discharge compliance; we manage the environmental impacts of our wastewater treatment and discharges.

### **Project Scope:**

Construction of an above ground flow balance pond for wastewater.

### **Relationship with other Projects:**

Turangi wastewater disposal system improvements (2022/23)

Turangi wastewater pond remediation (2022/23)

# **Outcomes - Alignment with Council Policy/Plans:**

Long Term Plan (managing nitrogen discharges from wastewater WRC Variation 5, protecting lakes rivers and mountains).

### **Options and Analysis:**

# Financial Considerations Cost Benefit Analysis

### **Recommended Option:**

### **Legal Considerations:**

Resource consent conditions for discharge of wastewater must be complied with. There are periods when the Turangi WWTP struggles and the balance pond will help address this and end use of the oxidations pond.

### **Policy Considerations:**

#### Risks:

Ground conditions – geotech investigations completed.

### **Option Lifecycle Analysis:**

Consultation: Already undertaken/required to be undertaken

### **Funding Sources:**

New capital works funded by loan.

### **Consent Requirements:**

A discharge consent from WRC has been applied for effluent discharge, it is related but does not impact this project.

Consents related to earth works may be required.

## Land Purchase / Land Designation Requirements:

## **Renewal Component of Project:**

0%

### **Growth Component of Project:**

0%

### **Communication Requirements:**

### **Project Implementation Considerations:**

Wider discussion on waterwater treatment and disposal for Turangi WWTP.

### **Significant Assumptions:**

Consent application for TDC to remain on site will be granted.

### Time lines and costs for proposed project phases:

The total project cost is \$1,800,000

Task	Year	Cost
Turangi Balance Pond	2018/19	1,800,000

### Local Government Act Funding Consideration Requirements.

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Benefits to Taupo district and local community; improved environmental outcome.

**s101(3)(a)(iii)** period in or over which those benefits are expected to occur 50 years

s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity

s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

Benefit of treatment plant performance improvements are increased environmental outcome.

# s101(3)(b) the overall impact of any allocation of liability for revenue needs on the community

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Name:	Kevin Strongman
Division:	Operational Services
Signature	<b>:</b>
Date:	

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Project sheet completed by: Michael Cordell

**Position:** Wastewater Asset Manager

**Proposed Start Date:** Stage 1 2019/20-21

**Stage 2** 2022-23-24 **Stage 3** 2025/26-27

**Proposed Investment:** \$ 850,000, \$850,000, \$480,000

Project Name: Southern Trunk Main Upgrade

**Asset Location:** Richmond Heights, Taupo.

**Significant Decision: Yes** 

## **Reason for the Project:**

Additional capacity is required to convey wastewater from the development area at the South end of Taupo as growth occurs.

### Links to Levels of Service - as per AMP document

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

### **Project Scope:**

Provide additional capacity to cater for growth at the Southern end of Taupo.

### **Relationship with other Projects:**

Related to wastewater pump station control project which will assist with augmenting wastewater flows.

### **Outcomes - Alignment with Council Policy/Plans:**

### **Options and Analysis:**

To be developed.

Could include storage, duplicate pipelines or pipe upgrades.

## Financial Considerations Cost Benefit Analysis

TBC for each option.

### **Recommended Option:**

Provide additional capacity to service the southern growth area. Method to be determined.

### **Legal Considerations:**

Private property rights when work could affect private property.

### **Policy Considerations:**

### Risks:

Increase sewer spills if capacity is not provided.

Construction risks.

### **Option Lifecycle Analysis:**

TBC

#### **Consultation:**

Affected parties will be identified as the project scope is refined.

### **Funding Sources:**

New capital works funded by loan.

Development contributions fund the growth portion of the project.

### **Consent Requirements:**

### Land Purchase / Land Designation Requirements:

### **Renewal Component of Project:**

~35% (to be updated with DC calculation figure)

### **Growth Component of Project:**

~66% (to be updated with DC calculation figure)

### **Communication Requirements:**

To be determined as the scope is developed.

# **Project Implementation Considerations:**

Project timing may need to change depending on the growth rates in the southern Taupo area

### **Significant Assumptions:**

Growth rates affecting timing

### Time lines and costs for proposed project phases:

The total project cost is \$2,180,000

Task	Year	Cost
Taupo wastewater Southern trunk main upgrade (stage 1) Design	2019/20	\$100,000
	2020/21	\$750,000
Taupo wastewater Southern trunk main upgrade (stage 2)	2022/23	\$100,000
	2023/24	\$750,000
Taupo wastewater Southern trunk main	2025/26	\$50,000
upgrade (stage 3)	2026/27	\$430,000

### **Local Government Act Funding Consideration Requirements.**

s101 (3) the funding needs of the local authority must be met from those sources that the local authority determines to be appropriate, following consideration of,(a) in relation to each activity to be funded,-

# s101(3)(a)(i) community outcomes to which the activity primarily contributes

Economy

Our communities prosper in thriving local economy with a diverse range of rewarding employment opportunities.

### Environment

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### Engagement

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Community Outcomes are taken into account when determining life cycle strategies, levels of service, etc.

Council's response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years, and in June 2006 published TD2050.

# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefit to service the growth areas Renewal benefit for Taupo community

s101(3)(a)(iii) period in or over which those benefits are expected to occur 80 year asset life

s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity The activity is needed to service growth.

s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

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Name:	Kevin Strongman
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Signature	<b>:</b>
Date:	

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Project sheet completed by: Michael Cordell

**Position:** Wastewater Asset Manager

**Proposed Start Date:** Stage 1 2025/26-27

**Stage 2** 2026/27-28

**Proposed Investment:** \$ 1,200,000, \$600,000

Project Name: Eastern Trunk Main Upgrade

**Asset Location:** Tauhara Road, Taupo.

**Significant Decision:** Yes

### **Reason for the Project:**

Additional capacity is required to convey wastewater from the development area at the industrial growth areas towards Broadlands road..

### **Links to Levels of Service – as per AMP document**

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

## **Project Scope:**

Provide additional capacity to cater for growth at the industrial growth area.

### **Relationship with other Projects:**

Related to inflow and infiltration study that will impact on the timing of the project.

### **Outcomes - Alignment with Council Policy/Plans:**

### **Options and Analysis:**

- i. Inflow and infiltration reduction to regain capacity
- ii. Install greater pipe capacity

The project will include elements of both.

## Financial Considerations Cost Benefit Analysis

### **Recommended Option:**

Provide additional capacity to service the industrial growth areas.

# **Legal Considerations:**

# **Policy Considerations:**

### Risks:

Increase sewer spills if capacity is not provided.

Construction risks.

# **Option Lifecycle Analysis:**

TBC

#### **Consultation:**

Affected parties will be identified as the project scope is refined.

### **Funding Sources:**

New capital works funded by loan.

Development contributions fund the growth portion of the project.

### **Consent Requirements:**

## **Land Purchase / Land Designation Requirements:**

### **Renewal Component of Project:**

~XX% (to be updated with DC calculation figure)

# **Growth Component of Project:**

~XX% (to be updated with DC calculation figure)

# **Communication Requirements:**

To be determined as the scope is developed.

### **Project Implementation Considerations:**

Project timing may need to change depending on the growth rates in the area.

### **Significant Assumptions:**

Growth rates affecting timing

### Time lines and costs for proposed project phases:

The total project cost is \$1,800,000

Task	Year	Cost
Taupo wastewater Eastern trunk main	2025/26	\$150,000
upgrade (stage 1)	2026/27	\$1,050,000
Taupo wastewater Eastern trunk main	2026/27	\$60,000
upgrade (stage 2)	2027/28	\$540,000

### **Local Government Act Funding Consideration Requirements.**

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Council's response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years, and in June 2006 published TD2050.

# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefit to service the growth areas Renewal benefit for Taupo community

**s101(3)(a)(iii)** period in or over which those benefits are expected to occur 80 year asset life

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Approva	sign off from Group Manager:		
Name:	Kevin Strongman		
Division:	Operational Services		
Signature	Signature:		
Date:			

Date	Description of Change	Changed by	Approved by
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Project sheet completed by: Michael Cordell

**Position: Asset Engineer** 

**Proposed Start Date:** 2018/19 **Proposed Investment:** \$ 100,000

**Project Name:** Motutere wastewater treatment plant improvements

**Asset Location:** Moturere

Significant Decision: No

### **Reason for the Project:**

Resource Consent requirements are expected to require minor improvements land disposal and plant control to improve environmental outcome. This project does not cater for growth.

### Links to Levels of Service - as per AMP document

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

Discharge compliance; we manage the environmental impacts of our wastewater treatment and discharges.

### **Project Scope:**

Scope will be confirmed once the resources consent is granted. Likely to include minor control and land disposal changes.

### **Relationship with other Projects:**

Nil

### **Outcomes - Alignment with Council Policy/Plans:**

Long Term Plan (managing nitrogen discharges from wastewater WRC Variation 5, protecting lakes rivers and mountains).

# **Options and Analysis:**

## Financial Considerations Cost Benefit Analysis

There is a financial cost to deliver this project. The benefits are improved environmental outcomes.

### **Recommended Option:**

Construct a wastewater effluent land disposal system for Kinloch in the public golf course.

### **Legal Considerations:**

Resource consent conditions for discharge of wastewater must be complied with.

### **Policy Considerations:**

### Risks:

Uncertain consent outcomes.

### **Option Lifecycle Analysis:**

**TBC** 

### Consultation: Already undertaken/required to be undertaken

Unlikely to be required as the scope of the project will likely be within the WWTP site and minor in nature.

# **Funding Sources:**

New capital works funded by loan.

### **Consent Requirements:**

A discharge consent from WRC has been applied for.

# Land Purchase / Land Designation Requirements:

Nil

### **Renewal Component of Project:**

0%

### **Growth Component of Project:**

በ%

### **Communication Requirements:**

Nil

## **Project Implementation Considerations:**

Nil

### **Significant Assumptions:**

The consent change will not be granted and the requirements will be minor

### Time lines and costs for proposed project phases:

The total project cost is \$100,000

Task	Year	Cost
Minor plant improvements	2018/19	\$100,000

### **Local Government Act Funding Consideration Requirements.**

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Council's response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years, and in June 2006 published TD2050.

# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

The wastewater treatment plant provides wastewater treatment for the camp ground.

**s101(3)(a)(iii)** period in or over which those benefits are expected to occur Term of consent in the order of 20 years

s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity Motutere camp ground continuing to operate.

s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

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<b>Approval</b>	sign off from Group Manager:
Name:	Kevin Strongman
Division:	Operational Services
D1 10.0	operational services
Signature	:
Signature	<u> </u>
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Date:	

Date	Description of Change	Changed by	Approved by
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Project sheet completed by: Michael Cordell

Position: Wastewater Asset Manager

**Proposed Start Date:** 2022/23 **Proposed Investment:** \$ 2,750,000

Project Name: Kinloch WWTP Upgrade Design

**Asset Location:** Kinloch

Significant Decision: No

### **Reason for the Project:**

This project is due to forecast growth in wastewater volumes.

# Links to Levels of Service - as per AMP document

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

Discharge compliance; we manage the environmental impacts of our wastewater treatment and discharges.

### **Project Scope:**

Detailed design of the Kinloch WWTP capacity upgrade.

### **Relationship with other Projects:**

Nil

### **Outcomes - Alignment with Council Policy/Plans:**

Kinloch Structure Plan.

Long Term Plan (managing nitrogen discharges from wastewater WRC Variation 5, protecting lakes rivers and mountains).

### **Options and Analysis:**

The budgeted options is to increase the treatment plant rather capacity by adding a third SBR tank. Other treatment options are possible and are to be considered in the design development.

Options to limit growth in Kinloch have not been considered as the growth in the Kinloch serviced area is defined by the Kinloch Structure Plan.

# Financial Considerations Cost Benefit Analysis

### **Recommended Option:**

Complete design work as required to allow for capacity expansion. Upgrade treatment plant as directed by design investigations.

### **Legal Considerations:**

The upgrade will be required for compliance with resource consent conditions.

### **Policy Considerations:**

#### Risks:

Project timing could be affected by growth rates in Kinloch.

## **Option Lifecycle Analysis:**

#### **Consultation:**

Consultation has been undertaken as a part of the consenting process for Kinloch wastewater discharge.

Consultation for this specific project will be part of the LTP processes.

### **Funding Sources:**

New capital project funded by loan.

Development contributions contribute to growth projects.

### **Consent Requirements:**

A resource consent for wastewater discharge has been gained however we are applying to modify some aspects of the consent (related to the disposal filed options)

# **Land Purchase / Land Designation Requirements:**

Ni

### **Renewal Component of Project:**

Nil

### **Growth Component of Project:**

100%

### **Communication Requirements:**

### **Project Implementation Considerations:**

### **Significant Assumptions:**

Growth rates in Kinloch

### Time lines and costs for proposed project phases:

### The total project cost is \$2,750,000

Task	Year	Cost
Detailed design	2022/23	\$250,000
Construction	2023/24	\$2,500,000

# **Local Government Act Funding Consideration Requirements.**

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# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefits are to the local Kinloch community and to the wider community as the project relates to environmental protection.

**s101(3)(a)(iii)** period in or over which those benefits are expected to occur The expected life of mechanical and electrical assets is 25 years and 50+ years for civil assets.

s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity

The activity is needed to service the existing Kinloch community and to cater for growth.

s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

The project is required to meet resource consent conditions.

needs on the community				
local in	"to meet the current and future needs of communities for good-quality local infrastructure, local public services and regulatory functions in a manner that is most cost effective for households and businesses"			
-	uality = effective, efficient and appropriate ated circumstances	to the prese	ent and future	
Effectiv	e – producing the desired or intended resu	lt¹		
Efficien	t – working productively with minimum wa	sted effort o	or expense <sup>1</sup>	
	Appropriate to present and future needs of the community – meets the needs of the community now and in the future			
Approv	al sign off from Group Manager:			
Name:	Kevin Strongman			
Division	Head of Operations			
Signatu	re:			
Date:				
Date	Description of Change	Changed	Approved by	
		by		

s101(3)(b) the overall impact of any allocation of liability for revenue

Project sheet completed by: Michael Cordell

**Position: Asset Engineer** 

**Proposed Start Date:** 2018/19 **Proposed Investment:** \$ 2,200,000

**Project Name:** Kinloch wastewater land disposal system

**Asset Location:** Kinloch public golf course

**Significant Decision:** Yes

### **Reason for the Project:**

Resource Consent requirements require a change in the method of wastewater disposal, away from the current point discharge to a more disperse application of wastewater. The environmental driver is the reduction of a nitrogen plume to Whangamata Bay. The project is a requirement of resource consent.

### Links to Levels of Service - as per AMP document

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

Discharge compliance; we manage the environmental impacts of our wastewater treatment and discharges.

### **Project Scope:**

Development of a subsurface irrigation system in the fairways of the Kinloch Public Golf Course. The disposal includes subsurface dripline and also retains the rapid infiltration trenches for high storm flow events.

### **Relationship with other Projects:**

Kinloch WWTP flood protection work (2017/18)

Kinloch WWTP effluent holding tank (2017/18)

Kinloch WWTP capacity upgrade (2023/24)

### **Outcomes - Alignment with Council Policy/Plans:**

Kinloch Structure Plan.

Long Term Plan (managing nitrogen discharges from wastewater WRC Variation 5, protecting lakes rivers and mountains).

### **Options and Analysis:**

This land disposal project is required to meet resource consent conditions.

# Financial Considerations Cost Benefit Analysis

There is a financial cost to deliver this project. The benefits are improved environmental outcomes (nitrogen dispersal).

## **Recommended Option:**

Construct a wastewater effluent land disposal system for Kinloch in the public golf course.

### **Legal Considerations:**

Resource consent conditions for discharge of wastewater must be complied with.

### **Policy Considerations:**

#### Risks:

Interruption of golf course use.

### **Option Lifecycle Analysis:**

The disposal system proposed will be sufficient to meet the needs of the Kinloch community for the extent of the current consent which is though till 2033.

### Consultation: Already undertaken/required to be undertaken

Consultation was undertaken as a part of the resource consenting process.

Further consultation will be required with the golf club regarding project timing and implementation.

### **Funding Sources:**

New capital works funded by loan.

Development contributions fund the growth portion of the project.

### **Consent Requirements:**

A discharge consent from WRC has been obtained.

### Land Purchase / Land Designation Requirements:

TDC has previously purchased the public golf course for the purpose of wastewater disposal.

# **Renewal Component of Project:**

0%

### **Growth Component of Project:**

28%

### **Communication Requirements:**

Kinloch community and golf club.

### **Project Implementation Considerations:**

The project cannot start until the effluent holding tank project is completed.

### **Significant Assumptions:**

The consent change will not be granted i.e. capex budget assumes the consent change is not granted however we have an expectation that the change will be acceptable and significant savings can be realised.

### Time lines and costs for proposed project phases:

The total project cost is \$2,200,000

Task	Year	Cost
Land disposal system construction	2018/19	2,200,000

### Local Government Act Funding Consideration Requirements.

s101 (3) the funding needs of the local authority must be met from those sources

that the local authority determines to be appropriate, following consideration of,(a) in relation to each activity to be funded,-

# s101(3)(a)(i) community outcomes to which the activity primarily contributes

### Economy

Our communities prosper in thriving local economy with a diverse range of rewarding employment opportunities.

### Environment

A shared responsibility for places we are proud of

### Engagement

Council is connected with its communities, advocating for their social and cultural well being.

Community Outcomes are taken into account when determining life cycle strategies, levels of service, etc.

Council's response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years, and in June 2006 published TD2050.

# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefits are to the local Kinloch community to the wider community as the project relates to environmental protection.

### s101(3)(a)(iii) period in or over which those benefits are expected to occur

The current resource consent is for 20 years and the benefits of the drip line irrigation system will apply over this period.

# s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity

The activity is needed to service the existing Kinloch community and to cater for growth.

# s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

The project is required to meet resource consent conditions.

# s101(3)(b) the overall impact of any allocation of liability for revenue needs on the community

"to meet the current and future needs of communities for good-quality local infrastructure, local public services and regulatory functions in a manner that is most cost effective for households and businesses"

Good quality = effective, efficient and appropriate to the present and future anticipated circumstances

Effective – producing the desired or intended result<sup>1</sup>

Efficient – working productively with minimum wasted effort or expense<sup>1</sup>

Approva	sign off from Group Manager:
Name:	Kevin Strongman
Division:	Operational Services
Signature:	
Date:	

Date	Description of Change	Changed by	Approved by
		•	

Project sheet completed by: Michael Cordell

**Position:** Wastewater Asset Manager

**Proposed Start Date:** 2018/19 **Proposed Investment:** \$ 1,800,000

**Project Name:** Kinloch wastewater influent balance tank

**Asset Location:** Kinloch WWTP

Significant Decision: No

### **Reason for the Project:**

Provide better management of flows at the WWTP which will provide additional treatment plant capacity.

# Links to Levels of Service – as per AMP document

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

Discharge compliance; we manage the environmental impacts of our wastewater treatment and discharges.

### **Project Scope:**

Construction on an influent balance tank at the Kinloch WWTP.

### **Relationship with other Projects:**

Kinloch WWTP flood protection work (2017/18)

Kinloch WWTP effluent holding tank (2017/18)

Kinloch WWTP capacity upgrade (2023/24)

### **Outcomes - Alignment with Council Policy/Plans:**

Kinloch Structure Plan.

Long Term Plan (managing nitrogen discharges from wastewater WRC Variation 5, protecting lakes rivers and mountains).

### **Options and Analysis:**

A wastewater process model was used to determine the need for the project

### Financial Considerations Cost Benefit Analysis

There is a financial cost to deliver this project. The benefits are maintained treatment performance.

# **Recommended Option:**

Balance tank construction.

### **Legal Considerations:**

Resource consent conditions for discharge of wastewater must be complied with.

# **Policy Considerations:**

#### Risks:

### **Option Lifecycle Analysis:**

Tanks of this nature will typically have a 50 year life span.

### Consultation: Already undertaken/required to be undertaken

Consultation was undertaken as a part of the resource consenting process.

Further consultation will be required with the golf club regarding project timing and implementation.

### **Funding Sources:**

New capital works funded by loan.

Development contributions fund the growth portion of the project.

### **Consent Requirements:**

A discharge consent from WRC has been obtained.

### Land Purchase / Land Designation Requirements:

TDC has previously purchased the public golf course for the purpose of wastewater disposal.

### **Renewal Component of Project:**

0%

### **Growth Component of Project:**

28%

### **Communication Requirements:**

Waikato Regional Council

### **Project Implementation Considerations:**

Alignment with other wastewater projects at Kinloch

# Significant Assumptions:

### Time lines and costs for proposed project phases:

The total project cost is \$1,800,000

Task	Year	Cost
Balance Tank	2018/19	1,800,000

### **Local Government Act Funding Consideration Requirements.**

s101 (3) the funding needs of the local authority must be met from those sources that the local authority determines to be appropriate, following consideration of,(a) in relation to each activity to be funded,-

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Council's response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years, and in June 2006 published TD2050.

# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefits are to the local Kinloch community to the wider community as the project relates to environmental protection.

# s101(3)(a)(iii) period in or over which those benefits are expected to occur

The current resource consent is for 20 years and the benefits of the balance tank will be 50+ years.

# s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity

The activity is needed to service the existing Kinloch community and to cater for growth.

# s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

The project is required to meet resource consent conditions.

# s101(3)(b) the overall impact of any allocation of liability for revenue needs on the community

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Approva	sign off from Group Manager:
Name:	Kevin Strongman
Division:	Operational Services
Signature	<b>:</b>
Date:	

Date	Description of Change	Changed by	Approved by

Project sheet completed by: Michael Cordell

Position: Wastewater Asset Manager

**Proposed Start Date:** 2020/21-22

**Proposed Investment:** \$ 650,000

**Project Name:** Control gate bridge wastewater siphon upgrade

**Asset Location:** Taupo

**Significant Decision:** Yes

### **Reason for the Project:**

Additional capacity is required to convey wastewater from the development area on the north side of Taupo.

### Links to Levels of Service - as per AMP document

System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.

### **Project Scope:**

Provide additional capacity to cater for growth at the north end of Taupo.

# **Relationship with other Projects:**

Nil

# **Outcomes - Alignment with Council Policy/Plans:**

### **Options and Analysis:**

To be developed.

Could include storage, duplicate pipelines or pipe upgrades.

## Financial Considerations Cost Benefit Analysis

#### Cost Delient Analysi

TBC for each option.

### **Recommended Option:**

Provide additional capacity to service the north growth area.

Method upgrade to be determined.

### **Legal Considerations:**

Private property rights when work could affect private property.

### **Policy Considerations:**

### Risks:

Increase sewer spills if capacity is not provided.

Construction risks.

# **Option Lifecycle Analysis:**

TBC

#### **Consultation:**

Affected parties will be identified as the project scope is refined.

### **Funding Sources:**

New capital works funded by loan.

Development contributions fund the growth portion of the project.

### **Consent Requirements:**

### Land Purchase / Land Designation Requirements:

### **Renewal Component of Project:**

 $\sim$ 0% (to be updated with DC calculation figure)

# **Growth Component of Project:**

~100% (to be updated with DC calculation figure)

# **Communication Requirements:**

To be determined as the scope is developed.

### **Project Implementation Considerations:**

Project timing may need to change depending on the growth rates in the northern Taupo area.

### **Significant Assumptions:**

Growth rates affecting timing

### Time lines and costs for proposed project phases:

The total project cost is \$650,000

Task	Year	Cost
Taupo wastewater Southern trunk main	2020/21	\$100,000
upgrade (stage 1) Design	2021/22	\$550,000

# **Local Government Act Funding Consideration Requirements.**

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### Engagement

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Community Outcomes are taken into account when determining life cycle strategies, levels of service, etc.

Council's response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years, and in June 2006 published TD2050.

# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefit to service the growth areas Renewal benefit for Taupo community

**s101(3)(a)(iii)** period in or over which those benefits are expected to occur 80 year asset life

s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity The activity is needed to service growth.

s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

# s101(3)(b) the overall impact of any allocation of liability for revenue needs on the community

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Effective – producing the desired or intended result<sup>1</sup>

Efficient – working productively with minimum wasted effort or expense<sup>1</sup>

Appropriate to present and future needs of the community – meets the needs of the community now and in the future

## **Approval sign off from Group Manager:**

Name:	Kevin Strongman		
Division:	Operational Services		
Signature	2:		
Date:			

Date	Description of Change	Changed by	Approved by

Date of Project Sheet Creation: 08/03/2018
Project sheet completed by: Michael Cordell Position: Wastewater Asset Manager
Proposed Start Date: 2021/22 Proposed Investment: \$400,000
Project Name: Atiamuri WWTP Upgrade
Asset Location: Atiamuri
Significant Decision: No
<b>Reason for the Project:</b> The existing resource consent expires on the 1 <sup>st</sup> of March 2024 and it is likely that an upgrade will be required as currently the treatment is only the very most basic treatment.
Links to Levels of Service – as per AMP document  System and adequacy; to provide sufficient capacity to meet the demands of today and future growth.  Discharge compliance; we manage the environmental impacts of our wastewater
treatment and discharges.
Project Scope: Investigate the upgrade of the Atiamuri WWTP.
Relationship with other Projects: Nil
Outcomes - Alignment with Council Policy/Plans: Long Term Plan (managing nitrogen discharges from wastewater WRC Variation 5, protecting lakes rivers and mountains).
Options and Analysis: To be identified, this project is purely for investigation.
Financial Considerations Cost Benefit Analysis
Recommended Option:
Legal Considerations:
Policy Considerations:
Risks:
Option Lifecycle Analysis:

# Consultation:

### **Funding Sources:**

New capex projects are load funded.

### **Consent Requirements:**

A discharge consent for wastewater to land is required.

### Land Purchase / Land Designation Requirements:

Nil

### **Renewal Component of Project:**

Nil

### **Growth Component of Project:**

Nil

### **Communication Requirements:**

Nil –investigation only

## **Project Implementation Considerations:**

### **Significant Assumptions:**

### Time lines and costs for proposed project phases:

### The total project cost is \$400,000

Task	Year	Cost
Design	2021/22	50,000
Construction	2022/23	350,000

### **Local Government Act Funding Consideration Requirements.**

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Council's response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years.

# s101(3)(a)(ii) distribution of benefits between the community as a whole, any identifiable part of the community, and individuals

Benefits are to the local community and to the wider community as the project relates to environmental protection.

**s101(3)(a)(iii)** period in or over which those benefits are expected to occur The expected life of mechanical and electrical assets is 25 years and 50+ years for civil assets.

s101(3)(a)(iv) extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity

s101(3)(a)(v) costs/benefits, including transparency and accountability consequences, of funding activity distinctly from other activities

The project is required to so long as the community is producing wastewater.

s101(3)(b) the overall impact of any allocation of liability for revenue needs on the community

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Efficient – working productively with minimum wasted effort or expense<sup>1</sup>

Approval sign off from Group Manager:
Name: Kevin Strongman
Division: Head of Operations
Signature:
Date:

Date	Description of Change	Changed by	Approved by