

5 Issues and Opportunities

This section of the Scoping Report describes key issues and opportunities for the City Centre section flood protection project. Responses to issues can present opportunities and the discussion below is cast accordingly. The issues are only those that are known at this time. There are likely to be other issues identified in the process of developing design and proceeding through the planning process.

5.1 Public Land Changes

As described in section 4 Context, the river corridor is well used by a large number of people and many are regular users of the public open space it presents. The changes proposed, including the loss of wider sections of the corridor because of channel widening, will particularly affect those users taking advantage of the breadth of space for activities such as dog exercising or sports. The issues associated with the loss of the current amenity will need to be considered in terms of the alternate locations that could be used in the corridor for those same activities.

There will be reinstatement of paths and vegetation and it is an opportunity (as noted below under Urban Park concepts) to design strategically for the purposes intended for each section of the river. The utilisation of in-depth knowledge and voluntary support given to the Hutt River Trails by Rotary and others should be recognised and encouraged in the process of design and implementation if they are willing.

In the section of the river corridor closer to the city centre, the large expanses of car parking provide some utility to their users. Much of this parking will need to be removed to allow the channel widening and stopbank replacement. There is an issue as to whether this parking should be reinstated in some reduced form, or relocated elsewhere. The parking occupies an area that could otherwise be developed with higher and broader amenity values.

There are significant opportunities to connect from the city centre across the new stopbanks and river berm spaces to the river edge including the beach areas. It may be possible in association with rock edges to generate steps down to the river edge in places and possibly develop swimming spots also if groynes (such as at Waikanae River) are able to be installed.

As noted further below, an issue for the project is the appropriate way to enable the opportunities for the river corridor amenity to be scoped and determined in conjunction with the flood protection works. A process is proposed under section 8 Governance below.

5.2 Private Land Acquisition

As described in section 2, there is a need to acquire some private land to enable the stopbanks to be upgraded. There are four residential buildings on 3 sites directly affected at Mills Street, although the complex of four buildings on

one cross leased site may suggest the purchase of more is required. The value given to the purchase is \$2.4M. There is also commercial property immediately upstream of the Melling Bridge for which part is proposed to be purchased to allow widening of the stopbank in the constrained area around Melling Bridge. Discussions on purchase are still at initial stages with that owner.

The owners of the affected properties will be confronted with a series of issues and the GWRC will need to sensitively work through the challenging process of private property acquisition. The number of affected properties is relatively limited but that does not lessen the issues for the owners. GWRC's land acquisition is guided by the Public Works Act or similar. This process requires fair land values to be determined and sets a process for any disputes to be decided.

There are also issues for the properties that will remain that will sit adjacent to the new stopbank and the interface between the bank and the buildings and private land uses will require some sensitivity in design. New fences and walkways and the relative height and placement in relation to private properties will need to be carefully considered.

There are potentially some catalyst opportunities for the commercial area (as described in Making Places) for adjoining property to take advantage of the adjacency to the river and its public amenity, especially if this is improved.

5.3 Making Places – Flood Protection Project Integration

As described in section 4 Context above, the Making Places strategy for urban quality improvements that will catalyse new development and investment in the Hutt city centre is a significant initiative of HCC.

There are some obvious opportunities associated with an integrated approach to designing and implementing the flood protection works in conjunction with the Making Places proposals (or some derivative of these). However, the opportunity also presents issues at various levels.

There is the issue of what level of development is appropriate within and adjoining the floodplain and stopbanks. The river floodplain must be able to function for its flood containment and movement purpose so there will be a limit to the extent of development on the floodplain that is possible.

Any development within the floodplain will also need to be designed and managed to recognise that after a flood there may be significant clean up or repair and reinstatement of any landscape treatment or structural elements (walls, steps, paths, lighting, seats, plaza etc) if these are included. There will be a potentially significant on-going budget that needs to be provided for if the floodplain is to be developed to any extent beyond its being a large open grass space.

The responsibility for this investment over and above the basic flood protection function and the upkeep of that investment will be a matter that requires resolution between GWRC and HCC if this opportunity is to be satisfactorily realised and the opportunities taken. Section 8 Governance below suggests a process for resolution of this issue.

5.4 Urban Park Concepts

Interlinked with the Making Places concepts are the aspirations expressed in the HRFMP for the creation of a linear park. The proposed project presents an opportunity to understand the nature of that park through the City Centre section. Making Places addresses part of the section as it touches the edge of the CBD, but there are extensive lengths of the corridor that are not resolved as to their use and the landscape that will support that use.

There are multiple precedents for river parks and some excellent examples where these have been achieved (Figures 25a – 25g) and the process for determining the appropriate format for the subject area will require a carefully considered design process. The HRFMP provides some guidance but it is relatively high level. There is an opportunity for the river corridor in the subject section to be considered as series of spaces with different identities linked to uses, context, and cultural values. The process of understanding the linear park concept can also assist to resolve some of the issues described in the section including the changes to existing uses and adjacencies to existing uses.



FIGURE 25a



FIGURE 25a



FIGURE 25b



FIGURE 25d

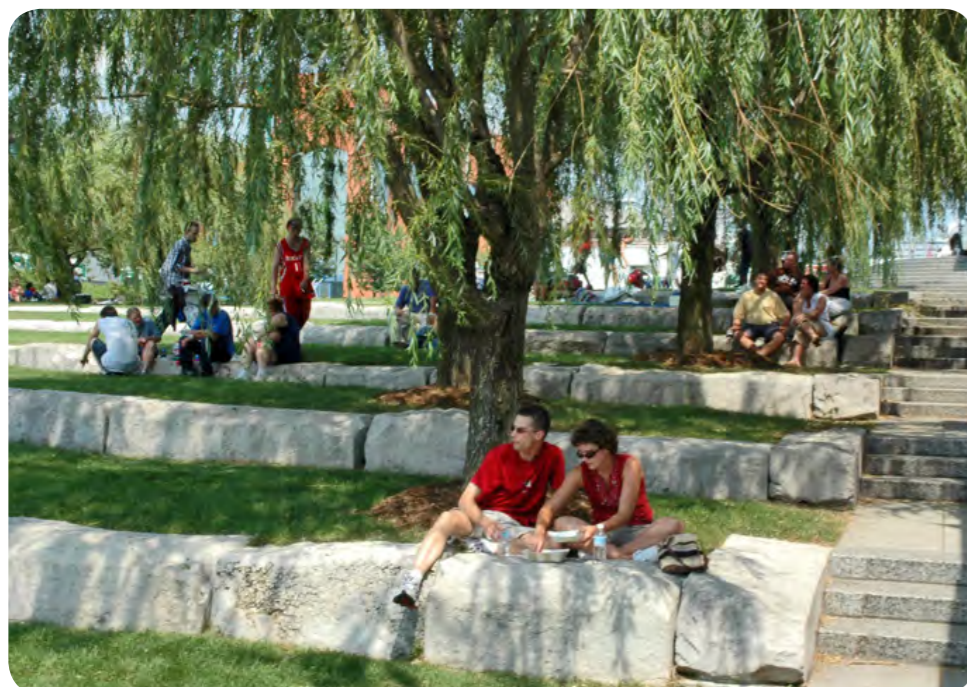


FIGURE 25c



FIGURE 25c



FIGURE 25e



FIGURE 25f

5.5 Melling Intersection Upgrade

It has been discussed previously in this report in section 4 Context that at the Melling Bridge the river flow is restricted due to the narrower width of the river between banks/abutments and the height of the bridge above flood water levels. The HRFMP identifies replacement of the bridge as an element of the protection works to achieve the recommended standard and NZTA have investigated this recently in combination with a grade separated interchange at the highway. However, there is no progress on the bridge replacement and less substantial highway intersection upgrades are now proposed as an interim measure.

The issue is that because the bridge is not proposed to be replaced in the NZTA's current planning period, the best that can be achieved for flood protection is widening the banks at the bridge as far as possible. There is some effect on the west side of the river in terms of Block Road and parking areas. As with the city centre Making Places project, there is an opportunity to work with NZTA to develop the opportunities for achieving intersection improvements and flood protection together.

There may be an opportunity to reactivate the consideration of the bridge replacement as part of the flood protection works if NZTA is able to apply its recent move to the Better Business Case approach. This enables a broader qualitative and quantitative approach to be taken to determining the benefits of a project.

5.6 Ecological Considerations

The river and its margins is a habitat for birds, fish and other animals. The habitat values vary but there are issues associated with river works in that they can disturb or eliminate habitat. It is a significant opportunity from the project to enhance the ecological values of the river.

Those values are recognised statutorily as well as provide recreational opportunities (eg fishing) and are important for iwi. However, the value of the habitat depends largely on the composition of the vegetation. Currently willow planting dominates the river edge and native planting is not particularly widespread. Biodiversity would be improved through greater planting of local native species along the river edge, on the berms and adjoining areas.

To some extent if the changes are timed to avoid fish spawning/whitebaiting periods and with design consideration to providing fish habitat, then the issue of effects can be made to be positive. The loss of existing river edge vegetation will also be an issue in the sense of a visual change and the limited habitat value this provides. When complete, the channel widening will see reinstatement of some new river edge willow replanting and other areas of rock revetment in combination with native or exotic planting. If designed with biodiversity improvement in mind, rock areas can be excellent habitat for fish and a greater use of native vegetation can support bird and other wildlife.



FIGURE 25g

Related to habitat value are the existing stormwater discharges to the river. There is an opportunity for these to be improved in terms of capacity and water quality (through debris catching) as well as potential for those that relate to lateral streams to be reconfigured as more natural wetlands, or vegetated areas that can filter water prior to discharging to the river.

5.7 Construction Activities/Timing

Construction activities themselves can have adverse effects and the issues common to projects of this type include the disturbance created to residents and users of the public spaces by additional heavy vehicle movements, noise, dust and vibration. These issues can be managed with care as to the timing of the works to avoid times when those disturbances are most likely to be worst. Any project of this scale is expected to have a construction management plan and these matters can be well scoped and addressed through management and mitigation.

5.8 Long Range Provision for Flood Protection

The effects on flood risk from changes in climatic conditions, or changes in expectations of urban area protection may influence the future need for further improvements in flood protection planning and design.

It is prudent in planning for resilience that the project being designed at this time, takes into account the potential future demands for protection and does not foreclose the ability to address those demands. It will also be a requirement of securing planning consents under the RMA (refer to section 6 Planning Consents) that the future options are considered.

There are issues associated with trying to anticipate future needs for flood protection as the nature of those needs are unknown. If it is assumed as described in section 2 Background that flood risks will continue to exist and probably worsen, then it would be reasonable to plan for further increases being required in flood defences.

It is very unlikely that the commitment to continuing urban living and development of the floodplain would be abandoned so more channel widening, stopbank widening or heightening are likely protection measures. The proposed works can be designed to enable banks to be increased by ensuring they are well engineered as a base. The issue will be the extent of land required for any further stopbank work and this may necessitate additional land outside the current corridor to be acquired for the purpose. There may be a need to recognise this long range planning for future flood protection additionally in the District Plan.

6 Planning Consents

This section sets out the key Resource Management Act (RMA) approvals that would be required for the project as described in section 3 of this report. In addition this section outlines the potential issues, information and assessment requirements, and programme for an approvals process.

6.1 Works

Various works will be required, which may include:

- earthworks within the river corridor involving the excavation and import of fill to form the larger stopbanks, retaining walls and possibly floodwall;
- excavation within the bed of the river to enable the widening and removal of river bank edge and gravel;
- removal of vegetation (willows) along the river margin and subsequent replanting of willows to provide new edge protection;
- works within the bed of any tributary watercourses to the river
- reinstatement landscaping which may include changes to the stormwater system (eg treatment areas);
- construction of rock protection on the river channel edges of the widened river;
- a construction area including access roads and haul roads, any construction compounds and site office;
- discharges of sediment laden water to land or the river that may enter (either tributary or directly to the Hutt River) from the construction areas;
- relocation of services such as stormwater and potentially other service infrastructure such as power, gas and sewer; and
- other construction related activities (e.g. temporary site office, parking, storage and laydown areas, etc);

If the scope of the project broadens to include additional or integrated work such as projects associated with Making Places, NZTA, service providers, or to enable other currently unknown opportunities, then further analysis of the RMA requirements will be required.

6.2 Location and Planning Document Context

The river in the subject project section is within the Hutt City local authority area. Under the City of Lower Hutt District Plan, the majority of the project area is zoned “River Recreation” with overlays of “Primary River Corridor” (Figure 26). This zoning and overlay follows the full length of the Hutt River and immediately adjacent corridor between the existing stopbanks. The stopbanks are also shown on the District Plan maps as “Flood Protection Bank”. None of the existing stopbanks are designated, except for the new designation for the recently constructed Boulcott Stopbank (Ref. No. WRC 11), but all stopbanks are within the river corridor.

Within the river corridor and between the Melling Bridge and Ewen Bridge the riverside carpark is ‘designated’ by Hutt City Council (Ref. No. HCC 4). Immediately adjoining the river corridor are various zonings associated with the predominant land uses which are typically “Central Commercial” and “General Residential”.

There are no specific notations or requirements in the Regional Plans for the length of the Hutt River relating to this project.

6.3 RMA Approvals Required

Listed below is the primary RMA approvals anticipated to be required for the proposed flood protection project, including temporary construction works and permanent structures. Appendix 3 provides an evaluation and commentary against the key relevant provisions in the District Plan and Regional Plans. The specific consents required would need to be determined once the design process is completed. The key approvals required for the project would be as follows:

- A Notice of Requirement (lodged with HCC) to designate the stopbanks for the project including new, upgraded and extended stopbanks. The scope of the designation would be to provide for the construction, maintenance and upgrade (future) of the stopbanks. The location and extent of the designation could include any additional area required for construction purposes.
- Water Permit from GWRC to permanently divert Hutt River flood flows so as to contain flows in flood events of up to 2,800 cumecs (discretionary activity, Rule 16 of the Regional Freshwater Plan).
- Land Use Consent from GWRC for works within the bed of the Hutt River to widen the river channel and construct river bank protection works (rock and tree protection) and for works within the bed of any tributaries or drains associated with construction works (discretionary activity, Rule 49 of the Regional Freshwater Plan).
- Discharge Permit(s) and/or Water Permit(s) from GWRC for any activities associated with construction works, such as a water take and / or discharge of sediment laden water to land (discretionary activity, Rule 2 of the Regional Discharges to Land Plan).

As noted above, HCC has an existing designation for the riverbank carparks. It is likely the new designations for the upgraded/extended stopbanks would extend over part or all of this existing designation. The future of this existing designation will require discussion with HCC and may require its removal.

Section 177 of the RMA deals with the situation where designated land is already subject to an earlier designation. Under Section 177, the requiring authority responsible for the later designation may do anything in accordance with its designation if it has first obtained the written consent of the authority responsible for the earlier designation. The authority responsible for the earlier

designation may do anything that is in accordance with its designation, without needing the written consent of the later requiring authority. If HCC retain the existing designation, it is suggested protocols be developed between HCC and GWRC to manage works with the area of land jointly designated.

6.4 Information Requirements

All Notices of Requirement and Resource Consent applications must be accompanied by an Assessment of Environmental Effects (AEE). For a project of this nature and scale, a comprehensive AEE would be required. Many of the positive and adverse effects for this project are of a technical nature, therefore the AEE would need to be supported by a number of technical assessments.

Based on the current scope (outlined above) and the anticipated environmental effects, a list of technical assessments has been identified in the table following.

For designations, a key information statutory requirement is an assessment of alternatives (Section 171 of the RMA). This assessment needs to cover alternative sites, routes and methods considered for the project. With respect to the project, the assessment of alternatives could be considered at two levels. Firstly, a high-level evaluation drawing on the overall alternatives evaluation which informed the HRFMP (i.e. why this project was selected and other alternatives considered at that time). Secondly, a more detailed evaluation of alternatives in the design and construction of this project, such as alternative stopbank designs and construction techniques.

As noted in section 4, some assessment of the future options for flood protection should be undertaken.

6.5 Processes and Programme

Due to the requirement for a designation and Regional Council resource consents together with the scale of the project, it is considered the most efficient process is a single application package and process, where the designation and all consents are sought concurrently from HCC and GWRC. This approach would ensure that related matters are considered together under one combined assessment of environmental effects.

However, if some project details or components were not completed, or available to meet the information requirements for the resource consent application from GWRC, some maximum parameters may alternatively need to be specified. This approach to using maximum parameters would need to be discussed and confirmed with Environmental Regulation Department at GWRC. This consenting approach should be discussed with the relevant Council departments early in the process.

TECHNICAL ASSESSMENT	LIST OF POTENTIAL EFFECTS TO CONSIDER
Construction	Construction works – temporary effects management – access, traffic, safety
Culture	Effects on cultural values
Ecology	Terrestrial values of river bank vegetation and effects of its removal/replacement Aquatic values and effects from vegetation removal, river bed and bank disturbance, discharges (water quality) Avian values and effects from vegetation removal and disturbance to river bed
Hydrology	Flood risk assessment Options for flood risk including responses to climate change Effects on channel hydraulics and flood flows Effects on channel morphology and flood flows and river bed/bank erosion
Landscape and Visual	Visual impact from public view points Visual impact from key private viewpoints Impacts on landscape values and natural character of river and its margins
Infrastructure	Changes to services – eg stormwater, electricity, sewer
Recreation	Effects on recreational values, including river users, public access and river bank (corridor) use
Traffic and Parking	Loss of car parks within river corridor and any on-street parking Changes to streets (eg Daly Street if required) Construction traffic effects
Noise and Vibration	Construction works generated effects from noise and vibration
Urban Design	Relationship to context (CBD, residential and industrial area) Consistency with planning documents (eg Design Guides) Fit with strategic documents (eg Making Places)

In addition to the above, for a project of this scale, it is also probable that there may be other ancillary consents sought once the construction details have been more definitively established. These would include matters such as the exact location, diameter and length of individual culverts or changes to the infrastructure/ servicing, where there is insufficient design information available at the time of consenting the overall proposal. It is likely these consent applications can be processed on a non-notified basis. Therefore, once the specific consent requirements of the proposed works are fully defined, a review of the regional resource consents to be sought concurrently with the designation can be determined.

With a joint application for the Notice of Requirement and regional resource consents, a joint consenting process is considered the most efficient as well. At this stage, it is anticipated that the decision-making process for this project would be the “traditional” process, in that HCC and GWRC would jointly notify the Notice of

Requirement and resource consent applications. They would then hold a joint hearing to determine the applications for regional resource consents and make a recommendation on the Notice of Requirement. The hearing and decision would be by independent commissioners in order to recognise the consent authorities are also the applicant in this case.

If the decisions on the resource consents are appealed and/or the decision to confirm the Notice of Requirement is appealed, a subsequent hearing would be held in the Environment Court. If the decision was appealed, mediation through the Environment Court process may be able to resolve any appeals. In respect of timing it is programmed that the planning consent process would occur over a two year time frame (refer to section 3 in Funding and Programme).

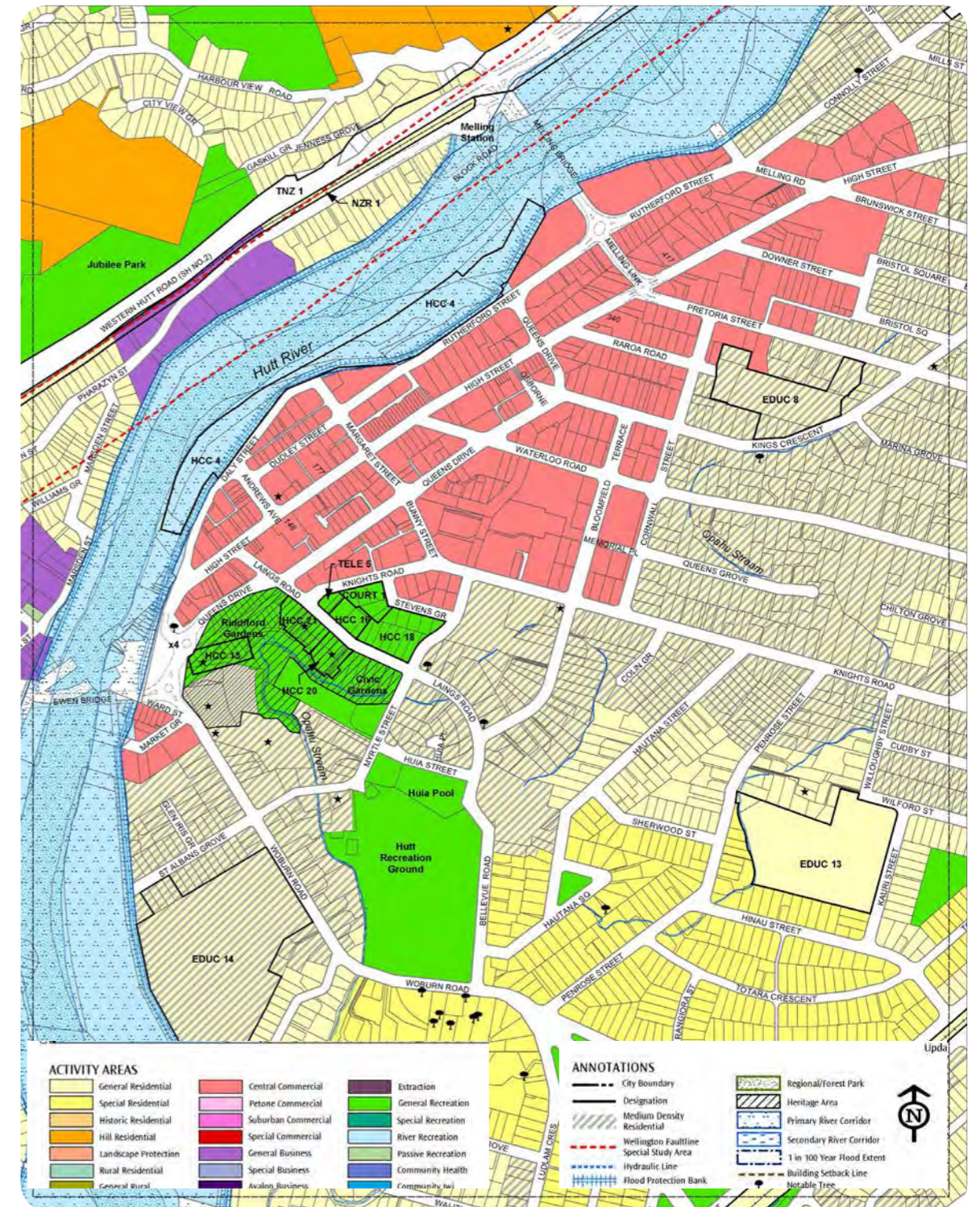


FIGURE 26 District Plan Map