

Building a house within the High Flood Hazard Management Area

The Christchurch District Plan maps areas where flooding could be of a scale that presents a significant risk to people, property or infrastructure. Planning and consenting rules are in place for these areas so new or replacement builds do not subject a house, and the people living in it, to unacceptable flood risk.

This information outlines how these areas are identified, and walks you through the process for building in these areas.



Building a house within the High Flood Hazard Management Area

High Flood Hazard Management Area (HFHMA)

Mapped in the District Plan, the **High Flood Hazard Management Area (HFHMA)** identifies areas within the city at risk from flooding in a very large event, which may be at depths and/or speeds that could be a high hazard to people, property or infrastructure. High flood hazard means areas that flood to a depth greater than 1 metre in a 1-in-500-year flood event (or the depth (m) x velocity (m/s) of the overland flow is greater than or equal to 1)¹.

Residential unit overlay

Within the HFHMAs are **residentially zoned areas** which may be susceptible to a high flood hazard from coastal or tidal flooding in the future as a result of sea level rise. In these areas, called the Residential Unit Overlay (RUO), an unacceptable high flood hazard risk does not currently exist, but will at some point in the future with sea level rise. The RUO only applies to parts of New Brighton, South New Brighton, South Shore, Monks Bay and Redcliffs.

The rules – an overview

The rules for building a house in the HFHMA differ depending on a number of factors, including:

- The location of the property and whether it is within the Residential Unit Overlay area.
- Whether there was a house on the section previously, and if so, how long ago.

On some properties a replacement house can be built as a permitted activity and no resource consent is required. In other cases a resource consent is needed so an assessment can be carried out to see whether a house and its occupants would be subject to unacceptable risk from flooding.

These provisions were clarified through a change to the District Plan on 14 December 2018. This introduced a new rule (5.4.6.1 P2) and an additional part to the flood hazard policy (5.2.2.2.1 b. i). The change primarily addressed the Residential Unit Overlay, making provision for replacement of houses that existed prior to the earthquakes, and for houses to be built on land influenced by sea level rise where unacceptable risk to safety, wellbeing and property can be mitigated.

The District Plan HFHMA rules only apply to the parts of a property that have the HFHMA overlay on them in the Planning Maps.

You can check whether a property is within the HFHMA or the RUO using the Christchurch District Plan Property Search. Go to ccc.govt.nz/districtplan and click on 'search for a property'. Enter the address of the property, then click on the brown Natural Hazards tab to show the overlays.

TIP: You can untick all the other hazards to view the flood hazard overlays more clearly.



¹ This is based on the Regional Policy Statement definition of “high hazard areas”, and takes into account a projected 1m of sea level rise due to climate change.

Resource consents in these areas

If you are building a replacement house there are a number of situations that will **not** require resource consent:

- **Existing use rights**² apply if a house existed on the property within the 12 months prior to a building consent application being made for a replacement house. The replacement house must be the same or similar in size and location, and can't breach any District Plan rules to a greater extent than the previous house did. Existing use rights can be complicated, so it is recommended that an Existing Use Certificate is applied for, to confirm that existing use rights do apply.
- If there was a **previous resource consent** for the old house, the same consent can be used again for the replacement house as long as the plans and location are the same.
- Within the RUO if there was an **existing house on 4 September 2010** before the earthquakes (Rule 5.4.6.1 P2), and outside the RUO if there was an **existing house on 10 November 2016**³ (Rule 5.4.6.1 P1) a resource consent won't be required as long as:
 - The ground floor area isn't greater than that of the previous house
 - It's located in a similar position on the site
 - The replacement house meets the recommended minimum floor level (based on the latest flood modelling), and
 - Other standard rules in the District Plan are met.

A resource consent **will** be required if:

- The plans show the replacement house in a different location or larger in size. In this case, any existing consent, or any permitted existing house, will be taken into account and only the additional risk above what existed previously will be considered when assessing the risk.
- The section did not contain a house previously, or the house was removed before 4 September 2010 (within the RUO) or 10 November 2016 (outside the RUO). In this case a resource consent will be required to build a **new house** on the site.

Type of resource consent required

The type of resource consent application and relevant policies differ depending on the location of the property and whether it has a Residential Unit Overlay on it in the District Plan maps.

- Within the RUO a restricted discretionary activity application is required. The District Plan HFHMA policy 5.2.2.2.1 b. i must be considered as part of the assessment.
- Outside the RUO a non-complying activity application is required. The District Plan HFHMA policy 5.2.2.2.1 b. iii, or policy 5.2.2.2.1 b. i may be considered as part of the assessment, depending on whether the risk of high hazard flooding is a current or future risk.

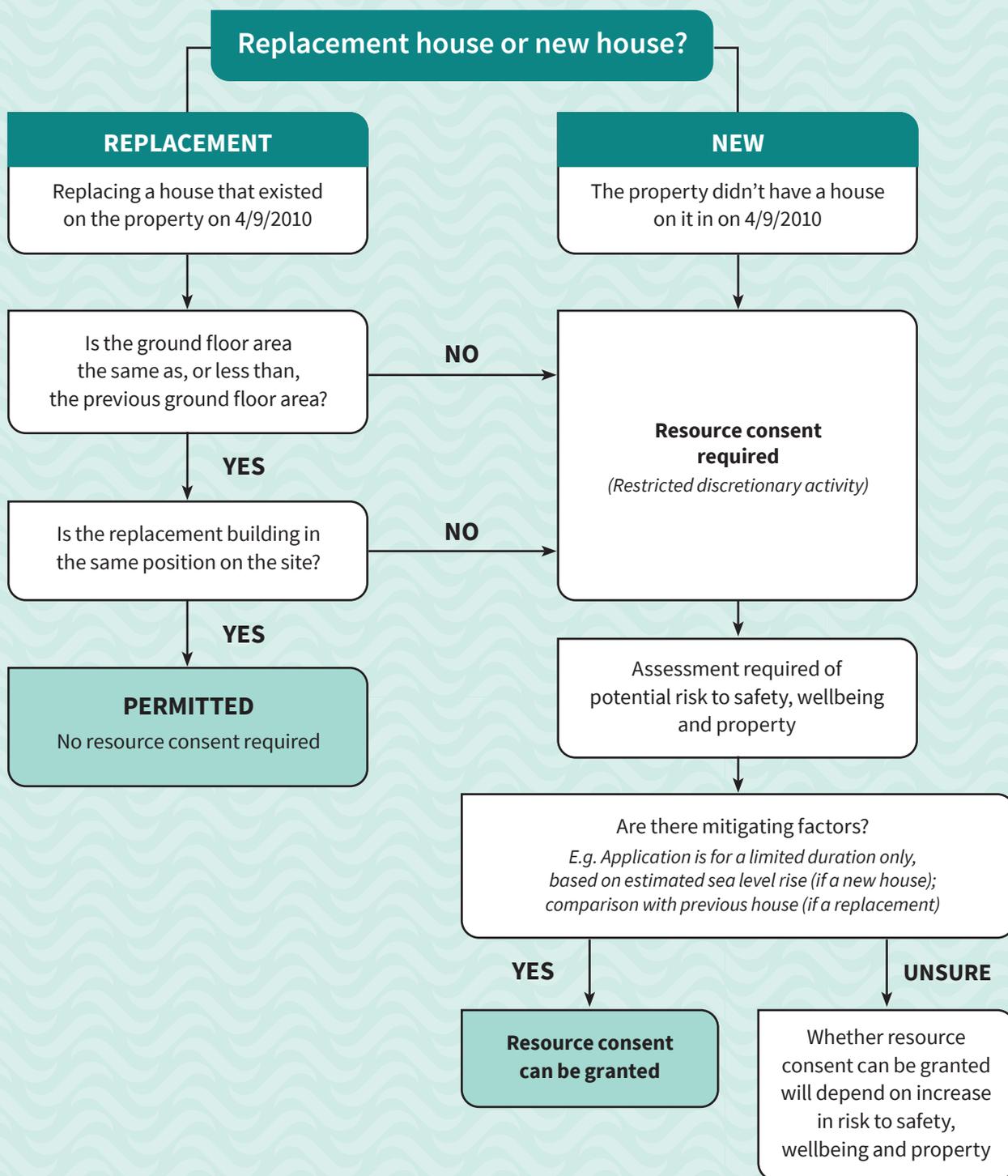
See page 6 for more information about the resource consent assessments.

² Section 10 of the Resource Management Act 1991

³ The date Rule 5.4.6.1 P1 for replacement and repair of buildings took legal effect

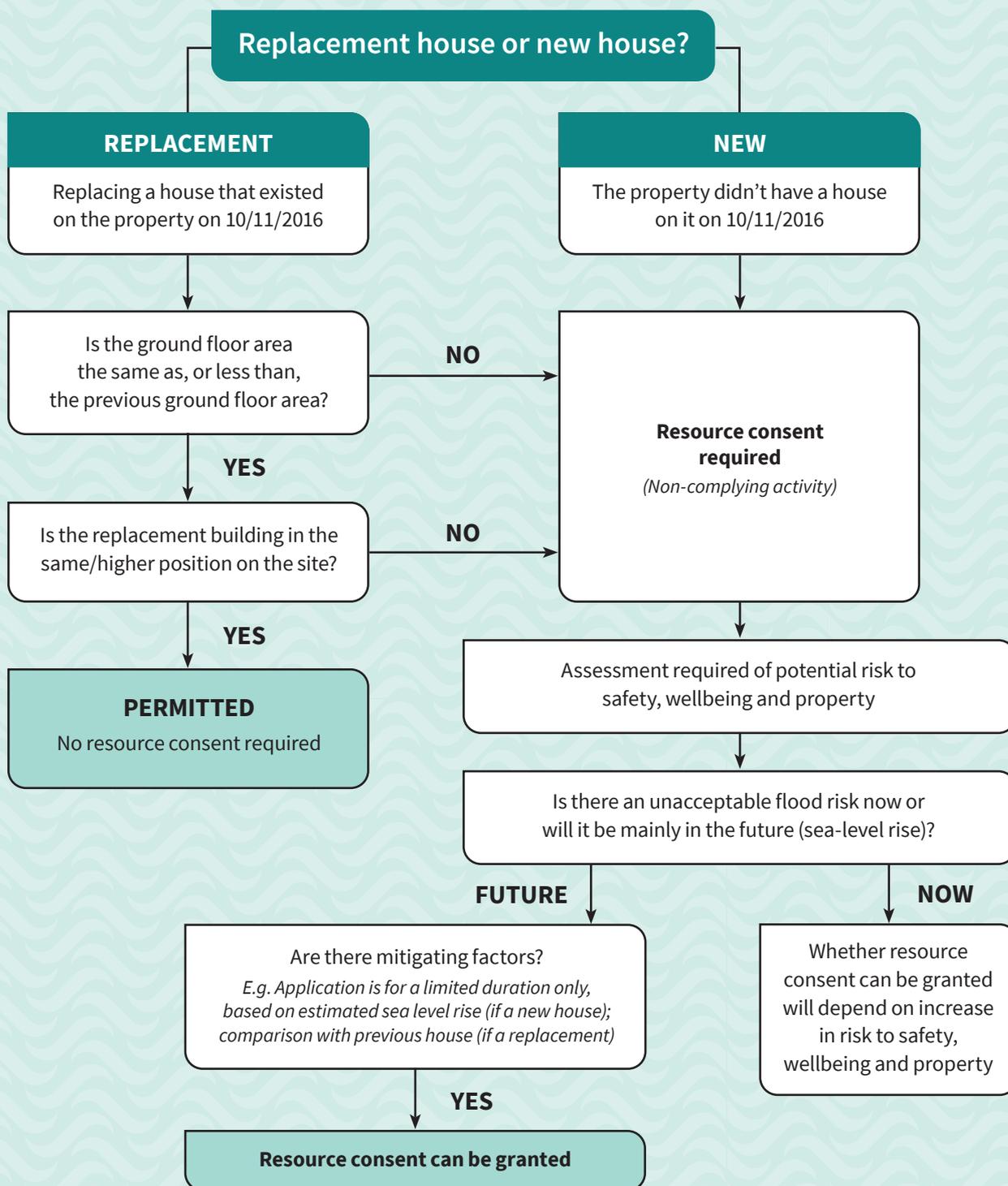
Building a replacement or new house in a High Flood Hazard Management Area *within* the Residential Unit Overlay

A resource consent isn't required if there are existing use rights, or if the house is being built in accordance with a previous resource consent (see page 3).



Building a replacement or new house in a High Flood Hazard Management Area outside the Residential Unit Overlay

A resource consent isn't required if there are existing use rights, or if the house is being built in accordance with a previous resource consent (see page 3).



What does the Council consider when deciding whether a resource consent can be granted?

There are some specific matters in the District Plan that the Council has to consider when deciding whether a consent can be granted. These include the HFHMA policies on whether the flooding risk can be mitigated (reduced), and if so, any conditions needed to make sure of this.

The HFHMA policy

Policy 5.2.2.2.1b is an important part of the District Plan policy on flood hazard and must be considered as part of any resource consent assessment for applications in the HFHMA.

Policy 5.2.2.2.1b says:

In the High Flood Hazard Management Area:

- i. provide for development of a residential unit on residentially zoned land where the flooding risk is predominantly influenced by sea level rise and where appropriate mitigation can be provided that protects people's safety, well-being and property from unacceptable risk; and
- ii. within the Specific Purpose (Otakaro Avon River Corridor) Zone, provide for structures in accordance with Policy 13.14.2.1.8.
- iii. in all other cases, avoid subdivision, use or development where it will increase the potential risk to people's safety, well-being and property.

Part (i) of the policy applies to the RUO and some other HFHMA areas where the risk of flooding is mainly due to coastal or tidal flooding in the future as a result of sea level rise.

Part (iii) applies to properties where the flooding risk is mainly due to other reasons (e.g. non-tidal river flooding), and the high flood hazard risk is generally present now rather than in the future.

Properties in the RUO

In the RUO area a resource consent can be issued where it can be shown that the flood risk is able to be "appropriately mitigated". An example of this is ensuring the new house will be removed from the site when the sea rises to a level which could lead to 1 metre flooding depth on the property in a large storm tide event (1-in-500-year event based on current modelling). The limited duration for each consent requires a site-by-site analysis based on flood modelling data and LiDAR⁴ site level information.

This approach is considered to be consistent with part (i) of the policy that requires the protection of *people's safety, wellbeing and property from unacceptable risk*. In other words, the unacceptable risk does not exist until the flooding predicted for the site in the modelled event reaches 1 metre depths, which is when the house would need to be relocated/removed from the property.

If building a replacement house, the assessment of appropriate mitigation will be based on the additional risk above what existed previously (as long as the existing house was permitted or consented).

If any other District Plan rules aren't met (setbacks from boundaries, recession planes, etc) the effects of those breaches need to be assessed too.

Properties outside the RUO

The key difference compared to properties in the RUO is that the area outside the RUO is generally a higher risk *currently*, and flooding is not necessarily affected by future sea level rise to the same extent. In these areas resource consent can only be granted if the development will not increase the potential risk to people's safety, wellbeing or property. This can be difficult to achieve where there was no house on the section previously or a replacement house is larger than the previous one, as the risk is generally increased in these situations.

It is difficult to issue temporary resource consents because an unacceptable (high hazard) flooding risk may already exist on many sites (i.e. if a 1-in-500-year flood event were to occur today, the property could be inundated with depths of water greater than 1 metre). Some sites are also influenced by sea level rise, so a site-by-site analysis is required.

⁴ Light Detection and Ranging survey method

If resource consent is granted, what types of conditions might be imposed to mitigate the risk?

The following types of conditions are commonly included on resource consents for houses in the HFHMA.

Replacement houses:

- Houses must comply with the recommended minimum finished floor level (based on the latest flood modelling).
- If garages are below the recommended minimum finished floor level, electrical outlets need to be positioned above the required level, and provision must be made for storage of non-durable items above that level.
- Structural elements and linings located below the minimum floor level must be designed with durable / water resistant finishes to withstand the impact of flooding.
- A 3 metre-wide clear evacuation route needs to be available to enable an inflatable rescue boat to reach the front entrance of the house, for safe evacuation of occupiers during extreme flood events. The evacuation route must not be obstructed by structures such as fences, gates or planting or landscaping.
- Limits on the type of planting between the road and the house, to maintain the emergency access.

New houses on sites that were vacant prior to the earthquakes:

- In the RUO and other properties affected by future sea level rise, a limited duration of consent, meaning the house must be removed from the section once modelled sea level rise results in a 1 metre flooding depth on the site in a 1-in-500-year flood event. The condition would also require a covenant to be registered on the property's certificate of title to make future purchasers aware of this.

The condition and covenant would be based on a depth of additional sea level rise, and could be accompanied by, or substituted with, an estimated timeframe based on current modelling, e.g. Xcm of sea level rise, currently estimated to be in Y years' time. (Note that the actual amount of sea level rise required to trigger removal and the time taken for this to occur will be very site specific and could vary significantly between different properties and different areas of the city).

- Other conditions on building materials, electrical outlets and access as for replacement houses above.

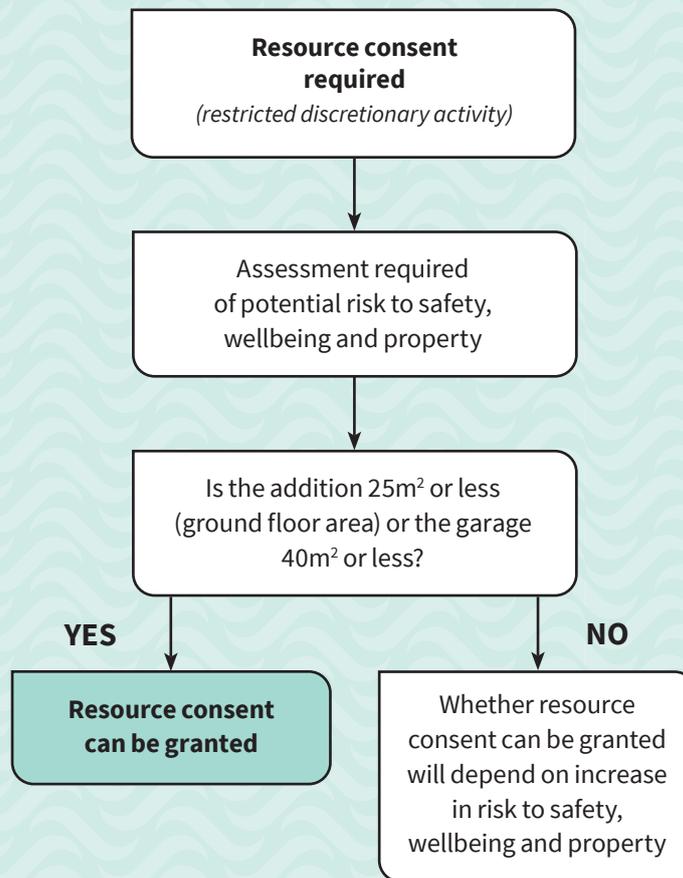
Sea level rise will be actively monitored by the Council over the coming years and the information will be available to property owners who have a limited duration condition based on this. For consents where the duration is based on a fixed time period the Council will monitor the conditions (as it does for all consents) and contact the owners closer to the expiry date.

Can I build a garage or make an addition to my existing house in the HFHMA?

A resource consent is needed for all additions to existing houses and construction of new garages and other accessory buildings in the HFHMA (both within and outside the RUO).

Resource consent can usually be granted for house additions with a ground floor area of 25m² or less, and garages of up to 40m². However larger additions/buildings require a more in depth assessment of the potential increased risk to people's safety, wellbeing and property.

Building garages and additions to existing houses in the High Flood Hazard Management Area



Can I subdivide my property in the HFHMA?

All subdivision requires resource consent in the District Plan. Subdivision to create an additional vacant lot is more likely to be granted resource consent if:

- The new lot is entirely outside the HFHMA; or
- The new lot is partly within the HFHMA but there is sufficient area for a residential unit to be built entirely outside the HFHMA.

The District Plan doesn't enable the creation of new lots that are completely within the HFHMA as this would increase the number of houses and people affected by future flooding (and hence increase the risk).

More information

If you have any questions about the HFHMA rules please contact our Duty Planner on DutyPlanner@ccc.govt.nz or phone **03 941 8999**.

You can email floorlevels@ccc.govt.nz to find out what the current recommended minimum finished floor level is for your property.