

Essential repairs to correct or prevent further movement is a first step in addressing some problems with friction surfaces.

Windows may be the largest source of lead dust from abrasion and chips, because paint tends to deteriorate faster under conditions of temperature variation, condensation and sunlight. Vertical sash windows, in particular, have sliding surfaces that are abraded. This is why the window trough (the portion between the lower surface of the sash and the sill) tends to accumulate high surface loadings of leaded dust. Vertical sash windows therefore require more critical attention than side or top hung window sashes.

Each surface subject to abrasion or impact damage needs to be considered individually because some may require treatment of the surface, others may be best protected from impact by enclosure or surface coating, and others will be best removed and replaced.

When advising on the treatment of friction and surface impact, the health protection officer should consider a number of factors.

## Surfaces subject to friction and impact damage

Look for the most likely friction and impact surfaces around doorways, including doors, doorstops, hinges, door jambs, head and threshold. Impacts from door slamming may have dislodged paint from adjacent surfaces of architrave, skirting or walls. External doors may be binding because of dampness.

Around windows, examine the sashes (vertical or horizontal sliding, and side or top hung), sills, jambs and head. Windows may be binding because of dampness due to failure of the paint film, defective flashings and sealants, or other building defects.

Inspect stairway risers, tread nose, string, balusters and hand rail. Examine skirting boards and other timber mouldings, and painted floors.

Externally, examine building corners, veranda posts, balustrades, steps and other surfaces that are knocked or rubbed against.

Make a note on the plan of friction surfaces and areas of impact damage involving lead-based paint.

## Essential repairs

Identify all essential repairs to remove factors causing poor fit of doors and windows, and dampness in timber.

## Contractors

Essential repairs, carpentry work, and enclosures will require a suitably trained and experienced building contractor to be selected by the building owner. Other treatments will require an accredited painting contractor.

## Treatment of windows and door systems, furniture and fittings

If the window sashes or doors are binding in their frames they will need to be removed and eased (preferably off-site) by wet planing. Other friction or impact-damaged surfaces of these items should preferably be stripped chemically (off-site) or misted and scraped back to bare wood and repainted, carefully following the advice in the next section, Paint removal.

Other friction and impact surfaces that cannot be removed easily for treatment, and where renewal would be an expensive option, should be misted, scraped and wet-sanded back to remove sufficient old paint to reduce the probability of future damage or abrasion (eg, tight window sashes), and then repainted with a paint system recommended by a paint manufacturer. Alternatively, some surfaces, such as the window trough of a vertical sliding sash window, and door thresholds may be capped with sheet metal (back caulked) or otherwise enclosed. Components such as internal sills that are often a favourite edge to be chewed should preferably be removed and replaced.

If windows and doors are in very poor condition and renovation of the property is economically viable, replacement may be the more satisfactory and practical option. Consider, at least, the renewal of windows and doors in children's bedrooms and rooms where they frequently play.

Any other items that can be removed from the house that have friction surfaces or are subject to impact damage (eg, drawers, furniture, cupboard doors) should preferably be chemically stripped off-site and repainted.

## Treatment of stair systems and skirtings

Coverings providing enclosure are generally the most practical for stairs. Rubber tread guards can be used to cover the entire width of the stairs, with metal nosing, if necessary, and plywood or high-density hardboard nailed to the risers. The fit must be tight and a strip of sealant applied to the edges of the coverings before fixing. Stair strings and skirtings may be similarly enclosed or, especially if skirtings have rot or borer damage, renewed.

Balusters and handrails may be amenable to treatment by paint film stabilisation, but if impact damage is serious the replacement of the components would be the preferred course. Paint removal is the least desirable method unless only a small area requires treatment and all the precautions in the next section on Paint removal can be met.

## Treatment of porches, verandas, decks, interior floors, exterior corners

These areas can receive use that creates significant amounts of paint chips and dust from abrasion and impact. As a minimum abatement measure, lead-based paint should be carefully stabilised using high-quality paint selected for wear and chip resistance.

Painted interior floor surfaces subjected to abrasion and impact damage should preferably be enclosed with plywood, hardboard or particle board and covered with a decorative wearing surface such as vinyl tiles. The enclosure sheets should be pinned and back caulked at the edges with a flexible sealant. Some heavily impacted surfaces such as veranda posts, steps or external corners of walls may be enclosed in treated wood or plywood, and corner mouldings or metal cover strips used on external corners.

## Protection and clean-up

Conduct thorough clean-up (standard cleaning cycle), especially if any paint removal was required.

## Monitoring

Plan how monitoring of the treated friction and impact surfaces will be carried out. Monitoring frequency as suggested for paint film stabilisation would be appropriate in most cases.

Assess the condition of the treatment work in a similar manner to that for paint film stabilisation, surface coating, or enclosure.

## Paint removal

Paint removal means the separation of (non-intact) paint from its substrate, either on, or off-site.

On-site paint removal inevitably creates hazards from dust generation. In addition, paint removal (whether carried out on-site, or off-site) seldom removes all lead particles from porous substrates such as wood. Instead, a lead residue will generally be left on or near the surface, which may leach into new paint or otherwise become available once again to susceptible children. Paint removal also imposes the highest operator risk of any abatement method, and can create significant waste disposal problems. For these reasons, on-site paint removal is not a preferred abatement method, and alternatives should be used when possible. As considered above, off-site paint removal by chemical stripping is a practical option for removable building components, furniture and fittings where renewal would be too costly.

If paint removal is to be done, it should be restricted to limited areas, and carried out as safely as possible. The extent of preparation, choice of removal technique, occupant and worker protection, clean-up, and maintenance will depend on the scope and scale of the job.

Reference should be made to the later section on Protection during abatement, at the end of this chapter, because this is especially important during paint removal.

The following provides general guidance to the health protection officer advising on a paint removal job.

## Choice of abatement method

Ensure that alternatives to paint removal (especially enclosure and building component removal) have been fully considered.

## Occupant protection

Ensure that occupants (especially preschool children, pregnant women and pets) will not be exposed to any hazard arising during the paint removal work. This will mean temporary relocation is recommended, unless the job is very small. As a minimum, children must be kept well away from the work area. Access restrictions must operate at all times, not just during working hours, until final clean-up has been done and the site is considered safe.

## Choice of contractor and worker protection

The building owner should select an accredited painting contractor. Ensure that the contractor (as the employer) and the employees fully understand the hazard of lead dust and fumes (including the risk of occupational take-home lead), as well as the hazards associated with the paint removal method(s) to be used.

## Environment protection

For interior paint removal, seal windows, doors, ventilators and other openings with adhesive tape to ensure that any dust generated does not leave the room. Remove all soft furnishings (including curtains and carpets where possible), furniture, utensils, food and medicines from the room (to lead-safe storage).

Install disposable polythene covers, taped down as required, to prevent paint fragments and dust contaminating the floor and any remaining carpets and fittings.

For exterior paint removal, seal windows, doors, ventilators, eaves and other openings of all nearby buildings into which dust from the work area may escape. Place disposable polythene sheeting as a groundsheet beneath the work area, to prevent paint fragments and dust from contaminating soil, vegetation or paved surfaces. Avoid working when wind or draughts could cause dust and debris to be blown away from the work area.

(Disposable polythene sheeting is recommended, because washing will not remove all the dust from sheeting; reusable sheeting may become a source of lead contamination rather than a containment device.)

## Choice of paint removal method

For small areas, manual wet scraping followed by wet sanding is the preferred method. Use a spray bottle attached to the scraper to keep the surface wet while scraping. Apply enough water to moisten the surface completely. Do not use wet methods near electrical circuitry.



Manual dry scraping and sanding will generate significant amounts of lead dust; however, in very limited areas near electrical circuitry, this method may have to be used.

Power sanding will generate a large amount of fine lead dust and should be avoided. If a relatively large area is involved, however, there may be few alternatives. In that case a power sander fitted with a HEPA exhaust must be used. The shroud or sanding head (depending on the type of tool) must be firmly applied to the surface at all times, even then dust collection may be incomplete.

Heat guns operating above 450°C, or any form of open flame burning (such as LPG or blow torches) will generate lead fumes. These very small lead particles cannot be contained and may cause widespread environmental contamination. Such methods should not be used.

For small areas, an electric heat gun operating below 450°C may be used to loosen the paint, but this will need to be followed by dry scraping and sanding, so will share the disadvantages of the latter method.

Water blasting may be an acceptable method for exterior use. There are two problems with this method; high-pressure water can raise the moisture content of timber cladding above 14 percent leading to subsequent paint film failure (especially if there is wholesale paint removal), and the contaminated waste water will require treatment before it is released in a manner approved by the territorial authority and/or regional council. Note that water blasting will inevitably create some degree of environmental lead contamination, however carefully attempts are made to collect the water and cover soil or vegetation.

Sandblasting (abrasive blasting) should never be used in residential environments. It generates large amounts of lead dust that cannot be contained.

Chemical paint removal methods are preferred for jobs too large, or otherwise unsuitable, for manual wet scraping (and will always be used for off-site paint removal). Various chemical strippers are available, and fall into two groups: alkali and non-alkali. Whichever stripper is used, the manufacturer's instructions must be followed. This will usually include the use of a respirator fitted with an appropriate cartridge. Apply the chemical in accordance with the manufacturer's instructions on the label and wait the full period of time recommended. Remove the loosened paint in as large size pieces as possible using a sharp tool. With all chemical strippers, the manufacturer's instructions on the label should be read before commencing, and followed closely.

## Clean-up

Accumulated dust and paint debris should be removed as often as necessary to ensure containment – as a minimum, at the end of each work day.

After gross debris removal, a HEPA-filtered vacuum cleaner should be used to remove dust (visible and invisible) from the work area and surroundings. Particular attention should be paid to ledges, windows and walls. This should be followed by wet mopping the surfaces and sheeting with a common detergent wash, to dislodge and aggregate

resistant lead particles. These particles should then be collected by a second HEPA vacuum, completing the cleaning cycle.

At completion of the paint removal work, the cleaning cycle should be repeated twice.

## Disposal

Debris should be carefully bagged and disposed of by co-disposal in a sanitary landfill that accepts low-grade toxic waste. You should liaise with your council about appropriate disposal. Used polythene sheeting, cloths, mops and vacuum bags should be sealed and disposed of in the same way. The territorial authority should be contacted for advice on acceptable disposal options.

If soft furnishings, such as carpets, have been contaminated (despite covers) they should undergo thorough off-site commercial cleaning. If heavily contaminated, there may be no option but to dispose of them. Affected layers of soil and vegetation may likewise need to be removed and replaced if they have become grossly contaminated.

Equipment (including cleaning equipment) can also spread contamination from one site to another and must be thoroughly cleaned of dust and paint fragments before it leaves the work area. A HEPA vacuum followed by a wet wipe and a second vacuum is recommended.

## Re-evaluation

Paint removal is a permanent abatement method. Re-evaluation of the hazard itself is not required (provided all paint has been removed).

## Enclosure

Enclosure is defined as the installation of a rigid (or semi-rigid), durable barrier that is mechanically fastened to the underlying (lead-based paint coated) building component, with all edges and seams sealed with an appropriate sealant.

Enclosure is appropriate where:

- a near-permanent abatement measure of more than 20 years is appropriate
- less onerous monitoring (compared with other abatement methods) is desirable
- the building structure has undergone all essential repairs before the enclosure is fixed and is very unlikely to require further repair that could disturb the enclosure within 20 years
- the surfaces to be enclosed are, generally, flat and unobstructed by mouldings and present the easy fixing of sheet material.

Surfaces with lead-based paint are enclosed to prevent exposure to these hazards; the enclosure must therefore be dust-tight. Unlike surface coating, the enclosure does not depend on the painted surface of the substrate for its durability but is mechanically fastened to the underlying building components. Enclosure differs from ordinary construction in that all edges, joints, seams and holes must be carefully sealed to create a dust-tight system.

If the underlying building components are structurally sound and there is no damp penetration or other defects (and therefore no repair is required), little dust should be generated by the enclosure process. There is little or no hazardous waste to dispose of, and the work is relatively permanent with little monitoring required. For these reasons, enclosure is the preferred abatement option, particularly for broad surfaces such as walls, ceilings, floors and exterior cladding. Difficulties do arise, however, where enclosure materials meet existing skirtings, architraves, window surrounds and fascias. Enclosure also involves a risk that future generations of occupants may be exposed to lead once again through remodelling activities that break through the enclosure, or failure of the enclosure as a result of water damage or other reasons.

A roof presenting a lead hazard from which water is collected for drinking would be best dealt with by enclosure using new roofing material.

The following provides general guidance to the health protection officer advising on an enclosure job.

## Suitability and structural integrity of the underlying building components

Check the structural integrity of the building components that are needed to support the enclosure. Any unsound structural member will need to be repaired if it is needed to support the enclosure.

Structural repairs may involve paint or plaster removal, or component replacement. Precautions relating to these processes will therefore apply.

If the substrate is sound but the (lead-based) paint is deteriorated, obviously no attempt should be made to stabilise or remove the deteriorated paint before enclosure (to do so would be to destroy the purpose of enclosure).

Consider the advantages that may be obtained (especially with external enclosure) to improve insulation, durability, weather proofing of the building envelope, and appearance.

Identify the other building components that may have to be disturbed (removed and re-fixed or replaced) and whether they present a lead-based paint hazard.

## Essential repairs

Identify all other essential repairs to remove factors likely to cause subsequent failure of the enclosure, particularly building movement and moisture penetration from external and internal leaks.

## Contractors

A reliable and experienced building contractor should be selected by the building owner. Although the skill required to fix enclosures can be provided by normal competent builders, extra care and understanding is required regarding sealing of the enclosures and lead hazards that may arise during the course of the work.

## Choice of enclosure material

Any appropriate, durable, rigid or semi-rigid construction material can be used. For ceilings and interior wall lining, plaster board, particle board, plywood, fibreboard, wood panelling, laminated sheeting and other drywall linings, are all satisfactory products. The provision of a vapour barrier under the enclosure is desirable because it prevents water vapour generated in the house from passing into the cavity and condensing on uninsulated external wall surfaces.

Practical problems arise where enclosures meet existing skirtings, architraves and other mouldings. Plaster board may be too thick to sit comfortably against existing mouldings and may require their removal and replacement. Thinner enclosure material, such as 4.75 mm hardboard, helps to overcome such problems but may produce less even surfaces for decoration.

Externally, cladding can be enclosed with a variety of products including new timber, uPVC or aluminium weatherboard, brick cladding (requiring ties secured to adequately strong framing), or fibre-cement sheet. Insulated cladding composed of 40 mm expanded polystyrene sheet covered and sealed with a skin of glass fibre mesh and special mortar provides a light weight and insulating external cladding. (The specifications of such systems require flexible sealants at all exposed edges.) Roofs may be enclosed with new long-run steel (in preference to metal tile systems that would seem to provide greater opportunities for dust escape).

Floors can be enclosed with sheet material, such as hardboard, mechanically fixed to the existing floor as a substrate for tiles, linoleum or vinyl products. Particle board or plywood are alternatives.

Enclosure for windows is generally not a practical solution. Replacement, either of the complete window, or of the sashes only (avoiding the abatement of lead-based paint on glazing bars and other moulded surfaces) is a better approach. Aluminium window manufacturers provide a number of alternatives. Limited enclosure is possible, for example of window troughs, as discussed under the treatment of friction surfaces. Door surfaces may be enclosed with sheet material, but it is impractical to enclose the door edges, frames and stops. Replacing complete door sets is preferable.

## Mechanical fastening

Although adhesives may be used as an additional fastening method, reliance should not be placed on adhesives alone. Instead, mechanical fasteners (such as screws or nails) penetrating to the underlying building structure should be used (instead of, or in addition to, adhesives) to anchor the enclosure material.

## Sealing

The key to success for any enclosure system is the creation of a durable, dust-tight seal. This is particularly important because (lead-based) paint deteriorates more quickly behind an enclosure.

All edges, joints and seams of the enclosure – especially the bottom edge – must be properly sealed. Enclosure with plaster board properly completed with stopping compound will normally be adequate. Other materials will require high quality adhesive and flexible sealants, especially if any movement of building components is anticipated. Sealing must also be carried out where pipes or wiring penetrate the enclosure system. A variety of suitable adhesive caulks and other sealants are commercially available. External enclosure with weather board (of various materials) and new roofing will not provide adequate sealing of the underlying surface on its own and a breathable building cloth or reinforced under-cloak of strong building paper with all joints and edges sealed should be fixed first. The use of insulated wall cladding with its monolithic and well-sealed surface provides several advantages.

## Protection and clean-up

Particularly if substrate repair is involved, some leaded dust may be generated. Appropriate measures to control, contain and collect dust must therefore be used. Generally, this will involve disposable polythene sheeting around the work site, collection and bagging of any gross debris, and a HEPA vacuum – common detergent wash – HEPA vacuum cycle at completion of the work.

Polythene sheeting, debris bags, vacuum bags and mop heads should be safely disposed of. Waste may simply be bagged and put out with the household refuse, if small in quantity. Otherwise it will need to be disposed of by co-disposal in an appropriate landfill.

## Warning label

A warning to later renovators in the form of an indelible sticky label or stencil should be applied once the work has been completed. A suitable warning label would be (include date):

Caution: this structure encloses a lead-based paint hazard. Contact your local health protection officer or WorkSafe before carrying out any work.

Homeowners should also be encouraged to ask their local council to add a record of any potential lead-based paint on their property file.

Public health units should also consider providing information to the relevant local council about lead paint hazards or mitigation measures recommended or undertaken regarding specific properties in appropriate circumstances. For example, if public health staff think the presence of lead-based paint may pose a health risk to future property owners or occupiers and the owner is not willing to consider recommended mitigation measures or provide warnings to future owner/occupiers.

Ultimately it is the local council's decision about whether to place any such information on the property file (or whether to include any such information on documents such as land information memoranda (LIMs) or project information memoranda (PIMs) that it produces for any applicant.

The roles of local councils and public health units are further described in chapter 6. This includes potential compliance and enforcement options under the Health Act 1956 and the Building Act 2004.

## Monitoring and re-evaluation

Enclosures should be inspected after six months to verify that no unexpected early failure is occurring. Thereafter, and providing the building structure remains sound and free from moisture penetration or leaks, the building owner should visually inspect the integrity of the enclosure annually. Independent inspection is suggested 10-yearly when the integrity of the enclosure should be evaluated and the general condition of the building assessed, especially for factors that could compromise the enclosure.

## Building component replacement

Building component replacement is defined as the removal of windows, doors, architraves, skirting boards, trim and other building components that contain lead-based paint hazards. Usually, the item will be replaced by a new lead-free component.

The definition may be expanded to include the removal of heavily contaminated carpet, furniture and other items (which may be replaced with lead safe items, or not replaced at all).

Component replacement is a permanent source control (elimination) measure, and can generally be carried out with little environmental contamination arising. Moreover, it has spin-off benefits such as energy saving (eg, new draught-proof windows) and improving the longevity and value of the property. However, some components cannot be removed. Component replacement is particularly attractive in situations where remodelling work is already being done, and it is possible to integrate component replacement into the building rehabilitation programme at (relatively) little additional cost. It should not be assumed that component replacement is always the most costly option, as the labour cost of other abatement options can potentially be higher. For example, the cost of correcting



binding window sashes, repair of rotted sills and defective flashing, treatment of impact surfaces on internal sills, and the removal of paint and re-painting may exceed a replacement with an aluminium window.

The following provides general guidance for the health protection officer advising on a component replacement job.

## Contractors and worksite preparation

A reliable and experienced building contractor should be selected by the building owner. Besides being competent in the building work, the contractor must be aware of the lead hazards that could arise.

The extent of preparation required will depend on the size of the component to be removed, its state of deterioration, and the ease of removal.

In most situations it will be sufficient to cover the floor adjacent to the site with disposable polythene sheeting and remove the furniture from the room.

## Removal process

Use a garden sprayer to mist down the component with water (for dust suppression). Do not use water near electrical circuitry.

Score all affected painted seams with a sharp knife (this will provide a ready space for a pry instrument while minimising paint chipping during removal).

After cutting through any screws or other mechanical fasteners, use a flat pry instrument to carefully pry the component away from the surface to which it is attached. Try to keep the component intact and avoid chipping paint or generating/ disturbing dust.

Bag the component if badly deteriorated, prior to disposing of it (in a landfill).

Removal of the component may reveal visible (leaded) dust underneath or behind it. Preparation of the area to accept the replacement component may also release accumulated dust. In either case, dust should be collected without delay via one or more HEPA vacuum – common detergent wash – HEPA vacuum cycles. Mops or cloths and vacuum bags should be (double) bagged and disposed of with household garbage or directly to landfill.

## Protection and clean-up

After installation of the replacement component (if any), the polythene sheeting should be bagged and disposed of to a landfill and the room subjected to a final HEPA vacuum – common detergent wash – HEPA vacuum cleaning cycle.

## Monitoring and re-evaluation

Component replacement is a permanent source elimination measure, and requires no re-evaluation.

## Soil cover

Soil abatement may be considered as an adjunct to paint/dust abatement strategies, but generally is of limited value (Weitzman et al 1993; Yeoh et al 2014) as the greatest influence on blood lead is dust and not soil. A range of soil abatement options is available:

- grass or other soft cover such as bark chips (analogous to surface coating)
- paving or other hard cover (analogous to enclosure)
- soil removal and replacement (analogous to building component replacement)
- raised garden beds
- remove and replace sand in sandpits.

The choice of soil abatement strategy (if any) will be based on the risk assessment. The key variables are:

- soil lead concentration (and bioavailability)
- location and use pattern
- condition of existing surface cover (if any).

If the ground cover is poor (ie, there are patches of bare soil exposed) at a particular location, reasons for this should be determined, because this will influence abatement method selection. Bare soil is commonly exposed in:

- heavily used play areas
- pathways
- areas shaded by buildings or trees.

In all situations, gross contamination (visible paint chips) should be removed. The area may then be covered with 25 mm of turf, 50 mm of bark chips, paving, raised garden beds or similar.

Usually, this will involve removal of some surface soil or a partial grass cover, to prepare the surface for the laying of turf or bark. This may temporarily increase the amount of bare contaminated soil potentially accessible to a child, or available to contribute by wind transport or tracking to interior surface dust. Care should be taken to minimise disturbance to the soil, and to contain, collect and safely dispose of any soil that has to be removed.

Behavioural adjustments to relocate outdoor play areas, reduce soil ingestion, and minimise soil transfer and tracking into the house, are necessary complementary strategies.

Paving is the preferred option when contaminated soil is found in high-traffic areas. Contaminated soil should be disturbed as little as possible in preparing the surface, and precautions must again be used in managing any soil that must be removed.

While many paving materials are available, a high-quality concrete or asphalt cover is recommended, with appropriate allowance for thermal expansion and traffic loadings, so that cracks will not develop over time. Any areas of bare (contaminated) soil remaining at the edges of the paved surface should receive a grass or similar soft cover.

## Soil removal and replacement

Soil removal and replacement is the most expensive and also the most hazardous soil abatement option. It should only be considered when soil contamination is extensive, behavioural factors are unfavourable (eg, a child with pica), and soft or hard ground cover is unlikely to be sustainable. In this situation, core samples should be taken from the affected area in a grid pattern to check that the expected decline in soil lead content with depth occurs (ie, that sublayers do not have equally or even higher lead content than the surface layer, as a result of historical events such as previous building or renovation on the site).

Typically, the soil profile shows a dramatic decline in lead content below 5 cm from the surface; however, removal of the top 15 cm (approximately) is recommended to provide a safety margin for activities that may disturb the surface such as gardening.

Soil removal generally involves a mix of both mechanical and manual methods. In either case, excavated soil should not be left on the property at the end of the working day (because of the risk of wind and water erosion leading to contamination both on-site and to neighbouring properties) but should be disposed of in an appropriate landfill. (Many jobs can, in fact, be completed in one day if properly managed and resourced.)

The soil that is removed should be disposed of at a hazardous waste facility and must not be used as top soil at another property.

Vehicles, containers and digging equipment must be washed down after use, and the waste water must be collected and filtered prior to disposal in a manner agreed by the territorial authority. Disposal to an on-site stormwater disposal soak-away may be acceptable.

At the end of each working day (and at the completion of soil removal), soil that has spilled from the excavation site onto adjacent grass or paved surfaces should be swept up and disposed of. Remaining soil particles contaminating grassed areas will largely be washed into the underlying soil by rainfall and will be rendered inaccessible (non-bioavailable) as a result of the grass cover. However, paved surfaces that have been contaminated with (leaded) soil, (such as patios, paths, concrete strips, driveways) may need to be vacuumed, hosed down, and vacuumed again. An industrial-strength vacuum cleaner fitted with a HEPA filter on the exhaust would be sufficient for relatively smooth surfaces and small areas. Alternatively, a suitable pavement cleaning machine (available from most local authorities) may need to be used, in which case the surfaces should be kept moist to minimise dust production.

After clean-up, replacement soil containing less than 210 µg/g of lead can then be installed, to a final grade of 5 cm above existing grades (to allow for settling and ensure that all drainage is away from the area). The replacement soil can then be covered with turf, bark chip, or other suitable cover.

Worker and occupant protection are both important during soil abatement. In particular, ensure that site access controls do not operate only during working hours and that children and pets are denied access at all times until the area is safe.

## Water

If measurements of lead concentrations in the first flush drinking-water are compared with measurements after flushing, a reduction in lead levels indicates the reticulation system is the most significant contributor to lead dissolution. Remediation extends to point of use treatment, component replacement or other treatment options. If no significant reduction in lead concentration occurs on flushing, the lead is most likely entering the system via the collection or possibly the storage system.

## Abatement options

### Management of the supply

Some plumbing fittings have the potential to allow minute traces of metals to accumulate in water standing in the fittings for several hours. Although the health risk is small, the Ministry of Health recommends that a mugful of water is flushed from drinking water taps each morning, before use, to remove any metals that may have dissolved from the plumbing fittings. The Ministry recommends this simple precaution for all households, including those on public and private water supplies.

Automatic flushing by use of a solenoid valve fitted at the end of each plumbing run can get over the latter; however, there is the initial cost of purchasing of solenoid valves and time clocks.

### In-line dosing

To reduce softness of roof or shallow bore water, installation of an in-line filter containing limestone material can neutralise the acid dissolution effect. Waters less than pH 6.7 generally accentuate lead dissolution.

The limitation of this approach is that treatment is only successful in water temperatures above 5°C and where iron concentrations are less than 0.5 mg/l. Therefore, in cold winter climates this treatment may not be an option.

### Point of use filters

These are effective on single cations only, that is where water supplies have two or more metals of health concern, two or more filters in series must be employed.

There are inherent problems with point of use filters, including maintenance, cartridge replacement, record keeping (in order to establish the replacement frequencies), bacterial build-up (generally controlled through regular maintenance of filters or other pre-treatment options).

### Total removal of lead-containing components

This generally involves replacement of all lead componentry. The advantage is obvious; the solution is permanent and involves no ongoing costs.

The disadvantage is initial capital cost to replace materials, together with the associated labour costs.

### Combination of options

The opportunity exists for combinations of options, such as the gradual replacement of lead-containing components, and use of in-line treatment and management approaches. Schools generally will find it difficult to invest in significant treatment; however, the decision to follow a particular course of action may be influenced by the severity of the problem.

## Protection during abatement

Most abatement jobs will generate or release lead-contaminated dust. Protection of workers and their families, residential occupants, household items, and the environment is therefore of critical importance to minimise the risk of short-term increases in dust lead hazards arising from the abatement activities themselves.

The following advice should be read with any Codes of Practice or other guidance issued by WorkSafe.

### Protection of workers and their families

Lead may contaminate the hands, face and hair of the workers, or their clothing (work overalls) and footwear.

Workers should use disposable overalls if possible, but otherwise change out of work clothes before leaving the site. The work overalls should be placed in a laundry bag and laundered separately from other family clothing.

Hair should preferably be kept short, but otherwise restrained in a (disposable) hair net or cap.

Workers should wash hands and preferably shower before donning home clothes and departing the work site (otherwise shower as soon as getting home, and before cuddling or playing with young children).

Footwear should be covered with protective (disposable) booties or reserved for use at the work site (ie, change into home footwear just before leaving the site).

These precautions should be sufficient to protect the worker's car and home environment from contamination with take-home lead, as well as preventing direct transfer of lead from the hands, skin, hair, clothing or footwear of the worker to young children with whom the worker may come into contact.

Workers, are of course, themselves exposed to lead dust while carrying out abatement work and may suffer adverse health effects as a result. Exposure may be by both ingestion and inhalation, depending on particle size distribution and other factors. Depending on the nature of the work, a suitable respirator or mask (complying with AS/NZS 1716: 2012 Respiratory Protective Devices), gloves, overalls, goggles and boots may be required to protect the worker. Respiratory protection is generally required only for large-scale paint removal jobs. (See *Paint removal* section, and consult WorkSafe if further advice is required.)

## Occupant protection

For anything other than minor abatement jobs, and particularly if paint removal is involved, temporary relocation of preschool children, women who are or may be pregnant, and pets, is recommended.

As a minimum, children (and pets) should be kept well away from the work area.

Access restriction must apply at all times, not just during working hours, until the work has been completed and final clean-up has been done.

Re-occupation may then be permitted, or the decision may be made to maintain access restriction pending the results of clearance tests.

## Environmental protection

While work should always be done in ways that minimise dust generation or release, dust can seldom be avoided entirely. It is important therefore that items such as furniture, furnishings, carpets, containers, toys, food, cosmetics, medicines, and so on be removed from the room and placed in lead-safe storage until it is safe to return. Items that cannot be removed (such as fittings, carpets and floors) should be covered with an appropriate sheeting material, taped down at the edges as necessary. Experience shows that clean-up is much more satisfactory if all items including carpets are removed.

Similarly, for exterior work, ground-sheets should be used beneath the work area. Windows, doors, ventilation holes and the like should also be sealed with adhesive tape. While a variety of sheeting materials may be used, disposable polythene sheeting is recommended. Non-disposable sheeting must be thoroughly washed between uses. It may become a source of contamination rather than a containment device if washing is not completely effective. Shaking soiled overalls, and thereby generating dust, should also be avoided.



## Disposal of abatement wastes

Small amounts of solid wastes (debris, dusts) can be bagged and disposed of as ordinary household refuse. Similarly, small volumes of waste water (eg, used wash water) can be tipped down the sink. Cloths and mop heads should be disposable. They may also be bagged and treated as non-hazardous domestic waste.

Large amounts of debris, polythene sheeting, and other solid wastes should be appropriately contained (eg, placed in polythene bags) and disposed of as low-grade hazardous waste by co-disposal in a landfill designated for this purpose. The same applies to building components, carpets and the like that have been removed as part of the abatement process.

Lead-based paint containing wood debris should never be used as firewood because this will generate lead fumes, as well as leaded ash that may cause disposal difficulties.

Large volumes of contaminated water are generated by water blasting as a paint removal technique, and they should be treated before being disposed of in a manner approved by the territorial authority and/or the regional council. Acceptable treatment may comprise passage through an earth dam or filter and disposal to the sanitary sewer or to an on-site soak-away, providing no groundwater is likely to be affected. Disposal to a stormwater system discharging to natural water is unlikely to be acceptable.

## Post-abatement clean-up

Although most leaded dust should have been retained on the polythene sheeting or other material used as floor/ground cover, it is essential that a thorough clean-up be done at the completion of the abatement work.

Once the cover material and abatement equipment has been cleaned and removed from the site, all surfaces that may potentially have received dust-fall should be cleaned. The recommended cleaning cycle is the same as that used for ongoing dust suppression (see next chapter) that is, a dry HEPA vacuum, followed by a common detergent wash, followed by a wet HEPA vacuum. If the abatement job has been large scale, and particularly if it has involved extensive paint removal, the cleaning cycle should be repeated twice.

Further rounds of cleaning may be indicated by the results of clearance tests (if any). In any event, cleaning cycles will almost certainly need to be repeated at regular intervals to manage (ongoing) dust build-up, unless all sources of lead in dust have been eliminated.

## Clearance testing, ongoing monitoring and re-evaluation

In situations where the blood lead level of the index case at notification exceeds  $1.2 \mu\text{mol/l}$ , environmental contamination is assessed as likely to be extensive, the case is judged to be especially vulnerable (eg, because of a pica habit), and/or large-scale

abatement is being planned, the decision will generally be made to carry out pre-abatement environmental sampling.

In that case, it will generally be appropriate to carry out post-abatement or clearance environmental sampling as well, for comparison with the pre-abatement levels and recognised standards. Serial environmental testing may be carried out at intervals thereafter to monitor the effectiveness of corrective action or ongoing dust control measures, but should seldom be necessary. The cost of laboratory analysis, together with the lack of well-validated health-based standards for comparison, and the problem of sampling variability, limit the usefulness of environmental monitoring in practice.

Instead, greater reliance should be placed on serial blood lead measurements of the index case (and other exposed household members where appropriate). Blood lead is a biomarker that integrates exposure from all sources, and has a well-established relationship to health outcomes. It is also particularly sensitive to recent (past three to four weeks) rather than cumulative exposure, making it well suited for trend analysis. Failure of blood lead levels to fall as expected could indicate several situations: the transient increase in environmental contamination that may result from some abatement activities if adequate precautions are not taken, inadequate implementation of abatement interventions, incomplete identification of hazards (and pathways of exposure) in the risk assessment phase, or replacement of excreted lead by lead stored in bones as a result of high cumulative exposure.

Finally, many abatement techniques require periodic re-evaluation to ensure their continued integrity. Usually this can be achieved by visual inspection alone.

The table below summarise the recommended re-evaluation schedules:

<b>Abatement method</b>	<b>Re-evaluation frequency</b>	<b>Type of re-evaluation required</b>
Paint film stabilisation	Initial evaluation at six months. Annual inspection by the building owner. Independent inspection at years 5, 8 and 10.	Visual examination of painted surface. Adjacent dust sampling if doubtful.
Treatment of friction/ impact samples	Generally as for paint film stabilisation unless other methods used.	As above.
Surface coating	Initial evaluation at six months. Annual inspection by the building owner. Independent inspection at five-yearly intervals.	As above but also examine for extensive delamination. Check for building defects that could compromise surface coating.
Paint removal	None (if all paint removed).	Not applicable.
Enclosure	Initial evaluation at six months. Annual inspections by building owner. Independent inspection 10 yearly.	Visual examination of seals; dust sampling if in doubt. Check for building defects that could compromise enclosure.
Building component replacement	None.	Not applicable.

Soil cover (soft)	One month initially, then three months, thereafter annually.	Visual examination of extent of cover.
Soil paving or removal	20-yearly.	Visual examination.

# Chapter 5:

## Risk reduction – behaviour modification

### Main points

- Abatement strategies should usually be complemented by behavioural strategies.
- Behavioural measures can be used to reduce exposure to lead hazards, and diet can affect the absorption of ingested lead.
- Behavioural strategies can be categorised into three groups:
  - house cleaning
  - personal hygiene
  - diet.
- Vacuum cleaning should be carried out using equipment capable of operating in both wet and dry conditions and be fitted with a HEPA filter, especially for dry vacuuming.
- Wetting of surfaces is a simple but effective dust suppression technique.
- Common detergent is effective in cleaning dust containing lead.
- Soft furnishings should be commercially cleaned where possible.
- Hygiene measures should be appropriate to the circumstances (ie, depending on blood lead levels, level of environmental lead contamination, case's exposure and behaviour, etc).
- Diet can have a significant effect on lead absorption. Advice on healthy eating should follow the Ministry of Health's *Eating and Activity Guidelines* (Ministry of Health 2020).<sup>2</sup>

### Introduction

While abatement is directed towards elimination or control of lead hazards, behavioural measures can be used to reduce exposure to these hazards, and diet can affect the absorption of ingested lead. Environmental, behavioural and dietary strategies are complementary processes, the relative efficacy of which depends on the extent of lead

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<sup>2</sup> A range of guidance documents are available on the Ministry of Health's website: [www.health.govt.nz/our-work/eating-and-activity-guidelines](http://www.health.govt.nz/our-work/eating-and-activity-guidelines). As at February 2021 this information includes the *Eating and Activity Guidelines* (updated in December 2020) and the *Food and Nutrition Guidelines series*.

contamination and the vulnerability of the receiving population. Environmental controls are most effective when contamination is extensive, or exposure is difficult to influence as a result of pica or excessive hand-to-mouth behaviour. In most other situations, behavioural adjustment will be effective on its own, although obvious lead hazards should always be abated.

Environmental and behavioural strategies in reality merge into one another, and some interventions include elements of each. With the exception of some abatement interventions that are one-off procedures, all strategies require ongoing maintenance and reinforcement, at least until potentially exposed case(s) age out of the window of susceptibility (generally regarded as age six), or relocate to a lead-safe environment.

Behavioural strategies can be categorised into three groups:

- house cleaning (dust control)
- hygiene (personal care)
- diet (absorption control).

Hygiene and dietary advice also apply to firearms users (see Appendix 5).

## House cleaning

House-cleaning routines are intended to suppress dust lead loading, the major exposure pathway for most non-pica children. These routines are similar to the clean-up process carried out at the end of abatement activities and use a combination of vacuuming and washing to collect and remove dust.

A meta-analysis of randomised controlled trials of low-cost lead dust controls (education about cleaning, provision of cleaning supplies or equipment, or professional cleaning) found that the reduction in blood lead level was greater for children who had a blood lead level of 0.72  $\mu\text{mol/l}$  or more. There was no significant reduction in average blood lead level for children in intervention groups compared with control groups (Haynes et al 2002).

## Vacuuuming

Vacuuuming must be done with a cleaner with a sufficiently powerful motor to collect most particulate from most surfaces, including from within carpet pile and cloth (all of which may vary widely in texture).

The cleaner exhaust must be fitted with a HEPA filter. Otherwise, fine particles will simply circulate again, and (depending on building ventilation patterns) may subsequently settle in more accessible locations. (HEPA filtration is particularly important for dry vacuuming. Once dust has been wetted, there is less risk of resuspending fine particles.) It is recommended that, in all buildings known to have lead paint used in the interior or exterior, a HEPA filter should be used to minimise the airborne redistribution of dust.

Ordinary domestic wet/dry machines, or the commercial carpet cleaning machines available for hire from some supermarkets and hardware stores may suffice for a wet vacuum, for which HEPA filtration is less important. Further information about the range of appropriate cleaners available, and their suitability for use in dry and wet modes, can be gained by contacting the manufacturers or their local agents directly.

The cleaning of moderately or heavily lead contaminated soft furnishings using HEPA vacuuming and steam cleaning may not remove sufficient lead-containing material and under some circumstances may make the lead more bioavailable. In many situations, replacement is the recommended option for soft furnishings.

## Washing

Wetting of surfaces is an important dust suppression technique.

Water should be used on hard surfaces and may be suitable for many carpet and other fabrics, using a wet and dry vacuum cleaner.

Large, flat surfaces such as walls, ceilings and wood cork or linoleum floors, can be wet mopped. A moist cloth or wipe can be used on window sills, glazing bars, around door frames, furniture, fixtures and appliances.

When washing with water, a common detergent should be added.

If possible, mop heads and washcloths should be disposable. If not, they will need to be carefully laundered before re-use. Cleaning equipment (ie, the vacuum cleaner, mop handle and wash-bucket) must also be wet-wiped after each use (or repeatedly washed out in the case of the bucket) to avoid re-contaminating the environment with the next 'cleaning'. Care is required in disposing of used wash water and full vacuum dust bags to avoid clean (and cleaned) areas from becoming contaminated.

## The cleaning cycle

The recommended cleaning process is an initial ('dry') HEPA vacuum (to remove visible traces of dust), followed by a detergent wash, followed by a second ('wet') HEPA vacuum to remove dust particles 'loosened' by the wash. If no HEPA filtered cleaner suitable for wet vacuuming is available, use an ordinary domestic wet/dry cleaner or a commercial carpet cleaning machine for this vacuum. (A HEPA filtered cleaner is **essential** for the dry vacuum, however.)

If necessary, the cleaning cycle may be repeated twice on each cleaning occasion. The frequency of cleaning will depend on the 'dustiness' of the environment, effectiveness of abatement measures (if any), and serial blood lead (and, if done, lead dust) measurements. In most situations, a weekly single cycle routine will suffice.

Soft furnishings, such as rugs and curtains, act as dust traps and should be commercially cleaned at regular intervals (generally monthly to quarterly). Rugs, curtains and removable carpets can be cleaned off-site, which is preferable. Fitted carpet and soft furniture which are difficult to send for commercial cleaning may be cleaned by an initial HEPA



vacuuming, followed by wet vacuuming where the material is unlikely to be damaged. Alternatively, steam cleaning should be considered for carpets. Fabrics that may be damaged by water (or steam), and cannot be removed for dry cleaning off-site, should be HEPA vacuumed frequently, say twice weekly. The use of aerosol foam fabric cleaners, following the manufacturer's instructions, may assist in fabric cleaning, but there is no evidence that they assist in the removal of dust lead. Other furniture, such as veneered or carved wood, can be HEPA vacuumed and wiped with a cloth moistened with a furniture polishing oil to assist in the collection of dust.

Dust suppression may also include sweeping and hosing down of exterior paved surfaces (patios, paths, concrete strips, driveways). If exterior dust is shown to be a major exposure pathway, a similar cleaning cycle to that used indoors can be instituted. Suitable hand-controlled pavement cleaning machines may be available from the local authority, or can be hired from commercial sources. These can produce dust emissions and surfaces should be moistened.

In designing an appropriate cleaning schedule, the household's current house-cleaning routine and access to resources (financial and human) must also be taken into account.

## Hygiene

Hygiene measures are a collection of strategies designed to reduce exposure to paint, dust and soil through change in the behaviour of the exposed population (people and pets).

Not all the measures listed below will be appropriate for each situation.

### Care of an affected child

The most successful strategies require parental supervision of the child and physical separation of the child from the hazardous environment. Environmental modification will be the primary protective activity. Parents should be reminded that lead has a sweet taste, and children may develop a craving for it.

If the child is under the care of a paediatrician, then they may be able to help with advice for parents and caregivers. A child with a resistant pica habit should always be referred for full paediatric assessment, irrespective of blood lead level.

- Fingernails should be kept short, because they can act as dust traps.
- Toys can be washed regularly, especially those likely to be chewed, sucked or cuddled.
- Washing the affected child's hands and face before meals or having a nap is useful (a wet wipe can be used).
- Children should not be fed on the floor, or while playing on the ground. Discourage children from picking up and eating food that has fallen onto the floor or ground.

- Encourage the affected child to play in safe areas – indoors on cleanable uncarpeted floors away from windows, outdoors on paved or grass-covered areas away from the house or other painted surfaces.
- Playing in bare soil (other than a tested sand pit) should be discouraged.

## Household pets

Pets can act as dust traps, accumulating dust and soil particles on their fur. They can also track soil into the house on the under-surface of their paws.

If possible, limit access of pets (dogs and cats) to the living space, particularly principal play areas and eating areas.

- Do not allow pets to sleep on the affected person's bed.
- Discourage children from directly licking or kissing the pet.
- Wash pet dogs regularly.

## Soil tracking

A walk-on mat can be provided at entrances to the house (which should be regularly HEPA vacuumed). This should be combined with encouragement to residents and visitors to remove footwear at the entrance, so reducing the tracking of soil into the house. Boots and other footwear heavily covered with soil should be washed off using an outside tap or hose, well away from principal play areas.

## Food

- Wash soil off root crops (eg, potatoes) before eating.
- Wash vegetables and fruit before eating (to remove leaded dust fall).
- Store food and eating/cooking utensils in sealed containers or closed cupboards that will protect them from dust fall.
- If visible traces of dust are present, the utensil should be washed before use.

## Diet

Diet can have a significant influence on lead absorption, varying this from 50 to 60 percent down to 10 to 20 percent of the ingested dose for a young child. The Ministry of Health's *Eating and Activity Guidelines* (Ministry of Health 2020) describes a healthy diet that is likely to meet the complete nutrient and energy requirements of the population group and therefore promote optimal nutritional status.

## Frequency of meals

Animal experiments and human volunteer studies have shown that lead is absorbed much better on an empty stomach. Frequent small meals, rather than fewer large meals, will significantly reduce the absorption of ingested lead. For young children with limited stomach capacity, small meals and snacks are needed, rather than three large meals.

## Fat content

Fat increases lead absorption. A diet with moderate fat content is recommended; this can be achieved by adherence to the Ministry's *Eating and Activity Guidelines (including the age-appropriate Food and Nutrition Guidelines series)*.

## Minerals and vitamins

Lead absorption is strongly influenced by nutritional status, in particular, iron and calcium deficiency.

Iron-rich foods include (lean) meat, chicken and seafood. Cooked or canned dried beans (eg, kidney beans, baked beans), chickpeas, lentils, split peas and tofu contain iron, but it is not absorbed as well as from animal foods. Iron absorption is assisted by vitamin C, so servings of fruit and vegetables (eg, citrus fruits, kiwifruit, leafy green vegetables, broccoli, tomatoes, capsicums) should be promoted. Tea contains tannins, which lowers the amount of iron that the gut absorbs. It is recommended to drink tea between meals rather than at mealtimes. Tea should not be fed to infants because it inhibits iron absorption.

Absorption of ingested lead is inhibited by phosphate (which complexes it in the gut), and other heavy metals (in particular, calcium and zinc), which compete with it for transport from the gut.

A diet that follows the Ministry's *Eating and Activity Guidelines (including the Food and Nutrition Guidelines series)* will contain sufficient minerals and vitamins; dietary supplements are not generally recommended. To ensure an adequate calcium intake, children should be encouraged to consume at least two servings of milk or milk products each day. A serving is equivalent to 1 glass of (reduced fat) milk  $\frac{3}{4}$  cup yoghurt or 2 slices of cheese. If plant-based milk alternatives, such as soy, rice, almond or oat milk, are being used, ensure they are calcium-fortified.

If iron deficiency is suspected, this should be discussed with the case's general practitioner (or paediatrician or physician).

## Breastfeeding

Breast milk is the ideal and preferred food for infants. Lead levels in breast milk are 1 to 10 percent of whole blood levels (reflecting equilibration with the plasma rather than the red cell compartment). Unless maternal blood lead is very high, therefore, breast milk should be safe. An expressed breast milk sample can be tested if there is concern, and the result

can be related to the volume of breast milk being ingested by the infant, to estimate exposure from this source. The table below can be used as a guide:

Age of child (months)	Typical weight (kg)	Typical volume of breast milk ingested per day (ml)*
1	3.5	500
3	5.5	750
6	7.5	1000

\* Derived from infant formula feeding guidelines.

Given the benefits of breastfeeding, the decision to breast feed or not, based on the concentration of lead in breast milk, should be decided on a case by case basis in discussion with the case's general practitioner.

## Compliance monitoring and outcome evaluation

Behavioural protocols will have to be maintained until the child has grown out of the period of susceptibility, typically taken to be age six.

Given the cumulative exposure that may have already occurred (ie, the size of the bone pool that will act as an internal source), and the variable effectiveness of available environmental and behavioural strategies in limiting exposure to external sources, rapid decline of blood lead should not be expected. A slow but steady fall of as little as 0.05-0.10  $\mu\text{mol/l}$  per month should be accepted as satisfactory. Plateauing over several months or actual rebound in blood lead should lead to re-assessment of compliance with behavioural protocols, and review of effectiveness of abatement work. There might also be previously unidentified lead hazards and open exposure pathways.

# Chapter 6:

## Roles and responsibilities

### Role of public health units

The public health unit will respond to the notification of a person with raised blood lead level. The public health unit should aim to facilitate households taking responsibility and ownership of the problem. Coordinating the case's care and follow-up may include:

- arranging for repeat blood lead testing of the index case, and other household residents (or other appropriate contacts, for example, from an early childhood care centre) as required
- in consultation with the general practitioner, arranging paediatric or physician referral of the index case (and other cases)
- communicating with general practitioners or paediatricians. For example, writing to the relevant GP when a case is notified from someone other than the patient's GP (such as the laboratory or hospital), or writing to a paediatrician if blood lead levels are over 0.96  $\mu\text{mol/l}$ . Telephone contact should be made with a paediatrician to arrange urgent assessment if the child's blood lead level is  $\geq 2.17 \mu\text{mol/l}$ . Examples of template letters are provided at Appendix 2.
- assessing nutritional status (especially iron) and diet of the index case (and other cases) in consultation with community dietitians
- educating the household about the health effects of acute and chronic lead exposure
- educating the household about how the risk of exposure to and absorption of lead can be reduced by behavioural strategies (house cleaning, hygiene and diet)
- assisting the household to participate in the development of a risk reduction plan
- advising the household on implementation of this plan, with particular regard to behavioural risk reduction strategies, and monitoring compliance with these strategies
- advising the household to obtain temporary lead-safe accommodation, if necessary
- liaising on the household's behalf with the property owner/landlord (if the occupier is not the owner) and with insurers, if necessary
- ongoing monitoring of the person's health, in particular through serial blood lead measurements, in partnership with the general practitioner or, less commonly, the paediatrician or physician

- communicating with the household at all stages of the investigation and follow-up, ensuring that their concerns are listened to and addressed, and all findings and options are fully discussed with them from the perspective of the case's and household's health
- ensuring that all necessary information is shared between the public health unit, the laboratory, the general practitioner, paediatrician or physician, other relevant organisations or individuals, and the household (while safeguarding the household's right to privacy and confidentiality)
- if necessary, issuing a certificate to the territorial authority regarding injurious or unfit condition of a dwellinghouse under section 42 of the Health Act 1956, as a last resort.
- when exercising the power of entry and inspection under section 128 of the Health Act, notifying (by notice in writing) the appropriate territorial authority if they believe that any building or site work does not comply with the Building Act 2004 (section 128A of the Health Act).

The specific skills of the health protection officer will be required to:

- carry out a risk assessment to identify contributory sources of lead (lead hazards) and (open) pathways of exposure to lead (including collection of environmental samples for laboratory analysis, and interpretation of laboratory results)
- design an appropriate abatement (source elimination) and management (exposure control) strategy in consultation with the household, the general practitioner, public health nurses, the territorial authority and other parties as appropriate
- advise the household on the implementation of the abatement strategy, including precautions to take
- ensure the implementation of key abatement processes
- evaluate the effectiveness of the risk reduction plan, including clearance (post-abatement) environmental testing if appropriate (and take corrective action as necessary)
- liaise with local authority officers and local WorkSafe officers, and other environmental agencies as required.

On rare occasions, it may be necessary for local authority officers to enforce the abatement plan through the exercise of legal powers through the Health Act 1956 or the Building Act 2004.

## Role of WorkSafe

WorkSafe New Zealand is responsible for setting controls for the use of hazardous substances in the workplace. WorkSafe New Zealand administers workplace legislation, including controls of hazardous substances transferred from the HSNO Act. WorkSafe New Zealand has responsibility for explosives (including fireworks), manufacture, packing, labelling, wholesale, retail, use/reuse, remediation of contaminated land by workers, and investigation of workplace chemical injuries. This includes:



- controlled substances licensing
- test certification
- issuing approvals (or waivers) for people, sites or equipment, including, for example, burners, tanks, dispensers, compliance plans and maintaining approvals registers
- developing and approving codes of practice for workplace activities
- providing information on how to comply with hazardous substance legislation in the workplace
- dealing with workplace hazardous substance enquiries.

## Notification to WorkSafe

Medical officers of health are required to advise WorkSafe New Zealand of work-related notifiable disease or hazardous substances injury (under section 199 of the Health and Safety and Work Act 2015). This requirement applies to cases of:

- a notification under section 74 of the Health Act 1956 of a notifiable disease that he or she reasonably believes arises from work; and
- a notification under section 143 of the Hazardous Substances and New Organisms Act 1996 (HSNO Act) of an injury caused by a hazardous substance that he or she reasonably believes arises from work.

To notify WorkSafe, please use the form "*Notifications under section 199 of the Health and Safety at Work Act 2015 Notifications by Medical Officers of Health*" (Appendix 4). Please email the notification to: [healthsafety.notification@worksafe.govt.nz](mailto:healthsafety.notification@worksafe.govt.nz).

A person conducting a business or undertaking (PCBU) is also required to notify WorkSafe under section 56 of the Health and Safety at Work Act 2015 of lead poisoning that arises from work if it was a notifiable event (ie a death, a notifiable illness or injury, or a notifiable incident).<sup>3</sup> The medical officer of health should inform the case (and the PCBU if the case agrees) of this obligation.

## Role of territorial authorities

In non-occupational settings, territorial authorities will normally be the regulatory agency with statutory authority to bring about a remedy. Territorial authority enforcement officers may collaborate with the other agencies, and the public health unit should provide the territorial authority with information and advice. Territorial authorities have duties and powers to prevent or control lead hazards under the following legislation.

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<sup>3</sup> An explanation of notifiable events is available at: <https://www.worksafe.govt.nz/notifications/notifiable-event/what-is-a-notifiable-event/#lf-doc-39637>.

## Health Act 1956

The Health Act 1956 includes provision for territorial authorities to:

- improve, promote and protect public health
- cause steps to be taken to abate nuisances or to remove conditions likely to be injurious to health or offensive
- enforce regulations under the Act
- make bylaws for the protection of public health
- issue cleansing orders, repair notices or closing orders.

Section 29 of the Act defines health 'nuisances' and generally includes matters 'likely to be injurious to health'. Particularly relevant are references to:

- accumulations or deposits
- situation or state of premises
- conduct of any trade, business, manufacture or other undertaking.

Enforcement in relation to nuisances is determined by the District Court if a nuisance is not abated voluntarily, except where immediate action is necessary. Works undertaken by a territorial authority to abate a nuisance may result in costs being recovered from the owner or occupier. It should be noted, however, that any person can lay information regarding a nuisance. A nuisance has to exist before any action can be taken and, accordingly, is not an effective means of preventive action.

Under section 41 of the Act, the territorial authority may serve a cleansing order on the owner or occupier, specifying the work to be carried out and the time in which to complete it. They may also issue a repair notice on the owner (or their agent) of a dwelling house under section 42. A closing order made under sections 42 or 44 can be issued as a last resort to protect the occupants, but such action will not, of course, resolve any external release of lead.

## Building Act 2004

The Building Act 2004 includes provision for territorial authorities to:

- require work to be done to prevent buildings from remaining or becoming dangerous or insanitary
- take measures to avert danger or rectify insanitary conditions
- issue project information memoranda revealing (inter alia) known hazardous contaminants.

A building consent will be required in most cases where demolition or structural alteration works are to occur. The ability to impose conditions on building consents appears to be limited to inspections or to enter premises (section 222). Nevertheless, territorial authorities could, at their discretion, include a 'Hazardous Building Material Warning' on relevant consent documents.

Project Information Memoranda (PIM) issued by territorial authorities must include information identifying special features of the land relating to the likely presence of hazardous contaminants where it is:

- likely to be relevant to the design and construction or alteration
- known to the territorial authority
- not apparent from the operative district plan.

Sections 121 to 130 deal with dangerous, affected, and insanitary buildings. It is possible that the presence of lead could cause a building being considered 'dangerous' or 'insanitary' for the purpose of the Act. Insanitary buildings include those of such construction as to be likely to be injurious to health. In determining whether or not a building is insanitary, consideration must be given to:

- size of the building
- complexity of the building
- location of the building in relation to other buildings, public places, and natural hazards
- intended use of the building, including any special traditional and cultural aspects of the intended use
- expected useful life of the building and any prolongation of that life
- reasonable practicality of any work concerned
- in the case of an existing building, any special historical or cultural value of that building
- any matter that the territorial authority considers to be relevant
- provisions of the building code.

Enforcement action is by way of formal notice requiring a remedy. An application for a court order authorising the territorial authority to do required work at the owner's expense may be made on default.

## Local Government Official Information and Meetings Act 1987

Section 44A of the Local Government Official Information and Meetings Act 1987 allows for anyone to apply to the territorial authority for a land information memorandum (LIM). Matters that must be included in the LIM are information concerning the 'likely presence of hazardous contaminants' that is known by the territorial authority but is not apparent in the district plan.

## Resource Management Act 1991

The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES) provide a nationwide set of planning controls, a national set of soil contaminant standards and

mandated investigation and reporting requirements. The NES is implemented by each territorial and unitary authority in accordance with their functions under the Resource Management Act relating to contaminated land, specifically section 31(b)(ia) 'the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land'.

Section 15 prohibits the discharge of contaminants into the environment except where some form of authority or consent exists. Section 17 requires every person to avoid, remedy or mitigate adverse effects on the environment.

Enforcement orders (by the Environment Court) or abatement notices (by an enforcement officer) may be issued requiring a person to cease, or prohibiting a person from commencing, anything that is or likely to be noxious, dangerous, offensive, or objectionable to such an extent it is likely to have adverse effect on the environment.

Similar action may require a person to do certain things to avoid, remedy or mitigate adverse environmental effects.

The Resource Management Act 1991 also includes provision for territorial authorities to make plans and rules that deal with hazardous substances. The health protection officer should be aware of the appropriate provisions of plans and when the NES may apply, since advice given in the absence of such knowledge could create difficulties.

## Role of property owners

Property owners, and their agents and/or managers, have the primary responsibility for correcting lead hazards arising from their property. Responsibilities include:

- meeting statutory obligations, such as under the Health Act 1956 and Building Act 2004
- providing properties that are lead safe
- assessing and managing all lead hazards arising from the property including hazards that have been caused by past actions such as lead-based paint removal
- administering and financing abatement work, including necessary repairs to the property
- selecting and agreeing to the abatement work with input from the public health unit and council as relevant
- engaging contractors for abatement work who are competent and appropriately trained
- informing contractors of the lead hazards
- monitoring the performance of contractors for compliance with work specifications
- revising routine property maintenance work practices to prevent lead hazards from being generated

- monitoring the condition of the property and abatement work to ensure that lead hazards do not recur
- obtaining necessary building consents and all other consents including those for the disposal of lead wastes and waste-water
- providing information to the occupier on lead hazards that the property may present and the steps that the occupier should take to minimise risks to the household
- informing purchasers of known or suspected lead hazards.

Landlords are thus required to protect occupants and others from (among other things) lead contamination arising from paintwork in the tenant's property or its fixtures and fittings.

The Residential Tenancies Act 1986 requires the landlord to provide and maintain the premises in a reasonable state of repair, with regard to the age and character of the premises (section 45(1)(b)). Landlords are also required to comply with all statutory building, health and safety requirements applying to the premises (section 45(1)(c)). Failure by a landlord to comply with these obligations is an 'unlawful act' under Residential Tenancies Act (section 45(1)A). The Act has a process by which a complainant can lodge a complainant with the Tenancy Tribunal.

## Role of property occupiers

The responsibilities of owner-occupiers are as outlined above. If occupiers are tenants, they are responsible for reporting to the landlord on any potential lead hazard developing, cooperating with the landlord in facilitating abatement work, and monitoring the condition of abatement work.

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# Appendix 1:

## Lead sampling and analysis

### Main points

- Results of blood sampling should be interpreted carefully and attention paid to whether the sample was capillary or venous blood, and in which units the results are reported.
- A simple qualitative test for the presence of lead-based paint will generally suffice.
- Wipe methods of dust sampling are recommended for measuring dust lead loading.
- Dust sampling should be considered if the index case's blood lead level is over 1.2  $\mu\text{mol/l}$ .

### Blood sampling

The level of lead in blood is a measure of the amount of lead recently absorbed and therefore an indicator of recent exposure (ATSDR 2020).

### Collection and analysis

When considering the results of the analysis of blood specimens, public health staff need to check whether the specimen was whole blood or capillary blood. This information should be included with the method of analysis on the laboratory report.

Capillary blood, from finger pricks, is appropriate for screening but if levels are elevated or action is being taken, whole blood samples should be analysed. Similarly finger pricks are appropriate for monitoring. Blood tests should be coordinated so all tests on the specimen can be done at once to minimise the need for further specimens to be taken.

Sample collection, storage, transport, and analysis must be undertaken correctly to ensure the reliability of the results. For example, care must be taken to avoid contaminating the sample at collection, and to avoid delays in dispatch to the laboratory.

It is recommended that only laboratories that have International Accreditation New Zealand (IANZ) registration for blood lead analyses be used. Laboratories conducting tests must be able to demonstrate adequate performance in a recognised quality assurance programme for blood lead assays.

### Blood lead level unit conversions

To convert from micrograms per decilitre ( $\mu\text{g/dl}$ ) to micromoles per litre ( $\mu\text{mol/l}$ ), divide by 20.71.

To convert from micromole per litre ( $\mu\text{mol/l}$ ) to micrograms per decilitre ( $\mu\text{g/dl}$ ), multiply by 20.71.

1.0 $\mu\text{g/dl}$ = 0.04829 $\mu\text{mol/l}$	1.0 $\mu\text{mol/l}$ = 20.71 $\mu\text{g/dl}$
5 $\mu\text{g/dl}$	0.241 $\mu\text{mol/l}$
10 $\mu\text{g/dl}$	0.483 $\mu\text{mol/l}$
15 $\mu\text{g/dl}$	0.724 $\mu\text{mol/l}$
20 $\mu\text{g/dl}$	0.966 $\mu\text{mol/l}$
25 $\mu\text{g/dl}$	1.207 $\mu\text{mol/l}$
30 $\mu\text{g/dl}$	1.449 $\mu\text{mol/l}$
35 $\mu\text{g/dl}$	1.690 $\mu\text{mol/l}$
40 $\mu\text{g/dl}$	1.931 $\mu\text{mol/l}$
45 $\mu\text{g/dl}$	2.173 $\mu\text{mol/l}$
50 $\mu\text{g/dl}$	2.414 $\mu\text{mol/l}$
55 $\mu\text{g/dl}$	2.656 $\mu\text{mol/l}$
60 $\mu\text{g/dl}$	2.897 $\mu\text{mol/l}$
65 $\mu\text{g/dl}$	3.139 $\mu\text{mol/l}$
70 $\mu\text{g/dl}$	3.380 $\mu\text{mol/l}$

### Conversions from the graded response protocol in Chapter 3

$\geq 70$ $\mu\text{g/dl}$	$\geq 3.4$ $\mu\text{mol/l}$ .
$\geq 45$ $\mu\text{g/dl}$	$\geq 2.17$ $\mu\text{mol/l}$
20 – 44 $\mu\text{g/dl}$	0.96 – 2.16 $\mu\text{mol/l}$
15 – 19 $\mu\text{g/dl}$	0.72 – 0.95 $\mu\text{mol/l}$
14 – 10 $\mu\text{g/dl}$	0.48 – 0.71 $\mu\text{mol/l}$
5 $\mu\text{g/dl}$ – 9.7 $\mu\text{g/dl}$	0.24 – 0.47 $\mu\text{mol/l}$
<5 $\mu\text{g/dl}$	<0.24 $\mu\text{mol/l}$

## Testing for lead-based paint

1. Testing of paint for the presence of lead (in excess of the standard) may not be necessary if the age of the paintwork can be established:
  - Pre-1945 paintwork may be assumed to be lead-based.
  - Paintwork dated between 1945 and 1965 is likely to be lead-based, but testing may be preferred to confirm this.
  - Testing is necessary for paintwork thought to date between 1965 and 1980, or if the age of the component is uncertain (that is, if paintwork cannot be accurately dated from the building and renovation history).
  - Post-1980s paintwork may be safely assumed to be below 0.25 percent lead, unless there is suspicion that old stock or industrial specification paint has been applied. (Exceptions may be lead chromate paints, which may occur to the late 1980s, and calcium plumbate paints on roofs to the 1990s.)

Note that determining the age of paintwork may be difficult if a full and accurate building and renovation history is not available.

2. Where testing is necessary, a qualitative field test ('spot test') is usually adequate. The sodium sulphide test has been extensively evaluated and is usually available at major paint retailers or home improvement stores. Each paint layer must be tested, as the lead paint may be covered by layers of non-lead paint. Non-destructive testing by X-ray fluorescence (XRF) can also be used to determine the presence of lead.
3. Sodium sulphide test:
  - Clean the surface to be tested.
  - Rub freshly prepared 5 percent sodium sulphide solution onto the surface (an area of several cm<sup>2</sup> is sufficient) using a clean cotton bud.
  - If less than 1 percent lead is present in the surface layer of paint, the exposed surface will turn black.
  - The surface layer can then be sanded off, and the test repeated on each newly exposed layer in turn, until the underlying surface is reached.
  - The test may also be applied to paint chips or flakes, but is less well validated in this context.

The test is qualitative only, with a limit of detection of about 1 percent (10,000 µg/g) (which is adequate). The relatively high false negative rate makes it important to check the test against the standard whenever a new location is visited. There is, however, a significant false negative rate (up to 15 percent when testing is done on dark colours), and occasional false positives.

4. Laboratory paint chip analysis can be done when a field test is negative (or positive or unclear) contrary to expectation (based on other evidence).

Cut a small paint chip (about 5 g) from the surface to be tested with a sharp knife, making sure all paint layers are represented. Place in a lead-free plastic or glass



container such as a blood collection tube, and dispatch to the laboratory. The result can be reported as a lead concentration ( $\mu\text{g/g}$ ), or loading ( $\mu\text{g/cm}^2$ ), if the area of paint excised is measured.

5. Take care when collecting destructive paint samples (for field or laboratory testing) to avoid contaminating the adjacent area (or collect other samples – ie, dust or soil – first). Any destructive testing should be discussed with the owner, and if possible a site selected that is less visible (but still representative of the suspected lead-based paint hazard).
6. Where most or all lead-based paint has been worn away or artificially removed, the existence of a lead-based paint hazard at the site may only be indicated by indirect evidence – ie, demonstration of lead contamination of dust or soil adjacent to the location of the hazard. Such ‘inactive’ sources should still be identified and abated if necessary.

## Dust sampling

### When to sample

Dust lead loading may be measured for risk assessment or clearance purposes. It should be considered when (see Graded Response Protocol Summary):

- the index case has a blood lead level over  $1.2 \mu\text{mol/l}$
- sources and pathways of exposure are not obvious from visual observation.

In other situations, dust control measures can be instituted (if necessary) without ‘before’ or ‘after’ dust testing.

Getting useful information from dust testing is not a straightforward process. Problems may be experienced with:

- difference in surface texture and condition
- measuring the area of the collecting surface
- timing collection in relation to time of last cleaning of the collecting surface
- consistently collecting all the dust deposited on the collecting surface
- avoiding sample contamination
- estimating case’s exposure to dust at a particular site
- estimating the fraction of lead in dust at each site that is bioavailable.

### Where to sample

Selection of sampling sites involves consideration of:

- case behaviour (location of principal play areas, time/activity relationships)
- lead-based paint hazards (nature and location) and (rarely) other lead hazards
- dust dynamics (dust deposition, dust removal by house cleaning routines).

Micro environments in which the case spends significant time, that are located close to a lead hazard, and that have visible dust accumulations, are the sites to sample (if available).

A typical sampling plan might include:

- window sill in case's bedroom
- floor in case's bedroom
- window sill (if any) and floor principal play area (lounge, playroom)
- kitchen floor
- floor adjacent to any major area of damaged or deteriorated lead-based paint.

Window sills are a particularly important sampling site, as dust is likely to be generated from paintwork abrasion wherever the window is opened or closed, and the window area is often an attractive place for children to play. Window sills are often favoured by children for biting or chewing, as well.

A number of samples should always be taken, as considered together they will provide a more accurate picture of the exposure profile than any single sample, which could be spuriously high or low.

## How to sample

The basic method for collecting surface dust samples is the wipe method. Wipe methods are more readily standardised and can provide more consistent and reproducible results than vacuum methods (Lanphear et al 1994), especially if results are expressed in terms of lead loading rather than lead concentration. The wipe method is therefore recommended for all dust sampling, irrespective of the texture of the collecting surface. Vacuum methods may be used in certain specialised situations but advice from the laboratory should be sought before this is undertaken.

The sampling and analytical process must be standardised so that consistent results are obtained, whether before/after comparison or comparison with a standard (exposure limit) is to be made.

## Standardised wipe method

1. A wipe material is required that:
  - is easily and completely digested to extract the lead
  - has low background lead content
  - is easy to use in the field
  - remains moist during the wipe sampling process.

A plain moist baby wipe (free of additional ingredients) is recommended.
2. To avoid contamination, collect dust samples before invasive paint sampling.
3. Time sample collection consistently in relation to time since last cleaning of the collecting surface. Sampling just before the next cleaning is due is recommended. It is pointless sampling just after a cleaning has been done.

Before sampling, wash hands thoroughly (or wear disposable surgical gloves – a fresh pair for each sample) and place an uncontaminated wipe into an uncontaminated plastic container. Seal, and label this as the blank.

5. Accurately measure the area to be wiped. A disposable template may be used, or one created on site using masking tape. For a typical floor, an area of 40 cm by 40 cm is recommended. For a window sill, generally the whole sill can be wiped and measured.
6. Do not overload the wipe such that dust is falling off (such dust will adhere to the sample container so reducing lead recovery) – wipe a smaller area if necessary. (Alternately, use a second wipe for the same area – but this will increase analysis cost.)
7. Collect all visible dust from the measured surface. Try to use a consistent and steady wiping technique, using the palm with the fingers held together. Do not use the fingertips to hold down the wipe, because there will be incomplete contact and dust will be missed. Ensure that the whole (measured) surface is covered.
8. Fold the wipe inwards to reduce the risk of sample loss. Place in a rigid plastic container (one for each site) and label, including the area wiped. Samples and blank may then be dispatched to the laboratory for analysis. Results will be reported as micrograms of lead per surface area wiped ( $\mu\text{g}/\text{m}^2$ ) – ie, as dust lead loading.

## Soil sampling

These sampling guidance notes are intended to assist public health units where soil sampling is required as part of the case management of lead exposed persons. Sampling may be required to confirm risk identification (exposure pathways) and inform subsequent risk reduction strategies. These guidance notes are not suitable for assessing a site's contamination status for other purposes.

### Sampling and analysis planning

Sampling soil for the presence of lead can assist the development of appropriate risk reduction strategies. Before collecting soil samples, some basic soil sampling and analysis planning should be carried out. This planning will assist officers to take meaningful and relevant samples. The planning should consider:

- the purpose of the soil sampling (ie, what additional information would the samples provide to assist with case management strategies)
- information about the site that may indicate the presence/absence and distribution of any lead contamination. This will include the location and history of potential soil contamination (eg, areas of lead paint, hobbies or repairs involving lead) or remediation activities
- the sampling collection technique and strategy to be used (eg, composite or individual samples)
- the location, depth, and number of samples that should be taken
- the order of sample collection (where practical, sampling should start at the part of the site suspected to be least contaminated to minimise the possibility of cross-contamination).
- any specific testing laboratory requirements regarding the collection and transport of samples.

## Hazardous activities and industries list (HAIL) sites

If the site's current or historic land use means it has been identified by the local territorial or unitary authority as a known or suspected Hazardous Activities and Industries List (HAIL) site then the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES) may apply when taking soil samples to assess for contamination<sup>4</sup>. Territorial authorities are responsible for implementing the NES. Any site investigation (including taking, analysing or assessing samples) to meet the requirements of the NES is not within the scope of public health unit work, although the results of such an investigation may inform the case management strategies.

If a public health unit's investigation of a lead-exposed case involves a HAIL site then the unit should liaise with the territorial authority. If no site investigation has been carried out and is not likely to be in the near future, (or lead contamination has not previously been investigated), then the public health unit should arrange for limited sampling to be carried out to meet their purposes ie, to assist in identifying the significant lead exposure pathways and priority areas for risk reduction strategies to reduce the case's lead exposure.

## When to sample

Soil lead may be measured for risk assessment or evaluation (clearance) purposes. Sampling for evaluation purposes should be considered when:

- the index case has a blood lead level over trigger levels in the *Graded Response Protocol Summary*
- the index (or other resident) case has a confirmed pica habit (ie, eating of non-food items including soil)
- sources and pathways of exposure are not obvious from visual observation (for example, testing is not usually necessary if soil contains visible confirmed lead-based paint flakes or chips).

In other situations, soil abatement and behavioural exposure control measures can be instituted (if necessary) without 'before' or 'after' testing.

Where there is visible contamination with known lead-based paint, this can be taken as evidence of soil contamination, reducing the need for testing and risk reduction strategies should be implemented.

## Where to sample

The decision of where to sample will be specific to the case and site being investigated and should be based on information obtained during the initial case investigation process. The following locations should be considered when determining where to sample:

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<sup>4</sup> The Ministry for the Environment *User's Guide: National Environmental Standard for Assessing Contaminants in Soil to Protect Human Health* state: The land-use history is the trigger for determining whether the land is covered by the NES. If no preliminary site investigation has been undertaken and there is no indication of a previous HAIL activity (or the potential for it) in the council records then the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations don't apply.

- principal outdoor play area(s)
- sand pit (if any)
- vegetable garden (if any)
- areas of soil readily tracked into the house
- bare soil areas within one metre of a lead painted surface (the dripline/foundation area), if the condition of paintwork is poor or there is a history of paint removal
- areas where debris from current or past renovation has been dumped or swept
- dust from paths, patios or concrete strips adjacent to the house and other buildings on site (especially if located adjacent to past or present lead-based paint hazards)
- areas where ashes from fires burning lead-based painted wood were emptied onto soil
- areas frequented by pets
- places where other lead-related activities may have occurred, (eg, boat or radiator repairing, fruit tree spraying prior to 1980, welding or preparing shot)
- areas where pica activity is known, or suspected, to be occurring and there is no obvious contamination.

## Sampling strategy

Focusing on specific locations within the property (as opposed to undertaking sampling across the whole section) is referred to as judgemental (or targeted) sampling. Prior knowledge of contamination activities, evidence of contamination (eg, paint flakes) and the use of professional judgement are all used to select sample locations. Judgemental sampling is specifically useful for confirming the presence or level of a contaminant at a specific location or to provide screening information that can inform further investigation.

The use of judgemental sampling will often be an appropriate strategy for case-management. In this situation the focus is on exposure pathways affecting the lead-exposed case, as opposed to identifying the presence of lead hazards *per se*

However, as judgemental sampling is inherently biased, it is not appropriate where a statistically sound sampling regime, or information on the distribution of the contaminant over the whole site, is required – in these circumstances a more extensive, statistically sound, sampling regime is more appropriate. The soil-sampling strategy should be consistent with the purpose of the investigation. There are two other types of sampling patterns commonly used in contaminated land investigations: systematic and stratified. Detailed information on selecting sampling patterns can be found in the Ministry for the Environment's *Contaminated Land Management Guidelines No. 5: Site investigation and analysis of soils*.

## Composite samples

Composite sampling occurs when individual samples from different spots are collected and mixed into one composite sample. This sample can then be analysed, and represents the average of the constituent sub-samples.

The benefit of composite sampling is its cost effectiveness as the number of samples that need to be analysed is reduced. However, this sampling method has some disadvantages as there is a loss of sensitivity in identifying areas with high lead levels. For example, a

high lead concentration in one area may be masked by the sample being diluted by other areas where the level of soil lead is significantly lower.

Composite samples should be made up of the same number and weight of sub-samples. Ideally no more than four sub-samples should be used to make up the composite. Sub-samples are usually taken from adjacent locations and from similar depths (ie, from the same soil/fill horizon).

Compositing is not suitable for soils that are not easily mixed (eg. clay) or for soils with different moisture contents.

The *Contaminated Land Management Guidelines No. 5* recommends compositing be undertaken at the laboratory and individual samples retained in case testing of individual sub-samples is required.

The number of samples that should be collected from each location is determined by the intended use of the data, the level of confidence required for the investigation, the area of the site and any site-specific constraints/limitations (including budgetary considerations). The sample planning process should identify the number of samples to be collected.

Appendix B (<https://www.mfe.govt.nz/publications/hazards/contaminated-land-management-guidelines-no-5-site-investigation-and-analysis-2>) of the *Contaminated Land Management Guidelines No. 5* contains guidance on how to calculate the minimum number of sample points required for statistically sound investigations and analyses.

For sampling around the perimeter of a building it is possible to make up a composite sample for each side of the building. The number of sub-samples should relate to the length of the side, ensuring the likely contamination level is similar along the areas where exposure is possibly occurring.

Remember that when comparing composite results against guideline values, the guideline value must be adjusted by dividing the value by the number of sub-samples in the composite:

$$\text{Adjusted guideline value} = \frac{\text{Guideline value}}{\text{Number of subsamples in composite}}$$

## Hot spots

'Hot spots' are areas where there is localised elevated levels of lead in the soil. There can be a number of causes of hot spots, such as the area where lead contaminated building materials or paint removal waste have been dumped or burnt or other lead related activities and hobbies have regularly occurred in one specific location.

From a case-management perspective, a hot spot is of concern if it is associated with an exposure pathway (eg, play area, area frequented by pets, or being targeted by a pica case).

Ideally hot spots being targeted by a pica case will be identifiable from observation of the child's behaviour, visual contamination or unusual soil disturbance: however, soil sampling may still be required. It is critical that hot spots are considered when planning soil



sampling. For a confirmed or suspected pica case, in addition to any composite sampling being done, a separate sample may be required from the localised area(s) where the case is eating soil. This is because high concentrations in one or more of the sub-samples making up the composite can be masked by a dilution effect of the other samples.

Appendix B of the *Contaminated Land Management Guidelines No. 5* (<https://www.mfe.govt.nz/publications/hazards/contaminated-land-management-guidelines-no-5-site-investigation-and-analysis-2>) provides a method for calculating the spacing and minimum number of samples required to detect circular hot spots with 95% confidence.

## Collecting and handling samples

Unless core samples are being taken, sample only the top 1.5 cm of soil. Collect about 100 g (half cup) of soil for each sample.

Any spoon, spatula or similar household or gardening implement can be used for surface sampling, provided it is thoroughly washed and dried before use, and then decontaminated again between samples to prevent cross-contamination. When decontaminating equipment, make sure not to contaminate any area that is to be sampled.

Should deeper samples be considered necessary (eg, to assess a vegetable garden at tuber depth or to confirm the depth of soil for replacement) then samples down to 0.5 m may be collected using trowel, push tubes, shovel or scoop.

For samples around a building perimeter, each sample should be taken about 50 cm from the face of the walls where paint and flakes are likely to fall. However, if there is a hard surfaced path adjacent to the wall, take the soil sample from the outer edge of the path where paint debris may have been washed, brushed or blown.

Sample containers must be clean and of an appropriate size and material. For soil lead samples, sealable plastic containers, such as screw top jars are acceptable. However, if there are any concerns about the use of sample containers this should be discussed with the analytical laboratory.

## Recording sampling information

Each soil sample that is taken needs to be clearly and correctly labelled. Public health officers should use their assigned sampling initials and sequential numbering to generate an unique sample code. A laboratory form will need to be completed and sent with the samples to the laboratory.

It is important that the unique code, location and depth of each sample taken is clearly identified and recorded in a field notebook, on a map or in a site file. The date, time and name of the person taking the sample must also be recorded.

The information on location is required when reviewing the test results to assist in defining which areas are considered contaminated/unsafe areas from those areas that are not. As the person taking the samples may not be responsible for determining the extent

of contamination, the information must be recorded in a manner that can be understood by other parties.

# Appendix 2:

## Sample letters for paediatricians and medical practitioners

The first sample letter is an example of correspondence that may be sent to the general practitioner (GP) when a case is notified from someone other than the patient's GP (such as the laboratory or hospital). The consent of the case or the case's caregiver should be sought before contacting the GP (if he or she is not the notifier). The second letter is for a paediatrician and relates to blood lead levels over 0.96 µmol/l. Note that a copy is sent to the GP. Telephone contact should be made with a paediatrician to arrange urgent assessment if the child's blood lead level is  $\geq 2.17$  µmol/l.

Dear Dr.....

### Elevated blood lead

**Patient name**

**Date of birth**

**Address**

.....

has been notified to the Public Health Unit as having an elevated whole blood lead level of ..... µmol/l.

Whole blood lead levels of 0.24 µmol/l or greater are notifiable to the Medical Officer of Health under the Health Act 1956. The Public Health Unit investigates all such cases to determine the source of exposure and to assist in ensuring that levels fall.

Our involvement includes counselling about the effects of lead on health, and modification of nutrition, housekeeping, and hygiene to further reduce lead exposure. We will often undertake testing to determine the most likely sources and pathways of exposure to lead.

Our aim is to provide sufficient information and support to allow a managed reduction in blood lead. Blood tests at a sufficient frequency are crucial to demonstrate that lead levels are declining at an appropriate rate. We keep in contact with the case as part of our follow-up to ensure that progress is maintained.

In accordance with the Ministry of Health's guidelines for *The Environmental Case Management of Lead-exposed Persons* (2021) which state that children with whole blood lead levels over 0.96 µmol/l should be referred for assessment by a paediatrician your patient has:

- been referred (copy of referral letter is attached)
- not been referred.

If you would like to discuss this case or any issue relating to lead poisoning further please contact me.

## Letter for paediatrician

Paediatrician's name

Address

.....

Dear Dr .....

### Elevated blood lead

**Patient name**

**Date of birth**

**Address**

.....

.....

.....

has been notified to the Public Health Unit as having an elevated whole blood lead level of .....  $\mu\text{mol/l}$ . The Ministry of Health's guidelines for *The Environmental Case Management of Lead-exposed Persons* state that children with whole blood lead levels over 0.96  $\mu\text{mol/l}$  should be referred for assessment by a paediatrician.

I would appreciate if you could arrange to see ..... as soon as convenient. In the interim, we will undertake an environmental assessment to identify sources and pathways of lead exposure in ..... 's environment, and provide abatement advice as necessary. Our involvement includes counselling about the effects of lead on health, and modification of nutrition, housekeeping, and hygiene to further reduce lead exposure.

We will supply you with a copy of the environmental assessment report when it has been completed.

I would be grateful if you could provide both myself and Dr ..... with a copy of your clinical assessment report.

If you would like to discuss this case or any issue relating to lead poisoning further please contact me or ....., Health Protection Officer, at this office.

Yours sincerely

Dr

Medical Officer of Health

**Public Health Unit**

cc: Dr .....General Practitioner

# Appendix 3:

## Report sheets

These report sheets are designed to:

- identify likely sources and pathways of lead exposure
- determine if and where environmental samples should be collected
- help develop a risk management strategy.

Each set is based on information obtained by interviewing the principal caregiver (and if necessary other household residents), supplemented by visual observation of the environment and behaviour, spot testing for lead-based paint and examination of building, medical and other records (if required).

### Copy the report sheets and adapt them for your own use

Save the Word document onto your hard drive so that the report sheets may be easily reproduced and adapted if necessary to suit individual cases.

Users may also find it useful to copy parts of the text from the Graded Response Protocol and other material into the report sheets.

### Suspected occupational exposures

Medical officers of health are required to advise WorkSafe New Zealand of work-related notifiable disease or hazardous substances injury (under section 199 of the Health and Safety and Work Act 2015). This requirement applies to cases of:

- a notification under section 74 of the Health Act 1956 of a notifiable disease that he or she reasonably believes arises from work; and
- a notification under section 143 of the Hazardous Substances and New Organisms Act 1996 (HSNO Act) of an injury caused by a hazardous substance that he or she reasonably believes arises from work.

To notify WorkSafe, please use the form "*Notifications under section 199 of the Health and Safety at Work Act 2015 Notifications by Medical Officers of Health*" (Appendix 4). Please email the notification to: [healthsafety.notification@worksafe.govt.nz](mailto:healthsafety.notification@worksafe.govt.nz).





Date	Blood lead	Comments

Previous history

Is the case, or anyone else in the household, or a household pet an existing or previous case of lead poisoning? (If so, summarise key information from previous medical and public health records.)

Possible sources of exposure

Where does the case or principal caregiver think the case is getting the lead from?

Assessment 1: the index case

Persons at risk:  
 Premises needing investigation:  
 Probable sources and pathways of lead exposure:  
 Assess severity of lead exposure (which will determine graded response)  
 Assess need to rebleed the index case to confirm or update the blood lead level

Blood sampling (and breast milk sampling where necessary)

Person	Relationship to index case	Blood test results					
		Date	Result	Date	Result	Date	Result

**2. People and environments at risk**

Who usually lives at this address? (Include pets)  
 Are there any preschool children who regularly visit? (List names, ages and relationships to index case.)  
 How long has the index case lived at this address?

Complete the table for all addresses where the index case has previously lived for more than six months over the past two years

Address	Dates (from – to –)	Approximate age of dwelling (if known)	Comments about conditions / known renovation

Time the index case spends away from home, including formal early childhood services, informal care provided by a friend, neighbour or relative

Type of care	Location of care	Number of hours/week	Comments about age and condition of premises, known renovation

Home ownership

<p>Do you rent or own your home? If rented, get details of landlord.</p>
--

Assessment 2: Persons at risk and implicated premises

<p>Assess need to get a blood test for any other household residents or visitors for blood lead levels (include pets).</p> <p>Assess need to investigate any premises other than the current address as possible sources of lead exposure (include previous residences; residences of friends, neighbours and relatives; early childhood services).</p>
---

### 3. Paint and dust hazards

This section should be completed for each implicated premises.

<p>Approximately what year was this house built? If unknown, was it built before 1945?</p> <p>Over the past two years, has there been any renovation, repainting, revarnishing, window replacement, sanding or blasting of painted or varnished surfaces inside or outside this house? (If yes, describe dates, durations and nature of work in detail.)</p> <p>Where does the case like to play or hide? (Include rooms, cupboards, decks, porches and outbuildings, eg, wendy house.)</p>
---

**Visually inspect the case’s bedroom and principal play areas for lead paint hazards** (chewed, worn, deteriorated or damaged paintwork, visible chips or dust in window wells, on window sills, or on floor directly beneath windows). Do spot tests if age unknown or dated between 1945 and 1980.

Location (room, etc)	Evidence suggesting that paint is lead-based and non-intact

Each identified lead paint hazard should be assigned a code for ease of reference, and located on the accompanying sketch-map.

Assessment 3: Lead paint and dust hazards

Identify lead paint hazards based on:

- age of building
- condition of paint/varnish in areas where case spends time (sleeping, playing or hiding)
- history of recent disturbance of lead paint/varnish
- spot tests for lead paint (if necessary).

Assess need for laboratory testing of paint, varnish and/or dust, and if so where to sample.

Paint sampling plan:

Dust sampling plan:

Environmental sampling: paint

Sample type and code	Location (sketch map)	Test results		
		Date–result–comment	Date–result–comment	Date–result–comment

Environmental sampling: dust

Sample type and code	Location (sketch map)	Test results		
		Date–result–comment	Date–result–comment	Date–result–comment

**4. Soil hazards**

This section should be completed for every implicated premise. See answers to section 3 and transfer or cross-reference information as appropriate.

Over the past two years, has there been any renovation or repainting of exterior painted surfaces? (Include house exterior, garage, outbuildings, outdoor play equipment and fences.)

If so, is the approximate age of this paintwork known?

If pre-1980, describe dates, duration and nature of work in detail:

Where does case like to play outdoors?

Note soil/sand cover in principal play areas including sandpits and proximity to painted surface

**Visually inspect exterior painted surfaces adjacent to principal play areas for paint condition**, that is, provide evidence of non-intact lead paint – use spot testing if necessary.

Location	Evidence of hazard	Ground cover at this location

Each identified soil hazard should be coded for ease of reference and located on the accompanying sketch-map.

Other soil hazards

Is this premises located within 100 m of a major road with heavy traffic flows pre-1996 (leaded petrol)?

Is this premises located near a lead industry such as a smelter, battery recycler, radiator repair shop, or electronics manufacturer?

Has soil around the property been removed or dug over in the past year?

Is there a vegetable garden on the property? If so, is it close to a lead paint hazard?

Has painted wood been burned in a wood stove or fireplace on the property? If so, have the ashes been emptied onto soil, and where?

### Assessment 4: Soil hazards

Assess likelihood of general contamination of the soil from stationary sources.

Identify hot-spots resulting from damage to a deterioration of lead paint. Assess these hazards in relation to ground cover, time spent by case playing in the area, and whether or not the case has a pica habit.

Decide whether soil sampling is necessary, and if so where to sample. Note that this requires knowledge of whether the index case (or other case) has a pica habit. It also requires knowledge of possible historic contamination remote from current lead hazards.

Soil sampling plan:

### Environmental sampling: soil

Sample type and code	Location (sketch map)	Test results		
		Date–result–comment	Date–result–comment	Date–result–comment

## **5 Uncommon lead hazards**

### 5.1 Water

Which tap is most commonly used to obtain drinking-water? To prepare infant formula?

Has new plumbing been installed in the past five years? (If so, get details) Is there any local knowledge that suggests that there may be old lead services still in use?

Is the drinking-water supply plumbosolvent (soft and acidic)?

Is it at risk of high lead levels? (Consider whether the supply is private or from roof water. You may want to check the Drinking-water Register for New Zealand (maintained by ESR [www.esr.cri.nz/our-services/consultancy/water-quality-and-sanitation/register-of-suppliers](http://www.esr.cri.nz/our-services/consultancy/water-quality-and-sanitation/register-of-suppliers).)

### Assessment 5.1: water

Assess whether lead in drinking-water could be a contributory source.

If so, test first flush water from the indicated tap or taps.

Environmental sampling: water

Sample type and code	Location (sketch map)	Test results		
		Date–result–comment	Date–result–comment	Date–result–comment

5.2 Foods, cosmetics, medicines

Do you (ie, the family) often eat imported canned foods? (If so, ask to see cans.)

Does the case eat eggs from free range backyard chickens?

Do you eat home grown vegetables? (If so, assess exposure of the vegetable to lead in air and soil, extent of washing before eating.)

What containers are used to prepare, serve and store the case's food? (Ask to see) Are any of them metal, pewter, crystal, soldered or glazed?

Does the case have a favourite mug, cup, bowl?

Are food and cooking/eating utensils stored under cover or exposed to dust? (Observe for evidence of visible dust traces.)

Are imported cosmetics such as kohl, suma or ceurix used in the home? (Ask to see.)

Are traditional medicines, home remedies, herbal treatments or bone-derived calcium supplements used in the home? (Ask to see.)

Does the case have access to any household chemicals or industrial products that contain lead? (Ask to see.)

Assessment 5.2: Foods, cosmetics, medicines, chemicals

Assess exposure (if any) from imported canned food, home-grown vegetables, cosmetics, traditional medicines, household/ industrial chemicals, cooking/ eating utensils.

Take samples for laboratory testing as required.

Environmental sampling: foods, cosmetics, medicines, chemicals

Sample type and code	Location (sketch map)	Test results		
		Date–result–comment	Date–result–comment	Date–result–comment

### 5.3 Hobbies

Dates, durations and activities over the past 12 months.

Has anyone in the household (over the past 12 months) removed paint or varnish while at home? (Include paint removal from cars, boats, bicycles, furniture, toys, woodwork.)

Soldered electrical parts while at home?

Cast lead models?

Applied glaze to ceramics or pottery?

Done stained glass work?

Painted pictures or jewellery using artist's paint?

Prepared shot for hunting or target shooting?

Participated in indoor rifle shooting? Outdoor rifle shooting?

Made fishing sinkers?

Done any car body repair work or battery breakdown in the garage or yard?

#### Assessment 5.3: Hobbies

Assess possible exposure of index case (or other household members) from these sources.

Plan any further investigation and laboratory testing with regard to hobby lead.

#### Environmental sampling: hobbies

Sample type and code	Location (sketch map)	Test results		
		Date–result–comment	Date–result–comment	Date–result–comment

### 5.4 Occupational (take-home) lead

Do caretakers, other adult household residents, or older siblings work with a lead process? (If yes, fill out table below)

- paint removal or repair/renovation of houses or other buildings
- demolition of buildings or structures such as bridges
- welding or other work involving cutting or melting metal (foundries, smelters)
- battery making or recycling



- plumbing
- radiation repair, panel beating or car painting
- paint manufacture
- pottery or jewellery making or repairing
- shipbuilding, repair or painting
- working in a glass factory
- working in a chemical plant that uses lead (whether a registered lead process or not).

Name	Relation to index case	Place of employment	Type of work	Probable lead exposure

If any probable occupational lead exposure identified, establish whether work clothes or footwear are worn home?

If so, are they kept separate? Are they laundered separately?

If any probable occupational lead exposure identified, establish whether the same motor vehicle used for commuting (or transporting workmates) is also used to transport household members?

#### Assessment 5.4: occupational take-home lead

Assess likelihood of occupational take home lead hazard, and possible exposure pathways. (Include clothing and footwear, car, hair and skin of worker.)

*Decide on further investigation (if any) including laboratory testing. (WorkSafe may need to be involved.)*

#### Environmental sampling: occupational take-home lead

Sample type and code	Location (sketch map)	Test results		
		Date–result–comment	Date–result–comment	Date–result–comment

Sketch map showing location of lead hazards, principal play areas, ground and floor cover, and sampling sites

(Include labelled photographs in envelope, if required.)

Envelope for photographs [attach]

## 6 Behavioural risk/protective factors

Note that section 6 needs to be completed separately for each case at risk. Intervention strategies can then be designed to meet the need of the most vulnerable case.

### 6.1 House cleaning routines

<p>What cleaning equipment does the family have in the home? (Broom, mops and bucket, sponges and rags, detergent?) (Is a HEPA filtered vacuum cleaner needed?)</p> <p>How often does the family:</p> <ul style="list-style-type: none"> <li>• sweep the floors?</li> <li>• wet mop the floors?</li> <li>• vacuum the floors?</li> <li>• wash the window sills?</li> <li>• wash the window troughs?</li> </ul> <p>Are the floor coverings smooth and cleanable?</p> <p>What types of floor coverings are there, and where are they located? (Indicate on sketch-map.)</p>
---

Assess the overall level of housekeeping

Adequate	Borderline	Inadequate
No visible dust on most surfaces	Slight dust build-up in corners	Heavy dust build-up in corners
Evidence of recent vacuuming of carpet	No evidence of recent vacuuming of carpets	No evidence of recent vacuuming of carpets
No matted or soiled carpets	Some matted or soiled carpets	Matted or soiled carpeting
No debris or food particles scattered about	Some debris or food particles scattered about	Debris or food particles scattered about
Few visible cobwebs	Some visible cobwebs	Visible cobwebs
Clean kitchen floor	Slightly soiled kitchen floor	Heavily soiled kitchen floor
Clean door jambs	Slightly soiled door jambs	Heavily soiled door jambs

### Assessment 6.1: house cleaning factors

Assess whether cleaning equipment appears adequate.

Assess whether cleaning routines appear adequate.

Assess whether floor coverings make it difficult to maintain a low dust environment.

### 6.2 Behavioural risk/protective factors: hygiene

Does the (index) case:

- suck their thumb or fingers?
- bite their nails?

Assess the general state of cleanliness of the case. Are hands or face visibly dirty?

Are finger nails long?

Does the case put any painted object into their mouth? (If yes, give details – directly observe if possible.)

Does the case chew on any painted surfaces? (If yes, get details. Ask about cot, window sills, furniture, railings, door moulding, broom handles.)

Does the case chew on any putty around windows?

Does the case eat paint chips or pick at painted surfaces?

Is the paint in the case's bedroom and principal play area intact?

Does the case eat soil (dirt)? If so, about how often and how much? (Directly observe if at all possible.)

Does the case have a favourite play area in the yard or garden?

Does this area have patches that are uncovered ie, bare soil is exposed?

How close is this area to the house or other painted structure? (Garage, outbuildings, fence)

Does the case chew or eat printed materials such as newspapers, magazines or books?

Does the case put any soft metal objects in its mouth? (Ask about lead or pewter toys, jewellery, containers, graphic materials, hobby items.)

Is the case commonly fed while playing on the floor? Outside?

Does the case pick up fallen food items from the floor or ground and eat them?

Does the household have a dog or cat that could track contaminated soil into the house?

If so, where does the pet sleep? Does it have access to the case's sleeping, eating or principal play areas? Does the case directly lick or kiss it? (Directly observe if possible.) How often are pet dogs washed?

### Assessment 6.2: hygiene and case behaviour

Assess the extent to which the case's mouthing behaviour, hand-to-mouth activity, play behaviour and feeding behaviour could be contributing to lead exposure.

Assess the extent and nature of pica (soil eating).

Assess the contribution of pet animals to case exposure.

Assess the extent and modifiability of existing hygiene practices (eg, hand washing, nail clipping).

### 6.3 Behavioural risk/protective factors: diet

Is the case being breastfed?

How many meals per day does the case eat (including breast milk or solid foods)?

How much milk does the case drink?

Are other dairy products eaten?

How much meat, chicken and seafood does the case eat?

How many servings of fresh vegetables or fruit does the case eat on a typical day?

Does the case drink tea?

What about other traditional foods?

### Assessment 6.3: diet

Assess the nutritional status of the case (especially iron-status). This should be done by, or in consultation with, a dietician and may require blood test to check iron status.

Assess the frequency of meals.

Assess the extent to which the case's diet complies with the age-appropriate Eating and Activity Guidelines, including the *Food and Nutrition Guidelines* (ie, low saturated fat, sufficient phosphate, calcium, iron and zinc). Refer to <https://www.health.govt.nz/our-work/eating-and-activity-guidelines>

Decide on further investigations, need for dietary change or dietary supplementation.

## **7 Action plan**

Temporary relocation

Action sought from landlord

Paediatric referral

Environmental abatement

Abatement work recommended	Sketch map reference	Date completed	Observed Y/N	Clearance sampling (date)	Comments

Behaviour modification: house cleaning routine

Behaviour recommended	Frequency	Date started	Date checked	Comments

Behaviour modification: hygiene/case behaviour

Behaviour recommended	Frequency	Date started	Date checked	Comments

Behaviour modification: diet

Behaviour recommended	Frequency	Date started	Date checked	Comments

**8 Situation review**

Summarise assessment, advice given, compliance, outcome evaluation)

<p>Initial visit</p> <p>First follow-up visit or other contact</p> <p>Second follow-up visit or other contact</p> <p>Further follow-up visits or additional contacts</p>
--

# Appendix 4:

## Work injury notification form



**Notifications under section 199 of the Health and Safety at Work Act 2015  
Notifications by Medical Officers of Health**

**Please email notification to: [healthsafety.notification@worksafe.govt.nz](mailto:healthsafety.notification@worksafe.govt.nz)**

**Mandatory Information (Section 199)**

Full name of patient: .....

Name of notifiable disease or injury:  
.....

**Discretionary Information (Section 197)**

Name of workplace: .....

Address of workplace: .....

Type of work:

<input type="checkbox"/> Accommodation and Food Services	<input type="checkbox"/> Administrative and Support Services	<input type="checkbox"/> Agriculture
<input type="checkbox"/> Arts and Recreation Services	<input type="checkbox"/> Construction	<input type="checkbox"/> Education and Training
<input type="checkbox"/> Electricity, Gas, Water and Waste Services	<input type="checkbox"/> Financial and Insurance Services	<input type="checkbox"/> Fishing
<input type="checkbox"/> Forestry	<input type="checkbox"/> Health Care and Social Assistance	<input type="checkbox"/> Information Media and Telecommunications
<input type="checkbox"/> Manufacturing	<input type="checkbox"/> Mining – Minerals	<input type="checkbox"/> Mining – Petroleum
<input type="checkbox"/> Mining – Other Services	<input type="checkbox"/> Rental, Hiring and Real Estate Services	<input type="checkbox"/> Wholesale Trade
<input type="checkbox"/> Professional, Scientific and Technical Services	<input type="checkbox"/> Public Administration and Safety	<input type="checkbox"/> Other Services (specify below)
<input type="checkbox"/> Retail Trade	<input type="checkbox"/> Transport, Postal and Warehousing	
Specify other:		

>=2 cases in the workplace: Yes  No

Name of hazard present in workplace: .....

Was there workplace exposure to the hazard?: Yes  No

### Demographic Information

Date of Birth: .....

Gender: Male  Female

Ethnic Origin:

- |   |                                  |  |
|---|----------------------------------|--|
| <input type="checkbox"/> NZ Pakeha/European     | <input type="checkbox"/> Maori   | <input type="checkbox"/> Other European    |
| <input type="checkbox"/> Samoan                 | <input type="checkbox"/> Tongan  | <input type="checkbox"/> Cook Island Maori |
| <input type="checkbox"/> Niuean                 | <input type="checkbox"/> Chinese | <input type="checkbox"/> Indian            |
| <input type="checkbox"/> Other: (please advise) | .....                            |  |

### Client/patient informed that:

1. Access to medical information will be limited to medically qualified WorkSafe staff as appropriate, and the Registrar for the purpose of collating such information on behalf of WorkSafe medical staff as required.
2. Other personal information will be held for statistical and/or research purposes. The client/ patient will not be identified in any publication.

Yes  No

**Client/patient objected to providing some or all s197 information:** Yes   
No

*Note: Only the s199 information that the client did not object to will be provided by Toi Te Ora Public Health. Toi Te Ora Public Health may override this objection after consulting with the Bay of Plenty District Health Board's legal advisers if disclosure is necessary to reduce the risk to other people*

### Contact Phone:

Business hours:

After hours:



# Appendix 5:

## Health advice for indoor shooters

The following information has been adapted, with thanks, from advice prepared by the Auckland Regional Public Health Service. It is updated to reflect organisational name changes and the revised notifiable blood lead level.

[www.arphs.health.nz/our-resources/category/lead-and-lead-poisoning](http://www.arphs.health.nz/our-resources/category/lead-and-lead-poisoning)

### What is lead poisoning?

Lead poisoning occurs when blood lead levels are higher than is considered safe for health. Under the Health Act 1956, blood lead levels greater than or equal to 0.24 µmol/L must be notified to the Medical Officer of Health by your doctor. This level is considered potentially unsafe for members of the public, particularly children and pregnant women, because lead can interfere with the development and functioning of the brain and other organs in developing children.

### Symptoms

The symptoms of lead poisoning may go unnoticed until blood lead levels are very high because they are very common and non-specific. Symptoms can include the following:

- Effects on the brain – mood change (depression, irritability), memory loss, sleep disturbance, headaches, difficulty concentrating, tingling and numbness in fingers and hands.
- Effects on the digestive system – lack of appetite, nausea, diarrhoea, constipation, stomach pains and weight loss.
- Other effects – kidney damage, reduction in sperm quality and number, miscarriage and anaemia.

### What causes lead poisoning?

#### At home

The main causes of lead poisoning in people who are not exposed to lead at work are indoor shooting; casting of lead bullets, fish sinkers and diving weights; paint-stripping on houses built pre-1980s; and consumption of herbal medicines and Ayurvedic medicines which contain lead. Non-occupational sources of lead exposure are investigated by the public health service.

## At work

Various occupations involve exposures to lead and cases of occupational lead poisoning are investigated by the WorkSafe New Zealand. Examples of occupations where lead exposure may occur include: painting, smelting, plumbing, panel beating, battery manufacture, soldering, and radiator repairs.

## Why are indoor shooters at risk of lead poisoning?

Research has shown that users of indoor firing ranges are at risk of exposure to high levels of lead. Cases of lead poisoning investigated by public health have also shown that indoor shooting is often associated with raised blood lead levels. This is generally because lead fumes and dust generated by shooting may be breathed into the lungs or swallowed, and then adsorbed into the blood. Lead contamination from hands may be transmitted to food items and cigarettes – where it can be swallowed. Lead dust may also be taken home on clothing worn at the shooting range and result in others being exposed at home. It is particularly important not to carry lead home on your body and clothing to an environment occupied by pregnant women and children aged six and younger (who are particularly sensitive to lead poisoning).

## What can you do to prevent lead poisoning?

A number of things may be done to reduce your exposure to lead. There are things that you should do as an individual, and these are listed below. There are also things that those who manage the firing range should do, such as:

- (1) ensuring adequate ventilation so that lead contaminated air flows away from shooters and is extracted safely
- (2) ensuring adequate hand washing facilities are available
- (3) ensuring that lead dust that accumulates via shooting is regularly removed using a HEPA filter vacuum cleaner or by wet mopping – these methods prevent lead dust being spread further or breathed in by those doing the cleaning.

## Monitoring

If you are a shooter who attends an indoor shooting club frequently, eg, one or more times per week, you should have your blood lead level monitored by your doctor at least once a year. This should be done during the shooting season when blood lead levels are likely to be highest. If your lead level is raised, public health will ring you and help you to identify and manage your exposures to lead.

## Hygiene

After shooting you may have lead residues on your hands, other exposed parts of the body, your clothes, and your shooting gear. If these are not cleaned, they will be an ongoing source of lead which you may breathe in or swallow. To avoid ongoing contamination, you should wash your hands after shooting, particularly before eating, drinking or smoking. Contaminated clothing should be put in a plastic bag for transporting home and stored and laundered separately from other clothing. Shooting vests and mats should be washed regularly using a phosphate detergent, and washed and

stored separately from other garments. Avoid shaking contaminated garments (which releases lead dust). Hair may be covered during shooting or should be washed as soon as possible after shooting. It is particularly important not to carry lead home on your body and clothing if pregnant women and children may be exposed to lead.

## Personal Protective Equipment (PPE)

Some shooting clubs advise the use of masks and other personal protective equipment (PPE) when shooting.

## Nutrition

Diet and eating patterns can help in reducing the amount of lead absorbed into your body. Eating before shooting may help reduce lead levels because studies have shown that full stomachs are less able to absorb lead. Foods rich in calcium and iron help reduce the amount of lead that is absorbed from the gut into the bloodstream. Adequate vitamin C levels are also important in increasing iron absorption. Advice on healthy eating should follow the Ministry of Health's *Eating and Activity Guidelines* (Ministry of Health 2020). A range of guidance documents are available on the Ministry of Health's website: [www.health.govt.nz/our-work/eating-and-activity-guidelines](http://www.health.govt.nz/our-work/eating-and-activity-guidelines).

## Shooting behaviours

The more frequently you shoot, the more lead you are likely to be exposed to, and exposure will also depend on where and how you shoot, PPE worn, ventilation, and any other activities or behaviours that affect dust levels. Casting of bullets is a particular concern due to personal handling of lead and lead-contaminated equipment; and inhaling lead fumes.

## Range cleaning

If you are involved in range cleaning and maintenance, your risk of lead poisoning will be increased due to higher exposures to lead, particularly if these activities result in dust being generated. Follow the advice above and use HEPA filter vacuums, wet mopping and PPE when cleaning.

## What do you do if you think you have lead poisoning?

- If you have any symptoms, please ensure that you see your doctor. Your symptoms may not be due to lead poisoning but you should tell your doctor of any lead exposures that you may have experienced, including indoor shooting, so that your doctor can decide whether or not you should have a blood test for lead.
- If your blood lead level is raised, the Medical Officer of Health is notified by the laboratory. An officer from public health will ring you and work through a questionnaire with you to find out how you are coming into contact with lead.
- Using the results of the questionnaire, a public health officer will offer you advice on how to reduce your exposures to lead. We will also work with you and your doctor to manage your blood lead level until it returns to normal. When we find that a number of people are being exposed to lead from the same place, we will offer advice on how the exposure may be reduced so that others are not exposed in the future.

# Appendix 6:

## Minimising lead exposure in shooting club ranges

The following information has been adapted, with thanks, from advice prepared by the Auckland Regional Public Health Service. It is updated to reflect organisational name changes and public health unit contact details.

[www.arphs.health.nz/our-resources/category/lead-and-lead-poisoning](http://www.arphs.health.nz/our-resources/category/lead-and-lead-poisoning)

### Public health advice for operators

The following are recommended as part of best practice design and operation of indoor shooting ranges. There is no one-size-fits-all solution as every range is different and requires its own design solutions. The design concept of 'dirty' areas and 'clean' areas is useful. Please note that it is difficult to assess indoor shooting ranges for risks from lead exposure and to develop pragmatic, workable solutions. The regulatory agency for use of land and requirements related to buildings is the territorial authority for the location, ie, the local council. It is recommended that early consultation occurs with the relevant council to avoid expensive mistakes.

These recommendations also include safety advice for shooters. Shooting ranges and clubs should educate shooters about the potential harm of lead exposure and promote mitigation strategies via information pamphlets, club newsletters, email updates and website information. This document includes a reference list to many other sources of information.

### Recommendations

Shooting club committees, range officers and shooters at indoor shooting ranges should take the following steps to protect themselves from risks of elevated lead exposure:

### When designing or renovating a shooting range (to minimise lead exposure)

- Ensure adequate ventilation and air filtration systems are installed in consultation with an expert third party. Ventilation changes may need council consent. (1)
- Where possible, use bullet traps that minimise lead dust generation. Some newer traps do away with the need for regular cleaning. Repeated misting with water using a garden sprayer will help to keep the dust down.

- In the 'dirty' area, facility walls, ceilings, floors and all fixed structures, partitions, chairs and tables should have washable, smooth surfaces that are easy to keep clean.
- Avoid dust traps on ceiling beams or roof trusses and promote aerial separation of the 'dirty' area from 'clean' areas, eg, by self-closing, draught-proof doors.

## Operating a shooting range (to minimise lead exposure)

- Discourage eating, drinking or smoking in the firing range 'dirty' area. (2, 3, 4)
- Ensure that shooters have ready access to hand washing facilities, and are advised to wash their hands immediately following their shooting session.
- Consider the use of lead free ammunition for indoor ranges.
- Consider limiting the number of shooters per session.
- Advise users to wear dust masks whilst shooting, to avoid exposure to excess lead. (18, 19)

## Cleaning and maintenance of 'dirty' areas

- Disposable overalls, gloves and masks should be worn at all times during cleaning. (5)
- Disposable overalls, gloves and masks should be worn during indoor repair and maintenance work. (5)
- Young persons of school age (defined as 15 and under) and women of childbearing age should not participate in cleaning or maintenance of 'dirty' areas.
- Laminated posters on personal hygiene (especially on hand washing and not eating, drinking or smoking in the firing range) should be displayed prominently at ranges.
- A regular monitoring programme should be established to ensure the correct operation of ventilation systems with a written record kept of checks conducted. Ventilation systems need regular maintenance and cleaning (including filter replacement if required) according to manufacturers' advice. (7, 8, 9, 10, 11, 12)
- Ensure fan and ventilation systems are always turned on and fully functional when the range is in use.
- Anyone participating in cleaning needs to have adequate training on ways to minimise lead dust exposure and in the use of appropriate personal protective equipment (PPE). (7, 13)
- A roster system should be created to rotate range officers and shooters to minimise lead exposure.
- Only use wet mopping or HEPA-filter vacuuming instead of dry sweeping when cleaning the floor in 'dirty areas'. Never dry sweep or use cleaning techniques that raise dust. (5, 13)
- When cleaning horizontal surfaces (other than the floor) in 'dirty' areas, always use wet squeegees or wipes. (5, 13)
- If bullet traps need to be emptied, debris should be emptied into sealed plastic bags and repeatedly misted with water to avoid raising dust.

- Contaminated materials (ie, wiping cloths, filters, mop heads and contaminated back stops/soil, etc) should be safely disposed to landfill by a Department of Labour WorkSafe approved cleaning contractor – as hazardous material.
- If contractors are hired to clean premises or remove lead contaminated back stops/soil, then they must follow best practice guidelines, ie, from WorkSafe New Zealand and/or territorial authorities.

## Information for shooters

Shooters regularly attending an indoor shooting range; shooters who cast their own bullets and shooters who are involved in regular range housekeeping or maintenance activities should consider asking their GP to monitor their blood lead level. These persons may have raised levels of lead in their blood, where indoor shooting could be a contributing lead exposure risk. (14, 16, 17)

## Environmental management

- Shooting range management should also consider how to dispose of waste that contains lead residues to minimise the impact of lead pollution on the environment.
- Ranges and clubs should nominate a health and safety representative, often the range officer, who is trained to minimise lead exposure and tasked to actively raise awareness amongst shooters of ways to decrease lead exposure. For example, they could initiate the production of advice, policies, procedures, and programmes specific to indoor shooting ranges according to relevant standards and legislation.
- Shooters should use personal protective equipment (PPE) and consider regular blood tests to check their lead levels. (14, 15)
- Clubs should advise shooters to consult a doctor if concerned about their health. The public health unit will contact members with raised blood lead levels and discuss how lead exposures may be reduced.
- Lead exposure resulting from work activities is a matter for WorkSafe New Zealand. (16, 17)

Should you require any further information about dealing with environmental exposure to lead, please contact the Health Protection Officers at your local public health unit (contact information can be found at <https://www.health.govt.nz/new-zealand-health-system/key-health-sector-organisations-and-people/public-health-units/public-health-unit-contacts>).

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# Glossary

<b>µg</b>	microgram, one millionth of a gram, sometimes written mcg
<b>µm</b>	one millionth of a metre, sometimes called a micron
<b>µmol</b>	micromole
<b>Abatement</b>	the removal or significant reduction of a source of hazard and intervention to reduce exposure to a hazard
<b>Certified Contractor – Lead-based Paints</b>	a registered master painter certified in the management of lead-based paint by the Master Painters New Zealand Association
<b>ATSDR</b>	Agency for Toxic Substances and Disease Registry
<b>Binder</b>	solid ingredients in a coating holding the pigment particles. Binders are based on oil, alkyd, acrylic, latex and epoxy. The nature and amount determines the coatings performance
<b>Blood lead</b>	blood lead level in micromoles of lead per litre of blood, µmol/l
<b>CDC</b>	Centers for Disease Control
<b>Ceurix</b>	a cosmetic, which may contain lead particularly if an imported brand
<b>Chalking</b>	photo-oxidation of paint binders causing powder on the film surface
<b>Clearance</b>	confirmation of acceptable levels of contamination
<b>Clearance and action levels</b>	in the US HUD guidelines and the US EPA Proposed Rule the clearance levels are the levels of lead in dust and lead in soil that abatement seeks to achieve. The levels are also action levels, ie, the levels which, if exceeded, require further action
<b>Decilitre</b>	one tenth of a litre or 100 millilitres
<b>Dust lead concentration</b>	the proportion of the mass of lead in a known mass of dust
<b>Dust lead loading</b>	mass of lead in dust per unit area, measured in µg/m <sup>2</sup> of dust bearing area
<b>Dust loading</b>	mg dust/m <sup>2</sup>
<b>ESR</b>	Institute of Environmental Science and Research Ltd
<b>GP</b>	General Practitioner
<b>HEPA filter</b>	high-efficiency particulate air filter capable of removing particles of 0.3 µm or larger from air at 99.97 percent efficiency
<b>Hg</b>	mercury
<b>HSNO</b>	Hazardous Substances and New Organisms Act
<b>IANZ</b>	International Accreditation New Zealand (formerly known as TELARC)
<b>IARC</b>	International Agency for Research on Cancer
<b>Index case</b>	case that is the subject of investigation
<b>Kohl</b>	a cosmetic, which may contain lead particularly if an imported brand
<b>LBP</b>	lead-based paint that contains by dry weight 0.5 mg/cm <sup>2</sup> or 2500 µg/g or more of lead
<b>LIM</b>	Land Information Memorandum
<b>l</b>	litre, sometimes written L
<b>MAV</b>	Maximum Acceptable Value

<b>MfE</b>	Ministry for the Environment
<b>mg</b>	milligram or one thousandth of a gram
<b>Micron</b>	one millionth of a metre ( $\mu\text{m}$ )
<b>MoH</b>	Ministry of Health
<b>NES</b>	Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.
<b>PbB</b>	lead in blood; measured in micromole of lead per litre of blood, $\mu\text{mol/l}$
<b>PbD</b>	lead in dust; measured in microgram of lead per gram of dust $\mu\text{g/g}$ (same as $\text{mg/kg}$ or $\text{ppm}$ )
<b>PbS</b>	lead in soil; measured in microgram of lead per gram of soil, $\mu\text{g/g}$ (same as $\text{mg/kg}$ or $\text{ppm}$ )
<b>PHU</b>	Public Health Unit
<b>Pigment</b>	insoluble fine particles giving paint colour and opacity
<b>PPE</b>	personal protective equipment
<b>ppm</b>	parts per million by mass
<b>Primary prevention</b>	measures taken to prevent hazardous conditions arising
<b>Secondary prevention</b>	measures taken to remove a hazard and correct or reverse harmful effects
<b>Suma</b>	a cosmetic, which may contain lead particularly if an imported brand
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs and Poisons
<b>Tertiary prevention</b>	providing medical treatment to a person with elevated blood lead levels to prevent more serious injury or death
<b>US EPA</b>	US Environmental Protection Agency
<b>US HUD</b>	US Department of Housing and Urban Development
<b>Window trough</b>	that part of the window sill below both the upper and lower vertical sliding sashes of sash windows, or the area of the sill or frame covered by a closed casement or top hung window
<b>WorkSafe</b>	WorkSafe New Zealand
<b>uPVC</b>	un-plasticised polyvinyl chloride
<b>XRF</b>	X-ray fluorescence

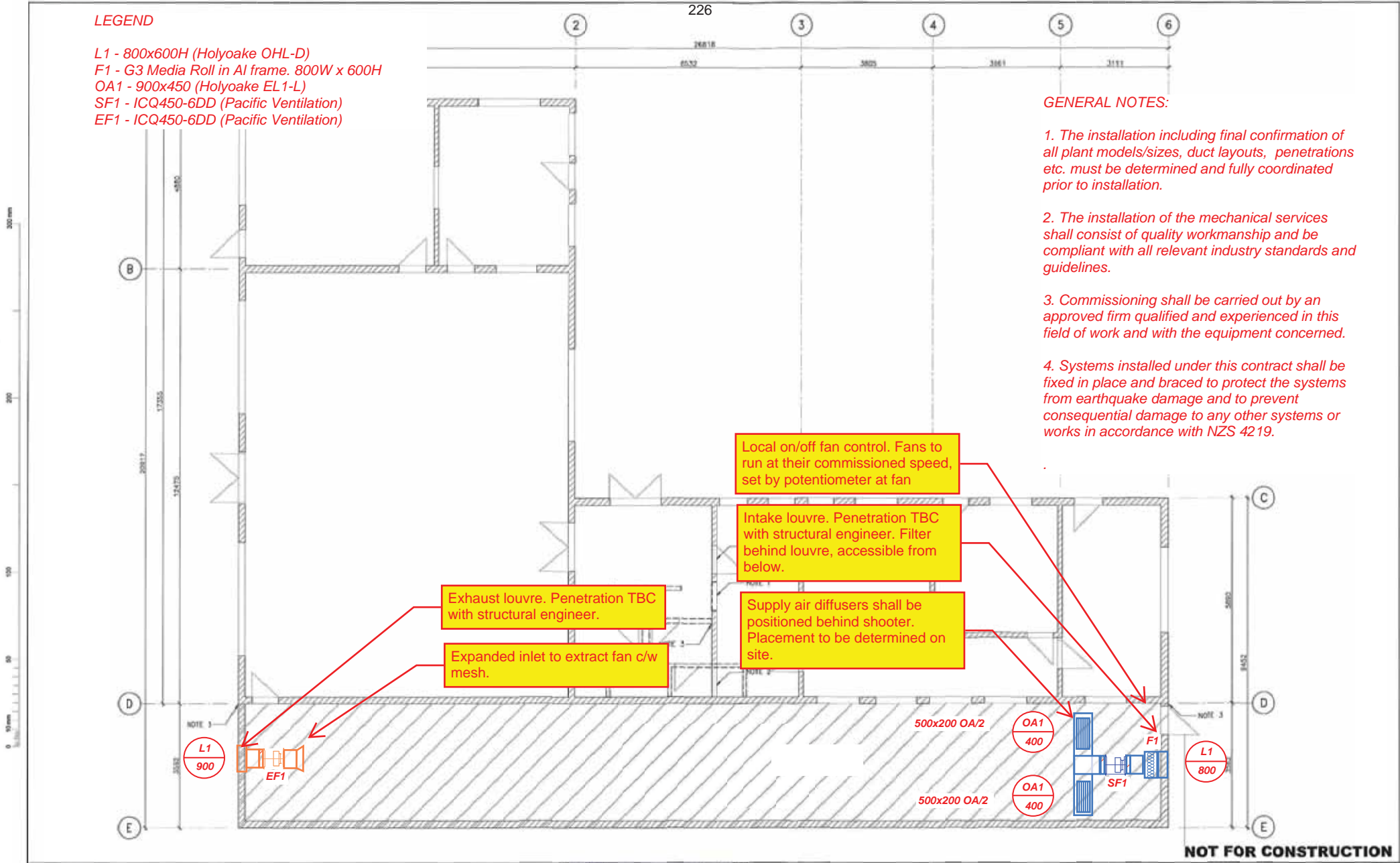
**LEGEND**

- L1 - 800x600H (Holyoake OHL-D)
- F1 - G3 Media Roll in Al frame. 800W x 600H
- OA1 - 900x450 (Holyoake EL1-L)
- SF1 - ICQ450-6DD (Pacific Ventilation)
- EF1 - ICQ450-6DD (Pacific Ventilation)

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**GENERAL NOTES:**

1. The installation including final confirmation of all plant models/sizes, duct layouts, penetrations etc. must be determined and fully coordinated prior to installation.
2. The installation of the mechanical services shall consist of quality workmanship and be compliant with all relevant industry standards and guidelines.
3. Commissioning shall be carried out by an approved firm qualified and experienced in this field of work and with the equipment concerned.
4. Systems installed under this contract shall be fixed in place and braced to protect the systems from earthquake damage and to prevent consequential damage to any other systems or works in accordance with NZS 4219.



**NOT FOR CONSTRUCTION**

**FLOOR PLAN**

SCALE: 1:50



NO.	REVISION	DATE	BY	CHECKED
1	BUILDING CONSULTANT			



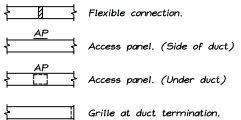
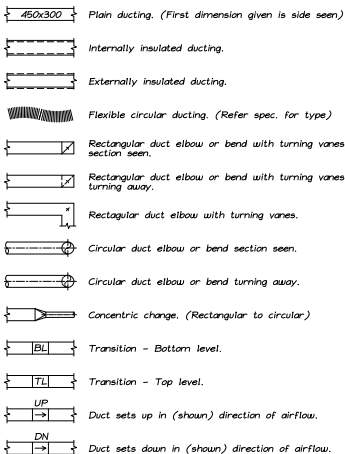
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 Ventilation  
 Job no. : 220030/M/1  
 Sketch title : Ventilation Layout  
 Sheet no. : M1

Sketch Rev : A  
 Date : 29 Apr 2022  
 Scale : NTS  
 Drawn : RMB

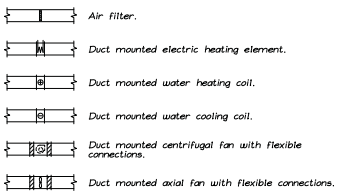


Original Sheet Size A1 (841x1189) Plot Size

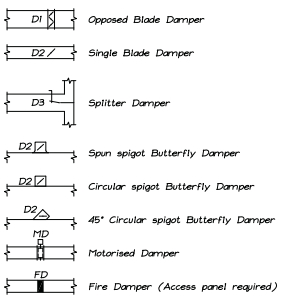
**DUCTING SYMBOLS**



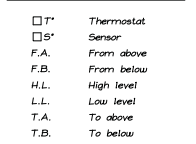
**DUCTING SYMBOLS**



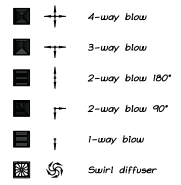
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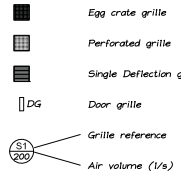
**MISCELLANEOUS SYMBOLS**



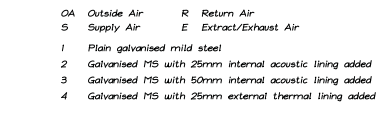
**SUPPLY DIFFUSERS**



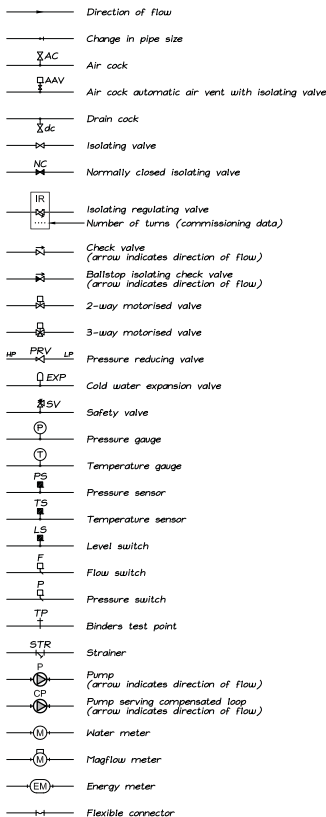
**RETURN OR EXTRACT GRILLES**



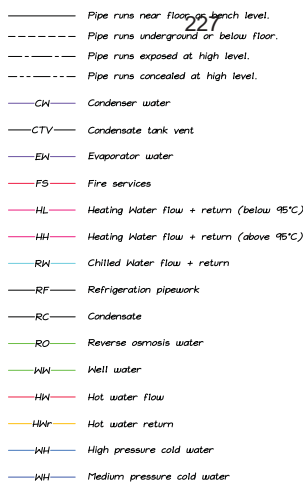
**DUCT CONSTRUCTION TYPES**



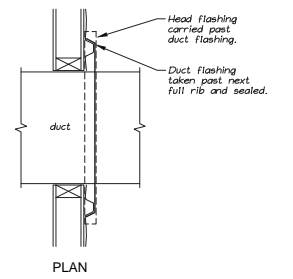
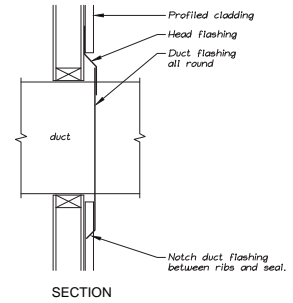
**SCHEMATIC PIPEWORK SYMBOLS**



**H.V.A.C. PIPEWORK LEGEND**



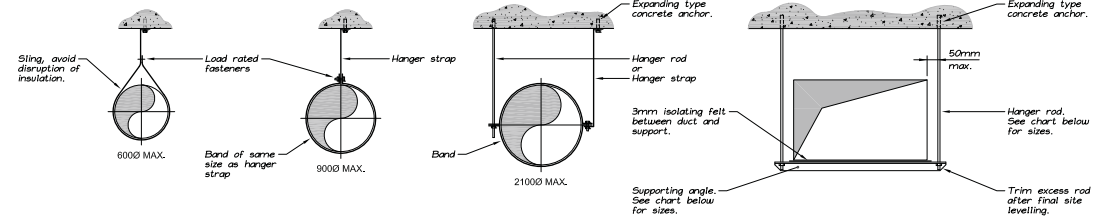
—	Plant label
∅	Pipe diameter
DJ/s	Design flow rate
M/s	Measured flow rate (commissioning data)
IR	Number of turns (commissioning data)



**TYPICAL DUCT PENETRATION THROUGH EXTERNAL WALL**  
1:10

**NOTES**

- Upstands, trimmers, roof/wall penetrations and flashings by the builder/roofer.
- All timber ground treated, all fasteners hot dip galvanised, all penetrations weatherproof, all flashings galv. steel painted to match roof/wall.
- Spoken flashings to be in accordance with NZBC E2/AS1 Fig E5.



**NOTES**

- Hangers must not deform duct shape.
- Fixings to wood shall be done with coach screws.
- Refer SMACNA for ducts outside of range shown.


**SUPPORT SIZES FOR CIRCULAR DUCTS**

DUCT DIAMETER (mm)	MAX. SPACING (m)	STRAP SIZE (mm)	SUPPORT ROD (mm)
Upto 600	3.6	25 x 0.8	6
600 to 900	3.6	25 x 1.0	8
900 to 2100	3.6	25 x 1.6	10

**SUPPORT SIZES FOR RECTANGULAR DUCTS**

DUCT HEIGHT (mm)	DUCT WIDTH (mm)	MAX. SPACING (m)	SUPPORT ANGLE (mm)	SUPPORT ROD (mm)
Upto 300	Upto 600	2.4	25x25x3	6
	600 to 1500	2.4	40x40x3	10
300 to 600	Upto 600	2.4	25x25x3	8
	600 to 1500	2.4	40x40x3	10
600 to 900	Upto 600	2.4	40x40x3	10
	600 to 1500	2.4	40x40x3	12

3 108 2016 S:\Jobs\180401\180401\Mech\Drawings\05 Current\180204 MG 102 Standard Details

**WAIMAKARIRI DISTRICT COUNCIL****REPORT FOR INFORMATION****FILE NO and TRIM NO:** GOV-01-04 / CMS-09-10-02 / 220804133305**REPORT TO:** Community and Recreation Committee**DATE OF MEETING:** 16 August 2022**FROM:** Tessa Sturley – Community Team Manager**SUBJECT:** COMMUNITY DEVELOPMENT STRATEGY REVIEW**SIGNED BY:**  
(for Reports to Council,  
Committees or Boards)  
\_\_\_\_\_  
Department Manager  
\_\_\_\_\_  
Acting Chief Executive**1. SUMMARY**

- 1.1. This report advises the Community and Recreation Committee of a review of the Waimakariri District Community Development Strategy, 2015 – 2025
- 1.2. It discusses how the community and its priorities have evolved since the strategy was developed; and considers emerging issues likely to impact on our District in the coming years
- 1.3. In particular, the report details the collaborative, community-led approach applied to the work of the Community Team and the broad engagement that will inform the strategy review.

**Attachments:**

- i. Full version, Waimakariri District Council Community Development Strategy 2015-2025 (Trim # 150605089108)
- ii. One page version Waimakariri District Council Community Development Strategy 2015-2025 (Trim # 150605089463)

**2. RECOMMENDATION****THAT** the Community and Recreation committee:

- (a) **Receives** report No. 220804133305
- (b) **Notes** that a broad engagement plan will be developed to inform this project.
- (c) **Notes** that staff have approached Mahaanui Kurataiao Ltd (MKT) to identify the most appropriate way forward in ensuring a bicultural, partnership approach is applied to the development of the strategy.
- (d) **Supports** a review of the Waimakariri Community Development Strategy, as an overarching framework for all work that ensures ongoing delivery of people-centred Council Community Outcomes.

### 3. **BACKGROUND**

3.1. The aim of the Waimakariri District Council Community Development Strategy is to provide a clear framework for the role that the Community Team plays in addressing identified local priorities.

3.2. Engagement to inform the first Community Development Strategy, (2007 – 2016) identified the need for increased collaboration to facilitate the creation of a safer, happier, healthier District. This resulted in the establishment of four broad networks:

- North Canterbury Family Violence Network in 2000
- Waimakariri Health Advisory Group in 2004
- Social Services Waimakariri in 2007
- North Canterbury Youth Services Network in 2009

With facilitation from Community Team staff, these networks are crucial in identifying emerging issues and providing context, alongside local data, around which appropriate issues-based working groups are established – some for a time, and some still enduring.

3.3. By 2014, the objectives in the 2007 - 2016 Waimakariri Community Development Strategy had largely been met. Furthermore, the aftermath of the Canterbury earthquakes had resulted in a changing social landscape. The District had seen a large influx of earthquake 'refugees' from Christchurch, along with an increase in migrant workers to support the local economy.

Whilst the rebuild had begun, there was still some impact from the temporary or permanent loss of the majority of 'main street' businesses and core services like libraries, aquatics centres and even supermarkets across the District. Significant upheaval continued for the residents of our eastern communities, many of whom had lost homes and businesses.

Consequently, engagement to inform a review of that strategy revealed an emerging need to focus on wellbeing, connection and resilience across the District and the organisations that support local residents. Four key aspects were identified:

- Facilitating increased provision of community and/or neighbourhood events to enable people to connect.
- Increasing the profile, capacity and capability of community groups to attract and integrate new members.
- A more linked-up approach to the provision of easily accessible community information.
- That more could be done to enhance and encourage better use of some of our spaces and places.

3.4. The Waimakariri Community Development Strategy 2015 -2025, was framed around four pillars that define the Community Team's collective role in addressing the new and existing community priorities identified by the community as part of the review:

- **Engage** with the community and so capture its views, imagination, skills, experience and ideas.
- **Inform** the community about significant relevant issues and opportunities that affect the lives of our residents.
- **Connect** people, groups and organisations with others who can help to address those issues and opportunities.



- Help them to establish working groups and **empower** them with the skills, information and resources they need to collectively translate their ideas into action.

It is intentionally aligned with 10 of Council's Community Outcomes and is planned and delivered according to the criteria for the Waimakariri District's status as an international Safe Community. It aligns with eight of the United Nation's Sustainable Development Goals, which "... are a call for action by all countries – poor, rich and middle-income – to promote prosperity while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection."

Retrieved from <https://sustainabledevelopment.un.org/>

3.5. In recent years, two key, new pieces of work emerged as part of the implementation of that strategy:

3.5.1. In 2016, a Migrants and Newcomers group was established. Its mandate is to engage, connect, inform and empower migrants, through education, events and social connection. A range of successful initiatives have been developed in this area over the past three years and this is now very much a migrant-led group.

3.5.2. In late 2018, Ministry of Social Development, 'Office for Seniors' funding was acquired for the development of an Age-friendly Plan for the District. This was adopted by Council in November of this year. An Age-friendly Advisory Group was established and a fixed term facilitator role put in place to oversee its implementation.

## 4. ISSUES AND OPTIONS

### 4.1. **The Emerging Landscape**

The Waimakariri District Community Development Strategy 2015 – 2025 has served its purpose. It has been the backbone of an extensive range of initiatives that support the social wellbeing, safety and health of Waimakariri residents. However it is now looking somewhat dated and is very much in need of a refresh.

As we head into the third decade of the 2000s, while the existing priorities remain, new challenges are impacting on Waimakariri residents. The District continues to evolve demographically and new priorities are emerging. These evolving areas of focus will be key considerations as we approach this strategy review.

#### 4.1.1. Social Recovery from COVID-19

Whilst social recovery from COVID-19 will essentially be delivered as part of business as usual for the Community Team, several key priorities have emerged that have the potential to significantly impact on the social recovery and enduring resilience, empowerment and wellbeing of local residents.

- Increased provision of easily accessible information about local supports and services to support the wellbeing and resilience of local residents
- The establishment of community hubs that will serve as a means to connect, educate and empower the community in the post-COVID environment.
- Food Security and the associated establishment of a community hub.
- Arts Strategy Development



#### 4.1.2. The impact of climate change and the associated importance of sustainability

Through its community development function and the implementation of an updated strategy, Council will play a key role as a leader in cultural change in these two areas. In Waimakariri District Council's Corporate Sustainability Strategy and Action plan, former Chief Executive, Jim Palmer refers to a clear link between these issues and the wellbeing of our residents, reflecting that strategy's introductory statement:

*"Ma tātou te taiao ko te atawhai.  
mō tātou te taiao ko te oranga*

*It is for us to care for and look after the environment, to ensure its wellbeing. In doing so we ensure our own wellbeing and that of its future residents."*

As the District continues to experience the effects of increased weather events, including catastrophic flooding, the role of community development in facilitating community resilience will be vital.

#### 4.1.3. Inclusive communities

In line with our obligations under Te Tiriti o Waitangi, we are aware of the need to apply more of a partnership approach, with more intentional involvement of local iwi, right from the start. To that end, staff have approached Mahaanui Kurataiao Ltd (MKT) to identify the most appropriate way forward in ensuring a bicultural, partnership approach is applied to the development of the strategy.

The demographic make-up of our District is changing, both culturally and experientially, so the creation of a more inclusive and accepting culture will be important if we are to ensure social cohesion. This relates to accessibility, diversity and the social exclusion that continues to be exacerbated, by a digital divide, as our population continues to age and people are forced into the online age.

#### 4.1.4. Housing

A need has been clearly identified for a community-led response to a local shortage of emergency, supported and affordable housing. The work that is being done by a recently established Emergency and Transitional Housing Steering Group will be crucial in addressing that need and needs to be acknowledged in that broader strategy for community development.

### 4.2. **Alignment with Existing and Related Strategies**

Over the seven years, the rapid evolution of local community development has necessitated a number of strategies and action plans for specific portfolios. For example, Youth Strategy 2018 or the Alcohol and Drug Harm Action Plan 2021. It is important that a strategic, evidence-based approach is applied to this work, particularly in areas affecting large cohorts of our local population, such as youth development, arts, suicide prevention and wellbeing, alcohol and drug harm, accessibility and the creation of an Age-friendly District.

It could be argued that these can stand alone, making the Community Development Strategy a redundant document. Whilst this would save considerable staff time, in failing to step back and take a wider-lens view of the community that we serve, we risk missing the bigger picture. – Emerging issues, evolving opportunities; or the potential to leverage off things that are already happening on a small scale, but that, with wider community support, could make a difference more broadly.

To this end, staff wish to highlight the value of the Waimakariri Community Development Strategy as an overarching framework for all work that ensures ongoing delivery of people-centred community outcomes. A review of that strategy will ensure a cohesive approach to the work that is being done across the District on community wellbeing, safety, connection, inclusion and resilience.

#### 4.3. Research

In preparing to apply a fresh perspective to this piece of work, staff have investigated a number of other Community Development Strategies already in place. These included:

- Safer Whanganui Strategy 2018:  
<https://www.whanganui.govt.nz/files/assets/public/strategies/safer-whanganui-strategy-2018.pdf>
- MacKay Regional Council Community Development Strategy 2018 -2021  
[https://www.mackay.qld.gov.au/\\_data/assets/pdf\\_file/0011/223688/Community\\_Development\\_Strategy.pdf](https://www.mackay.qld.gov.au/_data/assets/pdf_file/0011/223688/Community_Development_Strategy.pdf)
- Dunedin City Council Health and Wellbeing Strategy 2013 – 2023:  
[https://www.dunedin.govt.nz/\\_data/assets/pdf\\_file/0015/522060/Ara-Toi-Viewable.pdf](https://www.dunedin.govt.nz/_data/assets/pdf_file/0015/522060/Ara-Toi-Viewable.pdf)
- [https://www.armadale.wa.gov.au/sites/default/files/assets/documents/docs/Community\\_Development/CDStrategy17.21.pdf](https://www.armadale.wa.gov.au/sites/default/files/assets/documents/docs/Community_Development/CDStrategy17.21.pdf)

In researching other strategies, staff wanted to ensure alignment with best practice, particularly in:

- Ensuring a clear and sound framework for the strategy; particular given its direct alignment with a number of other local, regional and national strategies.
- Ensuring as broad community engagement as possible to inform the strategy development.
- Ensuring that a planning forum centres on the identification and agreement on a clear set of priorities for the framing of the objectives of the strategy.
- Ensuring that mana whenua are involved as early as possible and that the strategy reflects true partnership.

#### 4.4. Evidence-base

As with all of the work of the Community Team strong evidence base will applied to this piece of work. Prioritisation of local need will be informed by a number of local and national data sources, including, but not limited to Canterbury Wellbeing Index, Council Community Survey, Coronial and Police Data.

This quantitative evidence will be collated alongside evidence gathered throughout the community and stakeholder engagement detailed in 4.7, below.

#### 4.5. A community-led, collaborative response

4.5.1. Various local stakeholders and key networks, particularly Social Services Waimakariri, Waimakariri Health Advisory Group, Violence Free North Canterbury, local iwi, schools and the Age Friendly Steering Group, will be crucial in informing this piece of work. However it will be important that as broad as possible community engagement approach is applied. This will ensure that the

voices and experience of all local residents can be applied to informing and framing the strategy

4.5.2. The Community Development Strategy review project will take place across the whole Waimakariri District and will involve the wider community and the supports and services that it offers, including:

- Local iwi
- Grassroots community
- Health, wellbeing and social services
- Education
- District Promotion Associations
- Community Associations
- Sport and recreation
- Arts
- Business
- Ethnic migrants

Furthermore, given its broad scope, the development of the strategy, is relevant to, and involves various Council Teams, including:

- Libraries
- Greenspace
- Policy and Strategy
- Communications
- Governance
- Environmental Services
- Civil Defence

#### 4.6. **Planned Progress**

4.6.1. At this point, staff have raised the pending Community Development Strategy Review with Council's Policy and Communications and Engagement teams. They have also discussed this with key Community and Recreation Team partners.

4.6.2. An internal (Council) Project Control Group (PCG) is to be established, ensuring appropriately skilled guidance to ensure best practice for project development. The role of this group will be to oversee community engagement and consultation, and to support the development and review of the draft Strategy. The PCG will include initially include representation from Council's Policy, Communications, and Community Teams, with others potentially including Greenspace and Libraries, as deemed appropriate.

4.6.3. Working with the Project Control Group, staff will prepare a schedule to timeline the project through to its completion, including:

- Community Engagement
- Project Steering Group establishment
- Community Development Forum
- Draft Strategy design and review
- Strategy publication

- 4.6.4. A Project Steering Group, will essentially be made of Community Team staff and a few key partners, with particular skills and interests in Community Development. E.g. Local Iwi, Department of Internal Affairs, Social Services Waimakariri and one or two local social support Trusts.
- 4.6.5. Both the Project Control Group and Project Steering Group will be disbanded, following release of the new strategy. The existing collaborative networks will continue to serve as a mechanism for the ongoing implementation of the strategy.

#### 4.7. **Engagement Plan**

4.7.1. Staff will work with the Project Control Group on a community engagement plan for the strategy review. This will include:

- Development of branding and promotional material for the review
- Identification of appropriate engagement pathways, including:
  - Development and dissemination of resident and sector partner surveys
  - Establishment of focus groups and/or a community forum, as appropriate.
  - Identification of appropriate Project Steering Group representation

4.7.2. Staff will work with the Project Steering Group to draft two separate, extensive surveys. The first will be aimed at local service providers. It will be a reviewed version of the Social and Community Sector Survey, developed at the start of the 2020 COVID pandemic.

The second survey will be aimed at the wider community. Survey drafts will be submitted to the Project Control Group for approval and disseminated in line with the community engagement plan.

4.7.3. A key piece of the engagement 'puzzle' will be a stakeholder forum planned and delivered by the steering group.

#### 4.8. **Strategy Development**

4.8.1. Upon completion of the community engagement, staff will collate the responses, alongside relevant data.

This collation will be presented to the Project Steering Group who will use it to develop a draft vision, mission and key themes to begin to frame the strategy. These will be presented, alongside an overview of the survey results, at the stakeholder forum.

4.8.2. The aim of the forum will be to 'populate' the strategy, identifying opportunities and possibilities under each of the key themes drafted by the steering group.

4.8.3. Following the forum, the Project Steering Group will prioritise a set of objectives under each theme, to progress the strategy development. This piece of work will be carried out under the guidance and ultimate review of the Project Control Group.

4.8.4. It is expected that the draft strategy will be prepared for consultation with Community Boards and Council from early April 2023, be out for public

consultation in May/June of 2023 and then be finalized for adoption by Council in July of 2023.

### **Implications for Community Wellbeing**

There are significant implications on community wellbeing as a result of this works:

- The application of an evidence-based, community-led approach ensures the development of sound, relevant initiatives that empower residents to play a part in creating a safe, healthy, connected and resilient District
- The collective wisdom, experience and opinion of local residents is applied to local decision making.
- Broad sector collaboration results in better and locally accessible social, health, education and community service provision.
- People are empowered with skills and opportunities to access employment and engage in the life of their community.
- Community groups and volunteer-involving organisations are adequately skilled and resourced to support the needs and deliver quality service to local residents
- Our community will be sufficiently resilient to sustain itself through future natural disasters or crises.

## **5. COMMUNITY VIEWS**

### **5.1. Mana whenua**

The relationships that the community have built through engagement with Ngāi Tūāhuriri hapū and local and regional Maori health providers have fostered an increased the reach of information and supports for the rūnanga and the whanau that it supports.

Staff continue to seek Ngāi Tūāhuriri feedback and representation on local networks.

With respect to this piece of work, staff recognise the importance of ensuring that mana whenua are involved as early as possible and that the strategy reflects true partnership and the unique cultural heritage of our District. Consequently they have approached MKT to identify the most appropriate way forward in ensuring a bicultural, partnership approach to the development of the strategy.

### **5.2. Groups and Organisations**

Through its various working parties, project coalitions and steering groups, the Community Team has established and maintains an in-depth working knowledge of the Waimakariri District and the physical, socio-economic and environmental factors that affect the quality of life of our residents.

The Community Team applies a community-led approach to its work, collaborating with well over 300 community, education, business; and government and non-government stakeholders. This project will utilise those relationships to ensure that broad community engagement informs the development of the updated strategy

### **5.3. Wider Community**

Broad community engagement is an important part of the work of the Community Team. This ensures a community-led approach that is relevant to all with a stake in creating a safe, healthy, connected and resilient District.

## 6. **IMPLICATIONS AND RISKS**

### 6.1. **Financial Implications**

There are no significant financial implications for Council in relation to the content of this report. However, Community Team staff will continue assist with the acquisition of external funding for some of the key projects that are identified by the networks that they support.

### 6.2. **Sustainability and Climate Change Impacts**

The information in this report does have sustainability and climate impacts.

This work directly affects the sustainability of our community and our environment through initiatives that repurpose or reuse assets; and through the expansion and development of community gardens, food forests and edible trees in public places. Using our greenspaces to support the health, wellbeing and physical nourishment of our community we maximise the use of the environmental resources we have.

Additionally, strong and well planned community development will be essential over the coming years as some of our communities need to adapt to the impact of climate change on the land.

### 6.3. **Risk Management**

The Community Team maintain strong relationships with internal (Council) and external stakeholders to ensure that initiatives are community-led and sustainable.

### 6.4. **Health and Safety**

Health and Safety considerations are included in planning for all Community Team facilitated initiatives.

## 7. **CONTEXT**

### 7.1. **Policy**

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

### 7.2. **Authorising Legislation**      N/A

### 7.3. **Community Outcomes**

As detailed in the attached report, the collective work of the Community Team aligns with the following Community Outcomes:

- Effect is given to the principles of the Treaty of Waitangi
- People are friendly and caring, creating a strong sense of community in our District
- People's needs for mental and physical health and social services are met
- There is a safe environment for all
- People have wide ranging opportunities for learning and being informed
- There are wide ranging opportunities for people to contribute to the decision making that affects our District
- Public spaces and facilities are plentiful, accessible and high quality

- There are areas of significant indigenous vegetation and habitats that support indigenous fauna
- The community's cultures, arts and heritage are conserved and celebrated
- Transport is accessible, convenient, reliable and sustainable

7.4. **Delegations**

None



Tessa Sturley  
COMMUNITY TEAM MANAGER





**IT'S ALL ABOUT  
THE PEOPLE!  
THAT'S US!**

# **Waimakariri District Council Community Development Strategy 2015 - 2025**

***Ehara taku toa te toa, takitahi engari he toa takitini***  
*The strength is not of one alone, but of the collective.*



## Definition of Community Development

Community Development values people first. It builds strong communities by utilising local skills, knowledge and experience in decision-making to improve quality of life. It relies on everyone being informed, having a say and being included; with differences acknowledged and welcomed.

Community Development is a way of working which encourages people to come together to define their common needs and aspirations, to undertake planning and organise themselves to take action to achieve their collective goals.

## Introduction

By 2014, the objectives in the 2007 -2016 Waimakariri Community Development Strategy had largely been met. The aftermath of the Canterbury earthquakes had resulted in a changing social landscape. This corresponded with a dramatic population increase and shift in population dynamics. It was therefore timely to review community priorities and develop an updated strategy that would address these.

The aim of this strategy is to provide a clear framework for the role that Waimakariri District Council Community Development plays in addressing identified priorities.

The Vision, Mission, Goals and Objectives detailed in the strategy are supported by an implementation plan, which forms the basis of annual planning for Waimakariri District Council Community Development staff.



## Community Development in the Waimakariri District

Community Development is a key component of the Waimakariri District Council Community Team, which facilitates community development, youth development, injury prevention and crime prevention; all contributors to thriving communities.

The role of the Community Team is to **engage, connect, empower** and **inform** residents, community groups, agencies and organisations in the creation of stronger, safer communities.

This work aligns with the criteria for our status as a World Health Organisation accredited 'International Safe Community', ensuring that it is:

- Evidence-based
- Community-led
- Relevant to and inclusive to all
- Well documented
- Well evaluated

Community Development encompasses addresses the overall wellbeing of our communities, in line with the following key **Waimakariri District Council Community Outcomes**; that:

- There is a safe environment for all
- The community's needs for health and social services are met
- The community's cultures, arts and heritage are conserved and celebrated
- People have wide ranging opportunities for learning and being informed
- People are friendly and caring, creating a strong sense of community in our District
- Public effect is given to the spirit of the Treaty of Waitangi
- There are wide ranging opportunities for people to contribute to the decision making by local, regional and national organisations that affects our District.

The Community Team operates an 'open door' to the community, often responding to off-the- street requests for information and/or links to community support. Whether working with groups or across the community, the Community Team operates in line with Waimakariri District Council values;

- ***We'll work with you and each other***
- ***We'll keep you informed***
- ***We'll do better every day***
- ***We'll take responsibility***
- ***We'll act with integrity, honest and trust***

### **Identified Priorities:**

A Community Development survey and corresponding community fora were undertaken with the aim of engaging residents, community groups, organisation and other stakeholders. The aim was to gather perceptions of our community and to identify key areas of priority for Community Development.

Alongside this, several issues and opportunities had been identified through a number of networks aligned with the work of our Community Development staff. These include Social Services Waimakariri, the Waimakariri Health Advisory Group, a rural safety discussion forum and community networking fora. All mirrored the research and our community's feedback.

Four key priorities emerged for Community Development

- ***Community and/or Neighbourhood events to enable people to connect.***
- ***Increasing the profile, capacity and capability of community groups to attract and integrate new members.***
- ***A more linked-up approach to the provision of easily accessible community information.***
- ***That more could be done to enhance and encourage better use of some of our spaces and places.***



# Community Development 2015 – 2025

## Our Mission

*Facilitating stronger, safer, vibrant communities*

## Our Vision

*Waimakariri is a District where people are thriving*

## Our Strategic Goals

*To engage, to connect to inform and to empower the Waimakariri community*

### Goal 1: Engage key stakeholders to enhance community development, youth development and community safety.

#### **Objective:**

Foster and maintain relationships with all stakeholders in community development, including:

- Elected local and national government representatives
- Government and non-government agencies in the health, social, youth and education sectors.
- Te Ngai Tuahuriri Runanga
- Grassroots community groups and emerging leaders
- The funding sector
- The business sector
- Appropriate Council departments
- The media

**Result:** Community Development is supported by a broad range of stakeholders.

**Performance Indicator:** From Community Team annual report card

Indicator	Benchmark 2015	Target 2025
Total number of partners supporting Community Development, Youth Development and Community Safety initiatives	300	≥300

## **Goal 2: Facilitate connection across the community**

### **Objectives:**

- Support existing groups and networks that connect residents.
- Facilitate networking opportunities for local agencies and community organisations
- Support initiatives that increase accessibility to our spaces, places and services
- Identify and respond to emerging opportunities for greater connection across the community

### **Results:**

- Residents are welcomed and connected to the community
- Community groups and agencies know each other and are well informed about what each other does, leading to increased potential for collaborative work.

**Population Indicator:** from Waimakariri District Council Community survey

Indicator	Benchmark 2015	Target 2025
Percentage of respondent households involved in recreation, arts and cultural, school, church, community, sports or service groups/organisations.	40 %	65 %

**Performance Indicators:** from Community Team annual report card

Indicator	Benchmark 2015	Target 2025
Number of groups that connect residents or organisations, supported by the Community Team.	12	≥ 12
Evidence of Community Team Support for the development of new groups that facilitate community connection	N/A	8 new groups

## **Goal 3: Cultivate a more informed community**

### **Objectives:**

- Promote community initiatives and raise awareness of community issues and opportunities via electronic, printed and social media
- Facilitate the provision of local community information workshops, forums and seminars.
- Act as a conduit for information between community and Council
- Acquire relevant data to inform community priorities

**Result:** People and organisations are informed about opportunities, services and issues that affect them.

**Population Indicator:**

Indicator	Benchmark 2015	Target 2025
Percentage of respondent households satisfied with the information about what is going on in the District.	30 %	55 %





**Performance Indicators:** From Community team annual report card

Indicator	Benchmark 2015	Target
Facebook page following	1789	≥ 1800
Monthly hits on Community page of Waimakariri District Council website	2800	≥ 3000
Number of community groups contributing to Chatter monthly community information newsletter each year	150	≥ 150

## ***Goal 4: Empower the community to identify and achieve its aspirations***

### **Objectives:**

- Facilitate community engagement forums to enable all stakeholders to contribute to planning for community development, youth development and community safety.
- Facilitate and/or support community-led working parties to address priority areas in community development community safety, and youth development
- Support local community groups and networks in engaging with the wider community, Council, funders and Central Government
- Foster emerging leadership in the wider community
- Encourage and support community input into local, regional and national consultations.

### **Results:**

- There are wide ranging opportunities for people to contribute to the decision making by local, regional and national organisations that affects our District.”
- The community is empowered to work together to achieve its aspirations.

**Performance Indicator:** from Community Team annual report card

Indicator	Target 2025
Number of Community-led initiatives developed with support from the Community Team	Maintenance of ≥10 new initiatives per annum



## Appendix A: Background

### Waimakariri – a growing district.

The Waimakariri District has a diverse population residing in the towns of Rangiora and Kaiapoi, several smaller, but developing urban communities in Woodend, Oxford and Pegasus and a number of rural, lifestyle, village and beach settlements.

In recent years, the district has experienced a rapidly growing population; with 2013 Census results confirming that Waimakariri is the third fastest growing district in New Zealand. (*Statistics New Zealand, (2013), Census.*)

The Waimakariri District Council Long Term Plan 2015 -2025 states that the District's population is forecast to grow from an estimated 55,000 people in June 2015 to an estimated 63,000 by June 2025. (*Waimakariri District Council, Draft Long Term Plan, 2015 - 2025*)

The Waimakariri District Council 'Change of Address' survey, 2013, showed that 59% of our new resident households had relocated from outside of the Waimakariri District and that 42% of those surveyed had relocated from Red-zoned properties. This increase in population has resulted in District growth across at least eight new subdivisions. This influx of new residents brings new population dynamics, and new ways of being.

### Identified Community Need

The recent 'New Dwellings Survey, 2013/2014' indicated that of those in paid employment, over 60% travel outside of the District to work. This creates the potential that a significant proportion of our population focuses its recreation and service utilisation outside of the Waimakariri District. Survey results support this assumption, in that 40% of respondents were not currently involved in any local Community Groups.

The New Dwellings Survey report also detailed that of respondents who had moved from outside of the District 32% had found it difficult to get to know people. This is mirrored in the CERA Wellbeing Index report 2014, which refers to a lack of social connectedness as a significant issue for our communities.

The Waimakariri District Council Community Development survey, 2014 included questions about whether residents felt welcomed, supported, informed and connected. 42% of respondents said they feel "only a little" or "not at all" part of the community. Typical responses included:

- "New to district since earthquakes, people aren't that friendly."
- "There are a few people involved in everything. Seems hard to get voice heard."
- "The community remains somewhat insular and hard to break into which is typical of small towns."
- "I do not like the tension between long-time residents and new arrivals. I have heard some long -time residents say that the community isn't what it used to be."

Furthermore, when asked how well they knew their neighbours, 58% of respondents reported only knowing their neighbours "a little" or "not at all".

#### References:

- Waimakariri District Council (2014) New Dwellings Survey
- Waimakariri District Council (2014) Community Development Survey
- CERA (2014) Wellbeing Survey
- Ministry of Social Development. (2015.) Waimakariri Newcomer Profile
- Waimakariri District Council, Draft Long Term Plan, 2015 – 2025
- Statistics New Zealand, (2013), Census.

## **Appendix B: Waimakariri District Council Values**

### ***Our service promise to you:***

#### ***We'll work with you and each other***

- We'll listen to you
- We'll respect your point of view
- We'll always try to help you
- We'll take a team approach to getting things done
- We'll work in partnership with our community
- We'll enjoy our work
- We'll have fun

#### ***We'll keep you informed***

- We'll communicate proactively and transparently
- We'll use plain, understandable language
- We'll identify what is fact and what is opinion
- We'll share information openly

#### ***We'll do better every day***

- We take pride in ourselves and this Council
- We'll always try to find better ways of doing things
- We'll search for innovative and sustainable solutions
- We'll gladly accept changes that help us to do things better
- We'll use resources wisely

#### ***We'll take responsibility***

- We're accountable for our actions
- We'll get things done
- We'll encourage leadership at all levels
- We'll encourage and allow people to act
- We'll always follow through
- We'll try to provide solutions to your problems

#### ***We'll act with integrity, honesty and trust***

- We'll treat you with respect and dignity
- We'll do what we say
- We'll always be trustworthy and honest
- We'll always act ethically

## Glossary

**Vision:** The ideal that we would like to see as a result of our work with the community.

**Mission:** What we are in the business of doing.

**Goals:** What we aim to achieve through our work.

**Objectives:** Broadly, how we aim to achieve these goals.

**Results:** The expected outcomes of the meeting of the objectives.

**Population Indicators:** Measure increase in connectedness and satisfaction with information experienced across the whole community.

**Performance indicator:** Measure of how well we did what we said we'd do.

**Benchmark:** A starting point. i.e. the picture in 2015.

# Summary Community Development Strategy 2015 – 2025

## Our Mission

*Facilitating stronger, safer, vibrant communities*

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## Our Vision

*Waimakariri is a District where people are thriving*

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## Our Strategic Goals

*To engage, to connect to inform and to empower the Waimakariri community*



***Goal 1: Engage key stakeholders to enhance community development, youth development and community safety.***

### Objective:

Foster and maintain relationships with all stakeholders in community development, including:

- Elected local and national government representatives
- Government and non-government agencies in the health, social, youth and education sectors.
- Te Ngai Tuahuriri Runanga
- Grassroots community groups and emerging leaders
- The funding sector
- The business sector
- Appropriate Council departments
- The media

**Result:** Community Development is supported by a broad range of stakeholders.



**IT'S ALL ABOUT  
THE PEOPLE!  
THAT'S US!**

## **Goal 2: Facilitate connection across the community**

### **Objectives:**

- Support existing groups and networks that connect residents.
- Facilitate networking opportunities for local agencies and community organisations
- Support initiatives that increase accessibility to our spaces, places and services
- Identify and respond to emerging opportunities for greater connection across the community

### **Results:**

- Residents are welcomed and connected to the community
- Community groups and agencies know each other and are well informed about what each other does, leading to increased potential for collaborative work.

## **Goal 3: Cultivate a more informed community**

### **Objectives:**

- Promote community initiatives and raise awareness of community issues and opportunities via electronic, printed and social media
- Facilitate the provision of local community information workshops, forums and seminars.
- Act as a conduit for information between community and Council
- Acquire relevant data to inform community priorities

**Result:** People and organisations are informed about opportunities, services and issues that affect them.

## **Goal 4: Empower the community to identify and achieve its aspirations**

### **Objectives:**

- Facilitate community engagement forums to enable all stakeholders contribute to planning for community development, youth development and community safety.
- Facilitate and/or support community-led working parties to address priority areas in community development community safety, and youth development
- Support local community groups and networks in engaging with the wider community, Council, funders and central government
- Foster emerging leadership in the wider community.
- Encourage and support community input into local, regional and national consultations.

### **Results:**

- There are wide ranging opportunities for people to contribute to the decision making by local, regional and national organisations that affects our District.”
- The community is empowered to work together to achieve its aspirations.

**For a copy of the full Community Development Strategy document, including population and performance measures visit: [waimakariri.govt.nz](http://waimakariri.govt.nz) or request a printed copy from the Waimakariri District Council Community Team.**



**WAIMAKARIRI DISTRICT COUNCIL****REPORT FOR INFORMATION****FILE NO and TRIM NO:** GOV-01-04 / CMS-19-10-02 / 220804133781**REPORT TO:** Community and Recreation Committee**DATE OF MEETING:** 16 August 2022**AUTHOR(S):** Emily Belton**SUBJECT:** YOUTH DEVELOPMENT UPDATE**ENDORSED BY:**  
(for Reports to Council,  
Committees or Boards)

General Manager



Acting Chief Executive

**1. SUMMARY**

1.1. This report provides an overview of progress to date toward the Youth Development Strategy.

**Attachments:**

- i) Waimakariri Youth Council Work Plan 2022/23 (Trim # 220804133243)
- ii) Dudley Skate Park Redevelopment Project - Concept Plan (Trim # 210527085992)
- iii) North Canterbury Youth Futures – Social Media Content (Trim # 220804133270)
- iv) Waimakariri Youth Council Minutes – June 2022 (Trim # 220804133273)

**2. RECOMMENDATION**

**THAT** the Community and Recreation Committee:

- (a) **Receives** Report No. 220804133781
- (b) **Notes** that staff will present the Community and Recreation Committee an overview of plans around a more youth-friendly District

**3. BACKGROUND****3.1. Waimakariri Youth Council – Work Plan 2022/23**

- 3.1.1. An outcome of the January Planning Day for Youth Council was to create a work plan to support and guide the work of Waimakariri Youth Council, members, ensuring that all experience productive success during their tenure.
- 3.1.2. Staff developed the Waimakariri Youth Council Work Plan 2022/23, which was adopted in May 2022. This Work Plan highlights the six key projects that Youth Council see as the most important and details how they are going to achieve and progress their projects in the next 18 months.
- 3.1.3. A number of youth-led project groups have been established to progress this work. These meet regularly, with support from the Youth Development Facilitator.



The project groups include;

- Environmental, Community Space Development – Dudley Skate Park,
- Community Youth Award,
- Public Awareness,
- Youth Voice, and Collaboration.

All of these projects align with the Youth Strategy (2018) and are applicable to the implementation of the Waimakariri Community Development Strategy 2015 - 2025.

- 3.1.4. All members of Waimakariri Youth Council have been allocated to various project groups dependent on their interests. Some of these groups meet fortnightly or monthly depending on key events and tasks.

## **4. ISSUES AND OPTIONS**

### **4.1. Community Space Development - Dudley Park project**

The Dudley Skate Park Redevelopment project group have been working hard to ensure the continuation of this project, which has stalled due to the impact of the COVID-19 pandemic on our community. To ensure that it could be progressed through successive Youth Council tenures, the project has been divided into six succinct stages:

Stage 1: Activation Platform (Deck)

- “ 2: Mounded Seating
- “ 3: Natural Play mound
- “ 4: Picnic Table
- “ 5: Volleyball court
- “ 6: Mural

#### **4.1.1. Resourcing**

A funding strategy has been developed, to frame a time-lined approach to the acquisition of funding for the five stages of the Redevelopment Project. This included consideration of which of the six stages should be completed first. Two key aspects are now underway.

#### **4.1.2. Activation Platform – The Deck**

The project group have determined appropriate community organisations that would be a good fit to support this project.

Community support has been good, with private contractors asked to supply a quote for this work. Youth Development Opportunities Trust (YDOT) was approached to support young people from the community to construct the picnic table for Stage 4, once funding has been secured.

Unfortunately, one community organisation that was identified as being a good fit for this project, has since decided to pull its support, due to a lack of adequate volunteer capacity. However, with two funding applications completed and approved, including Annual Plan 2022/23 submission (\$20,000) and Aotearoa Gaming Trust (\$10,000), the Activation Platform can now progress to the installation phase.

#### 4.1.3. Mural

The mural is an addition to the original concept plan. It is to be painted on the wall of the Rangiora Squash Club.

With approval gained from the Squash Club, consultation began with the adjacent senior primary school and current skate park users. This included an online survey that could be completed by anyone in the school. This survey was also extended to schools outside of Rangiora. The aim was to understand what is important to local young people. This information guided the project group in their work local artist – Mark Larsen to develop a mural that is representative of Waimakariri youth today.

Currently, the draft is almost complete. It will be submitted to the Public Arts Trust and Creative Communities for approval and the Rangiora Ashley Community Board for acknowledgement.

It has been important to the group to ensure that this project is representative of its wider community, including local iwi. Whilst communication has been sent to Ngāi Tūāhuriri, at the time of writing this report, staff have yet to receive a response.

#### 4.2. Environmental/Sustainability project

4.2.1. Youth Council have established an Environmental Project Group to support the work that is currently being undertaken locally and nationally to educate and promote activities and actions that young people can take part in, as a means to reduce their environmental impact.

4.2.2. Over the past 12 months, Youth Council have engaged with a number of key local groups and organisations, including Tūhaitara Trust, Waimakariri Greenspace, Eco Educate to inform planning. A number of projects have been identified or completed. These include:

- An ECan transport review (April 2022)
- Mapping of Op Shops around the District,
- Promotion of NZ Conservation Week,
- Social media campaign for Earth Day 2023.

4.2.3. The primary focus for this group currently is Conservation Week Campaign – Youth Council have engaged with Libraries and Greenspace Teams to determine what these departments are currently planning for the week-long nation campaign.

It was decided that Youth Council's most appropriate role would be showcase a range of Conservation Week activities being organised for the community, appropriately marketing them to attract youth involvement.

Independently, Youth Council plan to organise a River Clean Up alongside community partners, such as Ashley Rakahuri River Care Group. This is something that they have undertaken successfully in the past.

#### 4.3. Youth Community Award

Youth Council have had the idea for a Youth Award for a while now. Recently they have worked alongside Mayor Dan Gordon and elected members to develop a 2022 Youth Award, aimed at highlighting the amazing work that young people do within our community.

#### 4.4. **Raising the Public Profile**

Social media plays a huge role in the lives of our young people. Youth Council have identified that their social media platforms could be updated and guidelines defined to help them attract and maintain a stronger following. This year, as Youth Council introduced their new members, profiles of all members have been shared on social media to build a more personalised profile for Waimakariri Youth Council and its role in the District.

#### 4.5. **Increasing the Local Youth Voice**

One of the key roles of any Youth Council is to be eyes, ears and a voice for local young people. To do this they need to be present at local and regional decision-making tables. As its profile grows, Waimakariri Youth Council is increasingly invited to have representation on local committees, steering groups, working groups, and events. Over the past 12 months this role has been varied, including:

- Southbrook Road Reference Group
- Creative Communities
- WDC Road Safety Co-ordinating Committee
- Youth Voice Canterbury
- Public Transport Steering Group (previously PTAG)
- The Big Splash
- ANZAC Day commemorations

#### 4.6. **Youth Council and WaiYouth – opportunity for greater alignment**

4.6.1. Discussions have started with Youth Council and WaiYouth to determine whether there is a possibility to merge the two groups. This would effectively make WaiYouth the event branch of Youth Council. There are a number of benefits for both parties to consider this proposal.

4.6.2. Over the past 12 to 18 months, WaiYouth has seen a decrease in attendance from current members. This is due to a number of factors, including the government's COVID restrictions and guidelines. While staff have continued to support this group, it is timely to reflect on the purpose of the group and future aspirations of its members.

4.6.3. Should a merger be deemed appropriate, the following considerations would apply, to ensure an effective model:

- Youth Council would gain more “sub-members” that can support them with their current events. Experienced WaiYouth members will be able to support Youth Council with their event planning, as that has always been a strength of WaiYouth. Additionally, such an arrangement would be valuable succession planning, making it easier for WaiYouth members to transition into Youth Council, better skilled and with a sound understanding of the work of Youth Council.
- WaiYouth could potentially continue their own social media pages, so that the brand was not lost. However this would need to be acknowledge as, “supported by Youth Council”.
- WaiYouth members would regularly report to Youth Council. This would address recent challenges around accountability.

- One budget could be developed for the merged groups, with Youth Council and WaiYouth each allocated a share of that budget.

4.6.4. Over the coming months, staff will work with the Chairs of both Youth Council and WaiYouth to determine a pathway forward. A planned review of the Terms of Reference for Waimakariri Youth Council will be a timely opportunity to progress this, should both groups be agreeable. Staff will report back to the Community and Recreation Committee, accordingly.

#### 4.7. **North Canterbury Youth Futures**

4.7.1. The focus for North Canterbury Youth Futures has changed from previous years. It was decided in early 2022 that, instead of an in-person employment and education opportunities expo, an online campaign would be created. This provided a degree of COVID protection and an opportunity to make the information and associated opportunities available to a wider audience over a longer period of time.

4.7.2. Throughout the planning for this campaign staff have kept in mind that North Canterbury Youth Futures is a project that supports young people transitioning from school to employment, education or training opportunities. To ensure its success, the project needed to have an element of 'youth led'. In line with that, the group have engaged two Rangiora High students to attend meetings to guide and support the direction of the campaign.

A second aspect of youth involvement has been that, before starting the online campaign, the group undertook a series of focus groups with Rangiora High, Kaiapoi High and Oxford Area School. Hurunui high schools were communicated with through the Hurunui District Council and the Ministry of Education representative, Joseph Houghton.

By completing these focus groups we determined the theme that the social media campaign should take and gained a clearer understanding as to the type of information young people today are looking for, with respect to local and regional education and employment possibilities .

4.7.3. The Youth Development Facilitator has been proactively encouraging the North Canterbury Youth Futures Steering Group to consider how this project aligns with the guiding strategic document. This has ensured that while the group is working towards the current campaign, Youth Futures is about more than expos.

Staff are currently working behind the scenes to create connections between local education and employment providers to ensure that local young people can have access to as broad a range of opportunities as possible.

Once the social media campaign is complete, staff will work with the steering group to facilitate a review of the North Canterbury Youth Futures Foundation Document and Terms of Reference. This review will include determining who is currently attending meetings and who else should be involved in the conversation.

#### 4.8. **North Canterbury Youth Services Network**

4.8.1. This network has seen an increase in participation over the past year. They now receive a monthly newsletter and the Youth Development Facilitator organises regular quarterly meetings to allow the network the opportunity to reconnect, upskill and to understand the challenges that the sector is facing.

4.8.2. The last network meeting, a Positive Youth Development in Aotearoa training, was delivered to ten youth service providers in North Canterbury. This served as a catalyst for some valuable conversations, including one youth service provider who faced a challenge within their role. The particular provider said that the conversation was “gold”. Youth sector work is challenging and it is so important to for the youth service network members to feel like they have a platform to voice their challenges and know that the other people in the room may also have a similar challenge, an alternative solution, or be able to provide some support.

#### 4.9. **Adding Value to Social Isolation Quarantine Support**

The Community Team played a significant role at the beginning of the COVID outbreak in early 2022, alongside North Canterbury Wellbeing, to support the Social Isolation Quarantine (SIQ) referrals from Ministry of Social Development.

Particularly relevant to youth development was that North Canterbury Wellbeing received additional funding to support community members who were unable to afford illness basics while in isolation. These packs included products like, Panadol, tissues, lozenges, hand sanitiser, face masks, and RAT’s.

Staff soon identified that during the quarantine period that families might also need support in other areas, such as, for female family members. Picking up on this, the Youth Development Facilitator connected with the Ministry of Education, who had recently established a programme in other areas of Canterbury that provided free sanitary items to high school students.

Through their Youth Services Network contacts, staff were able to secure a pallet of products to be included into a “Youth” pack and some of the “Adult packs” made available to women in local families. With this arrangement secured, staff have been able to get the programme into local schools and establish an arrangement whereby The Warehouse donate product that can be included in food parcels to local women in need.

#### 4.10. **Youth-Friendly Community**

4.10.1. Currently, the Youth-Friendly Community project is about building connections and understanding the current District environment from a youth-friendliness perspective. This will allow staff to understand where the need is and where their attention needs to be directed to.

4.10.2. Since the last Youth-Friendly Community report was produced in early 2020, there has been an update of the Youth Opportunities and Services database. A further 150 services and opportunities have been included in that database, which is used by local parents, young people and services providers.

Following the update of the Opportunities and Services database staff have communicated with the IT department to determine the best way to proceed with the Opportunity Mapping app and website concept outlined, as a piece of work completed by the Masters student intern in 2020.

In the interim, the new ‘Next Steps’ community information and support website, under development with Social Services Waimakariri, will host the database under the Youth section of the site. This useful resource is to be launched in October. Community Development staff will present the resource to the incoming Council, following local body elections.

### **Implications for Community Wellbeing**

There are implications on community wellbeing by the issues and options that are the subject matter of this report.

- The application of an evidence-based, community-led approach to Youth Development planning ensures the development of sound, relevant initiatives that support and empower local residents.
- The local youth sector will be better supported.
- A well-resourced local youth sector will play a significant role in the District's disaster recovery and on-going resilience.
- Local young people can play a more active role in creating positive futures for themselves and others.

4.11. The Management Team has reviewed this report and support the recommendations.

## **5. COMMUNITY VIEWS**

### **5.1. Mana whenua**

Te Ngāi Tūāhuriri hapū are likely to be affected by, or have an interest in the subject matter of this report. Staff have attempted communication with the Runanga regarding the Dudley Skate Park project; however to date have had no response.

Alongside this, with a pending review of Youth Strategy 2018, staff have approached Mahaanui Kurataiao Ltd (MKT) to identify the most appropriate way forward in ensuring a bicultural, partnership approach is applied to the review of the strategy.

### **5.2. Groups and Organisations**

There are groups and organisations likely to be affected by, or to have an interest in the subject matter of this report. Through its various working parties, project coalitions and steering groups, the Community Team has established and maintains an in-depth working knowledge of the Waimakariri District and the physical, socio-economic and environmental factors that affect the quality of life of our residents.

The Community Team applies a community-led approach to its work, collaborating with well over 300 community, education, business; and government and non-government stakeholders.

### **5.3. Wider Community**

Broad community engagement is an important part of the work of the Community Team. This ensures a community-led approach that is relevant to all with a stake in creating a safe, healthy, connected and resilient District for all local residents.

## **6. OTHER IMPLICATIONS AND RISK MANAGEMENT**

### **6.1. Financial Implications**

There are no significant financial implications for Council in relation to the content of this report. However, Community Team staff will continue assist with the acquisition of external funding for some of the key projects that are identified by the networks that they support.

## 6.2. **Sustainability and Climate Change Impacts**

The information in this report does have sustainability and climate impacts.

The environmental aspects of this work directly affects the sustainability of our community and our environment through initiatives that repurpose or reuse assets; and through support for a range of local environmental projects

## 6.3. **Risk Management**

Youth Development Facilitator maintains strong relationships with internal (Council) and external stakeholders to ensure that initiatives are community-led and sustainable.

## 6.4. **Health and Safety**

Health and Safety considerations are included in planning for all Community Team facilitated initiatives.

## 7. **CONTEXT**

### 7.1. **Consistency with Policy**

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

### 7.2. **Authorising Legislation**

N/A

### 7.3. **Consistency with Community Outcomes**

As detailed in the attached report, this project aligns with the following Community Outcomes:

- People are friendly and caring, creating a strong sense of community in our District
- There is a safe environment for all
- There are wide ranging opportunities for people to contribute to the decision making that affects our District
- Public spaces and facilities are plentiful, accessible and high quality

### **4.1 Authorising Delegations**

None

Emily Belton

YOUTH DEVELOPMENT FACILITATOR





# Waimakariri Youth Council

Work Plan | 2022 - 2023

## Our Vision

- A District where young people are engaged and connected to a community that values and supports them.
- Where young people have opportunities to grow, develop and get excited about the future.

## Our Approach

- The work of the Youth Council can evolve according to the needs and aspirations of the District's young people, in line with the implementation of the Waimakariri Youth Strategy.

## Our Purpose

Identify and communicate to the District Council the interests and preferences of Waimakariri young people in relation to;

- The content of strategies, policies, plans, and bylaws of the District Council,
- The processes and mechanisms for engagement with young people in the District,
- The consideration of regional issues raised by local young people,
- Consultation with young people and the community
- Advocating and advancing the Waimakariri Youth Strategy
- Any matter that the Youth Council considers to be of particular interest or concern to Waimakariri young people.

## Our Shared Deliverables

- Present to Council at least once (1) a year.
- Attending eleven (11) Youth Council Meetings per year.
- Social media – Create and share appropriate content to Youth Council's social media profiles to inform youth in the District about opportunities to engage with local community initiatives and relevant youth information.
- Rūnganga Connection - Develop a stronger connection and relationship with Ngāi Tūāhuriri

## Our Values

- |  |                                |                                    |
|--|--------------------------------|------------------------------------|
| • Be respectful & non-judging            | • To representing young people | • Accept each other                |
| • Be active & committed to Youth Council | • Value the whole District     | • Approachable & friendly          |
| • Value and seek everyone's opinion      | • Open to new ideas            | • Value positive youth development |

Priority : Environmental			
Project	Who	Youth Strategy <small>261</small>	Measure of Success
<p>Build strong and lasting relationships with local environmental groups</p> <ul style="list-style-type: none"> <li>- Tūhaitara Trust</li> <li>- WDC – Greenspace team</li> <li>- EcoEducate</li> </ul> <p><b>Community Plantings</b> Promote local plantings for local participation</p> <p><b>Ways to Reduce your Impact Campaign</b> Social media campaign to reduce easy ways to reduce individual environmental impact. Showcase a local initiatives and opportunities</p> <p><b>Opportunity Shops</b> Map local Op Shops and promote these shops to local youth</p>	<p>Chloe - Lead Sasha - Lead Oscar Lexie William Luke</p>	<p><b>Locations &amp; Services</b> <b>Goal:</b> Spaces, places, and services are created &amp; maintained for young people to enjoy</p> <p><b>Objective:</b> Work to maintain, conserve &amp; promote our local natural environment, and encourage the active participation of young people in this effort.</p>	<p><b>Build strong and lasting relationships with local environmental groups:</b> To promote the three identified groups activates and programmes that are relevant to the youth of the district. To meet at least once a year with each group to determine the collaboration opportunities. To post at least once a month on upcoming activities and programmes. Rotate the promoted local organisations.</p> <p><b>Community Plantings:</b> To promote opportunities for Youth Council and the public to participate in Plantings. To have 10 people attend each planting day. <i>To be completed by: August 2023</i></p> <p><b>Ways to Reduce your Impact:</b> To create <u>monthly</u> social media posts that engage the followers. To have 10 views or 10 post likes on both Facebook and Instagram.</p> <p><b>Opportunity Shops:</b> To create a map of local opportunity shops and promote on social media. To engage 20 post likes <i>To be completed: August 2023</i></p>

**Priority : Environmental**

262

Project	Who	Youth Strategy	Measure of Success
<p><b>Conservation Week</b> Organise a range of events and activities during the week.</p> <p><b>Consultation</b> Provide opportunities for youth to have their voice heard regarding environmental projects.</p> <p><b>Earth Day Campaign</b> Social media campaign to promote Earth Day and what Youth Council members are doing to reduce their impact to Earth.</p>	<p>Chloe - Lead Sasha - Lead Oscar Lexie William Luke</p>	<p><b>Locations &amp; Services</b> <b>Goal:</b> Spaces, places, and services are created &amp; maintained for young people to enjoy <b>Objective:</b> Work to maintain, conserve &amp; promote our local natural environment, and encourage the active participation of young people in this effort.</p>	<p><b>Conservation Week:</b> To create two activities for the community to be involved with during the week with one River cleanup on the weekend. To have 10 people attend the weekday activities. To have 10 people attend the River clean up. <i>To be completed: 13 September 2022</i></p> <p><b>Consultation:</b> To provide two opportunities to survey and consult the local youth. To survey and submit local youth on the ECAN Youth Transport Proposal in the Draft Annual Plan 2022/23. To determine one other opportunity for youth consultation <i>To be completed: August 2023</i></p> <p><b>Earth Day:</b> To create reels and posits for the Day (22 April 2022). To have 10 views and 10 post likes on both Facebook and Instagram. <i>To be completed: 23 April 2023</i></p>

**Priority : Community Space Developments - Dudley Park Project**

263

Project	Who	Youth Strategy	Measure of Success
<p>Stage 1: Activation Platform (deck) - Funding required \$40,000, funding received \$20,000</p> <p>Stage 1a: Mural - Funding granted \$3,000</p> <p>Stage 2: Mounded seating Funding required \$20,000</p> <p>Stage 3: Natural Play - Funding required \$5,000</p> <p>Stage 4: Picnic Table - Funding required \$5,000</p> <p>Stage 5: Volleyball Court - Funding required \$20,000</p> <p>Consultation: Pre &amp; post project surveys</p>	<p>Ruby Oliver Zack Monte</p>	<p>Locations &amp; Services Goal: Spaces, places, and services are created &amp; maintained for young people to enjoy Objectives: - Provide a range of public spaces and facilities for young people to use. - Work to maintain, conserve &amp; promote our local natural environment, and encourage the active participation of young people in this effort.</p>	<p>Stage 1: Completion of Activation Platform by 31 December 2022.</p> <p>Stage 1a: Completion of Mural by 31 August 2022.</p> <p>Stage 2: Completion of Mounded Seating by 31 March 2023.</p> <p>Stage 3: Completion of Natural Play by 30 June 2023.</p> <p>Stage 4: Completion of Picnic Table by 31 March 2023.</p> <p>Stage 5: Completion of Volleyball court by 30 June 2023.</p> <p>Consultation: Completion of pre-project surveys by 30 April 2022. Completion of post-project survey by March 2024.</p> <p>Another measure of success will be to determine if there has been an increase in visitation to Dudley Park by a wider range of community members .</p>

Priority : Community			
Project	Who	Youth Strategy	Measure of Success
<p><b>School Community Action Award</b> To develop a school community volunteer award to showcase the success and hard work that young people put into the betterment of their community.</p>	<p>Ruby Oscar Thalia Chloe Yulissa</p>	<p><b>Connection with Community</b> <b>Goal:</b> Young people are connected to their community &amp; invested with a sense of belonging. <b>Objective:</b> Encourage the celebration and nurture of young people across the community.</p>	<p><b>School Community Volunteer Action Award:</b> To develop the award criteria and gain buy-in from local schools. To promote Action Award to community. To develop a social media campaign, with the target of 10 post likes per post. To have at least 2 applicants for each school. <i>To be completed: July 2022.</i></p>
Priority : Public Awareness			
Project	Who	Youth Strategy	Measure of Success
<p><b>Media Branding Guidelines</b> Develop branding guideline and templates. Communication plan for projects and important projects.</p> <p><b>Regular Communication</b> Through utilising the Chatter newsletter. Regular social media posts of project updates, and relevant youth events, campaigns, projects.</p>	<p>Chloe Ruby Sasha Oliver Zack</p>	<p><b>Connection with Community</b> <b>Goal:</b> Young people are connected to their community &amp; invested with a sense of belonging. <b>Objective:</b> Support existing initiatives that build positive relationships &amp; connections with young people. Provide new opportunities for young people to connect positively with their community in meaningful, practical ways.</p>	<p><b>Media Branding Guidelines:</b> To develop branding guidelines that reflects the Youth Council. To design a realistic Communication plan that is achievable. To be completed: September 2022</p> <p><b>Regular Communication:</b> To write a quarterly update for Chatter. To post at least once a fortnight to the Youth Council social media profiles. To have at least 10 post likes and at least one comment on the page. To increase followers by 5% each year. <i>To be completed: August 2023</i></p>

**Priority : Youth Voice**

265

Project	Who	Youth Strategy	Measure of Success
<p><b>Youth Voice</b>                      Create a schedule of consultations and submission opportunities that are of the interest of youth.                      Promote these consultations on Youth Councils social media profiles.                      Determine if a submission on behalf of the youth community is required for a campaign.                      Seek the views and opinions of local youth and report back to council.                      Promotion of voting processes for Local, Regional and National Elections.</p>	<p>All</p>	<p><b>Connection with Community</b>  <b>Goal:</b>                      Young people are connected to their community &amp; invested with a sense of belonging.  <b>Objective:</b>                      Provide new opportunities for young people to connect positively with their community in meaningful, practical ways.</p> <p><b>Involvement &amp; Action</b>  <b>Goal:</b>                      Young people have a voice that is valued &amp; they are provided with worthwhile activities &amp; opportunities.  <b>Objectives:</b>                      Provide broader opportunities for a wider range of young people to get involved with decision-making and influencing change through forums, events and other forms of engagement.                      Engage, inform and encourage young people in the ways they can get involved and have their say – locally, regionally, and nationally.</p>	<p><b>Youth Voice:</b>                      To develop a schedule including at least 1 consultations per year.                      To determine which of these require public consultation and the time frame for the consultation.                      To develop a campaign, if required for consultations.                      To develop social media appropriate content for the available submissions and those that require public consultation.                      To have at least 10 likes per post.                      To develop easy to digest content regarding the voting processes and how young people can be involved and why they should vote.  <i>To be completed: August 2023.</i></p>

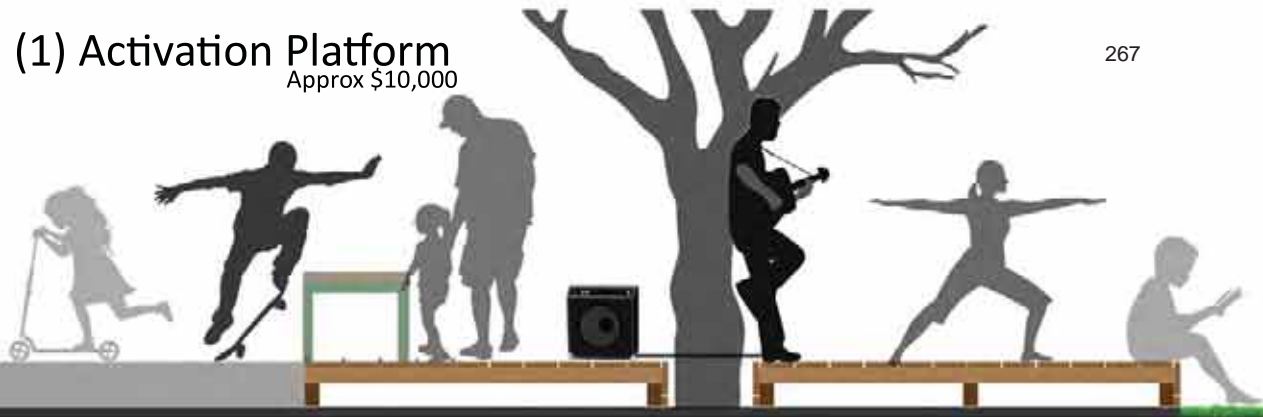


**Priority : Collaboration**

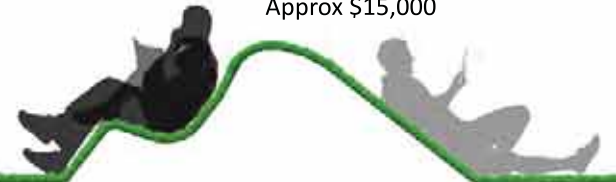
Project	Who	Youth Strategy	Measure of Success
<p>Canterbury Youth Councils To continue to develop a positive relationship with the other Youth Councils including; Ashburton YC, Christchurch YC, Hurunui YC, Kaikoura YC, and Selwyn YC.</p> <p>To be collaborative with similar projects.</p>	<p>All</p>	<p><b>Involvement &amp; Action</b> <b>Goal:</b> Young people have a voice that is valued &amp; they are provided with worthwhile activities &amp; opportunities. <b>Objectives:</b> Provide broader opportunities for a wider range of young people to get involved with decision-making and influencing change through forums, events and other forms of engagement. Engage, inform and encourage young people in the ways they can get involved and have their say – locally, regionally, and nationally.</p>	<p>Canterbury Youth Councils: To have collaborated and attended at least two events that includes another Youth Council. <i>To be completed: August 2023</i></p>



(1) Activation Platform  
Approx \$10,000



(2) Mounded Seat  
Approx \$15,000



(3) Natural Play  
Approx \$5000



(4) Picnic Table  
Approx \$5000



(5) Volleyball Net  
Approx \$5000



Trim: 210527085992

# YOUTH COUNCIL

## Dudley Skate Park Development - Concept Plan




North Canterbury Youth Futures – Social Media Content 2022 example



University of Canterbury

**RĀ TŌMENE | OPEN DAY**  
**FRIDAY 9 SEPTEMBER**

**NORTH CANTERBURY**  
**YOUTH FUTURES**



**POWERUP**  
**a Career in Tech**

The New Zealand tech industry is a dynamic, fast-growing industry to work in. It offers higher than average salaries, a variety of roles and great career opportunities. The tech sector has an ongoing need for employees across all sorts of roles, and it's not just coding or sitting in front of a computer!

If you have good communication skills, are a team player and like solving real-world problems, a career in tech could be for you.

Come along to this free, informal event to hear from women working in a variety of roles in local tech businesses, talk with employers to learn what they are looking for, and discover whether tech might be a great next step for you. Refreshments will be served.

**YOUR PURPOSE**

Date: Wednesday August 24<sup>th</sup> | Time: 5.30-7.00pm  
Venue: Webtools (opposite at 148A Lichfield Street, Christchurch)  
Register at: [events.humanity.co.nz/powerup-a-career-in-tech](https://events.humanity.co.nz/powerup-a-career-in-tech)  
Booked seats - places are limited.

Brought to you by ChristchurchNZ, Canterbury Tech & Webtools

Contact [info@powerup.com](mailto:info@powerup.com) for further information

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**YOUTH FUTURES**

It's more than what you think.



**NEXT INTAKE**  
**15th AUGUST**

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**YOUTH FUTURES**

It's more than what you think.



School Leavers' Toolkit

**HOW DO I WRITE A CV?**

**NORTH CANTERBURY**  
**YOUTH FUTURES**

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**WAIMAKARIRI YOUTH COUNCIL MINUTES**  
*held at Waimakariri District Council Chambers*  
*at 7pm on Tuesday 21 June 2022*

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**PRESENT:**

Ruby Wilson, Emily Belton, Dan Gordon (WDC Mayor), Oscar Bai, Chloe Betony, Niki Mealings (WDC Councillor), Alexandra Mealings, Oliver Kelly, Zack Lappin, Sasha Crawford, Eris Le Compte (Minute Secretary).

**APOLOGIES:** Kirstyn Barnett, Yulissa Louw, Monty Gooch.

The group were welcomed by Ruby and a 'speed talk' session was arranged as a way of getting to know one another. It was suggested by Emily that perhaps it would be a good idea that at some time later in the year, youth members introduce their families at a gathering. To be discussed in the future.

**MINUTES OF PREVIOUS MEETING 31 May 2022**

Minutes were moved to be accepted by Ruby and seconded by Niki. Carried.

**MATTER ARISING FROM PREVIOUS MINUTES**

*Amendment: Niki Mealings has been **helping** with the production of a video on how the climate change is expected to effect Waiamakariri.*

*And Council is submitting to the Ministry for the Environment re a draft NAP plan.*

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**1. REPORTS FOR DISCUSSION**

**Niki Mealings**

Council is currently reviewing the gambling policy and submissions can be made via a form on the council website.

The alcohol/drug steering group have a new coordinator and would like input from the youth voice. Emily to follow up on this.

**Mayor Dan Gordon**

Dan was pleased to announce of two former council members being recipients of honours in the Queen's Birthday Honours list.

- Former Mayor David Ayers received the NZOM for services to the community. David had previously also received the Mayor's Award last year.
- Chris Greengrass, Chair of Kaiapoi Community Board up until a few months ago, was posthumously awarded QSM, also for services to the community. Sadly, Chris Greengrass died about a month ago.

Between both recipients, they had totalled 90 years of service to the community.

A Rural and Provincial Conference was attended by Mayor Dan who was accompanied by some councillors in Wellington last week. The Waimakariri population is now around 69,000. There was the opportunity to talk with cabinet ministers and to discuss the Resource Management Reform.

Reports are being assessed around Regional Climate Change, but this is not moving as fast as hoped. A submission has been forwarded to government and thank you to Youth Council for their input with this. Various discussions are taking place and development contributions.

Mayor Dan attended an interesting viewing at the Theatre Royal in Christchurch about an Iranian who was wrongfully imprisoned. Dan also recently attended launch of a book at Rangiora Library – 'The Life and Times of a Rangiora Kid' written by Tom McLaren. Tom has lived all his life in Rangiora and the book covers life in Rangiora from the 1930's. Dan recommends it as a really good read. The book can be borrowed from Rangiora Library.

Matariki takes place this Friday, Dan will be attending a breakfast at Ashgrove School. At the Kaiapoi Library author/poet Ben Brown is giving a presentation which looks interesting. And the Festival Lights will take place in Oxford.

Mayor Dan will be holding open session community drop-ins in the coming weeks. The WDC social club went ten pin bowling – lots of fun for all.

## **2. WAIYOUTH UPDATE**

**Emily Belton**

The Mighty Duck Chase is underway. Each month Wallace will find a new location to explore. Details are on the WaiYouth Facebook page. This will run through to December this year.

Current Clue – "in a park somewhere"

## **3. DUDLEY PARK PROJECT**

**Project Group**

Emily is applying to a gaming charity for funding and would like to talk with members about applying for funds for a volley board. So, if anyone interested, please contact Emily.

Ideas for the mural design are being worked on and Emily would welcome all ideas. The group then entered their thoughts onto a whiteboard to come up with ideas for the design and these will be collated and discussed further. Going to launch a 'Let's Talk' which will include schools. So far, three schools have shown interest in participating.

## **4. ENVIRONMENTAL PROJECT**

**Emily Belton**

Not a lot to report this month but Emily has received an email from Kimberley who would like to work with the Environmental group in the future.

**5. CONSULTATIONS OPEN****Ruby Wilson**

- Waimakariri District Council Walking and Cycling Network – closes 30 June  
<https://letstalk.waimakariri.govt.nz/walking-and-cycling-network-plan>
- Ministry of Education Nomination of a Legend – closes 30 June  
<https://consultation.education.govt.nz/education/nomination-of-a-local-legend>
- Parliament/Ministry for the Environment Emissions Reduction Budget Plan – closes 27 June  
[https://www.parliament.nz/en/pb/sc/make-a-submission/document/53CEN\\_SCF\\_INQ\\_123972/emissions-badgets-published-in-2022-and-the-first-emissions#RelatedAnchor](https://www.parliament.nz/en/pb/sc/make-a-submission/document/53CEN_SCF_INQ_123972/emissions-badgets-published-in-2022-and-the-first-emissions#RelatedAnchor)
- Review into Future for Local Government Get Vocal in Your Local – closes 30 June  
<https://getvocalinyourlocal.govt.nz>
- Ministry of Justice Reform of Adoption Laws in New Zealand – closes 7 August  
<https://consultations.justice.govt.nz/policy/adoption-law-reform-2022/>
- Waimakariri District Council Current Gambling Policies – closes 11 July  
<https://letstalk.waimakariri.govt.nz/gambling>
- Waimakariri District Council Waikuku Beach Reserves Spatial Plan  
<https://letstalk.waimakariri.govt.nz/let-s-talk-waikuku-beach-reserves-spatial-plan>
- Environment Canterbury Te Kotari – Peoples Panel – Sign up via link, surveys sent via email  
<https://haveyoursay.ecan.govt.nz/hub-page/te-korari>
- Parliament Bill Water Services Entities Bill – closes 22 July  
[https://www.parliament.nz/en/pb/sc/make-a-submission/document/53SCFE\\_SCF\\_BILL\\_124081/water-servies-entities-bill](https://www.parliament.nz/en/pb/sc/make-a-submission/document/53SCFE_SCF_BILL_124081/water-servies-entities-bill)

**6. CO-CHAIR ELECTIONS****Ruby/Emily**

Chloe Betony was appointed as the new Co-Chair of Waimakariri Youth Council. Chloe then gave a short explanation of what her hopes are for the future. Congratulations Chloe.

**GENERAL BUSINESS:****Southbrook Road Reference Group and WDC Road Safety Comm. Ruby/Dan/Zac**

No further information to report at this stage on Southbrook Road but possibly be more information shortly.

Ruby recently attended a WDC Road Safety meeting. The Police made mention of how important it is to drive to the conditions, especially in wintertime. There appears to be some improvement in driving without being alcohol impaired.

**The Big Splash****Sasha Crawford**

Sasha will be representing Waimakariri Council for this annual event which will take place at the Rangiora RSA on 1 July, 5 pm. Anyone interested in joining her? Dan

encouraged all to come along and support Sasha in this worthwhile fund-raising event. There is a link on both Sasha's and Dan's Facebook pages.

### **Youth Voice Canterbury**

**Chloe/Emily**

An interesting meeting has been held around youth engagement. There is a possibility of reimbursing costs – to be followed up on. A framework is being developed. Boxes will have to be ticked before passing onto youth council. Open communications on what youth council expect and it is to be ensured that youth engagement is authentic.

“Nothing about us, without us” (Emily)

An economic strategy meeting is to be held on Thursday 7 July, 9 am to 1 pm. If unable to attend, Emily can send the details out.

### **Community Award Meeting Date**

This to be discussed at a meeting on Tuesday 5 July at 6.30 pm. Those involved in the discussion are: **Thalia, Oscar, Chloe Betony, Ruby, Emily, Mayor Dan Gordon.**

### **Smokefree Consultation Meeting**

A meeting to be held 22 June at 4.30 pm.

### **Festival for the Future**

Chloe Betony and Ruby will be joining with Emily to attend The Festival for the Future 10-year celebration conference in Wellington 29-31 July 2022.

### **Resignation**

A resignation from Waimakariri Youth Council has been received from Thomas Patterson due to other commitments. Thomas was thanked for his time at youth council.

### **Terms of Reference**

Letters have been sent to those who have not attended meetings for some time and Emily is yet to receive responses to her letters. Rules are that if absent for three meetings and no apology, response or contact received, it was considered they no longer have interest.

### **Ellie's Videos**

Ellie tasked all those who participated in the making of these videos. Should be completed by Monday-Thursday next week.

North Canterbury Youth Futures at Rangiora High School. Six videos will be promoted over the following three months.

### **Ruby**

Keep in mind youth council facilitating over the next couple of months. Not sure about holding a “meet the candidates” for the local body elections. Emily is advised to get advice from Sarah. However, Dan encouraged youth participation in the upcoming elections and Niki encouraged the making of a video.



**Christchurch Stadium**

Zac brought to attention the possibility of a youth voice around the planned Christchurch Stadium. Dan informed that Waimakariri District Council will make a submission to Christchurch Council on behalf of Waimakariri residents and will have to be mindful of not taking the community into something they do not want. Due to the delicate and political nature of the procedure, WDC is treading carefully. It is hoped that this will be discussed at the next Mayoral Forum. To date, WDC have not been considered – there needs to be a consultation. However, Emily will source advice on youth council's position.

**Group photo for newsletter**

The meeting ended with the group posing for a photograph.

**ACTIONS:**

- **Contact Emily if interested in discussing a volleyball court at Dudley Park for the Tū Manawa funding application.**
- **The Big Splash at Rangiora RSA, Friday 1 July. Go and support Sasha.**
- **Community Award meeting 5 July, 6.30 pm.**
- **Economic Strategy meeting 7 July, 9am to 1pm.**

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Meeting closed at **8.45 pm.**

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Next meeting is on **26 July 7pm, Venue to Be Confirmed – but possibly Council Chambers**

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Signed

Date

**WAIMAKARIRI DISTRICT COUNCIL****REPORT FOR INFORMATION**

**FILE NO and TRIM NO:** GOV-01-04/220804133482

**REPORT TO:** COMMUNITY AND RECREATION COMMITTEE

**DATE OF MEETING:** August 16<sup>th</sup>, 2022

**AUTHOR(S):** Paula Eskett – District Libraries Manager

**SUBJECT:** Library update to August 4<sup>th</sup>, 2022

**ENDORSED BY:**  
(for Reports to Council,  
Committees or Boards)



General Manager



Acting Chief Executive

**1. SUMMARY**

1.1. This report provides an update on key activities and customer service improvement and innovations undertaken by Waimakariri Libraries from May 7<sup>th</sup> - August 4<sup>th</sup>, 2022

**2. RECOMMENDATION**

**THAT** the Community and Recreation Committee

- (a) **Receives** Report No. GOV-01-04/220804133482
- (b) **Notes** the customer service improvements, community feedback, events, and use of New Zealand Libraries Partnership Programme funding to contribute positively to community outcomes by Waimakariri Libraries from May 7<sup>th</sup> – August 4<sup>th</sup>, 2022
- (c) **Notes** COVID-19 impact on the Libraries staffing has now generated four 2-4 hour disruptions to opening hours, outside of the mandated lockdowns.
- (d) **Circulates** the report to the Boards for their information.

**3. BACKGROUND**

3.1 The Waimakariri Libraries aim to promote reading, literacy, and learning; support a stronger, healthier and more resilient community; promote a culture of exploration and creativity; contribute to the economic wellbeing of individuals and the community, and deliver excellence in public service.

See the: Waimakariri Libraries' Strategic Framework 2018-2020 for details (TRIM: 180314027362 and 180924110635).

**4. ISSUES AND OPTIONS**

**4.1. Matariki Celebrations & Waimakariri Libraries first StoryWalk®**

- 4.1.1. Waimakariri Libraries celebrated Matariki with a programme of events and activities designed to promote understanding and celebration of the meaning behind Aotearoa' s new public holiday, and to bring whānau together at this time of reflection and renewal.
- 4.1.2. The launch of the District's first StoryWalk® at Northbrook Wetlands on Friday 24 June was a great success, timed well with Matariki celebrations.

A collaboration between the Libraries and Greenspace Teams, the StoryWalk® shows the story of Nikki Slade's *Little Kiwi's Matariki* in panels along the walkway in the reserve.

It will run until 21 August 2022.

On the launch day, also the public holiday, visitors were treated to a free sausage sizzle, and tamariki were able to complete an activity sheet to go in a prize draw. Jason Goldsworthy from the Rangiora-Ashley Community Board dressed as Puke the Pukeko for the morning.

A QR code placed on the final board links to a short survey where people can share feedback about their experience of the StoryWalk®.

Visitors have shared feedback expressing their enjoyment of the combination of a walk in nature, learning about Matariki and native birds, and spending time together as a family. Comments on what people have enjoyed have included:

“A great way to bring a story to life and get the kids outdoors. Lots of great questions were asked. We even did a second loop.”

“My granddaughter enjoyed finding the story boards and finding all the characters hidden in the trees. She was able to share her Matariki star knowledge from day care with us.”

“Learning more about Matariki with my whānau in a beautiful natural setting.”

“Sunshine, fresh air, kids excited about the story. Everything!! So much to love!! Thank you for a great outing.”

“Great family time, lots of birds everywhere and learning about the environment.”

“We've walked this track before but it's cool to do it with the story to follow along with.”

The StoryWalk® has shown how effective collaborating across teams can be, and has given us a great example of where to focus our energies as a team.

Planning is underway for a second StoryWalk® to be installed at a different reserve in the district.

Throughout the period of Matariki, further celebrations were held across all library branches.

Each library hosted a mystery trail that invited tamariki to learn about the whetū (Stars) of Matariki.

Matariki star trees in each library gave hapori members of all ages the opportunity to share what they were grateful for on a star that was then hung on the tree.

Preschool sessions also celebrated Matariki throughout the week at all branches.



- 4.1.3. Musicians from the Christchurch Symphony Orchestra conducted a Matariki-themed workshop at Kaiapoi Library as part of the orchestra's On the Road Programme, delighting approximately 30 attendees.
- 4.1.4. Library staff visited three primary schools in the District (Oxford Area, St Josephs, and Kaiapoi Borough), providing an engaging and entertaining session focused on Matariki. Feedback from teachers indicated they valued having a session that focused on this celebration, and children were informed and entertained.

- 4.1.5. Family Nights were held at Oxford and Kaiapoi Libraries, inviting whānau to join the Libraries Team and guests for an evening of stories, waiata, and craft.

Oxford's Family Night was delivered in collaboration with The Oxford Promotions Action Committee as part of the Oxford Winter Lights celebration. The evening was a great success with a strong sense of community at the well-attended event.

The family night at Kaiapoi was less well attended, despite having a special guest in Ben Brown. Contributing factors were likely the events planned in Kaiapoi for the following day, and late promotion.

- 4.1.6. The above array of events and activities shows Waimakariri Libraries commitment the community outcomes of:
- Giving effect to the principles of Te Tiriti o Waitangi in its programming.
  - Offering wide-ranging opportunities for people of different ages, abilities, and cultures to participate in community life, contributing to building a strong sense of community.
- 4.1.7. Evaluation of this year's Matariki celebrations has already begun to inform planning for Waimakariri Libraries' celebration of Te Wiki o Te Reo Māori in September, and will ensure Matariki festivities take pride of place in the calendar for 2023.

#### 4.2. **New Library collection supporting those with Dyslexia**

Dyslexia is defined as *a language related learning difference that is neurologically based and makes reading, writing, and spelling difficult for people of all ages*. In Greek **Dys** means "difficulty" and **lexia** means "Language"; dyslexia translates as a difficulty in processing language. It is estimated that one in ten New Zealanders, including approximately 70,000 school aged children live with Dyslexia, with the degree of severity affecting people differently.

Early intervention and targeted support with Dyslexia can mitigate developmental learning problems, with children able to make remarkable reading gains with increased confidence and self-esteem. Dyslexia can be successfully managed but not cured and was only recognised as a *Specific Learning Disability (SLD)* in 2007.

- 4.2.1. Waimakariri District Libraries have recently expanded our children's dyslexia collection and increased visibility and access of the collection with labelling consistent with the international symbol for Dyslexia Awareness.



The letters p q b d form this jewellery's symbol, which represents dyslexia. Often misunderstood as reading backward, or simply reversing letters, this design is a conversation starter about what it really means to be dyslexic.

- 4.2.2. A collection of books catering specifically for adults has recently be introduced. This collection has launched with approximately 40 titles, with content selectors focused on growing the collection size when quality resources are available.

Expanding the selection of non-fiction books and resources that support teachers and whānau working with people who live with dyslexia is additional area of focus for selectors.

4.2.3. Dyslexic friendly books are printed in sans serif font with cream coloured pages rather than white. The open dyslexic font changes letters so that they are no longer so similar, and that they are not mirror image of other letters. It does this in several ways

- Bolds capitals
- Bolds the bottom of letters
- Slants similar looking letters
- Gives letters larger openings
- Improves spacing
- These features address letter confusion, rotation and crowding.

4.2.4. By focusing on collection development that supports the recreational reading needs of both children and adults, Libraries contribute to lifelong learning and the development of; reading skills, critical thinking while supporting emotional wellbeing.

Education of the Library's team, focusing on specific support of those library users who share they have dyslexia is a key to harnessing the power of this collection, in conjunction understanding how this learning disability may be disguised. Changes to cataloguing practices that make the collections more visible via real language searching when online, are hoping to make our collections more discoverable.

#### 4.3. **Recollect – A new service and platform supporting local history & heritage**

4.3.1. Recollect is an online platform that provides digital access, discovery, engagement, management and preservation of cultural heritage, local history and special collections.

4.3.2. The platform will provide many new opportunities for Waimakairi Libraries to collaborate with local Museum's, history groups, and community organisations. Libraries will facilitate access to the platform and encourage the sharing and curation of local history and heritage materials. In time local history and heritage groups will be able to upload content to the platform with Libraries moderating content metadata to ensure consistency. Waimakairi Libraries used NZLPP funding to pay for the one of setup and establishment costs for Recollect.

4.3.3. Recollect is the replacement solution for *Kete* which was discontinued by National Library in June 2022. *Kete* was a community based web space that allowed individuals and groups to store and share with limited functionality and accessibility, local history artefacts including; photos, documents and stories.

4.3.4. Recollect is a New Zealand owned and operated product, with data back and sovereignty housed with our borders. It is a more intuitive and considerably more agile solution with a growing client base across Aotearoa and Australia

- [History Trust of South Australia](#) – which illustrates Recollect' s ability to combine engaging digital storytelling with narrative, timeline and cultural mapping features
- [Upper Hutt](#) with its simple design and bold colours, highlighting the ease of discovery on the platform via searching or browsing

- The platform provides access to visual files such as maps, photographs and ephemera e.g. [NZ Heritage Maps](#), sound files such as oral history, and written files such as letters and manuscripts
- Preservation of digitized heritage material is key in all websites as Dunedin Libraries [Scattered Seeds](#) provides an excellent example.

#### 4.3.5. Implementation

Between July and November 2022 Waimakariri Libraries Recollect Project Team will work with staff from Recollect on implementation. This will consist of three stages; Discovery; to look at users, data and user experience; Configuration; where we migrate our existing data and finally User Acceptance and Testing. Our aim is to have the platform ready and loaded with a selection of vibrant content for public release by December 2022. Libraries will then approach the uploading and adding of new content in real time.

#### 4.3.6. What content is already gathered?

Over 500 photographs will be transferred from Kete and the Waimakariri Library website plus new content from the Oxford Museum and the Rangiora Photographic Society.

6 local history books have been digitalised with permission granted for Waimakariri Libraries to share these on Recollect.

Titles include; "Beyond the Waimakariri" by D.N. Hawkins and "The life and times of a Rangiora kid" by Tom McLaren.

14 Waimakariri Heritage Trails and thirteen issues of the Oxford Bulletin from 1950-2015, will be in the initial content loading with twenty three oral histories, pending permissions being granted.

#### 4.3.7. Looking to the future

Anyone can browse and use existing Recollect platforms to access information but Recollect also allows for deeper engagement. Community members are able to create a personal login to the platform which allows for them to curate items into their own personal collections. Individuals and groups are able to make suggestions for contributions for the platform this way and they are able to submit additional information on existing content on the platform e.g. additional tags, geo-locations, corrections and other additional information. Everything that is submitted by a third party will be moderated by Libraries before being added to the site.

Waimakariri Libraries have begun work to promote the platform and it's potential to local community groups such as local museums and schools as a place for them to use for research but also as a place that they can contribute to. This type of crowdsourcing means we will be able to grow the body of knowledge more quickly, while also contributing to our community's digital literacy skills.

Projects could be run for special events or organisations such as Te Ngāi Tūāhuriri Rūnanga, Women's History, anniversary of Earthquakes, A&P Associations, and centenary events. These may focus on gathering photographs; an oral history project; digitising a history or relevant documentation. Schools may decide to submit student projects following study of the new history curriculum. Museums may have collections that they would like to make more accessible to the public.



#### 4.4. **Te Pouwhenua - *Poipoia te kākano kia puāwai – Nurture the seed and it will blossom***

The roopu *Te pouwhenua* was established in April 2022 with the financial assistance of Te Putahitanga. Ihaia and Jasmyn Pihema along with their brother-in law David Ruru created the roopu for school aged boys years 6-13 to provide after school activities with an emphasis on Mana Māori.

Their vision is to walk alongside tama Māori of our hāpori to develop strong positive identities of themselves and of each other. Proud to be Māori, proud to be part of our community and caretakers of āpōpō.

4.4.1. Libraries Rangatahi co-ordinator Rebecca Moreland arranged to meet with Mātua Ihaia and Mātua Dave at one of their planned afternoons at Woodend Community Centre.

The tama were organizing themselves for a round of b-ball. Rebecca reported she could feel a real sense of pride and empathy for the boys, emanating from nga mātua.

It was shared how for many of the boys, they feel adults view them as ‘naughty’ or ‘problem kids’, this in turn doesn’t create positive relations in the community for our young ones.

Rebecca invited Dave and Ihaia to bring the roopu along to Ruataniwha, the following Friday.

4.4.2. Upon arrival at Ruataniwha the boys (around a dozen) were quiet and a little disengaged. They soon warmed up and found things to interest them around the library. Many had been in the library before, but were not aware of the services we provide. Rebecca distributed a quick paper survey, to gauge their feelings on libraries and find out what interests them. Overall consensus the roopu finds the library a welcoming and warm place, however didn’t feel that the teen section was a place for them, and probably wouldn’t sit there. They like how we offer free Wi-Fi (that actually goes, unlike the Kaiapoi or McDonalds one), and that there is a place to charge their devices.

4.4.3. Most of the suggestions on what our libraries could be improve came down to gaming, food and music:

- Free food
- Arcade style games
- Car racing tracks – slot cars
- Virtual reality – gaming weekdays
- T.V
- Gaming days – competition
- Music playing or headphones to use
- Organizing/hosting rap battles
- Musical area with instruments
- Longer hours on Saturday/after 5pm
- Play local films, music and stories

The boys were especially keen on coming to [Pixels and Pieces](#) and expressed interest in attending escape room style events.

It is Rebecca’s hope that by planting the seed of the possibilities libraries hold they may become members of our library community.

#### 4.5. **Kidsfest 2022**

2022 was another wonderful year for Kidsfest at Waimakariri Libraries with seven exciting events which were warmly received and a huge success.

4.5.1. Our forever popular **Mystery Trail** broke all the records this year and a few words. Based on Wordle children had to explore the Library finding letters to create



words. Over 300 trails were completed making this the most successful trial we have had. Maggie a mum of 3 happily shared she loved the element of persistence her children show, “They just have to find all 20 letters!”

#### 4.5.2. Tech Time was new this year.



Children could book into a workshop run by staff to play with robots, try coding and be interactive with technology. Workshops were held at each of our three libraries and fully booked with 48 children in attendance. Databases and Digital Inclusion Librarian; Sarah Stenhouse designed and led this

project.

In one session *Cohen* created and uploaded a video of what he did with the robots during the session and created a [Youtube](#) video too.

#### 4.5.3. Storybook Escape was another new event for Kidsfest 2022 and the brainchild of Libraries most recent recruits Ciaran Findlay and same Grueber

Children we able to interact with staff who were dressed up as characters who



had escaped from their storybooks to do activities with library visitors! Storybook Escape received a lot of positive feedback for being “engaging” “imaginative and “creative.”

Running twice over the holidays both times at the Kaiapoi Library it maximised the use of library spaces some children may not have explored before, including the Community Boardroom. All participants were given a badge for attending with over 100 children participating.

4.5.4. The *world-famous-in-the-Waimakariri* Family Quiz nights were once again a massive success and held at all three libraries. Families bonded as teams fought it out, testing their knowledge. Kaiapoi and Rangiora were fully booked with ten teams in attendance at each location. Over 90 people attended the three quiz nights. Scott Gregan from Kaiapoi praised the event, “Best family night ever – we try to come every year!”

4.5.5. Pitter Patter is a local dance company and were invited to entertain the tamariki these school holidays.



Two shows were held; one at both Rangiora Town Hall and Oxford Town Hall. It was a fun interactive dance show encouraging young and old to boogie and really get moving – this was really appreciated by parents at the end of the school holidays. Pitter Patter was the only Waimakariri Libraries Kidsfest event that had any cost.

\$5 per ticket was charged to cover costs and pay the entertainers, 65 children attended.

#### 4.6. **New Zealand Libraries Partnership Programme (NZLPP) finishes**

After 20 months of targeted financial support from government aimed at strengthening the Library sector across Aotearoa, NZLPP came to an end of June 30<sup>th</sup>, 2022.

Announced in May 2020 it was the largest government investment in Libraries since the launch of [Aotearoa Peoples Network Kaharoa \(APNK\)](#)

Through a variety of funding avenues and opportunities made available by NZLPP, Waimakariri Libraries received close to \$700,000 in funding, fee waivers and professional development.

Ten staff received direct professional development opportunities with the full library’s team able to participate in a one year programme that strengthened capability and confidence using digital technologies and databases.

4.6.1. Waimakariri Libraries made significant contributions to the programme’s outcomes including

Short-term outcomes - first one to two years

- key stakeholders value libraries
- enhanced engagement and reach with key communities
- improved skills of librarians and community
- broader range of services that meet local community needs
- increased community access to digital services and support
- increased diversity of partnerships.
-

Medium-term outcomes - three to five years:

- improved partnering with other libraries and organisations
- retaining and strengthening librarian skills and services
- improved rates of library usage by broader range of people and groups
- wider variety of pathways into library work.

Long-term outcomes -six to ten years:

- improved sustainability of libraries
- improved diversity in libraries
- improved library capability.

- 4.6.2. In addition to fully funding 4 FTE library positions, a substantial upgrade of the technology Libraries use to provide digital skills classes and activities was also supported by NZLPP funding.

12 laptops, 8 Chromebooks and 8 tablets were purchased. These devices have been used to create free community learning classes, and will continue to be used for a range of activities, for example the recent Kidsfest event used the laptops, tablets and Chromebooks for different activities and meant groups of 18 tamariki could be involved in the program at once.

- 4.6.3. NZLPP funded staff were given access to a comprehensive Learning Management System (LMS) with each secondee assigned a personal training budget to fund professional learning and development opportunities related to the focus areas of their NZLPP mahi.

A selection of the courses chosen by secondee's is below

- A Creative's (& Non-creatives) Heaven: Using Canva to Bring your Marketing Projects to Life
- Connecting with People and Communities – Open Polytech
- Crafting the Perfect Marketing Campaign for Community Engagement
- Getting Started with Small Projects
- Engaging and Working with your Community
- The Resilience Mind-set
- Making (Local) Collections Discoverable and Useable in Digital Format
- Toro Mai - Tikanga Māori
- Working with Tāngata Whenua
- Engagement with Māori - The 5 Wai's Framework
- Content Creation and Curation E-Collection
- Using Digital NZ (Ā-Tihi O Aotearoa)

- 4.6.4. Community engagement and partnerships have been significantly strengthened through a wide variety of author's talks, library presentations and free community events.

Book Talks

- Friends Indeed by Sue Allison
- A Backpack, a Chair and a Beard by Eamon Wood
- Julie Zarifeh and Matt Calman
- Rural Tales – Tim Fulton, George Black
- Eel of Te Raki by Barbara Petrie
- Life & times of a Rangiora Kid by Tom McLaren,  
- supported by the Rangiora Museum.

### Community connections

- Woodend Friendship Group
- Ashley Friendship Group
- Waimakariri Combined Friendship Group
- Probus Women's Group
- Rangiora Museum
- Karanga Mai
- Rachel's House
- Compass FM interview
- Step Ahead
- TimeBank Waimakariri
- Tuahiwi Marae
- People First

### Other events

- Stash Swap      March 2021  
                                June 2022
- Volunteer Expo June 2021
- StoryWalk®

- 4.6.5. We are fortunate to have been offered an additional 6 months of staff funding for our NZLPP Library Assistant, and were successful in a bid for additional funding to carry on the work or a project begun by NZLPP.

The money was channelled into the establishment costs of Recollect.

- 4.6.6. With close to 2 years of additional services, offerings and events the community have embraced these as business as usual services now.

In conjunction with Human Resources support, changes to staffing have been made to make permanent the roles of; Community Connections and Digital Inclusion.

The secondees in these roles; Anna Paterson and Sarah Stenhouse were successful in their applications for these permanent positions. Work is underway to bring to Council the business case for a permanent Local History role in 2023.

- 4.6.7. Waimakariri Libraries are significantly more focused on community partnerships and collaboration after our support from NZLPP.

The digital capability of the wider team is noticeably more confident and competent and a culture of leading from any position is becoming the norm.

Without COVID New Zealand Libraries would not have had the opportunities and funding availed by NZLPP.

This programme has truly been a silver lining for libraries and librarians across our motu during a time when being of service to our communities is at times challenging.

### 4.7. **Implications for Community Wellbeing**

There are implications on community wellbeing by the issues and options that are the subject matter of this report.

- 4.8. The Management Team has reviewed this report and support the recommendations.

## 5. COMMUNITY VIEWS

### 5.1. **Mana whenua**

Te Ngāi Tūāhuriri hapū are likely to be affected by, or have an interest in the subject matter of this report.

### 5.2. **Groups and Organisations**

There are groups and organisations likely to be affected by, or to have an interest in the subject matter of this report.

### 5.3. **Wider Community**

The wider community is likely to be affected by, or to have an interest in the subject matter of this report.

## 6. OTHER IMPLICATIONS AND RISK MANAGEMENT

### 6.1. **Financial Implications**

There are not financial implications of the decisions sought by this report.

6.1.1. **Notes** The current surplus in Capital Expenditure - Library Collections budget is accounted for by on-going encumbered and delayed book orders. Some spending is being reallocated to local vendors, with invoicing since June 2022 financial reporting. As reported previously, a sizeable amount of this surplus will cover the additional costs to be incurred due to price increases in shelving for Rangiora Library, and network wide Kiosk replacement.

6.1.2. Retrofitting the former Citizen Advice Room with Library security and refurbishment has accounted for additional budget spend since June 2022.

<b>Library</b>			
<b>Summary Report June 2022</b>			
	<i>Actual</i>	<i>Budget</i>	
<b>Revenue</b>			
Revenue	110,222	127,618	↓
Rates	4,010,745	4,011,762	↓
	4,120,967	4,139,380	
<b>Operating Expenses</b>			
Maintenance	1,801,019	1,953,410	↓
Overheads	408,628	542,540	↓
Internal Interest	853,736	886,653	↓
Depreciation	12,732	14,595	↓
	720,919	826,250	↓
	3,797,034	4,223,448	↓
<b>Surplus/ (Deficit)</b>	323,933	(84,069)	↓

This budget is included in the Annual Plan/Long Term Plan.

### 6.2. **Sustainability and Climate Change Impacts**

The recommendations in this report do not have sustainability and/or climate change impacts.

### 6.3 **Risk Management**

There are not risks arising from the adoption/implementation of the recommendations in this report.

**6.3 Health and Safety**

There are not health and safety risks arising from the adoption/implementation of the recommendations in this report.

**7. CONTEXT**

**7.1. Consistency with Policy**

This is not a matter of significance in terms of the Council's Significance and Engagement Policy.

**7.2. Authorising Legislation**

**7.3. Consistency with Community Outcomes**

The Council's community outcomes are relevant to the actions arising from recommendations in this report.

**7.4. Authorising Delegations**



**WAIMAKARIRI DISTRICT COUNCIL****REPORT FOR INFORMATION**

**FILE NO and TRIM NO:** GOV-01-04 / AQU-02-09 / 220727127656

**REPORT TO:** COMMUNITY AND RECREATION COMMITTEE

**DATE OF MEETING:** Tuesday 16 August 2022

**AUTHOR(S):** Matthew Greenwood, Aquatics Manager

**SUBJECT:** Aquatics July Update

**ENDORSED BY:**  
(for Reports to Council,  
Committees or Boards)

  
General Manager

  
Acting Chief Executive

**1. SUMMARY**

- 1.1. This report is to provide the Community and Recreation Committee with a summary of the Aquatic Facilities Unit's year to date progress, as measured against the unit's most significant Key Performance Indicators. It includes a summary of Attendance, Water Treatment results and a budget update for the year to 30 June 2022.
- 1.2. This report updates the committee on business continuity efforts and changes to our main Waiswim programme.

**Attachments:**

- i. Nil

**2. RECOMMENDATION**

**THAT** the Community and Recreation Committee:

- (a) **Receives** Report No. 220727127656.
- (b) **Notes** Aquatic Facilities progress against key performance indicators including Financial results, Customer Attendance and Satisfaction.
- (c) **Notes** that lockdowns, head count restrictions and community spread has had a significant impact on customer attendance over the past three years.
- (d) **Notes** that the impacts on service from covid, after savings in costs, saw a final result of \$302,000 behind budget which will be balanced against the covid loan.
- (e) **Notes** the development of a number of initiatives and collaboration within the recreation sector with an aim to engage the wider community in wellbeing and healthy habits which will drive attendance within our facilities going forward.

**3. BACKGROUND**

- 3.1. The Waimakariri District Council's Aquatic Facilities team deliver strong aquatic programmes and enjoyable recreation opportunities for the ongoing wellbeing of our community and visitors. We do so from four sites: two indoor, year-round facilities and two seasonal summer pools, which operate over the summer period from October to April.
- 3.2. The Aquatic Facilities team work closely with partner organisations, clubs, trusts and interest groups to support water safety programmes, grow and develop swimming and



Aquatic exercise initiatives, and works with the Council to ensure our facilities are inclusive places, accessible to all members of the community.

- 3.3. The Waimakariri District Council has been part of Recreation Aotearoa’s Poolsafe programme since early in its inception as, in lieu of other legislation, the programme offers an independent assessment against key operating criteria, ensuring robust health and safety practices. Recreation Aotearoa enable sharing of best practice examples within the industry while engaging, lobbying and seeking clarification from Government departments on behalf of the industry.

**4. ISSUES AND OPTIONS**

**4.1. Aquatics attendance**

The following information shows attendance at the facilities over the last three years and the impact that covid has had on our core business activities.

After the initial impact of the first lockdown in 2020, and despite short ongoing lockdowns overall customer attendance improved, due in large part to the national focus on border controls and eradication which created periods where businesses were able to operate as normal despite the ongoing pandemic. However, in the last year as the nation transitioned to living with covid, customer attendance took a further hit with restrictive access to activities, the introduction of vaccine pass requirements and increased community spread requiring more customers to isolate while unwell.

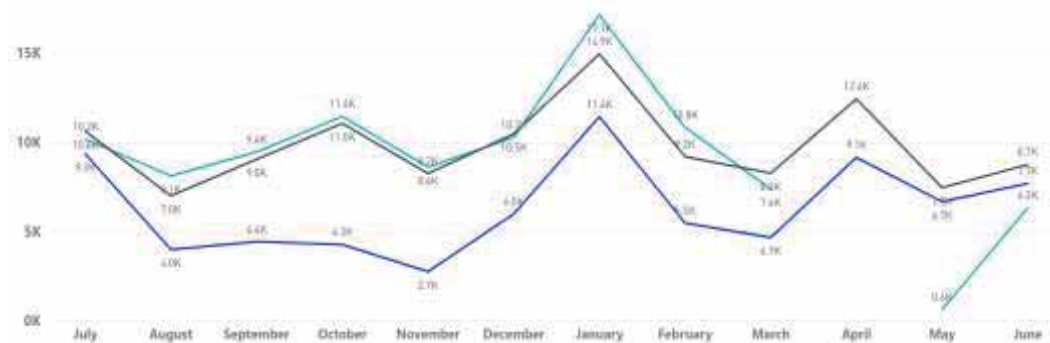
It is important also to note the cyclical nature of attendance at the facilities. Recreation swimming, while steady throughout the year, peaks around January, April, July and October in line with primary school holiday periods. Similarly, our WaiSwim programme numbers dip away in the holidays although not always as significantly as the uptake in recreation swimming, due to lessons only taking a break for part of the month and the uptake in intensive holiday classes.

**Overall attendance for last 3 years**

	2019/2020	2020/2021	2021/2022
Programmes	107,435	108,452	94,005
Recreation	75,595	103,071	65,072
Pre-paid	42,140	48,703	40,170
<b>Total</b>	<b>225,170</b>	<b>260,226</b>	<b>199,247</b>

**Overall sales**

This table captures an overall view of all business transactions over the past 3 years, tracking product and ticket sales across facilities.



Key Teal – 2019/2020, Black – 2020/2021, Blue – 2021/2022. Note the missing data coincides with the first national lockdown in April 2020 with the facilities closed and no programmes operating.

## WaiSwim programme attendance

This table captures attendance at lessons in our WaiSwim programme which is our flagship activity and the facilities main source of income, excluding rates.



Key Teal – 2019/2020, Black – 2020/2021, Blue – 2021/2022. Note the missing data coincides with the first national lockdown in April 2020 with the facilities closed and no programmes operating.

Programmes swimming trends – While programmes have stayed relatively steady in the first two years, this last year saw families withdraw due to increased uncertainty, facility head count limits and disruption from class cancellations due to isolation. Decreased attendance and staff turnover allowed us to scale our programme offerings as well as a number of recent changes as detailed in the previous report which will see a focus on refreshing our core programme offering to deliver better outcomes for our current customers and reengage with the wider community.

Recreation swimming trends – Recreation swimming was impacted largely by the initial lockdowns in 2020. Attendance improved in the 20/21 with periods where covid had limited impact due largely to border restrictions. The transition to living with covid saw an increase in brief lockdowns and periods where the facilities were unable to operate within Government guidance. The introduction of indoor headcount limits on top of physical distancing required us to prioritise and schedule activities which made casual attendance for recreation swimming difficult. However it is promising to see numbers trending back towards previous figures in the final stages of 21/22.

Prepaid swimming trends – Prepaid swimmers are largely those that do so regularly for fitness. Their attendance has mirrored some of the wider trends and were only impacted by periods of lockdown. Numbers have remained relatively consistent comparatively as lane swimmers often attend during off-peak times with the core undertaking being a relatively low risk activity to comply with previous government requirements, as opposed to say excited children enjoying a recreation swim.

In conclusion, the previous year has been one of the most difficult for our customers to access of the pools between lockdowns, restricted access due to head count limits and community spread requiring isolation. While there is an element of ongoing uncertainty, overall attendance is improving as restrictions are lifted and the community transitions to living with covid. Further, the team continue to work on a number of avenues to draw customers back to the facilities with improvements to our programmes, increased focus on communications and engagement and working in with allied services and promotions with the aim to increase recreation within the district and wider customer activity.

- 4.2. The Management Team has reviewed this report and support the recommendations.

### **Implications for Community Wellbeing**

While there are no specific implications raised by the issues above, Community Wellbeing continues to be a key driver for all activities within the district's Aquatic Centres. From the sharing of knowledge, developing key life skills, fellowship and the opportunity for

recreation, rehabilitation and recovery, the wellbeing of our community is central to our ongoing relationship with our customers.

## 5. **COMMUNITY VIEWS**

### 5.1. **Mana whenua**

Te Ngāi Tūāhuriri hapū are not likely to be affected by, or have an interest in the subject matter of this report.

### 5.2. **Groups and Organisations**

There are no groups and organisations likely to be affected by, or to have an interest in the subject matter of this report. Aquatics staff continue to work closely with our key community partners and wider industry organisations, including North Canterbury Swim Club, Water Skills for Life, Waimakariri Access Group, Recreation Aotearoa and the North Canterbury Sports and Recreation Trust, to name a few.

### 5.3. **Wider Community**

In our most recent customer satisfaction survey the Aquatic Facilities achieved an overall customer satisfaction rating of 91%. While this is down from our previous result of 96%, it exceeds the target of 90%, especially when considering the challenging environment that we are operating in. An updated survey is due to be run in the coming months with results available for the next update report.

Aquatics staff continue to engage with our community, through developments such as SwimDesk, the website, Facebook pages and emails to members. Further, we invite feedback through our in-house surveys, customer feedback boxes, staff interaction and social media channels.

## 6. **OTHER IMPLICATIONS AND RISK MANAGEMENT**

### 6.1. **Financial Implications**

The following table summarises the Aquatic Facilities operational financial position in the 2021/22 year as at June 2022.

<b>Aquatic Facilities Budget Summary</b>	<b>YTD Actual \$'000</b>	<b>YTD Budget \$'000</b>	<b>Variance \$'000</b>
Operational Income	1,231	1,730	(499)
Rates Funding	3,220	3,221	(1)
<b>Total Income</b>	<b>4,451</b>	<b>4,951</b>	<b>(500)</b>
Operation Expenses	3,244	3,397	154
Maintenance	259	274	15
Overheads	670	662	(8)
Internal Interest	257	258	1
Depreciation	505	542	37
<b>Total Expenditure</b>	<b>4,936</b>	<b>5,134</b>	<b>198</b>
<b>Total Surplus (deficit)</b>	<b>(485)</b>	<b>(183)</b>	<b>(302)</b>

Covid had a large impact on the facilities Operational Income take this year with decreased attendance as detailed in 4.1. With the general situation improving off the back of decreased budget targets for 20/21, budget figures for 21/22 remained as per the LTP which proved to be difficult to meet. Lockdowns, the introduction of vaccine pass requirements followed by increased community spread and a hard hitting cold and flu season all impacted income through decreased customer attendance.

As noted in previous reports, the final income deficit, currently \$500,000, continues to not align with the activity as anticipated for the Long Term Plan budget. After savings in costs, the result is \$302,000 behind budget which will be balanced against the Covid loan.

The income result was balanced in part by savings in Operational expenses through careful management and decreased resource usage. Direct staffing costs remained on budget or slightly under due to the need to continue to meet contractual obligations for staff and paying for time spent supporting other areas within Council. Staff turnover within the unit allows us the benefit of adjusting class and programme structure to best mirror actual community demand.

There are no financial implications of the decisions sought by this report.

This budget is included in the Annual Plan/Long Term Plan.

## 6.2. Sustainability and Climate Change Impacts

While the recommendations in this report do not have a direct sustainability or climate change impact, the impact our operation has on the land, our community and environment are key drivers for the delivery of services and our planning processes.

As explored in the District Aquatic Strategy, ensuring the efficiency of our operation is key to managing the sustainability of current and future offerings. This ensures that facilities will be well utilised and continue to be good value for money for future generations.

Aquatic staff continue to investigate more sustainable and climate conscious alternatives with examples including switching to LED lighting, closely monitoring our water quality to reduce the need for additional chemical balancing and switching products to prioritise less impactful chemicals for cleaning and filtration.

To further minimise its environmental impact, our pool plant utilises systems to recirculate water and recover heat, which ensure efficient use of resources, minimising the overall energy required to operate.

## 6.3 Risk Management

Staff continue to monitor and comply with all Ministry of Health guidance. While further Covid guidance changes are not expected, the leadership team now has a lot of experience and a range of plans to draw on for different scenarios. If needed these can be put into play at short notice. Staff continue to meet with neighbouring councils and the wider Aquatics industry to discuss, plan and share industry best practice solutions.

As detailed in 6.4 with a decreased but ongoing community Covid spread and a rise in cold and flu cases, Aquatics' greatest risk continues to be the ability to fully staff the facilities. Our Business Continuity Plan (BCP) ensures we will be able to maximise the available space and activity, while maintaining safe staffing levels with a potentially limited staff resource.

Staff availability and sickness continue to put pressure on both Aquatics leadership and the other operational staff. This requires a heightened awareness by the leadership team of the individual team member's wellbeing.

Impacts on the global supply chain continue to create issues for the supply of key products and chemicals. While there are often alternatives and a number of other potential suppliers, this is a growing concern which is beginning to impact upon delivery times and overall product cost.

While we have completed a number of recent recruitment activities the market continues to be fluid and ongoing movement threatens to further impact services. We are currently working with staff to ensure the optimisation of our current resource before we once again seek externally for new candidates.

Fluctuating attendance affects the revenue split between ticket sales and rates revenue. Staff will continue to monitor revenue and expenses closely, working to refine the business model to identify efficiencies and meet the community demand for low cost, safe and enjoyable recreation opportunities.

There are no risks arising from the adoption/implementation of the recommendations in this report.

#### 6.4 **Health and Safety**

Customer and staff safety is key to the ongoing success of the facilities with leadership staff working closely with Council's Health and Safety team, Recreation Aotearoa, SportNZ, and other key groups to ensure our ongoing operation continues to comply with Ministry of Health instructions and guidance.

As detailed in 6.3 the increase in cold and flu cases and the ongoing covid situation risks impacting staffing levels and our ability to safely staff programmes and services. Our Aquatics BCP outlines how we will manage staffing pressures to ensure we continue to operate a safe and secure environment for our customers.

Poolsafe accreditation requires robust practices around reporting, investigation, trending and management of both staff and public accidents. This is on top of the Council's Health and Safety requirements, and ensures a comprehensive overview.

The safe management of our Pool treatment and chemical management systems is governed by NZ Standard 5826:2010 and forms part of our annual Poolsafe assessment. Accreditation of this aspect requires both consistent and robust procedures.

There are no health and safety risks arising from the adoption/implementation of the recommendations in this report.

## 7. **CONTEXT**

### 7.1. **Consistency with Policy**

This matter is not a matter of significance in terms of the Council's Significance and Engagement Policy.

### 7.2. **Authorising Legislation**

Poolsafe - Though not currently a legislative requirement, Poolsafe accreditation is recognised as industry best practice, representing a base safe standard for operating a public aquatic facility following a coronial enquiry delivered in October 2006.

### 7.3. **Consistency with Community Outcomes**

The Council's community outcomes are relevant to the actions arising from recommendations in this report.

Public spaces and facilities are plentiful, accessible and high quality, reflecting our cultural identity.

People are friendly and caring, creating a strong sense of Community in our District.

There is a healthy and sustainable environment for all.

There is a safe environment for all.

The community's cultures, arts and heritage are conserved and celebrated.

There are wide ranging opportunities for people to contribute to the decision making that affects our District.

People needs for mental and physical health and social services are met.

Businesses in the District are diverse, adaptable and growing.

People have wide ranging opportunities for learning and being informed.

#### 7.4. **Authorising Delegations**

This committee has delegated authority for the governance of the Aquatic Facilities.