

Wellington Water Shutdown Requests

Process to Request a Network or Critical Asset Shutdown



Our water, our future.

Revision history

Date	Version number	Description of change
31/05/2024	0.1	First draft (working draft)

Document information

Process Review Team			
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Plan Approved by

WWL Group	Role	Name	Signature	Date
NMG	Network Controller	Sam Lister		31/05/24

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1.0 General

1.1 Purpose

The purpose of this process document is to provide guidance for shutdown planning, requesting, and obtaining WWL approval to carry out a shutdown or undertake work on a Critical Asset.

The target audience includes Designers, Project Managers and Contractor's approved to undertake work on Wellington Water three water assets. Key Wellington Water stakeholders include WWL Customer Group (COG), WWL Network Operations Group (NMG), WWL Land Development, WWL Network Design and Delivery (NDD), WWL Contractor Panel, Consulting Panel and Approved Contractors

The objective of the Shutdown Approval Process is to ensure that all shutdowns are coordinated, and all risks are considered, and mitigations and contingencies are in place.

1.2 Definitions and Abbreviations













Critical Asset	Strategically important assets and those that any service interruption or failure would be expensive and/or disruptive. Examples include, pump stations, bulk watermains, pressure stormwater mains, wastewater riser main and interceptor pipelines, treatment plants
Critical Customer	Includes dialysis patients, hospitals, clinics, schools, educational facilities, and non-residential customers where water is critical to the business (hairdressers, bakeries etc)
Jira	Computer software system adopted by WWL for managing shutdown requests
Consulting Panel	Consulting panel company approved by Wellington Water
Approved Contractor	Contractor approved by Wellington Water for installing new water connections and published on WWL Web Page
WWL	Wellington Water Limited
NMG	WWL Network Management Group
COG	WWL Customer Management Group
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

1.3 About Wellington Water

Wellington Water (WWL) exists to provide water services so that communities prosper. We are a values-based company, and we weave these values throughout everything we do. We are owned by the Hutt City, Porirua City, Upper Hutt City and Wellington City, South Wairarapa District and Greater Wellington Regional Councils. We manage their drinking water, wastewater, and stormwater services. We employ staff and engage contractors and consultants to deliver these water services to Wellington’s communities.

1.4 Our Customer Outcomes and Service Goals

Wellington Water strategic objectives and Asset Management is underpinned by our three primary customer outcomes and twelve underlying service goals shown below. Works undertaken on our three waters critical assets contribute to our outcomes and should be front of mind when planning and executing works on critical assets.

Safe and healthy water	Respectful of the environment	Resilient networks support our economy
 <p>We provide safe and healthy drinking water</p>	 <p>We manage the use of resources in a sustainable way</p>	 <p>We minimise the impact of flooding on people's lives and proactively plan for the impacts of climate change</p>
 <p>We operate and manage assets that are safe for our suppliers, people and customers</p>	 <p>We will enhance the health of our waterways and the ocean</p>	 <p>We provide three water networks that are resilient to shocks and stresses</p>
 <p>We provide an appropriate region-wide fire-fighting water supply to maintain public safety</p>	 <p>We influence people's behaviour so they are respectful of the environment</p>	 <p>We plan to meet future growth and manage demand</p>
 <p>We minimise public health risks associated with wastewater and stormwater</p>	 <p>We ensure the impact of water services is for the good of the natural and built environment</p>	 <p>We provide reliable services to customers</p>

1.5 Safe and Healthy Drinking Water

The Water Services Act 2021 regulates drinking water quality. It places obligations on water suppliers and water storage managers to provide safe, high-quality drinking water. It provides a regulatory framework that includes: a risk management framework 'from catchment to tap'.

Taumata Arowai is a Crown entity established under the Water Services Act to regulate drinking water to ensure all communities have access to safe drinking water every day and have an oversight role in protecting the environment from the impacts of wastewater and stormwater.

Our network operators and approved contractors have a critical role to play to ensure the supply of safe and healthy water is assured to our customers through ensuring suitable qualified staff are engaged to carry out works and hygiene practices are enforced when working on the public potable water supply networks.

All Personnel carrying out shutdowns of the water supply must be always under the supervision of a water qualified person on site (Level 4 Water Reticulation) and must follow the Water NZ "Good Practice Guide - Hygiene Practices to prevent Water Supply Contamination".

1.6 Our Customer Promise

We have moved away from an infrastructure focus to a customer focus – putting people before pipes. Listening to customers concerns and collaborating on solutions leads to greater trust and satisfaction.

Managing customer impact is a key component of Asset Shutdown Planning. Thoroughly planned and well executed shutdowns will reduce the number and length of interruptions to the water supply. When the correct process is followed during shutdowns, in terms of customer notification, customers will understand the impact of the shutdown and feel well informed.

Our Customer Promise outlines what we strive to deliver.

1.7 Health and Safety Expectations

WWL are committed to ensuring all workers (including our contractors and consultants), can be their best at work, and operate in an environment that is safe, healthy and supports their individual wellbeing.

Wellington Water values and wishes to work with partners who support and demonstrate good health and safety practices in their workplaces.

The health and safety at work Act 2015 (HSWA 2015) sets out that all business and organisations in New Zealand (Persons Conducting a Business or Undertaking (PCBU)) have a Primary Duty of Care to

ensure the health and safety of the workers that they influence or direct when they carry out work for them.

In addition, PCBU's working together on the same work or contract, must consult, cooperate, and coordinate their activities to ensure the management of health and safety risks.

It is expected that all Contractors are familiar with and have processes in place to comply with the Health and Safety at Work Act 2015, subsequent regulations, and other relevant legislation.

Contractors undertaking works on Wellington Water managed assets should be aware of and follow Wellington Water H&S Policies and Minimum Standards. Our Health and Safety and Wellbeing Expectations Guide is published on our website.

2 Shutdown Request Process

2.1 Network Control Approval

All Shutdowns and work activities that carry operational risk and/or affect customer service require WWL stakeholder and Network Controller Approval before proceeding.

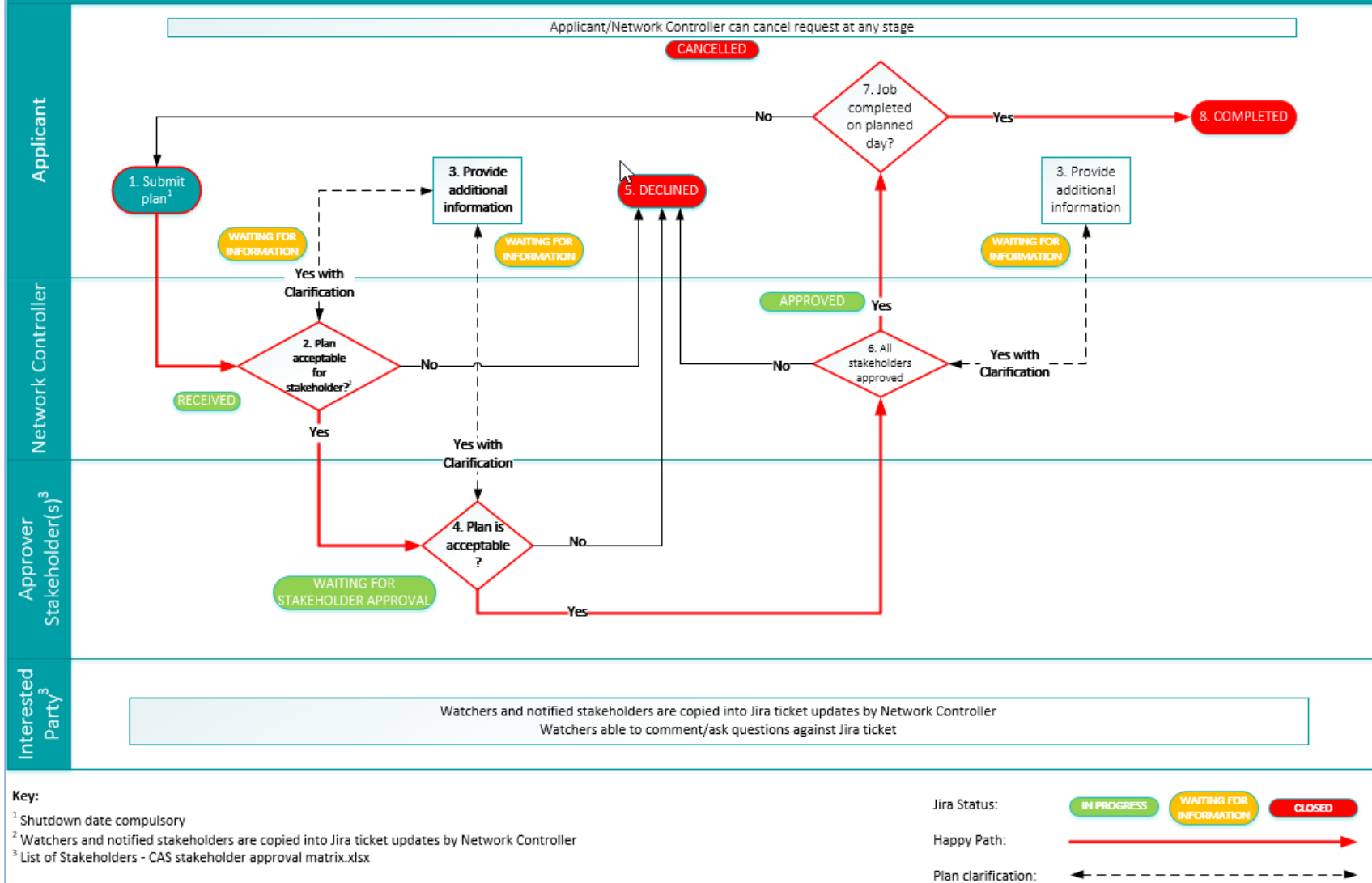
Shutdown requests are made by submitting a request through the WWL Web Site in the Contractors Page under "[WWL Shutdown Requests](#)".

The IT system used to process shutdown requests is called Jira , sometime referred as Atlassian which is the Jira system licence company. The process for submitting and approval of shutdown requests is shown in the diagram below.

Once the shutdown plan has been submitted it is forwarded to the relevant WWL stakeholders for their approval, Jira records, tracks and notifies the requestor and stakeholder of any new information added and approval status.

The workflow process from submitting a shutdown request, obtaining approvals through to completion of works is shown below.




1. Shutdowns and work on critical assets process (Simplified)







2.2 Process to Request a Water Network or Critical Asset Shutdown

Notes prior to plan submission

- Complex shutdowns or activities that call for WWL operator input
 - o A Pre-planning meeting may be necessary
- Shutdown and work action plans relating to WWL Capex project activities
 - o Checked and signed by the Consultant Project Manager before submitting in Jira for Operations and Network Control approvals.

Step		Who	Jira Status
1.	Submit Plan <ol style="list-style-type: none"> a. Shutdown date is compulsory. The applicant can resubmit the plan with a changed date. Network Controller can amend the date and the request will go back to the beginning of the process. b. New users to the Jira system are required to create an account for the first time. Video instruction setting up an account and submitting a shutdown request is available on our web site under “contractors” c. Submit a request, by filling in the Jira form and attaching the completed Shutdown/Action Plan and any supporting information such as letters to customers for a water shutdown. Shutdown templates are linked to Jira. Additional notes and updated plans can be uploaded into the system which will automatically notify applicable stakeholders. 	Applicant	
2.	Plan acceptable for stakeholder <ul style="list-style-type: none"> • Jira status changes to “Received” • Network Controller reviews the plan and forwards to the appropriate WWL stakeholders for their approval in Jira • At this stage Jira status changes to “Waiting for Stakeholder Approval” (Step 4) 	Network Controller	
3.	Provide additional information <ul style="list-style-type: none"> • The Network Controller may require more information from the Applicant • The Approver Stakeholders or Interested party can put a comment into the Jira request to ask for more information from the Applicant 	Network Controller	
4.	Plan is acceptable? <ul style="list-style-type: none"> • Once all Approval Stakeholders have approved the Jira status will change to “Approved” • The request may not proceed if more information is required. 	Approval Stakeholder(s)	

5.	<p>Declined</p> <ul style="list-style-type: none"> Request could be declined by Network Controller or Approval Stakeholder(s) Jira status changes to “Declined” 	Network Controller and Approval Stakeholder(s)	
6.	<p>Approved</p> <ul style="list-style-type: none"> Formal approval from the Network Controller. Jira status changes to “Approved” Note – this will happen automatically once all approvers have approved. The network Controller is considered one of the approvers. 	Network Controller	
7.	<p>Job completed on planned day</p> <ul style="list-style-type: none"> The requestor will receive an email the day following the shutdown date, with a Jira system link, to acknowledge completion of the works. This information is used for regulatory reporting purposes along with a means to provide feedback on any aspects of the shutdown or work that requires follow up. Attach the updated Shutdown Template plan to include any learnings if required or add in the comments field when you change the status of the request to completed. 	Applicant	
	Applicant and Network Controller can cancel request at any stage.	Applicant/ Network Controller	

2.2.1 Jira Portal view for Stakeholder Approvers and Requesters to view and track shutdown jobs in Jira

Status Types

- **Received** – Once applicant has submitted a Shutdown request in the portal
- **Waiting for Stakeholder Approval** – Network Controller adds Approvers at this stage
- **Waiting for Information** – Waiting on information from applicant
- **Approved** – Network controller has Approved
- **Completed** – Shutdown has happened as per plan
- **Declined** – Shutdown has been declined by Network Controller
- **Cancelled** – Shutdown has been cancelled

Request Type (Shutdown plan types)

- Water Supply Network Shutdown plan
- WW or SW Network Shutdown plan
- WTP Shutdown plan
- WWTP Shutdown plan
- Generic Shutdown plan

Request Number

Shutdown name

Request field details
(filled out by requestor in [shutdown portal](#))

Shutdown start and finish dates
If you need to update these please email the network controller directly and add a comment in Jira as shown below

Activity
• Comments
• Attachments – 5 Shutdown templates (Same as Request Types)

Profile
You can update your name profile here (see page 2 for more instructions)

Requests
You can bring up a list of your shutdowns by click here (see page 2 for more instructions)

Shared with
You can add the emails here for those you want to keep informed. They will receive an email each time the request is updated

Waiting for Stakeholders Approval
Shows who has approved the shutdown
Note – Status will not change until all stakeholder have approved

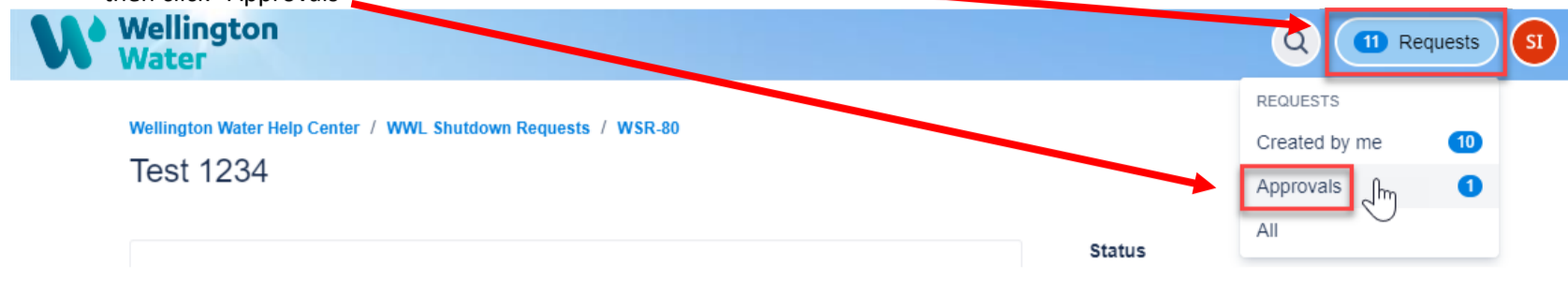
Add a comment

1. click here to add an additional comment
2. The following screen will show where you can add:
 - Text
 - A file
3. Click "Save"

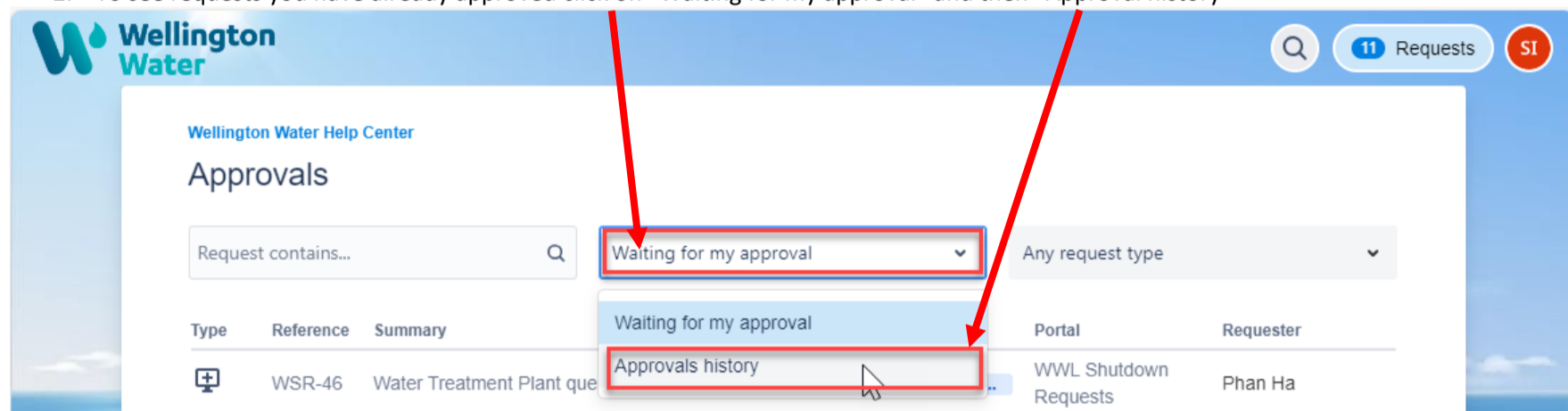
REQUEST SUMMARY VIEWS & PROFILE UPDATES

To view list of requests you have approved

1. From the portal page click on "Requests" then click "Approvals"

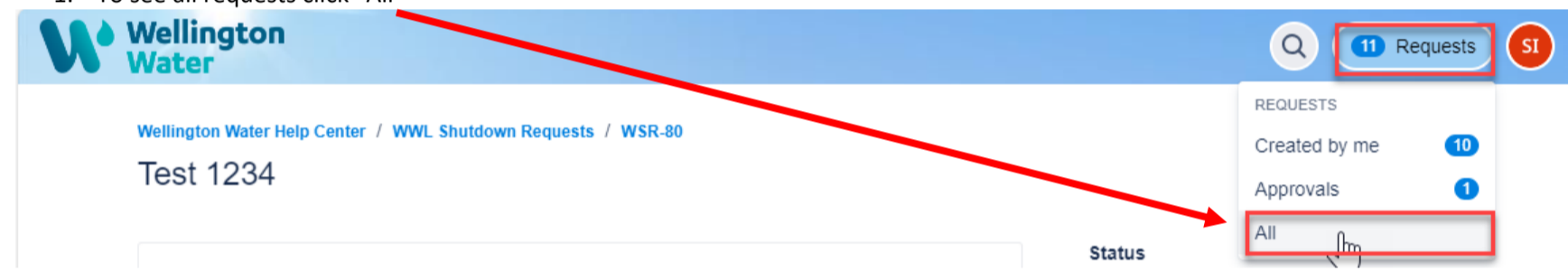


2. To see requests you have already approved click on "Waiting for my approval" and then "Approval history"



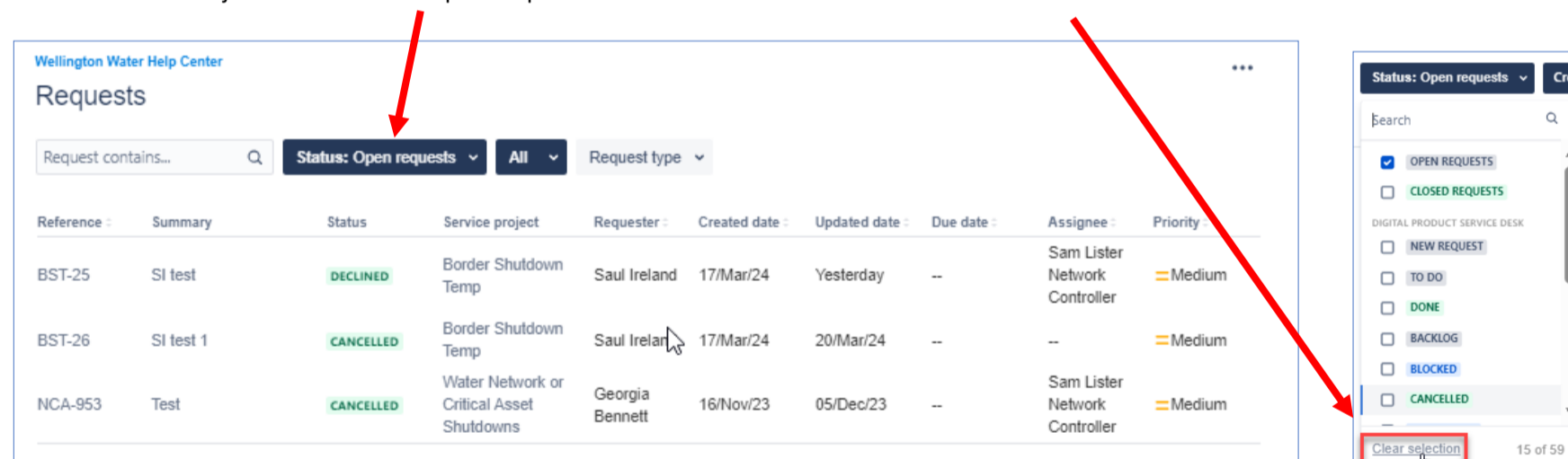
To view list of all your requests

1. To see all requests click "All"



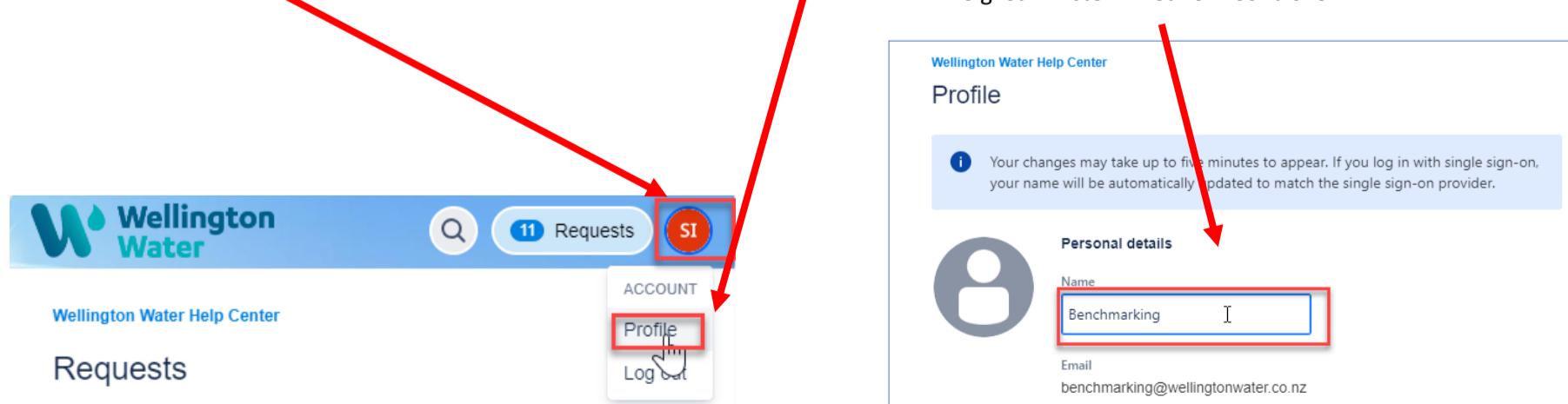
2. To show all jobs click "Status: Open Requests"

Then click "clear selection"



To change the name on your profile to include your job name

1. click on "your initials"
2. and then click "Profile"
3. Update your name here (To include your role name in brackets) e.g. Sam Lister – Network Controller



2.3 Types of Shutdown and Shutdown Plan Templates

Shutdown work types and shutdown plan templates are categorised into four primary types to align with operational teams. Shutdown types are further broken down to asset type as detailed in [Table 2.3.1](#) below. The applicable shutdown type is selected when submitting a plan for approval in the Jira system which will provide the requestor with a link to the applicable shutdown plan template.

2.3.1 Shutdown Templates

Shutdown Template	Shutdown Type
Water Supply Network Shutdown	Water Network Reticulation Water Network Bulk Supply Water Pump Station Water Reservoir Water Pressure Control Valve
Water Treatment Plant	Water Treatment Plants
Wastewater and stormwater Network	Wastewater Network Wastewater Pump Station Stormwater Networks Stormwater Pump Station
Wastewater Treatment Plant	Wastewater Treatment Plants
Generic Shutdown Plan	Covers any other shutdown type not listed

The templates have been developed to capture the key work planning information for stakeholders to assess for approval. The completed plan should also serve to provide clear user guidance and instruction for personal carrying out the work activities. The templates provide the minimum content, the level of detail should be appropriate for the level of risk and job complexity.

Where multiple parties are involved, the plan should also clearly define roles, responsibilities, and lines of communication.

Work execution plans, H&S or Risk management plans or alike that have been produced on a different template specifically for use by staff performing the works may be attached to avoid duplication of detail.

2.4 WWL Key Stakeholders

Shutdown Plans and Actions Plans submitted in Jira are forwarded to the applicable Wellington Water operational and technical stakeholders for approval to proceed. The stakeholders involved will depend upon the nature of the works being undertaken and the assets being worked upon. **Table 2.4.1** below outlines the stakeholders that are generally called upon for input and approval of shutdown plans. Additional stakeholders from within Wellington Water can be called upon to review and approve plans as and when required.

High risk activities, complex works and jobs that call for WWL operational resource planning may require pre-planning meetings prior to submitting a plan for approval to ensure the plan roles, responsibilities, timing, contingencies etc, are clearly defined and agreed.

2.4.1 Stakeholders

WWL Key Stakeholders	Stakeholder Interests
Network Operations and Engineering Lead	All Network shutdowns and Level 2 treatment plant shutdowns
Team Leader Land Development	Land development related works such as new connections
Team Leader Utilities	Plans calling for Utility Operator input such as pump station, pressure control valves and reservoir operations
Team Leader Automation	All shutdown types where controls and automation input are involved such as Scada reconfiguration and upgrades
Team Leader Bulk Water	Bulk water supply shutdowns
Team Leader Treatment	Treatment plant shutdowns
Production Controller	Bulk water and treatment plant shutdowns
Customer Information and Resolutions Lead	Input required from Customer Hub
Communications and Engagement advisor	External communication plan approval
Project lead	Capital works project activities
Chief Advisor	High risk and high-profile activities or SME input required

2.5 Wellington Water Capex Projects

2.5.1 Contractor and Project Engineer responsibilities

Shutdown plans and action plans associated with Wellington Water project activities that are submitted by the Contractor for approval must be checked and approved by the Project Engineer prior to submitting in Jira for Wellington Water stakeholder and Network Controller approvals.

The Project Engineers approval provides verification that applicable construction gateway stages have been completed such as pressure testing and pipework sterilisation for new mains prior to connection to the network. WWL Panel Consultant and Contractors project gateway procedures are outlined in [WWL Guidance for Capex Project Delivery](#).

Where a shutdown or action plan is submitted by the project manager, the Contractor shall sign the plan to confirm approval that all processes, methodology, resources, timeline, risks, and contingencies are covered and that the plan meets the requirements for staff undertaking the works.

The Project Engineers or Engineer's Representative shall be present on site during the shutdown to maintain supervision over all aspects of the shutdown and pipework connection.

For complex shutdowns involving multiple stakeholders, planning and pre-shutdown go/no go meetings may be necessary. This may be called for by the Network Controller. The Project Engineer shall ensure all necessary planning and stakeholder coordination meetings are carried out and that the planning outcomes are documented. The shutdown plan shall detail stakeholder roles and responsibilities and specify the person in charge of the shutdown that will be directing communications.

3. Water Shutdowns

3.1 Water Supply Network

Water supply shutdowns fall into three categories depending on the level of risk. Level 1 and Level 2 shutdowns relate to the local reticulation network, Bulk Water shutdowns are specific works undertaken on the Greater Wellington Bulk Water network. Risk level indicators applicable to L1 and L2 are defined in the table below.

3.2 Local Reticulation Shutdowns

The following matrix shall be used to determine the shutdown level:

Risk Factor	Level 1	Level 2
Carriageways	Shutdowns on local roads or outside of the carriageway.	Shutdowns affecting any of the following: <ul style="list-style-type: none"> - Level 2 roads (AADT >10,000vpd) - Level 3 roads (AADT >10,000vpd and speed >75 km/h)
3Waters assets	Shutdowns on local reticulation with pipes <DN200.	Shutdowns affecting any of the following: <ul style="list-style-type: none"> - Pipes DN300 and larger - Pumping stations - Reservoirs - PCVs
Shutdown Duration	Shutdowns expected to take less than four (4) hours.	Shutdowns expected to take longer than four (4) hours ¹ .
Critical Customers	Interruption of supply affecting only domestic customers or business who confirm the interruption will not significantly impact their business.	Interruption of supply affecting at least one of the following: <ul style="list-style-type: none"> - Hospital - School or early childhood education facility - Critical customer (e.g., Dialysis Patient) - Businesses dependent on water (e.g., bakery, restaurant, bars, hairdressers, coffee shops etc.)
Water Supply Affected Customer Volume	Shutdowns interrupting supply to fewer than one hundred (<100) domestic customers.	Shutdowns interrupting supply to one hundred or more (≥100) domestic customers.
Water Supply – Alternate/Temporary Supply	n/a	Shutdowns requiring alternate supplies (PRVs, boundary valves, hydrant to hydrant feeds, etc.). Shutdowns requiring temporary supplies (water tanker, feed from fire hydrant, etc.)
Water Supply Resilience	n/a	Shutdowns resulting in an area greater than one thousand (>1,000) domestic customers or any non-domestic customers being supplied by a single feed resulting in reduced resilience.
Fire Prevention	n/a	Shutdowns affecting fire protection systems.

3.3 Bulk Water Network Shutdowns

All bulk water shutdowns are carried out by the COG bulk water team.

Bulk supply network includes the Greater Wellington Regional Council owned network that supplies water from the Metro Water Treatment Plants to the GW and local Council primary reservoirs.

The Water Network Shutdown plan template shall be used for any planned bulk water supply shutdowns. The plan shall address any affect to reservoir storage and any WTP operator management requirements such as pump station and WTP operational inputs.

Bulk water shutdowns require NMG WTP Operator input for flow management, pump station and treatment plant operations and system monitoring during the shutdown. Timing for bulk water shutdowns shall be planned by e-mailing the NMG Planner/Scheduler or attending the weekly NMG Planning/Scheduling meeting.

3.4 Completing a water supply network shutdown plan template

The Water supply shutdown template shall be used for all water network types, this includes reservoirs, pump stations, PCVs and bulk water supply shutdowns.

The shutdown template provides sections for the attachment of applicable water network plans, GIS plans and any supporting as-built, construction plans or PID drawings. As a minimum, all shutdown plans shall include:

1. For reticulation mains, the relevant section of WWL's water network plan shall be attached and marked up showing the valves and hydrants that will be operated. Network base plans for this purpose can be found on WWL Web Page [Knowledgebase](#). The network plans provide an easy to interpret schematic view showing supply zones, shut valves, PCVs, pipework size and material type.
2. For bulk water shutdowns, any relevant GIS and PID drawings shall be attached
3. The relevant section of Councils GIS plan shall be marked up showing the valves and hydrants to be operated, and identifying properties affected. GIS plans are accessible on Council's web sites.

The template includes sections for operational, environmental, and critical H&S risks and contingencies, the level of detail should reflect the risk and complexity of the planned work and provide clear instructions for the personal undertaking the work.

3.5 Shutdown times

Where possible, shutdown shall be planned such that customers are not without service for longer than 4 hours

Planned interruptions to normal water supply services shall, where possible, not be carried out during peak demand periods. The peak periods are:

- (i) 6am to 9am on any day
- (ii) 5pm to 9pm on any day and
- (iii) 7am to 11am Saturday, Sunday, and public holidays.

The Water Services Act 2021 Part 2 Section 25(4) requires any planned restriction or interruption of the provision of drinking water by a network supplier or a bulk supplier that is expected to exceed 8 hours to be notified to Taumata Arawai.

3.6 Notifications

Water supply interruptions shall be notified to the affected residents and business, as follows:

- (a) Domestic Customers – Approved shutdown letters delivered at least 48 hours prior to shutdown.
- (b) Business customers - Approved shutdown letters delivered 5 working days prior to shutdown
- (c) Critical Customers shall be notified verbally as well as in writing. A suitable time for the shutdown shall be negotiated with businesses, or an alternative supply organised.

Wellington Water's Customer Hub shall be notified of all shutdowns 24 hours prior to any trial or actual shutdown at customernotifications@wellingtonwater.co.nz

The Customer Hub will then advise the Client Council Call Centre and the New Zealand Fire Services.

3.7 Trial Shutdowns

Trial shutdowns may be required for a number of reasons such as

- (a) Check isolation valves are operating correctly.
- (b) Confirm the extent of the shutdown area.
- (c) Check there are no pressure or supply issues outside of the planned shutdown area
- (d) Trailing an alternative or temporary supply
- (e) Confirm which customers are connected to the main being isolated
- (f) Check there are no valves off in the network

Risk factors to consider when deciding if a trial shutdown is necessary relate to potential customer and operational risks if the shutdown does not go as planned.

Factors that would warrant a trial shutdown may include

- (a) Principal supply mains >250mm
- (b) Shutdowns requiring multiple valves, increased likelihood of valves passing
- (c) Significant cost or customer impact if that shutdown is abandoned and needs to be rescheduled e.g., works in CBD, Main Roads, high re-establishment cost.
- (d) Risk that the shutdown could affect a wider area

Trial shutdowns should be considered for all for level 2 shutdowns.

Trial shutdowns are treated the same as any other shutdown as far as notifications and the approval process requires a shutdown plan to be submitted in Jira for stakeholder approval.

3.8 Incident Escalations

includes incidents unforeseen events such as supply issues outside of the shutdown area, pipe failure, unable to complete the shutdown on time, or any unforeseen occurrence that may have adverse operational or customer impact.

The Person responsible for the shutdown shall notify the Wellington Water Customer Hub and Wellington Water Planning Engineer immediately should any incident arise. Contact details are noted in the shutdown plan template title block.

For capex project activities, the project Engineer shall ensure incident escalation communications to Wellington Water Network Controller, COG Planning Engineer, WWL Customer Hub and WWL Project management stakeholders are carried out.

The Customer Hub and COG Planning Engineer will manage any operational response and stakeholder communications as appropriate for level of response necessary.

The Network Controller will initiate an Incident Management Team if the level of response requires.

3.9 WWL Approved Contractors

Only Wellington Water approved contractors a permitted to perform water network shutdowns and undertake maintenance activities or connections to the public water supply network.

Approved contractors include Wellington Water Capex panel contractors, Wellington Water Customer *Operations approved contractors* and WWL [Land Development approved contractors](#) authorised to install new development connections.

All Personnel carrying out shutdowns of the water supply must be under the supervision of a water qualified person on site at all times (Level 4 Water Reticulation).

3.10 Reactive Shutdowns

Emergency and unplanned shutdowns may be required in response to reactive repairs, burst mains, to significant and major leaks and other situations which require an immediate isolation of the network to prevent further damage or risk to public health.

Only Wellington Water Customer Operations Group (COG) shall carry out reactive shutdowns. Reactive shutdown shall follow the Wellington Water COG Standard Operating Procedures (SOP).

Affected customers shall be personally notified where practicable prior to the water being shut-off. Where it is not practical to notify customers individually, the use of a clear and concise message broadcast over a vehicle mounted public address system may be used. This message shall be broadcast along the full length of all affected streets.

Alternative supplies shall be arranged for critical and key account users where practicable.

Where customers are not present, a calling card shall be left with the customers adjacent to the work being carried out informing them of the interruption.

3.11 Water Pump Stations, Reservoirs and PCV Shutdowns

The Water Network shutdown template is applicable for Reservoir, pump station and PCV shutdowns

In addition to the table in section 3.2, the following matrix shall be used to determine the shutdown level.

Risk Factor	Level 1	Level 2
Operational risk	Works are able to be carried out with the PS, Reservoir or PCV remaining in service	Shutdown of the Reservoir, Pump Station or PCV is required. Shutdown will affect service to customers Reduced resilience risk such as reduction in network supply feed capacity. Shutdowns requiring alternate supplies (PRVs, boundary valves, hydrant to hydrant feeds, etc.). Shutdowns requiring temporary supplies (water tanker, feed from fire hydrant, etc.)
Operational input	WWL Operator input required	Shutdown calls for risk specific documentation such as lock out tag out, hot works, confined space entry.

3.11.1 Level 1 Action Plan

A Level 1 Action Plan will not require the reservoir to be taken offline. For activities such as internal drone cleaning and in service reservoir cleaning where there is a risk of the reservoir having to be shut, the action plan shall include a contingency plan for this possibility.

3.11.2 Level 2 Shutdown Plan

A Level 2 shutdown plan that requires the reservoir or pump station to be taken out if service will require COG Utility Planning Engineer consultation prior to submitting in Jira. The level of detail will vary depending upon the level of risk and complexity. For task’s involving critical risks such as confined space\working at height\heavy machinery\divers hot works, a Risk Control Plan must be submitted for review by the COG Utility Engineer.

3.12 Water Treatment Plant Shutdowns

The planned date and time is a mandatory field to complete in the Jira system when making a shutdown request. For Water Treatment Plant shutdowns, prior to submitting your plan for approval, the NMG Planner\Scheduler shall be informed of the proposed task via email and a request made for a suitable date and time to undertake the activity. The date and time A planning meeting is held weekly for coordination and scheduling for Water Treatment Plant shutdowns and action plans. A request to change the date and time can be made in the Jira system after the request has been submitted if the timing did need to be changed for any reason.

The Shutdown Plan shall be submitted through Jira for review and approval by NMG’s WTP Team Leader, Production Controller & Network Controller. For task’s involving critical risks such as confined space\working at height\heavy machinery\asbestos removal etc, a Risk Control Plan must also be submitted for review and approval by the NMG Health and Safety Advisor.

The following matrix shall be used to determine the Action Plan level and notification period required:

Action Plan Level	WTP Shutdown Required	WTP Process Interruption	Operator Resource Required?	Notification Period	Supporting Document
1	N	Y	Y	10 working days	Basic Action Plan, Risk Control Plan, Maximo WO
2	Y	Y	Y	20 working days	Detailed Action Plan, Risk Control Plan, Maximo WO

3.12.1 Level 1 Shutdown Plan

A Level 1 Action Plan will not require a WTP shutdown or impact on plant production, however, the work could interfere with normal WTP process and require Operator Assistance. Operator availability will be approved by the NMG Planning team/WTP Team leader. The shutdown plan will need to be submitted in Jira no later than 10 working days prior to work commencing.

3.12.2 Level 2 Shutdown Plan

A Level 2 Shutdown Plan will be required for a WTP shutdown or will interfere with normal WTP Operations and will require Operator assistance. Operator availability will be approved by the WTP Team Leader. The shutdown plan will need to be submitted in Jira no later than 20 working days prior to work commencing.

3.12.3 Maximo Work Order

At the time of completing the Shutdown Plan template, a Maximo work order must be created in order to schedule and track the task. It is the responsibility of the requester to raise a work order in Maximo or complete the WO creation request template (included in shutdown template) and send to the NMG Planner\scheduler for creation.

4 Wastewater and Stormwater Shutdowns

Network control approval is required for activities that carry a high risk of customer, environmental or operational risk. This includes activities such as shut down of wastewater riser mains, work and inspection activities associated with stormwater pressure mains, working on or in close proximity to main wastewater interceptor pipelines and tunnels.

The action plan template provides a high-level content guide however action plans need to be customised and expanded to address the job specific risk mitigations and contingencies. In some cases, stakeholder planning meetings may be called upon to capture and document risk and work methodologies.

4.1 Stormwater/Wastewater Network and Pump Station Shutdowns

Wastewater network shutdown plan approval is required for high-risk activities and works that require WWL operational resource input. Examples include wastewater riser main shutdowns, works effecting stormwater pressure mains, sludge pipelines and construction work in close proximity to interceptor pipelines and tunnels.

The following matrix shall be used to determine the shutdown level:

Risk Factor	Level 1	Level 2
Operational risk	<p>Shutdowns on local reticulation with minimal operational risk or customer impact</p> <p>Low risk activities that call for Wellington Water planning or operator input</p>	<p>Shutdowns affecting any of the following:</p> <ul style="list-style-type: none"> - Pressure mains - Pump Stations <p>Undertaking work in close proximity to Interceptor pipelines and tunnels</p> <p>Alteration to network flow may impact on WWPS or WWTP operations</p>
Wastewater Resilience	n/a	Undertaking work in close proximity to Interceptor pipelines and tunnels
Environmental Risk	Shutdown has a low environmental	Shutdown has a high environmental impact

	impact consequence	consequence
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Stormwater and Wastewater Pump stations shutdowns need to include system flow and wet well storage data to support sizing of any temporary over pumping of wastewater tanker resource requirements. A trial shutdown trial may be required to test storage capacity or temporary flow management where there is a potential risk of overflow to the environment.

4.2 Wastewater Treatment Plant Shutdowns

All Wellington metro Wastewater treatment plants are maintained and operated by Veolia Ltd. The shutdown request system is available for use by Veolia to use for Wellington Water stakeholder approval for level 2 shutdowns as well as for use by other Wellington Water Contractors and WWL Project Managers to apply for Wellington Water and Veolia stakeholder approvals to carry out Level 1 and Level 2 shutdowns.

Wellington Water’s Network Management Group (NMG) manage the South Wairarapa Wastewater treatment plants. As with the Metro WWTPs, the Wellington Water shutdown request Jira system shall be used for obtaining approval for works that impact WWTP operations or require operator input for Operational and Network Control approvals.

The following matrix shall be used to determine the shutdown level:

4.2.1 Risk Shutdown Level

Risk Factor	Level 1	Level 2
Operational risk	Shutdowns of equipment that require operator input but do not impact on treatment plant process with minimal environmental risk or customer impact	Shutdowns that impact or have potential risk to affect treatment plant operations
Environmental Risk	No environmental impact risk	Possible environmental consequence Risk of consent compliance breach

5 Related Legislation and Documents

Water Services Act 2021

Safety at work act 2015

WWL Regional Specifications

WWL Regional Standards

Water NZ Good Practice Guide - Hygiene Practices to Prevent Water Supply Contamination

Wellington Water, Water Supply Shutdown Templates:

- o [Water Supply Shutdown Plan Template](#) (Q-Pulse ref: ONPT_0004)
- o [Water Treatment Plant Shutdown Plan Template](#) (Q-Pulse ref: ONPT_0005)
- o [Wastewater or Stormwater Shutdown Plan Template](#) (Q-Pulse ref: ONPT_0006)
- o [Generic Shutdown Plan Template](#) (Q-Pulse ref: ONPT_0007)
- o [Wastewater Treatment Plant Shutdown Plan Template](#) (Q-Pulse ref: ONPT_0008)

Wellington Water, Water Supply Letter Templates:

- o [Shutdown Letter Wellington City Council](#) (Q-Pulse ref: COMT_0002)
- o [Shutdown Letter Hutt City Council](#) (Q-Pulse ref: COMT_0003)
- o [Shutdown Letter Porirua City Council](#) (Q-Pulse ref: COMT_0004)
- o [Shutdown Letter Upper Hutt City Council](#) (Q-Pulse ref: COMT_0005)
- o [Shutdown Letter South Wairarapa District Council](#) (Q-Pulse ref: COMT_0006)