

Works Within A Floodplain

Consent Requirements

When do I need a consent for in a floodplain?

A consent for work within a floodplain may be required under Section 14 of the Resource Management Act. If you are planning physical works within a stream bed, or a certain amount of earthworks, consents may also be required under the Auckland Regional Plan: Air, Land and Water and the Auckland Regional Plan: Sediment Control respectively.

What is a floodplain?

A floodplain is defined as an area of land bordering a river which is subject to flooding (up to the 100 year flood event).

Floodplains serve a number of beneficial functions for flood control. An undeveloped, vegetated floodplain reduces the force, height and volume of floodwaters by allowing the waters to spread out horizontally and relatively harmlessly across the floodplain.

Water that floods into vegetated floodplains re-enters channels of streams slowly, enabling it to be soaked up by the "sponge" of floodplain wetland soils and streamside forest leaf litter. Living, decaying and dead vegetation on riparian lands that falls or extends into the water provides numerous barriers against moving water, which slows it down so water is not delivered downstream as quickly. Such vegetation also intercepts and detains runoff from adjacent upland areas that would otherwise flow directly into rivers and exacerbate flooding conditions downstream. The root systems of streamside forest and emergent aquatic vegetation keep pores of the soil open so that two to three times more water can infiltrate the soil compared to lands used for cultivation or grazing.

In addition, trees, shrubs and herbaceous plants in riparian areas use large amounts of water in transpiration, which, in effect, transfers floodwaters to the atmosphere, thereby drying the soil and making more room in the "soil sponge" for floodwater. The combined effect of all of these functions is a significant reduction in peak flows and flooding downstream.

What information do I need to provide?

When applying for Regional Council consents your proposed project can be assessed and approved more quickly when accurate and detailed information is provided. Therefore, always be sure to include with your application at least the following basic information, as outlined in the Section 14 (??) application form. This can be found on our website at www.arc.govt.nz or by contacting us at 09-3662000.

All applications must include:

- a location plan;
- an accurate description of the proposed work;
- a record of any consultation that has been undertaken with affected parties; and

- an assessment of the likely effects on the environment, both positive and negative. This must include effects on flood levels and a description of what you intend to do to minimise any adverse effects.

You should discuss the scope and contents of the information relating to your application with Regional Council staff or consultants, especially for more complex matters such works within sensitive areas. A site visit by ARC staff will be necessary to assess your application.

Even if ARC approves your project, you must still make certain you obtain any necessary consents required by the local or district councils. You can make it easier by identifying all the consents you require when you first make an application. It is a good idea to talk to local contractors, engineers and regulators to be certain all aspects of your project are planned properly.

Further Information and References

The Auckland Regional Council has a number of technical publications relating to works within a watercourse including fish passage, sizing and design suggestions and appropriate models of stream diversions available for viewing at the Internet link: <http://www.arc.govt.nz/arc/about-arc/publications/> There are also further fact sheets available on related topics such as, Sediment Management: Site staging and stabilisation, Streamworks methodology and Fish passage or for further information contact the Sediment Management Team on (09) 366 2000.