

Auckland Unitary Plan

Standard Conditions Manual

Streamworks Conditions

Disclaimer

The information in this Standard Conditions Manual is, according to Auckland Council's best efforts, accurate at the time of publication. Auckland Council makes every reasonable effort to keep it current and accurate. However, users of the Conditions Manual are advised that:

- Although the conditions are "standardised", in the sense that they should be applied
 consistently where they are required, this does not mean that they should all be applied in
 every instance. Applicants need to consider the nature of the activity, and the characteristics of
 the site and its surroundings in considering whether to apply each and every condition.
- The standard conditions should be used with caution as a starting point from which appropriate conditions for the individual consent should be drafted to align with the requirements of s108, 108AA and 220 of the Resource Management Act 1991.
- Further guidance as to whether to apply the conditions are included in the guidance notes that accompanies each condition.
- Users should take specific advice from qualified professional people before undertaking any action as a result of information obtained in this Standard Conditions Manual.
- Auckland Council does not accept any responsibility for, or liability whatsoever whether in contract, tort, equity or otherwise (including negligence) arising from the use of, or reliance on, this Standard Conditions Manual. This includes, without limitation, any liability arising from any error, or inadequacy, deficiency, flaw in or omission from the information provided.

Introduction

These conditions relate to activities in, on, under, or over the bed of rivers and streams (sections 13 and 14 of the RMA) including for activities referred to in Chapter E3 – Lakes, rivers, stream and wetlands of the AUP(OP) and Subpart 2 – Reclamation of rivers in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES FW).

These conditions are primarily written for works being undertaken within rivers and streams and must be placed on consents under the direction of a specialist (earth and stream works) in the council's Earth, Stream and Trees team. The guidance notes of each condition outlines how each should be applied.

There are no standard conditions for proposals that require ecological enhancement in the form of mitigation, offset or compensation. These are site specific, complex proposals and conditions will be advised at the discretion of the Specialist.

For activities in, on, under, or over the beds of lakes and wetlands, please contact a specialist (earth and stream works) in the council's Earth, Stream and Trees team.

Where the proposal relates to structures with the potential to block or impede fish passage, the conditions set out in the *Standard Conditions Manual - Fish Passage Conditions* are also required.

All integrated consents will be monitored by the Compliance Monitoring Team. An internal agreement between the Monitoring and the council Specialist teams will ensure that all information necessary to the consent is appropriately assessed while the customer maintains a single point of contact with the council.

Streamworks Conditions

Condition 1: Completion Date

The consent holder must complete the construction / streamworks activity (*involving any disturbance, deposition, and / or associated diversion of water under this consent*) to the stage of finalised re-vegetation and / or stabilisation of stream beds within x period [*insert period, based on proposal e.g. six months etc*] from the commencement of the activity [amend if staged works].

Guidance notes:

This condition can and should be applied to any streamworks consent. It is different from the lapse and / or expiry dates, and is designed to ensure the 'construction' effects in terms of timing and / or staging that have been assessed, are done in as timely a manner as possible, to minimise the duration of construction effects on the stream's hydrological and ecological values.

For instance, a culvert structure will have a duration of 35 years, with a lapse period of 5 years to give effect to it, but the intent of this condition is to ensure the physical 'construction' stream works (disturbance, deposition of materials and / or structures, and temporary diversion of water) occurs as quickly as possible. This also has an impact on, and is related to, the mitigation works in terms of timing.

On-site works methodology

Condition 2: Daily stabilisation

The consent holder must ensure that all exposed work areas associated with the streamworks, including the bed and banks of the stream and any adjacent overland surface flow paths (for normal flows at the time of year the works are undertaken) are stabilised at the end of each construction day.

Advice Note:

If there are any sediment and erosion control plans or measures within the floodplain or beyond, the consent holder is advised to integrate any stream works stabilisation measures with the design of sediment and control measures to avoid any sediment discharge to the stream.

Guidance note:

This condition may not always be necessary and will be dependent on the applicant's methodology. This is applied when there are physical in-stream works; it may be for the installation of a culvert, in-stream disturbance or the diversion of a watercourse. It is designed

to ensure that any exposed area is covered overnight, so that in the event of rainfall and/or pump failure (for diversion) there is no erosion and sediment discharge. The requirement for overland flow paths relates to surface water flow paths immediately adjacent to the stream bed which during rainfall events will flow into the stream bed.

Daily stabilisation is not necessary though if there is an approved diversion which has appropriate capacity for flows expected during the time of year the works are undertaken, with appropriate contingencies in place in case flows exceed the diversion capacity (see condition 4).

Conditions 3: Timing

Streamworks must be carried out only during periods when: [specialist to select appropriate flow level below]

- all flows, up to the 24 hour 20 year return period storm event, are diverted around the area of works. [amend/delete as necessary] and/or
- all normal flows at the time of the year are diverted around the works area.

Guidance notes:

This is applied to all stream works consents.

The Earth, Streams and Trees specialist will recommend appropriate flows that need to be accommodated, depending on circumstances; the standard is the 24 hour 20 year return period storm event, except where this is not practicable due to the particular circumstances / constraints.

As the length of works may vary, flows are variable throughout the year and dependent on rainfall events, this typically involves the contractor matching pump capacity to water flows, taking into account anticipated rain events. Note though that where there is a significant storm event beyond the capacity of the diversion i.e. exceeding the 1 in 20 year storm event, then the consent holder is expected 'to pull the plug' and enable the flows to then pass through the appropriately stabilised area of works (up to the 1 in 100 year flood event) – cross reference to the 'diversion of stream' condition 4 for stabilised flow path.

Condition 4: Diversion of stream

During any periods of flow greater than the capacity of the diversion, up to the 100 year flood event, a stabilised flow path, in accordance with Auckland Council's Guidance Document: *Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland region* (GD05) must be provided.

Any stabilised flow path must be designed and implemented to ensure:

- no scour or erosion occurs;
- no sediment is generated or discharged to water; and

• flows pass safely around or through the area of works, with minimum nuisance and damage to infrastructure and properties from obstruction of flows or flood debris.

Guidance Note:

This condition is only necessary when a diversion of a stream is proposed, usually for the 'construction' works in the stream (for example, the methodology includes temporary diversion of a watercourse in order to install a culvert 'in the dry'). The purpose of the condition is to ensure that if there is a storm event that will exceed the capacity of the diversion, then the stream flow can pass through the site without sediment generation, flooding of adjacent and / or downstream properties, nor capture materials (e.g. tarpaulins etc used for stabilisation purposes).

Condition 5: Ensure machinery does not discharge/spill hazardous substances during earthworks

Machinery must not enter the wetted cross section of the bed of the stream at any time and machinery associated with the streamworks activity must be operated (including maintenance, lubrication and refuelling) in a way, which ensures no hazardous substances such as fuel, oil or similar contaminants are discharged.

In the event that any discharge occurs, works must cease immediately, and the discharge must be mitigated and/or rectified.

Advice Note:

Refuelling, lubrication and maintenance activities associated with any machinery should be carried out away from any water body with appropriate methods in place so if any spillage does occur that it will be contained and does not enter the water body.

If a construction management plan is required under any land use consent, you are advised to include any maintenance / servicing areas as part of that construction management plan.

Guidance Note

Applied to most stream works consents where works methodology is likely to involve machinery. This condition makes it explicit that machinery stays out of the water body.

Condition 6: Construction materials

The use of construction materials, such as concrete products or grout, must only occur outside the wetted cross section of the bed of the stream. [delete if proposal involves construction materials within stream e.g.piles] Any mixing of construction materials must occur outside the 100 year floodplain, and using methods so that if a spillage does occur it will be contained to avoid it entering the water body.

Advice Note:

If a construction management plan is required under any land use consent, you are advised to include any maintenance / servicing areas as part of that construction management plan.

Guidance Note:

The above applies to any streamworks which involves construction / structures, and / or any construction activities immediately adjacent to the stream (where associated streamworks is proposed). The condition is amended (1st sentence deleted) if the work does specifically require some construction materials in the stream – in which case the streamworks management plan will be used to manage risk (details of construction methodology etc).

This condition manages the risk from concentration of potential contaminants close to the stream and the increased risk (and associated significant effects) from discharge to the freshwater body.

In the alternative, an advice note can be applied for low risk small scale streamworks when the specialist is of view that no condition is needed:

Condition 7: Stockpiling of removed sediment / material

Any sediment or material excavated from the bed of the stream must be stockpiled outside the 100 year flood plain area, with appropriate erosion and sediment control measures in accordance with Auckland Council's Guidance Document: *Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland region* (GD05).

Advice Note:

If there are any sediment and erosion control plans or measures within the floodplain or beyond, you are advised to integrate any requirement for stockpiling areas for stream bed spoil with the design of sediment and control measures to avoid any sediment discharge to the stream.

Guidance Note:

This condition is typically applied where there is excavation ('mucking out') of a stream bed, and to ensure in those circumstances it is not deposited in the flood plain.

Timing of streamworks activity

Condition 8: Streamworks timing (ecological & sediment control)

- I. Streamworks on the site must not be undertaken between 1 May and 30 September in any year, without the submission of a 'Request for winter works' for approval to the Council. All requests must be renewed annually prior to the approval expiring and no works must occur until written approval has been received from the Council. All winter works will be re-assessed monthly or as required to ensure that adverse effects are not occurring in the receiving environment and approval may be revoked by the Council upon written notice to the consent holder.
- II. [amend/delete as necessary] and/or: To protect downstream fish (inanga) spawning habitat, streamworks must not be undertaken, nor will any written approval be provided, during the spawning season (1 September to 1 December).

Advice Note:

Any request for winter works outside these periods will require information addressing the level of risk, contingency methods to manage the risk, including demonstrating that the selected contractor has established experience and record of compliance with the resource consent conditions.

Any request for 'winter works' (excluding any period to protect fish spawning habitat), should include:

- Description of scope of works proposed for the period outside 1 May to 30
 September
- Measures to prevent sediment discharge from the specific works, especially during periods of heavy rainfall
- Details of the area(s) that are already stabilised
- Amended stream management plan and methodology/ or erosion sediment control
 plan detailing stabilisation to date and time / staging boundaries with proposed
 progression of stabilisation / re-vegetation (and integration between any stream
 management plan and erosion sediment control measures);
- Contact details of the contractor who will undertake stabilisation of the site (including dates expected on site);
- Contingencies proposed if contractor above becomes unavailable
- Details of site responsibilities, specifically for erosion and sediment controls and stabilisation processes over period

Guidance Note:

Season or reason may be amended by the Earth, Streams and Trees specialist (for identified ecological reasons). Condition I applies to all consents and Condition II applies to works within the fish spawning habitats.

Condition 9: Control measures and methodologies in accordance with approved streamworks management plan

- I. All streamworks must be undertaken in accordance with the approved streamworks management plan [include specific reference and date of document]. All required control measures and methodologies must be in place prior to the streamworks commencing and be maintained for the duration of the streamworks activity.
- II. Any changes to the approved streamworks management plan must be submitted to the Council demonstrating that the changes to the management plan incorporates best practice methodologies for managing effects from the streamworks and that the adverse effects from the streamworks remain the same or less. Any changes to the approved plan must only be implemented once certified in writing by the Council.

Guidance Note:

This condition (I&II) is used to manage effects associated with the discharge of sediment as a result of in-stream works. The StMP may also address additional ecological effects such as fish spawning habitat or maintaining fish passage. This condition is used if the applicant has provided a detailed and comprehensive streamworks management plan (StMP) (approved as part of the resource consent application) **and** it is a relatively simple stream works. Note most proposals involving stream works will not have a finalised StMP approved as part of the resource consent application. Instead see condition 10 requiring an approved final StMP, based on a draft StMP submitted as part of the application (usually prepared and submitted by the relevant contractor undertaking the works).

Condition 10: Streamworks management plan to be provided

Prior to the commencement of the streamworks activity, a finalised streamworks management plan (StMP), must be submitted to the Council for certification. The purpose of the StMP is to provide a finalised streamworks methodology and management measures that enables effects of streamworks to be managed during construction in accordance with best practice (and with a prompt to integrate with any other management plan, such as earthworks, sediment control, fish capture and relocation etc)

Streamworks activity must not commence until written certification is provided from the council.

The StMP must include as a minimum but not be limited to:

- management measures to demonstrate how erosion and sediment controls will avoid sediment or sediment laden water entering the stream in accordance with best practice;
- management of contaminants to water (e.g. hydrocarbons, construction materials);
- maintenance of fish passage during and after the streamworks;

- methodology for diverting upstream flows during the streamworks, including how sufficient flow will be maintained at all times below the site of the works to maintain in-stream biota;
- a detailed methodology for the installation of the structure(s) / disturbance / reclamation [amend depending on type of stream works activity] and
- details of final streambed remediation or stabilisation upon completion of stream works
- II All streamworks must be undertaken in accordance with the certified StMP and measures identified within the StMP must be implemented and maintained throughout the streamworks activity.

Advice Note:

If any other management plans are required as conditions of any other resource consents for the proposal, such as a construction management plan, or an earthworks and sediment control plan, you are advised to ensure that the requirements are integrated to ensure comprehensive site management during physical works.

Guidance Note:

This condition is the usual condition for streamworks, with an expectation that a draft StMP has been assessed and approved in principle as part of the resource consent application; but it remains likely there will be changes 'on-site' to respond to 'on the ground' conditions, and to ensure alignment with any other construction and / or earthworks management plans.

StMPs, should therefore focus on the mitigation of specific effects, and methodologies to avoid other effects – such as avoiding contaminants during maintenance of machinery entering any stream. Any condition requiring the preparation and certification of a StMP needs to be clear and specific about the effects it is intended to address.

This condition is used where a draft StMP has been submitted with the application, approved in principle, but the finalised StMP requires certification before the stream works commences. As a general rule, all effects need to be addressed at the consenting stage i.e. this is not a substitute for an absence of information on effects, and details on methodologies to manage adverse effects. However, a requirement to have certification of a final StMP, after the granting of consent, may be appropriate where:

- ✓ the works are extensive, complex and of lengthy duration
- ✓ some flexibility, contingency or scope for adaptation in how certain identified effects are dealt with over the duration of the works is important

Ecological specific conditions

Condition 12 – Native fish capture and relocation plan.

Prior to the commencement of any streamworks, a Native Fish Capture and Relocation Plan must be submitted to the Council for certification. The purpose of the Native Fish Capture and Relocation Plan is to ensure fish will be appropriately removed prior to commencement of works from an area subject to the stream works, to avoid fish mortality [insert purpose/objective]. The Native Fish Capture and Relocation Plan must be prepared by a suitably qualified and experienced Freshwater Ecologist and include the following detail, but not be limited to:

- a) Methodologies to capture fish within the impact streams and wetland habitats, or justification there is no habitat for native fish present at the time of earthworks;
- b) Fishing effort;
- c) Details of the relocation site;
- d) Storage and transport measures including prevention of predation and death during capture;
- e) Euthanasia methods for diseased or pest species; and
- f) Confirmation on the habitat availability of the relocation site to support fish at the time of streamworks.

Condition 13: Native fish capture and relocation

Native fish capture and relocation must be undertaken in accordance with the certified Native Fish Capture and Relocation Plan, and must only be undertaken by a suitably qualified and experienced freshwater ecologist. The freshwater ecologist must also be onsite during the dewatering process to ensure that any remaining native fish that is not caught during defishing are salvaged.

Condition 14: Dewatering

All pumps used to dewater the stream(s)/wetland(s) must have a 3mm mesh screen to prevent fish from entering the pump.

Condition 15: Fish Salvage Report

The consent holder must provide a Fish Salvage Report detailing the relocation site, the species and number of freshwater fauna relocated prior to and during dewatering, to the Council within 5 days of completion of the native fish capture and relocation. These results must be uploaded into NIWA's New Zealand native freshwater Fish database.

Condition 16: Final stabilisation of stream bed

Prior to any re-diversion of stream flows into the culvert/reconstructed/diverted stream [delete/amend as necessary], the stream bed and banks must be stabilised against erosion using best practice methods.

Advice Note:

Best practice measures may include biodegradable materials such as wool fibre and cocofibre matting.

Guidance Note:

While this condition is placed in the ecological conditions section (on the basis of a replacement stream channel being engineered), it can also be used for any stream works where there has been works undertaken in the dry (i.e. stream flow has been diverted during the works), as an obligation to be addressed before the dam and diversion is removed, and stream flow re-instated.

Post development

Condition 17: Post development as-built plans

Version A - structure e.g. outfall, culvert, erosion protection etc

Within twenty (20) working days following completion of the installation [and / or maintenance] of the structure, the consent holder must provide a certified (signed) as-built plans that confirm that the structure has been constructed in accordance with [(e.g. approved design and ecological assessment)] to the Council

The consent holder must engage at their own expense a suitably qualified professional engineer to prepare and certify these plans.

Version B – stream diversion channel

Within twenty (20) working days following the completion of the installation of the permanent/temporary stream diversion channel, the consent holder must provide, certified (signed) as-built plans that confirm that the stream diversion channel has been constructed in accordance with [(eg approved design and ecological assessment)] to the Council

The consent holder must engage at their own expense a suitably qualified professional engineer to prepare and certify these plans. These plans must also be certified by a suitably qualified freshwater ecologist to confirm the creation of ecological and habitat features [amend/delete as necessary].

Guidance Note:

This condition (version A) is included in streamworks consents with structures to ensure the structure was constructed in accordance with the consented plans. It is important to have access to accurate as-built plans for monitoring.

For permanent/temporary stream diversion channels (version B) certification is also required from the freshwater ecologist to confirm the artificial creation of appropriate habitat features. This condition (version B) is not required in consents unless recommended by the Earth, Streams and Trees specialist.