

## Appendix A Initial longlist late 2022/early 2023

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ID	Longlist item
1	Widen the urban reach
2	Widen the urban reach, re-establish meanders
3	Widen the urban reach, re-establish meanders plus re-establish the hyporheic zone
4	Plant the urban buffers in natives including kahikatea groves
5	Redesign the QEII Park lake so it is integrated into the river system in normal and/or flood flows
6	Plant and animal pest control especially foothills/upper catchment
7	Plantings: upper catchment, riparian, targeted areas i.e. purchase land. Replant catchment in natives both upper and riparian margins
8	Install swales throughout the catchment
9	Install retention bunds across the flood plain (typically at right angles) and elsewhere
10	Wetland regeneration: new, full suite highland, spring backwater, harakeke, kahikatea, create a network
11	Aquifer recharge
12	Stopbank upgrades: Oxford St
13	Stopbank upgrades: Fire station
14	Stopbank upgrades: South of SH2
15	Stopbank upgrades: North of Rail Bridge
16	Remove all the stopbanks upstream of the Rail Bridge
17	Sill banks
18	Leaky weir installations small/large streams equivalent of beaver dams
19	Sacrificial flood areas designed to overspill
20	Collective consciousness enhancement

21	Narrative connection
22	Diversion of Waipoua to adjacent river/s
23	Buy a farm - prioritise service to the river
24	What would the river want? Legal entity
25	Fertiliser regulations
26	Network of privately owned dams
27	Review current weirs in urban reach
28	Do nothing
29	Continue with existing maintenance
30	Remove all stopbanks
31	River alignment upstream of Rail Bridge
32	Rail Bridge replacement/realignment
33	Strengthen and raise railway embankment
34	Road bypass through to SH2 Bridge (along Bentley/Villa Street up to Carters) - David Holmes option
35	Drain/stream clearance (i.e. Akura Road, Makoura Stream)
36	Retreat and rebuild stopbanks further back from the river where possible
37	Improve conveyance through town reach - berms and bed level considerations
38	Concrete lined channel through town
39	Straighten the river
40	Divert to the Ruamāhanga upstream of town
41	Divert to natural streams and reinstate older channels
42	Use roads/design of roads to take excess flood water
43	Purchase all houses at risk of flooding
44	Raise all vulnerable houses/bulidings

45	Move the town
46	Flood resilient construction techniques
47	Use fields downstream of SH2 for flood water storage/attenuation
48	'Natural' pool beside the river - Andrew Donald option
49	Land purchase/repurpose to widen urban reach (i.e. Bentley Street)
50	Slow the water down before getting to town/through town (roughness assessment), how? Vegetation
51	Land use planning and planning controls (i.e. option 58)
52	Emergency management responses
53	Community awareness and preparedness
54	Flood warning systems
55	Additional monitoring rainfall, gauging outside of main stem
56	Develop a water balance for the whole catchment
57	Create a sediment balance
58	Address stormwater from Kaituna block/Makakaweka: make sure it is not an issue through town reach
59	Direct the overflow at the Fire Station into the QEII Park lake and down into the sports field
60	Investigate Ngaumutawa Road cut off drain
61	Consequences of future i.e. development upstream of railway inundation area (Akura area)
62	Debris/slash management
63	Combination of multiple options
64	Gravel extraction
65	Moveable/temporary glass wall beside the river
66	Temporary bunding/sandbags/flood walls
67	Flood walls instead of stopbanks

68	Returning the whole catchment back to its floodplain
69	Reforest the entire catchment
70	Sponge catchment with super soakers at different points
71	Buildings that float
72	Town centre rebuild to integrate the river
73	Introduce beavers to build dams
74	Widen/raise bridges - Rail bridge, SH2 (and Colombo Road) (consider with options 1, 2, and 3)
75	Soil and land management - i.e. soil types for better water retention, regenerative agriculture
76	Divert water along railway line and through existing streams through town