

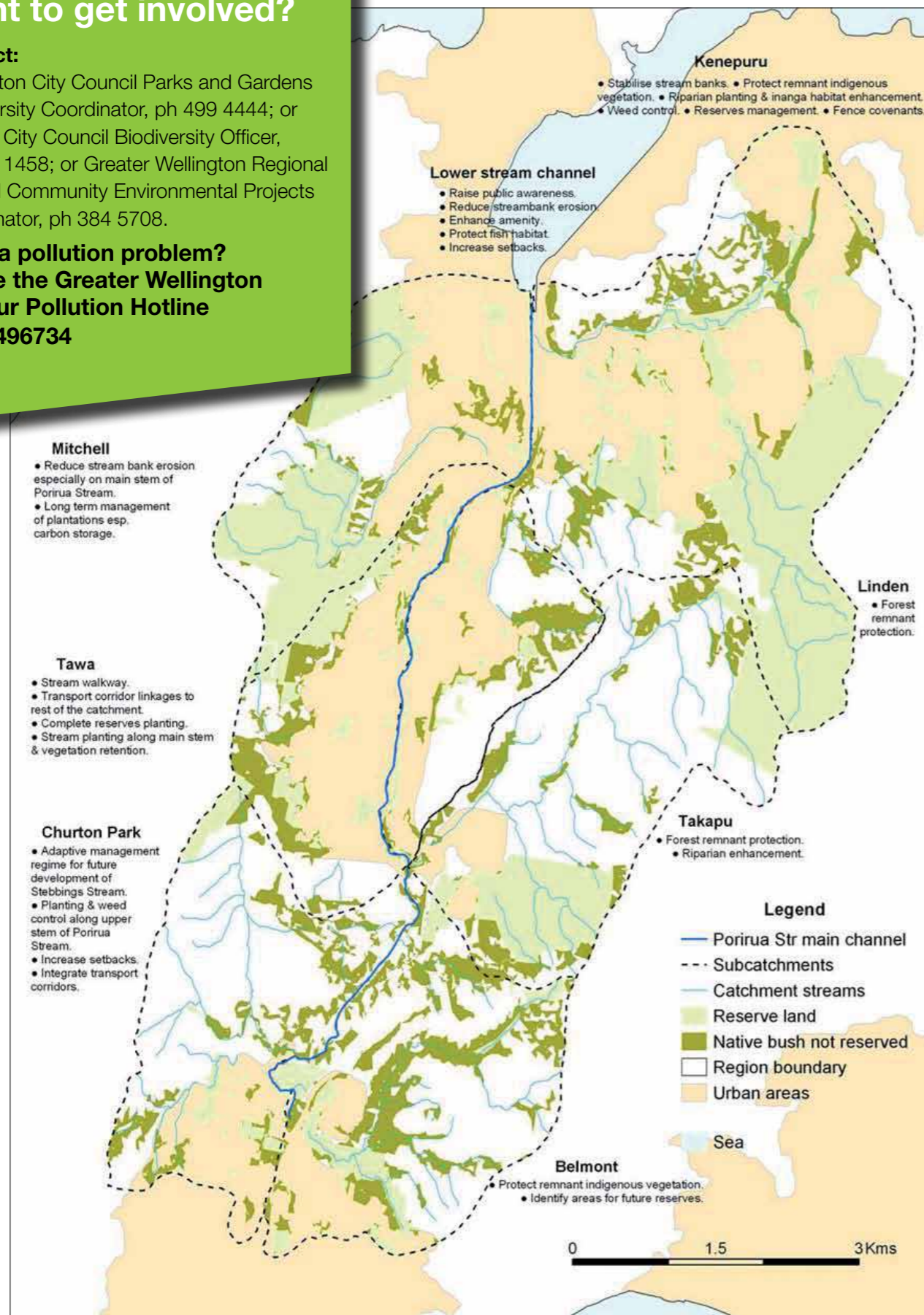
## Priorities by sub-catchment

### Want to get involved?

#### Contact:

Wellington City Council Parks and Gardens Biodiversity Coordinator, ph 499 4444; or Porirua City Council Biodiversity Officer, ph 237 1458; or Greater Wellington Regional Council Community Environmental Projects Coordinator, ph 384 5708.

**Seen a pollution problem?  
Phone the Greater Wellington  
24 hour Pollution Hotline  
0800 496734**



This pamphlet is based on a report "Ecological restoration priorities for the Porirua Stream and catchment" written for Wellington city Council, Porirua City Council and Greater Wellington Regional Council by Paul Blaschke, Frances Forsyth and Clive Anstey, Blaschke and Rutherford Environmental Consultants.

June 2009

## Porirua Stream "your stream, your catchment"



### Ecological restoration priorities

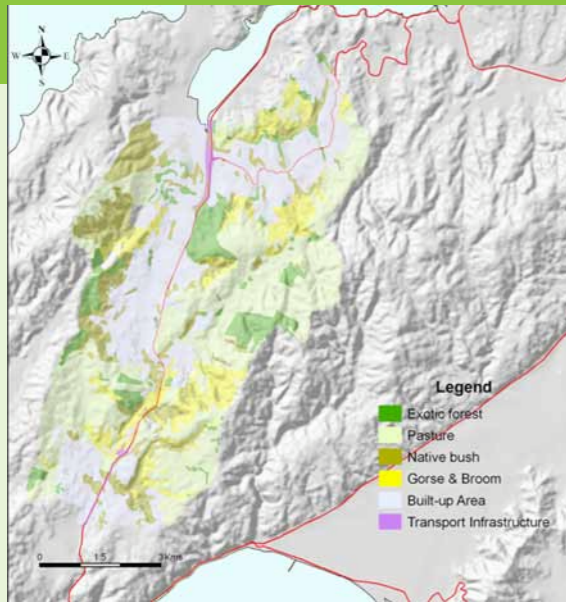
Porirua Stream is one of the most significant streams in urban Wellington. Running from Johnsonville to Porirua Harbour, its catchment covers more than 5,600 hectares (see map to right).

Three councils, Wellington and Porirua City Councils and Greater Wellington Regional Council, manage the stream, harbour and catchment. Community support for natural landscape and ecosystem values in the catchment is growing and more than a dozen community groups and iwi are now actively involved with a range of environmental projects. A harbour and catchment management strategy is being prepared to address issues affecting Porirua Harbour, which includes the Porirua Stream catchment.

This pamphlet about the catchment summarises the findings of a project commissioned by the three councils. The project report recommends objectives and priorities for ecological restoration and biodiversity protection in the catchment and can be viewed on council websites.



## Issues for the catchment



Current vegetation and land use in the Porirua catchment, showing extent of urban areas, native and plantation forested areas, pasture and exotic scrub (mainly gorse and broom). Pasture and scrub areas are the most likely areas for urbanisation and change. Red lines show road highways.

**Landscape:** The landscape of the catchment has been greatly modified since it was first settled. Reclamation of harbour and streams, re-contouring of the land for infrastructure and housing, modification of the stream channel for flood protection and removal of original vegetation cover have caused the greatest changes.

**Terrestrial biodiversity:** Most of the original native vegetation cover has been lost and the present day forest is almost all secondary growth. However, at this point the catchment is showing some promising signs of recovery, much of it due to increased pest management.

**Stream and harbour:** The diversity of fish populations appears to be declining. Sediment movement and pollutants adversely affect the water quality in both stream and harbour, and harm aquatic wildlife. The piping of streams and other development that restricts surface permeability, threaten natural values.



Porirua Stream near Porirua CBD.



Past flooding at Porirua Railway Station, 1976.



Lower Porirua Stream and Onepoto Arm, key areas for restoration.



## Priority actions for restoration in Porirua catchment

### Protect and enhance habitat:

- 1 Protect and enhance existing native vegetation, and populations of birds, lizards, insects and fish, by planning appropriate reserve areas during subdivision.
- 2 Increase and enhance vegetation corridors and linkages within and outside the catchment to increase connectivity.
- 3 Prioritise the arterial road/rail corridor for ecological restoration and habitat linkages, focussing on targeted weed control, enhancement planting and linkages between the transport corridor and headwaters areas where feasible.

### Reduce sediment, pollution and water run-off:

- 4 Reduce rapid run-off, sediment inputs and water temperature by setting aside a high proportion of riparian land in greenfield developments for protection and/or restoration.
- 5 Review District Plan rules regarding the footprint of impervious surfaces and for large industrial and retail complexes with regard to onsite stormwater detention.
- 6 Review erosion and sediment control guidelines to minimise the risk of fine sediment from developments entering waterways.
- 7 Establish protocols for monitoring water quality below contaminated sites, and investigate possible causes for deterioration in water clarity.

### Enhance the ecological design elements in flood and stream management:

- 8 Increase the width of the riparian corridor, along the main stem of the stream to reduce the slope of the stream bank, reduce erosion, increase the capacity of floodway and allow more vegetation to shade the stream.
- 9 Develop a feasible floodway building/yard restriction that recognises access requirements for maintenance and owner obligations for erosion control work.
- 10 Review structures in streams with regard to the possibility of enhancing fish passage.
- 11 Utilise land set aside for flood attenuation, flood protection and transport corridor reserves with appropriate planting and with regard to public amenity.

### Promote catchment-wide planning:

- 12 Establish the feasibility of a statutory combined (district/regional) catchment plan for the Porirua Stream and catchment.
- 13 Develop a catchment-wide "Porirua Stream and catchment forum" of agency, community group and stakeholder representatives to coordinate and promote a full catchment management plan and catchment restoration actions.
- 14 Hold a forum/focus group to discuss and develop objectives for sediment management in the Porirua catchment.
- 15 Improved liaison between councils and infrastructure providers, especially ONTRACK.

### Build community support and awareness for restoration:

- 16 Standardise support for volunteer care groups across territorial boundaries to ensure equity and a transparent process of resource allocation.
- 17 Raise public awareness of pollution and litter problems and direct actions towards prevention by highlighting amenity values of stream and bush areas.

Photos from left to right: Revegetation project, Cannons Creek below Lakes Reserve; weed-infested banks of lower Mitchell Stream; Porirua City landfill in Spicers Valley at the head of Mitchell Stream; Cannons Creek in channelised steps below impoundment lakes; restoration group inspecting Porirua Stream at Willowbank Park, Tawa; head of Belmont Stream, where subdivision can cause sedimentation and stormwater issues if not carefully controlled; Onepoto Arm at Porirua, the receiving environment for Porirua Stream.

Note that this is an edited summary of priority actions. The full set can be seen in the main report.