

12 April 2024

INTRODUCTION

The purpose of this monthly report to give an overview of our river operational plans for the three months ahead across Canterbury. These plans may change at short notice due to weather conditions, but the attached outline is our anticipated workplan.

Staff will make contact to discuss further detail of specific projects where we need to gather feedback and adapt work plans as necessary prior to commencing the work.

Please let me know if there's any additional information you would like in this report going forward or if there are any other parties we should be making aware of this this information.

Please note that Berm Transition Project updates on this report are indicative only and more detail is available here: [Regionwide planting and berm transition | Environment Canterbury \(ecan.govt.nz\)](https://ecan.govt.nz/regionwide-planting-and-berm-transition)

Kind regards,

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Kaikōura to Waitaki Rivers

RIVER OPERATIONS

TERMS AND ABBREVIATIONS USED IN THIS REPORT

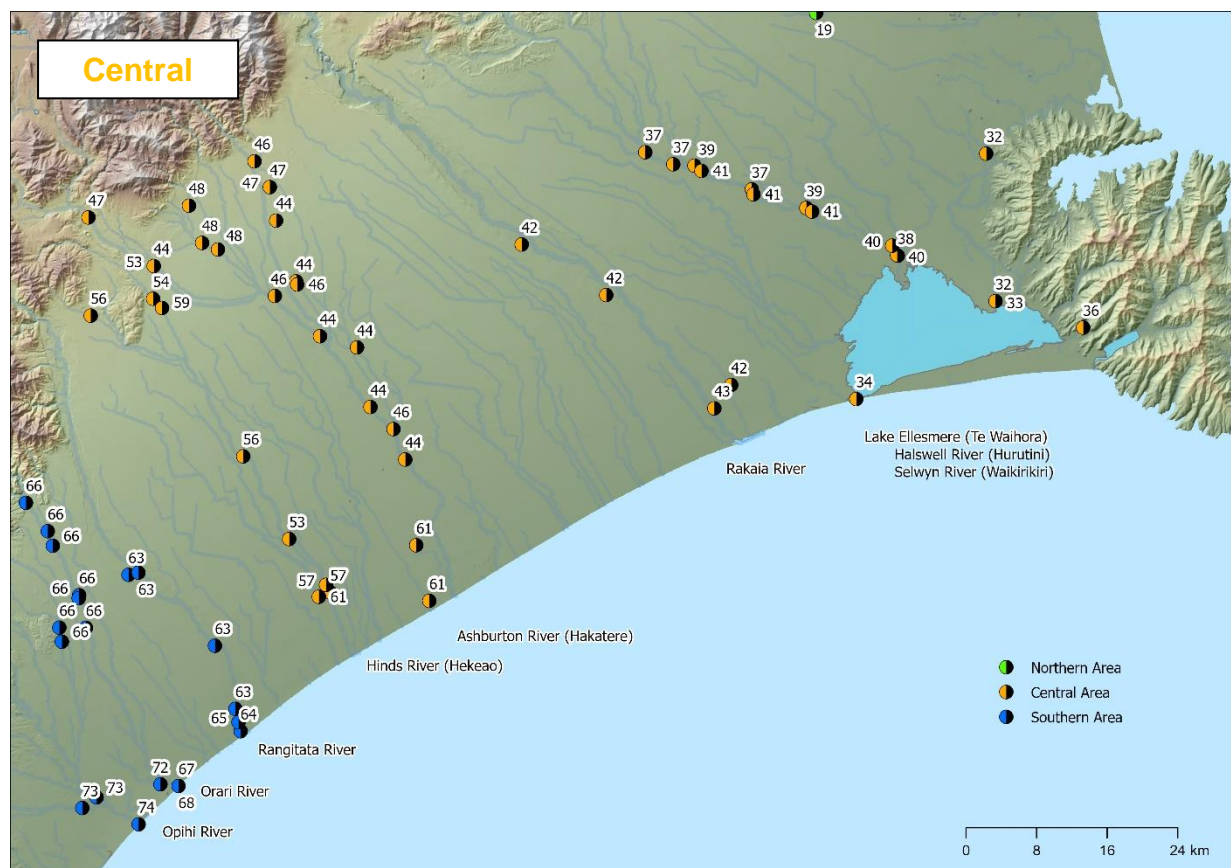
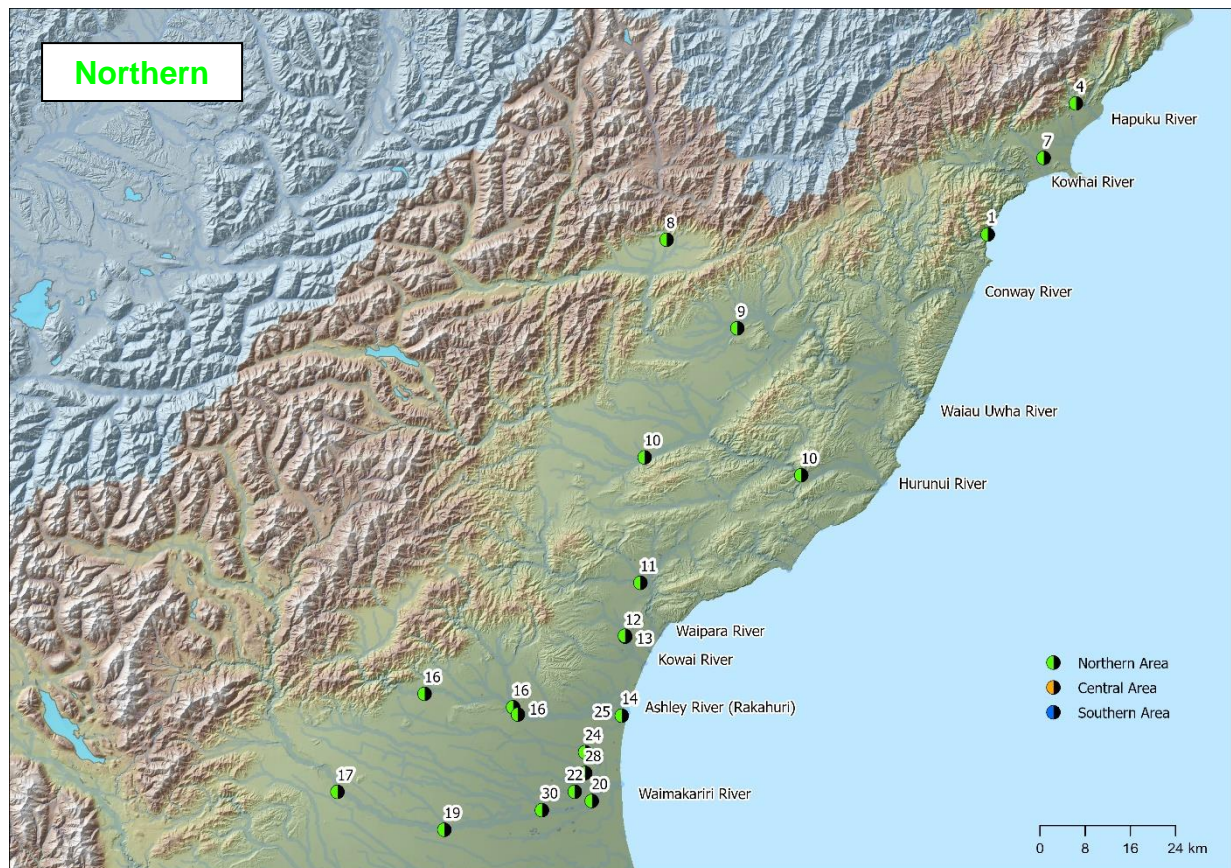
ATP	Anchored tree protection (large trees transplanted and tied in place to resist erosion)
Berm	The vegetated strips of land next to the active part of a riverbed
D/S	Downstream
Fairway	Open gravel area between the berms
Layering	A process used to thicken vegetation by the felling of a tree (or group of trees) whereby the trunk remains partially connected to the stump.
Monitoring	When a waterway, structure, or works are being checked routinely for changes or damage. An action or operation is then required to remediate or resolve.
OMB	Old Man's Beard (a deciduous, smothering, climbing vine)
Pole planting	Planting of (typically) poplar or willow stems which root, sprout and grow into trees to provide bank stabilisation and to help control erosion.
RDR	Rangitata Diversion Race
SH	State highway
Snagging or snag removal	Removal of unwanted trees in river fairway which can divert flows causing bank erosion
TL	True left (the left-hand side of a river when looking downstream)
TLB	True left bank
TR	True right (the right-hand side of river when looking downstream)
TRB	True right bank
U/S	Upstream
LABP	Light anchor bank protection
HABP	Heavy anchor bank protection
DIST	Distance from sea

NEW EDITION - maps below show approximate locations of proposed rivers operational work.

- The coloured points represent the rivers operational area that the work falls within.
- Numbered points on the map correspond with the code number on the left-hand side of the report.
- Some work where exact location is not yet known, may not be represented on the maps.

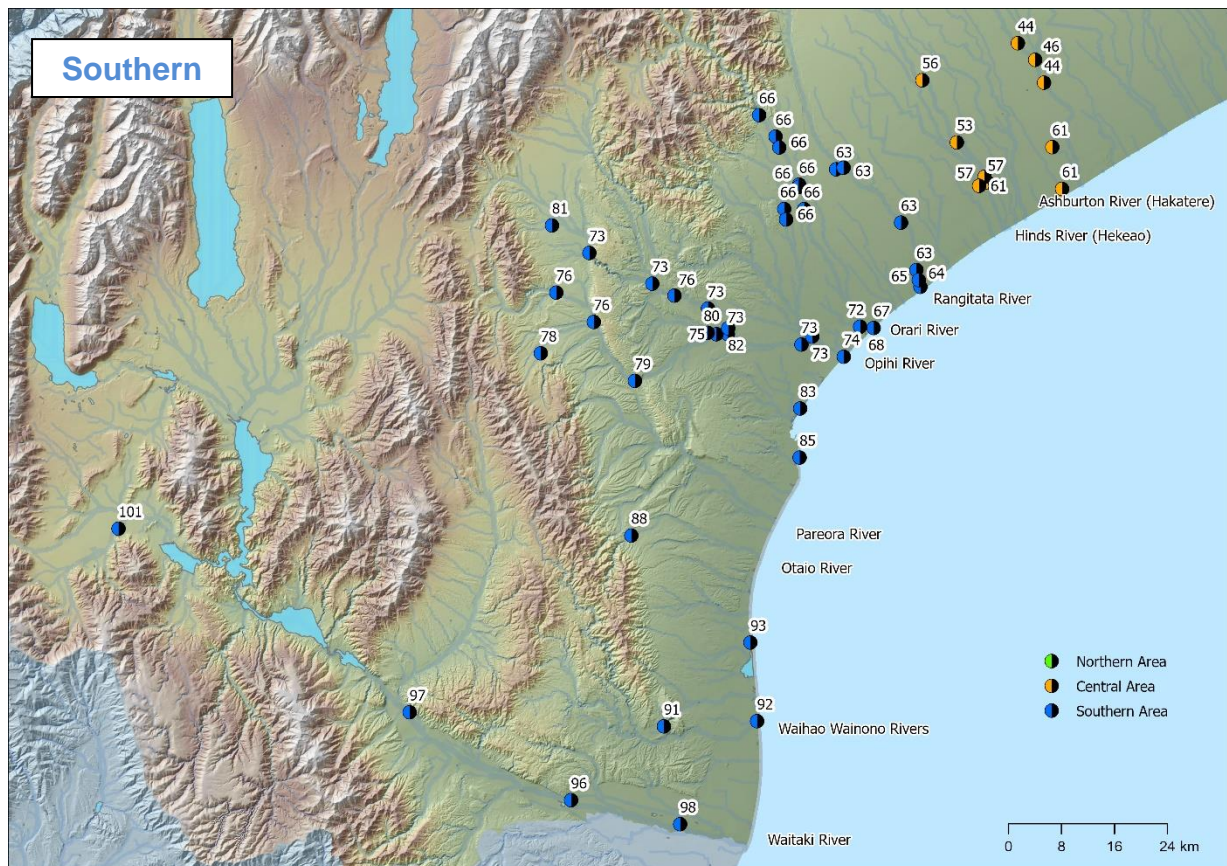
Kaikōura to Waitaki Rivers

RIVER OPERATIONS



Kaikōura to Waitaki Rivers

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Kaikōura to Waitaki Rivers

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Code	What	Where	When	Map Coordinates
Kaikōura Rivers and Drains Schemes				
1	Berm Transition Project: Native planting maintenance	Oaro	Feb-May	1641487, 5293049
2	Gravel traps maintenance	Mt Fyffe Streams	As required	Various
3	Mouth openings	Lyell Creek & Middle Creek	As required – pre rainfall based on forecast	Various
4	Rock Excavation from Island	Hapuku River near TRB Carpark	Postponed	1657112, 5316240
5	Roadside Drain Spraying as required	Various Roadside drains, Kaikoura Flats	Starting 15 Nov-March	
6	Channel Works	Waimangarara Kowhai River Lukes Creek	March - June	Various
7	Rock Extraction and Placement	Kowhai River	Feb- April	1651389, 5306601
Hanmer – Percival & Chatterton River				
8	Berm Transition Project: Native plant maintenance program	Chatterton River U/S of Woodbank road, both banks.	Feb-May	1584624, 5292115
Waiau Uwha River				
9	Blockline Extension	Waiau Rotherham	March-April	1597139, 5276443

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RIVER OPERATIONS

Code	What	Where	When	Map Coordinates
	Hurunui River			
10	Berm Transition Project: Native plant maintenance program	SH1 bridge & Balmoral bridge	Feb-May	1580723, 5253604 1608454, 5250441
	Waipara River			
11	Berm Transition Project, Tree clearance of the fairway.	SH1 bridge to mouth, currently chipping wood	Clearance complete, chipping continuing.	1579982, 5231395
	Kōwai River			
12	Berm Transition Project: Native plant maintenance program	TRB at Leithfield U/S of SH1 and section downstream of Lawcocks Road	Feb-May	1577285, 5221873
13	Fallen tree removal and minor channel works	Downstream of Lawcocks Road	April	1577240, 5222018
	Ashley River / Rakahuri and Sefton			
14	Taranaki Creek Floodgate Structural Upgrades, Full drained inspection, safety upgrades	Taranaki Creek Floodgate Structure	Ongoing	1576663, 5207873
15	Old Mans Beard Spraying (Berms)	North and South Bank Berms, Rangiora to SH1	March – April 2024	Various
16	Berm Transition Project: Native plant maintenance program	Glentui-Bennets Road; Okuku confluence; Mount Thomas Road; Saltwater Creek.	Feb-May	1541754, 5211750 1557426, 5209378 1558286, 5208088

Kaikōura to Waitaki Rivers

RIVER OPERATIONS

Code	What	Where	When	Map Coordinates
	Waimakariri – Eyre – Cust Scheme			
	Waimakariri			
17	Berm Transition Project: Native plant maintenance program	Between Bleakhouse Road and gorge on TRB	Feb-May	1526316, 5194397
18	Culvert and floodgate inspection/maintenance	All major Waimakariri culverts and floodgates	Ongoing	Various
19	Removal of eroded trees from fairway	36-37km DIST (Thompsons Road / Willows)	Underway	1545246, 5187685
20	Clearance of obstructive trees creating instream blockages	Upstream of SH1 and Otukaikino Confluence	May 2024	1571358, 5192781
	Kaiapoi			
21	Weed Removal	Harpers Road to Cust Confluence	Underway, Completion by Mid-April	Harpers Road – Cust Confluence
22	Widening of flood channel to alleviate flooding, 200m of TLB	Downstream of Elders Road	April	1568342, 5194415
	Cam / Ruataniwha			
23	Channel Cross Sectional Surveys & Investigation of Stopbanks	Tuahiwi Area & Lower Camside Road	Underway	Full Length Cam River
24	Removable of overgrown/problematic Willows in Conjunction with WDC	Bramleys to Marsh Road	Underway Completion by May 24	1570176, 5201419

Kaikōura to Waitaki Rivers

RIVER OPERATIONS

Code	What	Where	When	Map Coordinates
25	Stop bank repairs	Cam River, Downstream Bramleys Road	Starting April 2024	1576663, 5207873
	Cust			
26	Channel Cross Sectional Surveys & Investigation of stop banks	Ashworths Road to Kaiapoi Confluence	Underway	Ashworths Road to Kaiapoi Confluence
27	Emptying Gravel Traps	Between Threlkelds Road and Kaiapoi River	As Required	Various
28	Tree Maintenance, Downstream Skewbridge on TLB	DS of Skewbridge, Lower Cust	April	1570199, 5197742
	Eyre			
29	Gravel beaching in erosion bays	Depot Road to Eyre Diversion	Postponed	Various
30	Tree Maintenance / Clearance from fairway	Harrs Road to Waimakariri Confluence	Late April	1562529, 5191153
	Halswell River / Huritini			
31	Drain clearing/maintenance, tree removal windblown trees when necessary.	District wide drains and main river channel.	Ongoing monthly	
32	Weed Cutting	Halswell River Te Waihora to Halswell	Barrier set up January – First cut commenced up to Burkes Creek	1564541, 5171727 to 1565595, 5154999

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Code	What	Where	When	Map Coordinates
33	New barrage / screen project	Halswell canal at the eastern end of Hudsons Road.	Contractor established onsite – pile installation from 11th April, screen installed by September.	1565595.02, 5154999.8
Te Waihora / Lake Ellesmere				
34	Te Waihora / Lake Ellesmere is currently CLOSED to the sea. The wind affected average level on the Monday 8 th of April 2024 was 0.57m . Te Waihora /Lake Ellesmere was opened to the sea in favourable conditions on Saturday the 18th November at 1200hrs, the calm average level at 0800hrs was 1.06m. The Lake naturally closed to the sea on the 1 st January 2024, the calm average level at 0800hrs was 0.59m. The average lake levels can be found on the Environment Canterbury website here: River flow data - Te Waihora/Lake Ellesmere (Average) Environment Canterbury (ecan.govt.nz) Potential lake opening to the sea may occur (following consultation) when the lake: <ul style="list-style-type: none">• exceeds 1.05 metres above mean sea level, from 1 August to 31 March; or• exceeds 1.13 m above mean sea level, from 1 April to 31 July: or• at any level, from 15 September to 15 October, (fish passage) or• at any level, from 1 April to 15 June (fish passage).			1549795 5143892
Little River / Waiwera				
35	Windblown willow tree removal	District Wide as required	Ongoing monthly	

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RIVER OPERATIONS

Code	What	Where	When	Map Coordinates
	Prices Valley			
36	Willow Clearing and windblown tree removal	Prices Valley Road	End of March - April	1575536, 5152002
	Selwyn River / Waikirikiri			
37	Berm Transition Project: Native plant maintenance program	U/S of SH1 Westenras Road Hororata River confluence	Feb-May	1525867, 5171886 1529039, 5170520 1537944, 5167672
38	Tree Clearing – Fairway management, Willow removal	Coes Ford d/s to Selwyn Huts	Ongoing: Due to complete end of March	1554507, 5160152
39	Flood Recovery - Erosion bay repair, ATP, Pole bundles.	Withells Ford (Brookside and Burnham Road)	April - May	1544133, 5165558 1531440, 5170369
40	Stop banks repairs following July 2023 flood event.	True right Stopbank - Selwyn-Lake Road Minor sites across network Between Chamberlains and Coes Ford.	March - May	1554429, 5160206 1553871, 5161289
41	Beaching and channel re-profiling	Westernras Road, SH1 Bridge, Selwyn Rd to Whithells ford	March - April	1544784, 5165155 1538139, 5167106 1532237, 5169765

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RIVER OPERATIONS

Code	What	Where	When	Map Coordinates
	Rakaia River			
42	Berm Transition Project: Native plant maintenance program	Barrhill SH1 Headworks Road Dobbins Road	Feb-May	1511845, 5161420 1521438, 5155692 1535611, 5145488
43	Layering, Groynes Repairs, Track Maintenance	Rakaia Island	April - June	1533699, 5142845
	Ashburton River / Hakatere and tributaries			
44	Berm Transition Project: Native plant maintenance program	North Branch, TRB U/S of Thompsons Track North Branch, TLB D/S of Thompsons Track South Branch, TRB U/S of Hills Road Main channel TRB D/S of SH1 Taylors Stream Mt Harding Creek at Aikens Road South Branch Ashburton at Mt Somers village	Feb-May	1486261, 5157239 1493167, 5149750 1494688, 5142992 1498639, 5137035 1488967, 5151018 1483988, 5164137 1470108, 5158981
45	All Scheme – Stopbank maintenance, spraying etc.	Entire stopbank network	March - April	
46	Layering – Mechanical and Hand	South Branch, North Branch, Taylors	January - May	1481531, 5170856 To 1486373, 5156884, 1483850 5155585 To 1497303, 5140488

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RIVER OPERATIONS

Code	What	Where	When	Map Coordinates
47	Flood Recovery - Erosion repairs - ATP and pole planting – Site Prep	Various Sites - Ashburton North Branch – Ashburton South Branch Inverary Various Sites – Ashburton Main Stem 7 Bends	April - June	1483277, 5167929 1462696, 5164489 1483277, 5167929
48	Flood Recovery – Large Cliff Erosion Repair – Channel realignment, Tree work, Hayman Fencing, rock repairs	Bowyers Stream – Various Spots Flynn's Road and between Arundel Rakaia Rd and Moodies Rd	March/April – Instream Channel work April – June – Aim to complete works out of water.	1474105, 5165827 1475595, 5161604 1477391, 5160859
49	Targeted vegetation control in fairway, Berm & Fairway Spraying	South Branch, North Branch, Taylors, Bowyers – Islands as required	March - April	
50	Aerial Spraying – islands infested with woody weed species	South Branch – Other Stems as required	Complete	
51	Stopbank maintenance (spraying / mowing)	All stopbank network	In Progress	
Dry Creek				
52	Targeted Gravel Extraction	Entire Scheme	TBC	
Hinds River / Hekeao				
53	Berm Transition Project: Native plant maintenance program	Above RDR Above SH1	Feb-May	1470108, 5158981 1485472, 5128024
54	Targeted gravel extraction	Lower Downs Road	April	1470035, 5155268
55	Targeted vegetation control in fairway, Berm & Fairway Spraying	Main Stem, North Branch, South Branch	March - April	

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Code	What	Where	When	Map Coordinates
56	Erosion Repair - Channel Realignment - LABP reinstatement	Various Sites – South Branch, Upper Downs Rd, Main Stem Lismore	Minor sites deferred until Autumn	1462961, 5153354 1480260, 5137400
57	Stopbank rebuild and reprofiling	TLB in vicinity of Surveyors Road	March - April	1490133, 5121967 1489646, 5122827
58	Aerial Spraying	Main Stem – Various Beaches Lismore School to Bulls Rd	Complete	
59	Erosion repair – Hayman fencing	North branch Peters Road	April - May	1471053, 5154228
Ashburton Hinds Drainage Scheme				
60	Mechanical drain clearing	Various sites across entire scheme	Complete	
61	Erosion Repairs, Drop structure upgrades	Various site Blees Drain, Northern Drain, Maginess Drain	March - May	1501360, 5121011 1488833, 5121470 1499886, 5127317
62	Drain spraying	Various site across entire scheme	Due to complete end of March	
Rangitata River				
63	Restoration sites work: Native plant maintenance program	South branch breakout point, Withell's island, McKinnon's creek confluence, various sites along the true right bank near dip road	Feb-May	1467239, 5123964 1468364, 5124210 1477047, 5115917 1479368, 5108765

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Code	What	Where	When	Map Coordinates
64	Clearance of weeds around nursery area	True Right at mouth	April - May	1479962, 5106227
65	Reinstatement of tracks along river side	All of true right bank	April - May	1479718, 5107244
Orari-Waihi-Temuka Scheme, including Clandeboye Drains				
66	Berm Transition Project: Native plant maintenance program	Orari – Above Howard Rd Orari – Burdon Rd Orari – Main North Rd Orari – Lloyd road Orari – Inglis road (scour bay) Waihi – Waitui Drive Nth Waihi – Waitua Drive Sth Waihi – Geraldine High Waihi – Tabolt Road	Feb-May	1455614, 5132133 1458089, 5128909 1458653, 5127261 1461652, 5121650 1461590, 5121308 1462408, 5117959 1459397, 5117974 1459684, 5116379
67	Targeted vegetation control, ground spraying of fairway, stop banks, berms, and tracks. Aerial spraying of selected areas of fairway.	Mouth to gorge as required	Completed	1472914, 5100020
68	Rock protection replacement lost in May 2021 flood	Orari River mouth	Design is underway, works delayed till July	1472914, 5100020
69	Rebuilding stopbanks and reinstating tree protection at May 2021 breakout points (flood recovery programme).	Waihi River, Geraldine to Winchester	Completed pending pole planting in May-June	

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Code	What	Where	When	Map Coordinates
70	Erosion Repairs - Rock placement, ATP, mesh fences and reinstating of tree protection (flood recovery programme).	Waihi River, Geraldine: Behind NPD garage	Completed New erosion (winter 2023) at repaired site. Stopbank repaired. ATP to be done.	
71	Culvert Inspections	All areas	March - April	
72	Battering of banks on the Ohapi	Clandeboyne Milford Rd to the mouth	April - May	1470863, 5100212
Opihi Catchment Scheme, including Te Ana a Wai and Opuha				
73	Berm Transition Project: Native plant maintenance program	Opihi Mouth SH1 Te Ana a Wai confluence Upper Waitohi Opuha confluence Fairlie to Opihi Gorge Road	Feb-May	1429974, 5111334 1439471, 5106700 1447889, 5102954 1450889, 5099085 1462001, 5097518 1463625, 5098722
74	Opihi mouth opening. Issues, land flooding and inundation of local dwellings	Mouth of Opihi River	As required, unless opens naturally.	1468393, 5095674

Kaikōura to Waitaki Rivers

RIVER OPERATIONS

Code	What	Where	When	Map Coordinates
75	Channel works and reinstatement berm	Te Ana a Wai River upstream Tengawai Bridge Opawa Stream	Underway Completed and further maintenance as required	1449173, 5099082
76	ATP along with channel improvement	Te Ana a Wai River adjacent to Opawa Ford Te Ana a Wai River TLB below Cricklewood Road Opihi River TRB above Opihi Road	On hold subject to consultation with stakeholders and iwi partners. On hold subject to consultation with stakeholders and iwi partners. Islands have been cleared of debris, major works in the planning stage.	1430643, 5100922 1424977, 5105362 1442829, 5104898
77	Fairway, stopbank and berm spraying as required	Full scheme	Completed	
78	Tree removal and channel works	Opawa – Rutherford Road	Partially completed	1422639, 5096195
79	Channel Works	Tengawai – Cave	Monitoring	1436854, 5092032
80	Tree removal & Channel works	Totara Valley Creek	April - June	1447842, 5099300

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Code	What	Where	When	Map Coordinates
81	Tree removal & Channel works	Halls Stream	Monitoring	1424330, 5115496
82	Poplar & Pine Removal	Cones Road Nursery	April - May	1450938, 5099972
Seadown Drain				
83	Mechanical weed clearance	Main Drain	Currently monitoring weed growth	1461807, 5087865
Washdyke Creek				
84	No works planned at this time			
Saltwater Creek				
85	New Track to be built at Cally Grounds	Cally Grounds	April - May	1461727, 5080468
Pareora River				
86	Snagging and beaching as required	Mouth to Huts	April - June	
87	Berm Transition Project: Native plant maintenance program	Evans crossing U/S of Huts. Cannington sub-canopy work near the school.	Feb-May	
Otaio River				
88	Channel works, willow poles (winter)	u/s Church Hill Ford Road	February - June	1436309, 5068702

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Code	What	Where	When	Map Coordinates
89	Aerial Spraying	SH1 to Blue h Hills Road	Completed	
90	Fairway, stopbank and berm spraying as required	Full scheme	Completed	
Kapua Drain				
91	Drone Spraying	Kapua Road	April - May	1441232, 5039901
Waihao Wainono Combined				
92	Replacing boards on Waihao Box	Waihao Box	Ongoing	1455309, 5040687
93	Spraying of Canary grass	Hook Drain	Completed	1454295, 5052551
94	Stopbank tree clearance	Waihao stopbanks	Completed	
Lower Waitaki River				
95	Channel realignment, rock groynes, ATP, erosion repairs (flood recovery programme)	Mouth to Kurow	Ongoing	
96		1km D/S of Stonewall on north bank	Completed	1427212, 5028767
97		3.5km D/S of Kurow Bridges, rock delivered	Completed	1402827, 5042027
98		North bank, at Ferry Road	Major works completed. Monitoring. Follow up ATP planned for this season.	1443686, 5025142

Kaikōura to Waitaki Rivers

RIVER OPERATIONS

Code	What	Where	When	Map Coordinates
99	Layering	Sea to Kurow where required	Work is ongoing.	
	Maerewhenua River			
100	Nothing planned this period			
	Upper Waitaki Rivers			
101	Gravel relocation and stopbank repair along with selected willow removal.	Omarama Stream below SH8	Ongoing	1358870, 5069733
102	Aerial Spraying	Takapō, Ohau, Pukaki and Lake George Scott	Completed	
103	Truck and Tractor Fairway Spraying	Lake to Greys Creek	Completed	