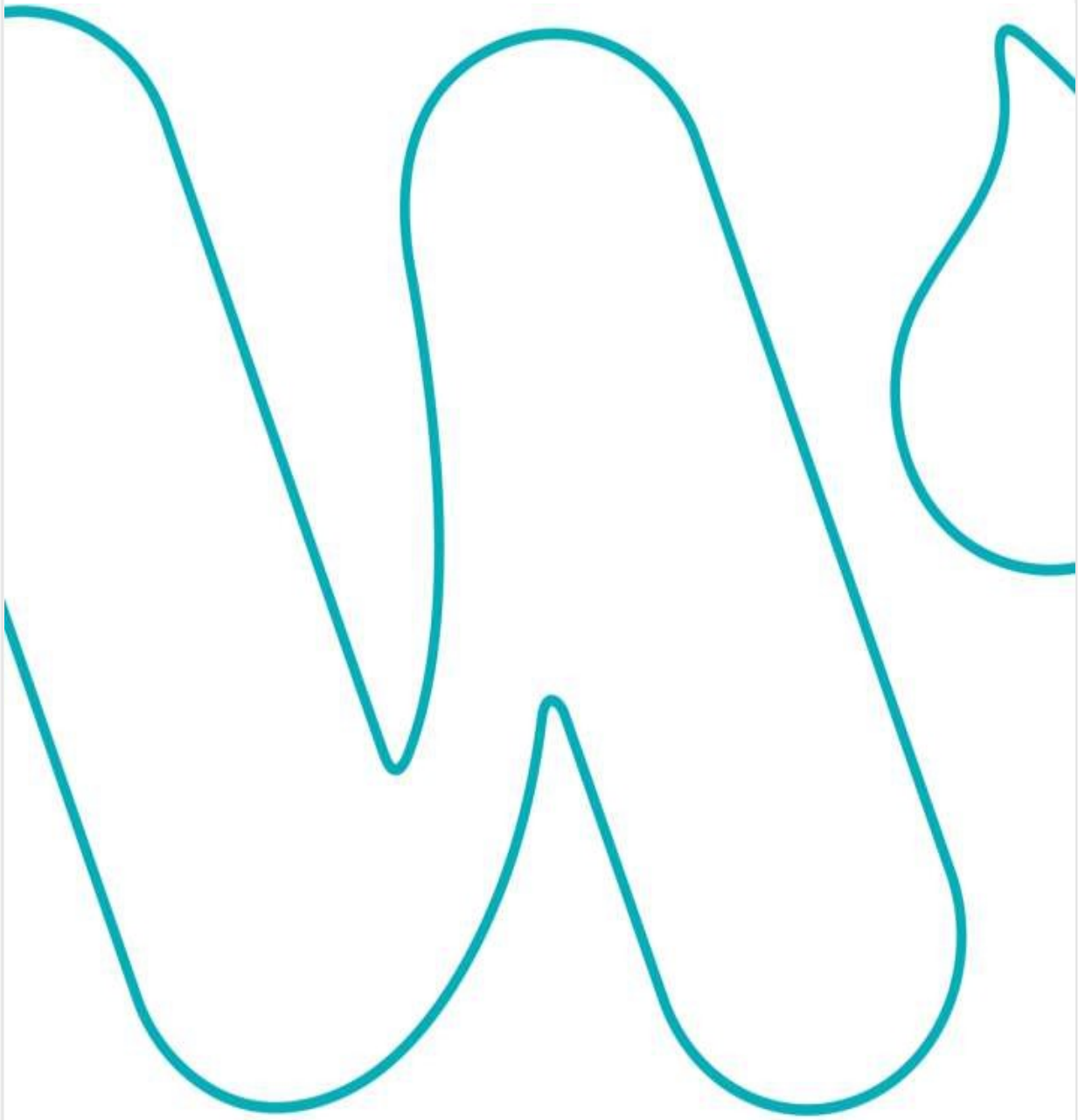
Wellington Water

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)
31/5/2024	1.0	Published in QPulse
23/7/2024	1.1	Draft Revision (working Draft)
6/8/2025	1.2	Enhancements and links added to WTP shutdown section 3.12. Miscellaneous updates including WWL Group, Team and position name changes.

Document information

Process Review Team			
WWL Group	**Role**	**Name**	**Date**
NDD	Senior Engineer, Design Design Lead	Kate Wynn Jonathan Eweg	Feb - May 2024 Feb - May 2024
COG	Customer Planning Manager	Gerry O'Neil	Feb - May 2024
NS&P	Land Development	Kevin Brown	Feb - May 2024
NMG	Senior Wastewater Operations and Assets Advisor	Joemar Cacnio	Feb - May 2024
NMG	Production Controller	Andrew McMaster	Feb - May 2024
TCS	Senior Production Controller	Mark O'Sullivan	August 2025
TCS	Production Controller	Jennifer Cordero	August 2025

Plan Approved by

WWL Group	Role	Name	Signature	Date
NMG	Network Controller	Sam Lister		August 2025

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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 Network Operations Group (NOG), WWL Network Maintenance Team (NMT),WWL Treatment and Control Systems Group (NMG), WWL Land Development. WWL Capital Delivery (CD), WWL, Consults 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
Approved Contractor	Contractor approved by Wellington Water for installing new water connections and published on WWL Web Page
WWL	Wellington Water Limited
TCS	WWL Treatment and Control Systems Group
NOG	WWL Network Operations Group
NMT	WWL Network Maintenance Team
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
We provide safe and healthy drinking water	We manage the use of resources in a sustainable way	We minimise the impact of flooding on people's lives and proactively plan for the impacts of climate change
We operate and manage assets that are safe for our suppliers, people and customers	We will enhance the health of our waterways and the ocean	We provide three water networks that are resilient to shocks and stresses
We provide an appropriate region-wide fire-fighting water supply to maintain public safety	We influence people's behaviour so they are respectful of the environment	We plan to meet future growth and manage demand
We minimise public health risks associated with wastewater and stormwater	We ensure the impact of water services is for the good of the natural and built environment	We provide reliable services to customers

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.

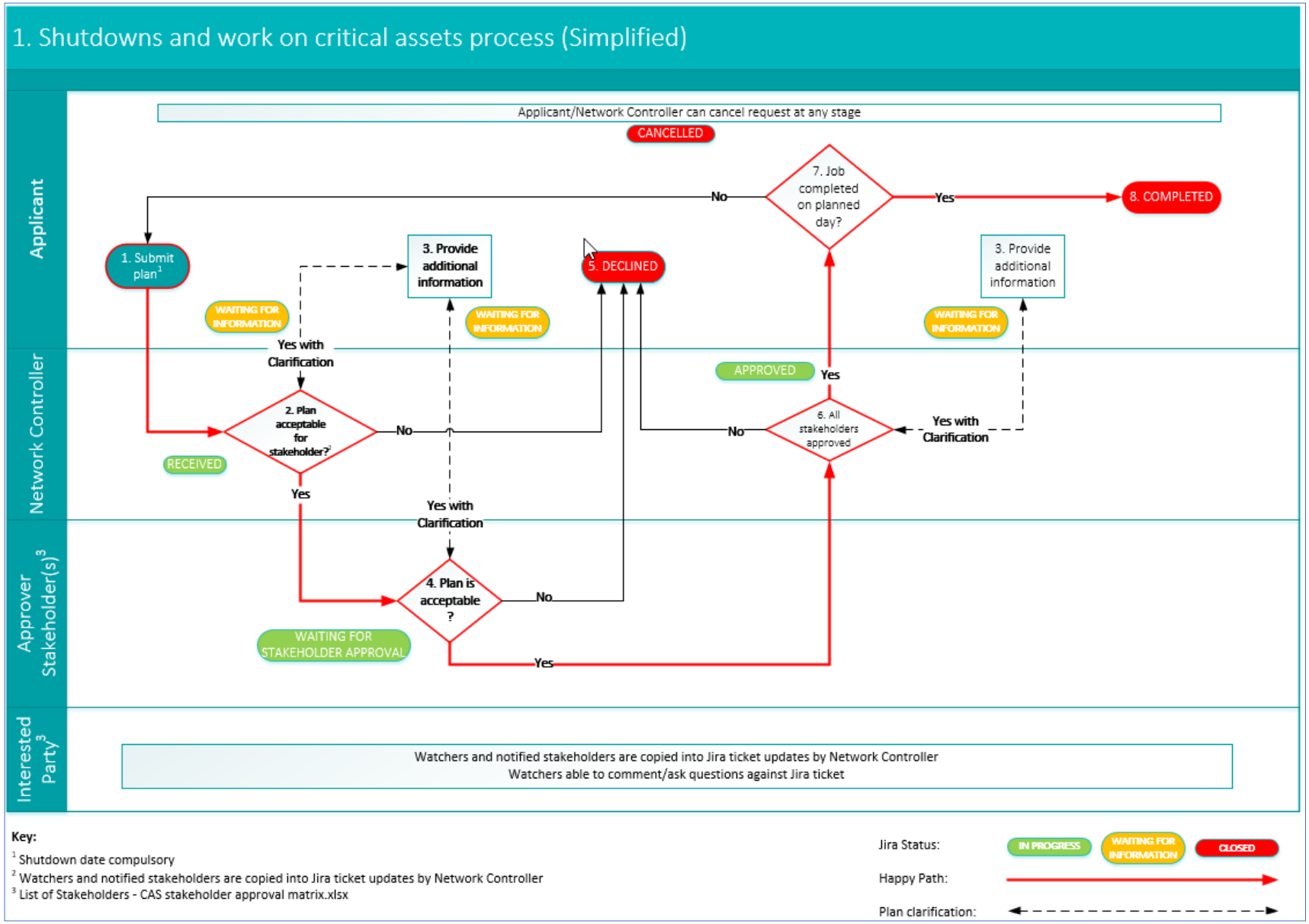
Shutdown requests are made by submitting a request through the WWL Web Site in the Contractors Page under "WWL Shutdown Requests".

The IT system used to process shutdown requests is called Jira , sometime referred as Atlassian which is the Jira system licence company. Once the shutdown plan has been submitted in Jira, it is forwarded to the relevant WWL stakeholders for their approval, Jira records, tracks and notifies the requestor and stakeholders of any new information added and approval status.

The time required to process a shutdown request will depend upon factors such as shutdown complexity and risk, WWL operator resource input and planning, stakeholder planning prior to submitting the plan, time required to provide additional supporting information that may be called upon.

Water Treatment Plant shutdown plans shall be submitted in Jira for approval no later than 10 days in advance for level 1 shutdowns and 20 days in advance for level 2 shutdowns (see section 3.12.6)
For all other shutdowns requests, the minimum time required to process a shutdown request in Jira, subject to all necessary supporting information being provided is 5 working days for Level 1 shutdowns and 10 working days for level 2 shutdowns.

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)
Applicant
Network Controller
Approver Stakeholder(s)[3]
Interested Party[3]
Applicant/Network Controller can cancel request at any stage
CANCELLED
1. Submit plan[1]
RECEIVED
2. Plan acceptable for stakeholder?[2]
No
Yes
WAITING FOR INFORMATION
Yes with Clarification
3. Provide additional information
WAITING FOR INFORMATION
5. DECLINED
4. Plan is acceptable ?
No
Yes
WAITING FOR STAKEHOLDER APPROVAL
Yes with Clarification
6. All stakeholders approved
No
APPROVED
Yes
Yes with Clarification
3. Provide additional information
WAITING FOR INFORMATION
7. Job completed on planned day?
No
Yes
8. COMPLETED
Watchers and notified stakeholders are copied into Jira ticket updates by Network Controller
Watchers able to comment/ask questions against Jira ticket
Key:
[1] Shutdown date compulsory
[2] Watchers and notified stakeholders are copied into Jira ticket updates by Network Controller
[3] List of Stakeholders - CAS stakeholder approval matrix.xlsx
Jira Status:
IN PROGRESS
WAITING FOR INFORMATION
CLOSED
Happy Path:
Plan clarification:

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
  - A Pre-planning meeting may be necessary
- Shutdown and work action plans relating to WWL Capex project activities
  - 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** 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** • 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	RECEIVED
3.	**Provide additional information** • 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	WAITING FOR INFORMATION
4.	**Plan is acceptable?** • 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)	WAITING FOR STAKEHOLDER APPROVAL

5.	**Declined** • Request could be declined by Network Controller or Approval Stakeholder(s) • Jira status changes to "Declined"	Network Controller and Approval Stakeholder(s)	5. DECLINED
6.	**Approved** • 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	APPROVED
7.	**Job completed on planned day** • 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	8. COMPLETED
	Applicant and Network Controller can cancel request at any stage.	Applicant/ Network Controller	CANCELLED

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

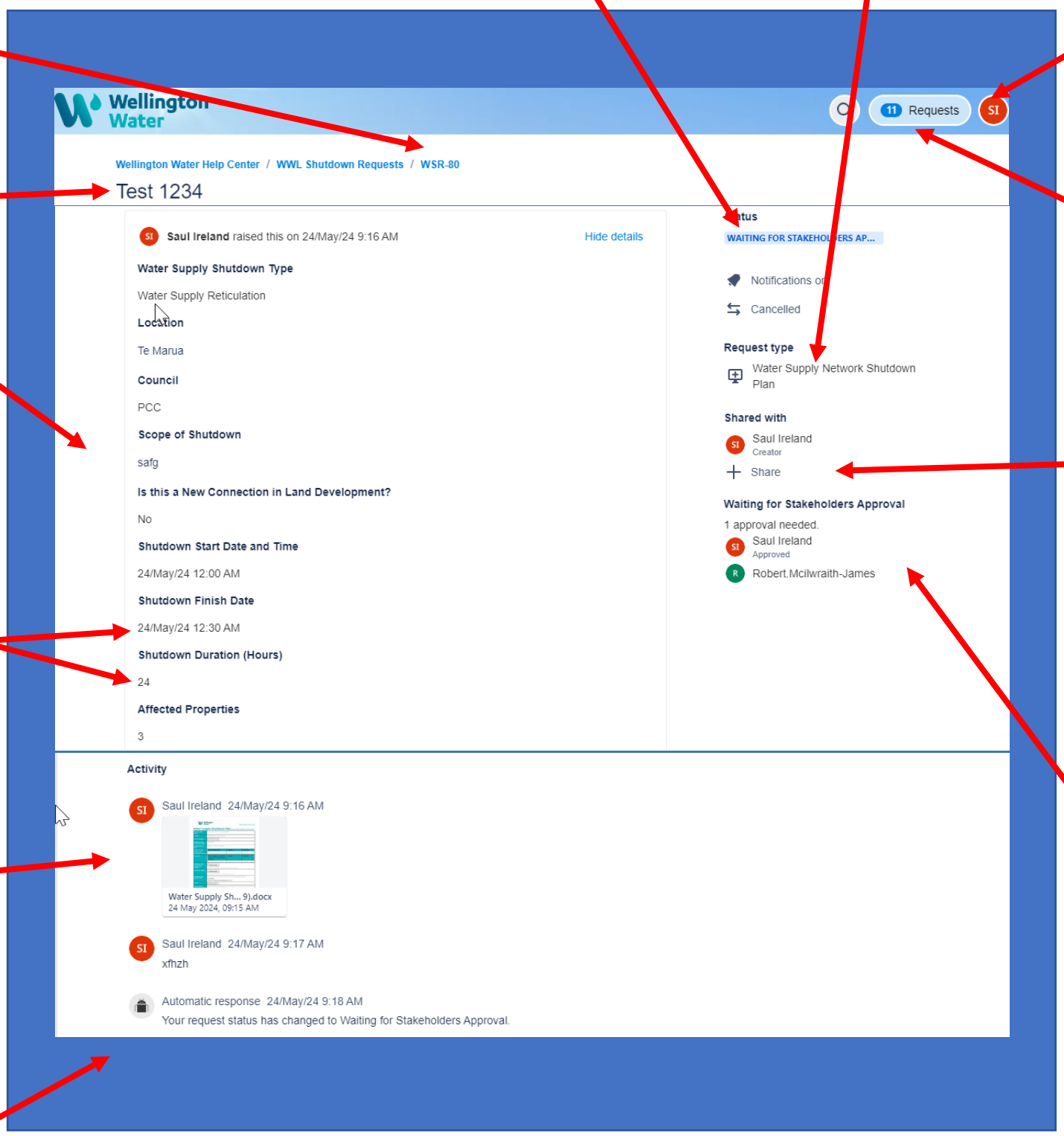
(filled out by requestor in shutdown portal

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

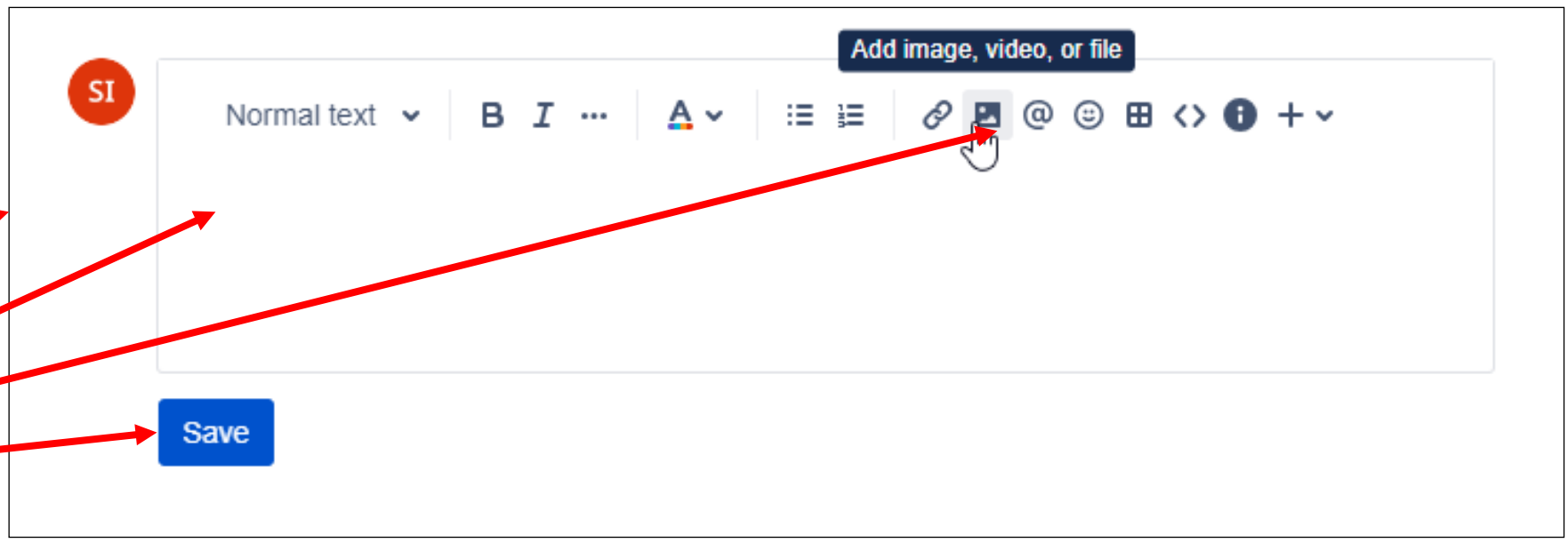
Add a comment

1.click here to add an additional comment

2. The following screen will show where you can add:

- Text
- A file

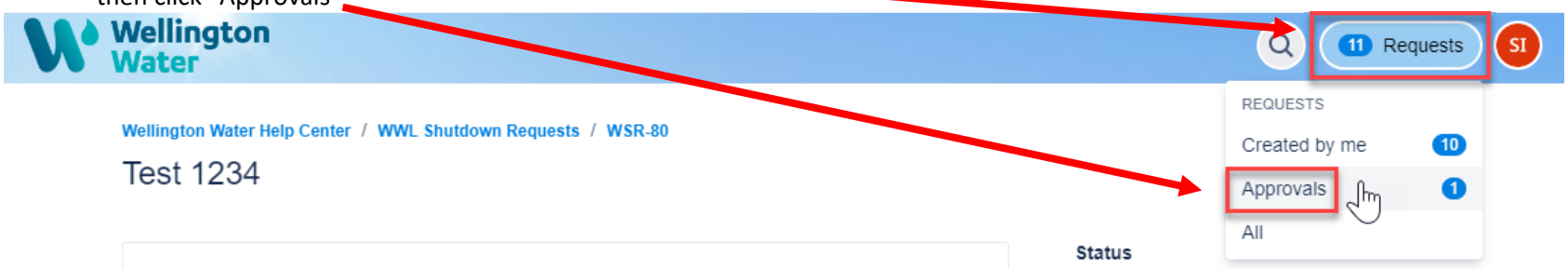
3. Click "Save"



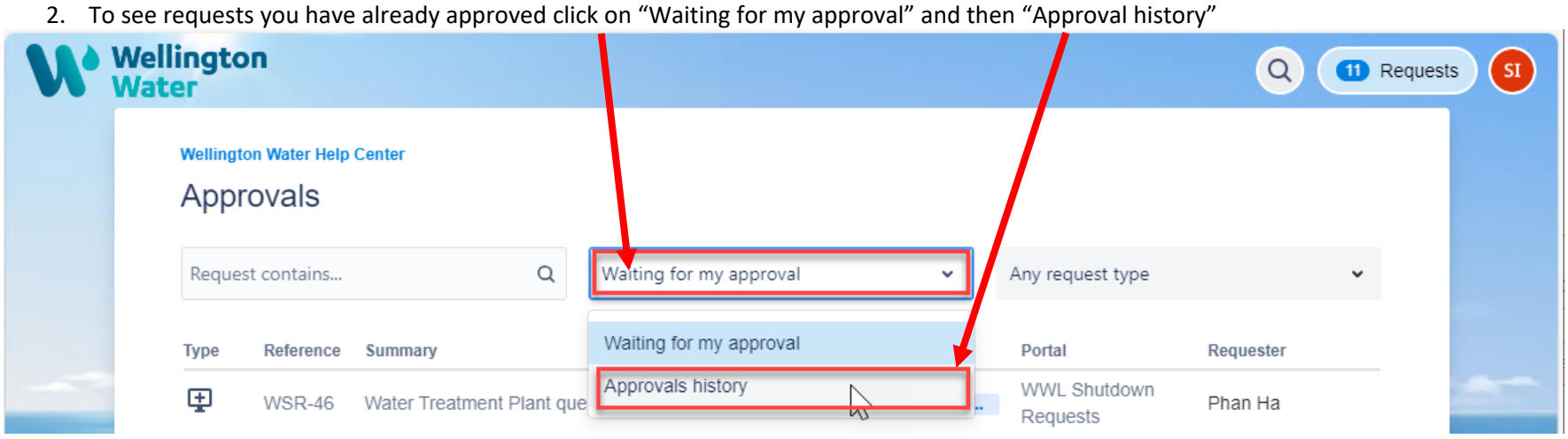
REQUEST SUMMARY VIEWS & PROFILE UPDATES

To view list of requests you have approved

1. From the portal page click on “Requests” then click “Approvals”

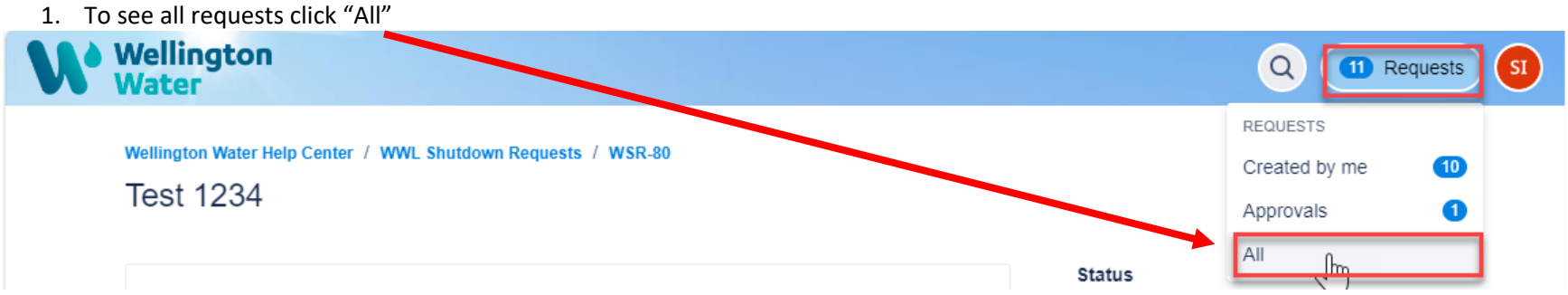


2. To see requests you have already approved click on “Waiting for my approval” and then “Approval history”

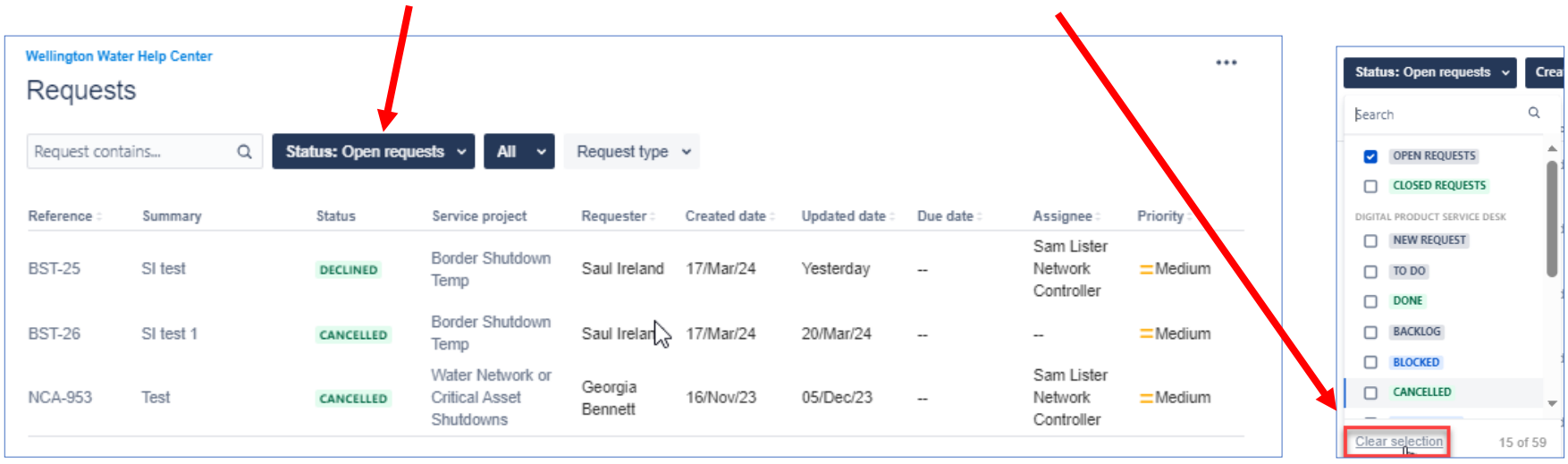


To view list of all your requests

1. To see all requests click “All”

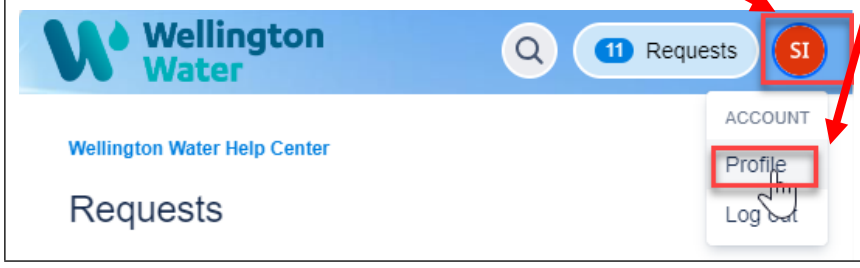


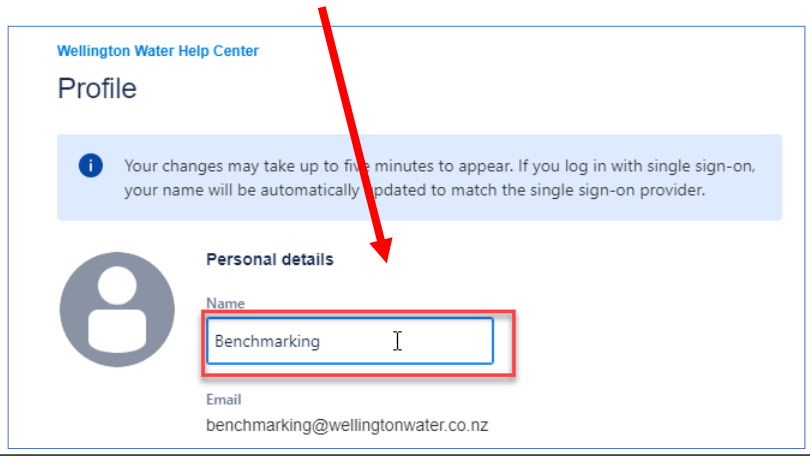
2. To show all jobs click ““Status: Open Requests” Then click “clear selection”



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 instructions 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, Risk management plans or alike that have been produced on a different template specifically for use by staff performing the works may be attached with the request application 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 notification and 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 both within and outside of 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
Head of Health and Safety	High H&S Risk activity or specialist H&S input called for.

2.5 Wellington Water Capital Delivery 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 responsible Project Engineer. This can be done prior to submitting the request Jira for Wellington Water stakeholder and Network Controller approvals. The shutdown plan template includes a cover page for Project Engineers approval signature to confirm Engineer checking and approval has been completed. Alternatively, Project Engineers that have an activated Jira account can be included as a Stakeholder Approver within the Jira system to confirm checking/approval has been completed. Selected Jira stakeholders receive and e-mail with a link to view, add comments, and approve shutdown plans if called upon.

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 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: - 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: - 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: - 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 NOG 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 GWRC and local Council primary reservoirs.

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

Bulk water shutdowns require TCS 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 TCS 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. Links to WWL Network Plans for this purpose can be found on WWL Web Page and are also attached in section 5 of this document. 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 and All water networks map can be accessed on WWL's web page

The shutdown plan 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, shutdowns 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.

Critical customers include dialysis patients, hospitals, clinics, schools, educational facilities, and non-residential customers where water is critical to the business (hairdressers, bakeries etc).

Dialysis patients - Consultants and contractors planning shutdowns are able to view the general areas where registered dialysis patients reside on WWLs web page All water networks map , the area is identified by an orange polygon. Patient details are not published due to privacy reasons however, where presence of a dialysis patient has been identified in the affected area, the map provides a pop-up message with contact numbers to request dialysis patient details.

Wellington Water's Customer Hub shall be notified of all shutdowns 24 hours prior to any trial or actual shutdown at customer.notifications@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. If necessary, the need to undertake a trial shutdown can be discussed with the WWL Network Operations Engineer or WWL Network Controller when planning.

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

Incidents include 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 Network Operations Engineer immediately should any incident arise. Contact details shall be 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 WWL Network Operations 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 are permitted to perform water network shutdowns and undertake maintenance activities or connections to the public water supply network.

Approved contractors include Wellington Water authorised Capex contractors, Wellington Water Network Operations *approved contractors and WWL Land Development approved contractors*.

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 leak repairs, burst mains, and other situations which require an immediate isolation of the network to prevent further damage or risk to public health.

Only Wellington Water Network Maintenance Team (NMT) or Network Operations Group (NOG) personal are authorised to carry out reactive shutdowns.
Reactive shutdowns 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 pump station or reservoir to be taken offline. For activities such as internal drone inspections 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 may require NOG Utility Operations Engineer consultation prior to submitting in Jira. The shutdown plan 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 NOG Utility Operations Engineer.

3.12 Water Treatment Plant Shutdowns

3.12.1 Shutdown Request and Initial Planning

The requester must first contact the TCS Planner/Scheduler to confirm resource availability and tentative scheduling. During this initial communication, a Maximo Work Order should be created to schedule and track the task. Shutdown requests should be emailed to TCSPlanning@wellingtonwater.co.nz. Weekly shutdown planning meetings are held to coordinate and schedule all Water Treatment Plant shutdowns and related work plans.

3.12.2 Shutdown Plan Preparation and Submission

The requester must complete the Shutdown Plan using the WTP shutdown Template (ONPT_0005), which is available via QPulse and can be downloaded from Jira and the link in section 5 of this document

The Final Shutdown Plan must be submitted through **Jira** for review and approval by the relevant stakeholders. For any questions or concerns, please contact the TCS Production Control team at allproductioncontrol@wellingtonwater.co.nz.

3.12.3 Shutdown Level Classification and Notification Periods

Water Treatment Plant (WTP) shutdowns are classified as level 1 or level 2 based on whether a full plant shutdown is required and the level of complexity and risk involved. This classification determines the notification period and level of documentation required:

- **Level 1 – Low Risk Shutdown:**

This level applies when a full plant shutdown is not required, but specific processes, assets, or standby equipment are taken offline, which could impact the plant's contingency options. Shutdowns at this level may still cause process interruptions and require operator involvement. The complexity, length, and specific processes involved in the work will influence the risk level. Notification must be provided at least 10 working days in advance. Supporting documentation includes a Basic Shutdown Plan, relevant Process and Instrumentation Diagrams (PIDs) identifying affected assets or interruptions, a Risk Control Plan if applicable, and the Maximo Work Order number.

E.g., works in the Kaitoke abstraction area of the Te Marua WTP may be classified as Level 1 due to the option of using Lake water; however, if the work is extensive or complex, the shutdown level should be upgraded to Level 2 (see note below)

- **Level 2 – High Risk Shutdown:**

This level applies when a full plant shutdown is required or when the work involves significant operational risks due to complexity, duration, or critical process involvement. Level 2 shutdowns directly affect water production and require close coordination with other WTPs to manage overall supply and demand, which can vary seasonally. Due to this, Level 2 shutdowns require comprehensive planning, full operator resource allocation, and a minimum of 20 working days advance notification. Required documents include a Detailed Shutdown Plan, PIDs, a comprehensive Risk Control Plan, and the Maximo Work Order number.

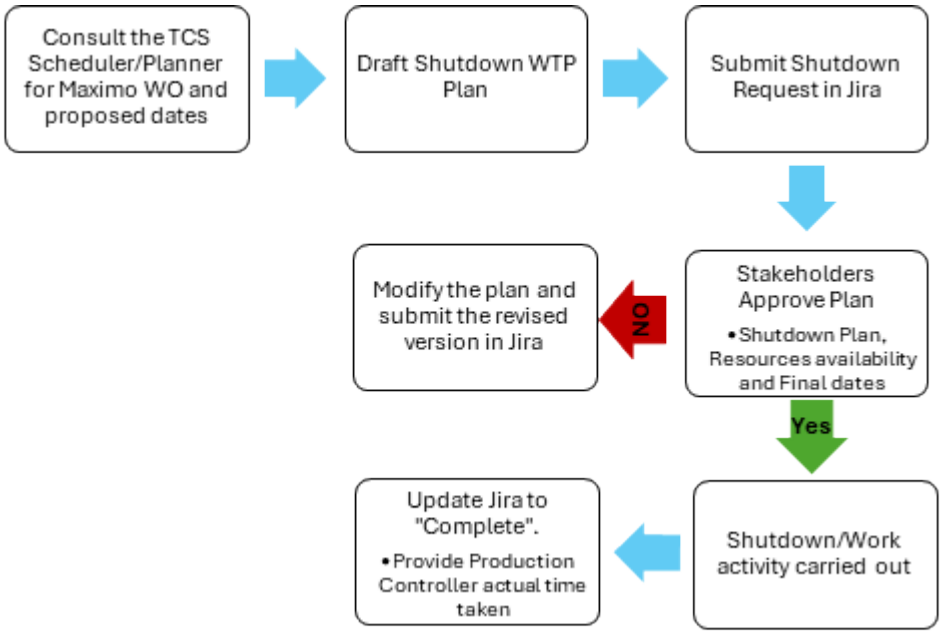
Note: If a Level 1 shutdown involves a critical process, or if the scope and duration of the work increase the risk, the shutdown must be reclassified as Level 2 to ensure appropriate controls and approvals. A detailed WTP Shutdown Risk Level file provides clear criteria based on process involvement and work complexity to assist requesters in accurately determining shutdown levels.

3.12.4 H&S Risk Control and High-Risk Activities

Tasks involving confined space entry, working at height, heavy machinery, asbestos, or other high-risk activities require the submission of a Risk Control Plan along with all relevant documentation. This plan and documentation must be reviewed and approved by the TCS Health & Safety Advisor.

3.12.5 Stakeholder Consultation and Approval Process

This section describes the key steps for consulting and obtaining approval from relevant stakeholders for shutdown plans. Stakeholders include the Network Controller, Production Controller, WTP Team Leader, TCS Planner, and others as needed. All shutdown plans must be submitted via Jira for approval. For a clear overview of the process, please refer to the accompanying flowchart.



3.12.6 Submission Timing and Exceptions

Shutdown Plans must be submitted with sufficient lead time to ensure proper coordination, review, and approval by all relevant stakeholders. For this reason:

- **Level 1 shutdowns** require submission at least **10 working days** prior to the planned execution date.
- **Level 2 shutdowns** require submission at least **20 working days** in advance.

These timeframes allow multiple stakeholders, Network Controllers, Production Controllers, WTP Team Leader, Scheduler/Planner and Health & Safety Advisors, to thoroughly evaluate the shutdown plan, agree on suitable dates, allocate resources, assess operational risks, and coordinate activities. This is especially important for Level 2 shutdowns, which interrupt water production and require synchronization with other WTP plans and operational schedules, often influenced by seasonal demand.

In urgent or special cases, exemptions to these timelines may be considered. However, even in these situations, shutdown plans submitted with less than **5 working days' notice** will **not** be approved. This minimum timeframe ensures there is still adequate opportunity for essential reviews and risk mitigation before work commences.

Exceptions to Jira Submission

Type of shutdown	Approvals required
Emergency works requiring immediate response	Team Leader Treatment escalates to Production Controller and Network Controller

3.12.7 Reference to Guidelines

For a concise overview of the Water Treatment Plant Shutdown process, comparison of risk levels, and submission procedures, please refer to the WTP Shutdown Guideline **WTP0G_0004** document. This document provides a streamlined summary of this SOP for quick reference.

4 Wastewater and Stormwater Shutdowns

Network control approval is required for activities that carry 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, action plans need to be customised 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	Shutdowns on local reticulation with minimal operational risk or customer impact Low risk activities that call for Wellington Water planning or operator input	Shutdowns affecting any of the following: - Pressure mains - Pump Stations Undertaking work in close proximity to Interceptor pipelines and tunnels Alteration to network flow may impact on WWPS or WWTP operations
Wastewater Resilience	n/a	Undertaking work in close proximity to Interceptor pipelines and tunnels
Environmental Risk	Shutdown has a low environmental impact consequence	Shutdown has a high environmental impact consequence

Stormwater and Wastewater Pump stations shutdowns need to include system flow and wet well storage data to support sizing of any temporary over pumping or 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

Veolia Ltd are contracted by Wellington Water to Operate and Maintain the Wellington metro Wastewater treatment plants. Veolia are responsible for the management of Wastewater Treatment plant shutdowns for the Wellington, Porirua and Hutt City treatment plans. The Jira shutdown request system is used for Wellington Water Contractors and WWL Project Managers to obtain both Wellington Water and Veolia approvals to perform Level 1 and Level 2 work activities and shutdowns.

The Jira system is also available for use by Veolia for Wellington Water stakeholder notification and input when undertaking level 2 shutdowns.

Wellington Water's Treatment and Controls Systems (TCS) Group manage the South Wairarapa Wastewater treatment plants. The Wellington Water shutdown request Jira system shall be used internally by Wellington Water O&M staff for Stakeholder notification and approval of Level 2 shutdowns. For contracted activities, the Jira shutdown request system shall be used for Level 1 & 2 shutdowns for obtaining approval for works that impact WWTP operations or require operator input and Operational and Network Control approvals.

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

4.2.1 Shutdown Risk Level

Risk Factor	Level 1	Level 2
Operational risk	Shutdowns of equipment that require operator input but do not impact on treatment plant process	Shutdowns that impact or have potential risk to affect treatment plant operations. Critical treatment plant process or critical equipment component to be taken out of service
Environmental Risk	No environmental impact risk	Possible environmental consequence Risk of consent compliance breach

5 Related Legislation, Documents and links

Water Services Act 2021

Safety at work act 2015

WWL Regional Specifications

WWL Regional Standards

WWL Hygiene Practice for Safe and Healthy Drinking Water 2024

Wellington Water, Water Supply Shutdown Templates:

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

Wellington Water, Water Supply Letter Templates:

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

Wellington Water Network Plan Links

- WNP_0001 Featherston Water Network Plan
- WNP_0002 Greytown Water Network Plan
- WNP_0003 HCC Water Network Plan
- WNP_0004 Martinborough Water Network Plan
- WNP_0005 PCC Water Network Plan
- WNP_0006 Pirinoa Water Network Plan
- WNP_0007 UHCC Water Network Plan
- WNP_0008 Wellington Water Network Plan

Wellington Water 3 Waters GIS Plan

- public all water networks map