

1913.

NEW ZEALAND.

# WANGANUI RIVER TRUST

(ANNUAL REPORT OF THE).

*Presented to both Houses of the General Assembly by Command of His Excellency.*

MEMBERS.—T. D. Cummins, Government nominee (Chairman); G. V. Pearce, M.P., Patea; W. A. Veitch, M.P., Wanganui; W. J. Polson, Chairman, Wanganui County Council; W. Ritchie, Chairman, Waitotara County Council; C. E. Mackay, Mayor of Wanganui; David McFarlane, President, Chamber of Commerce; J. T. Stewart, W. G. Bassett, and T. B. Williams, elected by the ratepayers of Wanganui.

## REPORT.

SIR,—

Wanganui, 20th April, 1913.

I have pleasure in furnishing you with a report of the operations of the Trust for the year ended the 31st March, as well as notes taken on a visit of inspection commenced on the 12th April.

Following my usual practice in visiting the river for the purposes of making my annual report I endeavoured to catch the river at a low level, so that the improvements effected during the past year and the necessary works to be undertaken next working season could be noted.

I left Wanganui by the steamer "Ohura" for Pipiriki on the 12th April. The water-gauge at Hatrick's Wharf at Pipiriki showed 36 in. below "the mark"—a zero established by Messrs. Hatrick at the inception of the steamer service, and at which level local steamers could safely reach Pipiriki—this before the river improvements were commenced. The 36 in. referred to was the lowest level found this year (1st April, 1912, to 31st March, 1913). The steamer had about forty passengers and a full load of cargo, and, despite the low conditions of the river and a full cargo, no difficulties were experienced in the navigation. We reached Pipiriki at 5.30 p.m. simultaneously with the s.s. "Wakapai," also passenger- and cargo-laden from Wanganui. It was noticeable with both steamers that the major portion of the cargo and most of the passengers were for wayside ports, thus showing the importance of the service in assisting settlement on lands adjacent to the river—the passengers being mainly settlers, bushfellers, and roadmen; the cargo being fencing and building material, tools, and provisions.

The conditions of the river gave an excellent opportunity of noting the work accomplished this working season below Pipiriki, consisting of clearing the channel of obstructions, renewing shingle and wire-net walls with stone, and lengthening stone walls at Tupapa (235), Ohaoa (232), and Matahiwi (212), and at several points snags and a few large boulders that will require removal later, notably between Parikino and Upokopoito (Nos. 232 to 238). At Upokopoito the shingle island in mid-channel is increasing in width and height. Willows have taken root and will hold the shingle, and should be at once eradicated, as by their growth the island will be still further enlarged and will be, in case of severe floods, a menace to the adjoining lands on the right bank. It would be of advantage to lengthen the tail of the wall from the island: this would have the effect of scouring away the shingle-bank now forming at the foot of the wall on the right bank and make easier entrance for steamers to the Upokopoito Rapid. The work below Pipiriki will in the future be more in the nature of maintenance.

On Sunday night while I was at Pipiriki it rained heavily, and the river had risen over a foot on Monday morning when I left for Taumarunui *via* the houseboat, and from Pipiriki on to the houseboat the river was steadily rising. This was specially unfortunate, as it completely negated any possibility of noting the works, as the walls were completely covered. Leaving the houseboat the following morning for Taumarunui, the river was still too much in flood to allow me to take notes of any value, and this continued till I reached Taumarunui.

At Taumarunui I was joined by Mr. W. J. Polson, Chairman of the Wanganui County Council, a member of the Trust. Leaving Taumarunui on the 17th by launch for Pipiriki, we found the river had fallen somewhat and the walls were showing up, although the conditions were not of the best for

noting future necessary works. It was pleasing, however, to observe that, with the exception of a few places where the shingle had scoured and dropped the walls, they were doing excellent work, not only by scouring on the rapids, but by lifting the water on the shallows behind the rapids. Occasionally it was noticed that in places the wire netting had been torn off the walls by floating timber in flood-time. These torn places are easy to repair, and will be taken in hand at once.

We found two parties at work, one at Turangahoru (No. 5) repairing and extending a shingle and wire-net wall from the left bank, and a second party at Otutekawa (69) constructing a new wall of shingle and wire netting from the left bank. After completion of this work and repairs to netting on the tops of several walls the work will be shut down for the winter months.

The foreman of works, Captain Allan Marshall, again urged the necessity of procuring a fully equipped motor-launch. This matter has been fully referred to in previous reports. It is estimated that such a vessel will amply justify the cost of construction, which will be about £1,250. The estimates last session of the House provided £500 towards the construction of a launch. A further sum asked to be placed on the supplementary estimates did not, however, appear, and the Trust decided to allow the sum voted to lapse, and to ask for a sum of £1,250 to be placed on the estimates in the approaching session for the purpose indicated.

With the works now in hand and proposed for the ensuing year it is necessary that a vote of not less than £1,000 be passed, as well as £1,250 previously referred to for procuring a launch; and an additional sum of £150 for the roading of the lands on the left bank of the river that have been recently leased, and for which the subsidy of £315 10s. was passed at last session of the House and found, on investigation, short of requirements. The votes therefore asked for by the Trust are as follows: For new work and maintenance, £1,000; for launch, £1,250; for roading, £150.

I have little doubt that with the approaching completion of the major portion of the improvement-work on the river, and the fact that the waste lands that are not of value for scenic purposes are coming into profit and will be an important factor for revenue-producing purposes, and that in the near future it may not be necessary to make application for subsidy to the extent it has been in the past, will all commend the desirability of making the appropriations as suggested.

I furnish herewith schedule of works completed and in progress for the year ended 31st March, 1913:—

*Walls and Groynes.*—No. 1, Ngahuinga: Shingle and wire-net wall from right bank repaired. No. 16, Tauteti: Walls repaired, left bank and additional shingle and wire-net wall constructed. No. 22, Hikamutu: New shingle and wire-net wall from left bank. No. 23, Tikataka: Shingle and wire-net wall extended from right bank. No. 26, Omaka: Repairs to shingle and wire-net wall right bank. No. 2, Auhauora No. 2: Repairs to shingle and wire-net wall. No. 212, Matakiwi: Extension of stone walls from right and left banks. No. 230, Te Rimu: Repairs and extension of stone walls from left bank. No. 232, Ohaoa: New stone wall from right bank.

*Landings.*—Kokakonui (in progress); Tawhata (completed); Kokakoriri (in progress).

*Blasting and Removal of Boulders.*—Large numbers of boulders have been removed from mid-channel throughout the length of the river.

*Snagging.*—The removal of snags is not the important matter it was in the early history of the work. Removals now are mainly vagrant snags deposited during freshets and floods. Attention has been given to this.

*New Punt.*—A new punt has been built, mainly for carrying shingle and small stones for repairs to walls.

Captain Allan Marshall (Trust's foreman) has again amply demonstrated his ability in dealing with the improvement and maintenance works.

In conclusion, I would like to say that the river-channel from Taumarunui to Wanganui, a distance of 144 miles, is in excellent condition; that the steamer service has been continued during the past year without interruption; and that cargo and passenger traffic is increasing.

I forward with this a booklet showing the numbers, names, and descriptions of the rapids on the river, commencing from its junction with the Ongarue and ending at Wanganui; also showing where walls have been constructed and other important works undertaken, with a general compendium of necessary works required to be undertaken in the future.

The Under-Secretary for Lands, Wellington.

I am, &c.,

T. D. CUMMINS, Chairman.

SCHEDULE SHOWING NUMBERS, NAMES, AND DESCRIPTIONS OF RAPIDS AND SHALLOWS, ALSO TRAINING-WALLS CONSTRUCTED AND REQUIRED.

(Commencing from Taumarunui and ending at the River Trust's jurisdiction at Kaurapoa Stream, about 14 miles from Wanganui.)

Hatrick and Co.'s wharf in the Ongarue River, Taumarunui (144 miles from Wanganui). Below the above and before reaching the junction with the Wanganui River, not named or numbered, there are three walls on the left and one on the right bank of the Ongarue constructed of shingle enclosed in wire netting.

No. Ongarue joins Wanganui River.

1. Ngahuinga.—Shingle and wire-net walls from right and left banks.
2. Pungahuru No. 1.—Shingle and wire-net walls from right and left banks.
3. Pungahuru No. 2.—Shingle and wire-net walls from right and left banks.
4. Rurumakatea.—Good channel; shingle and wire-net wall left bank.

- No.
5. Turangahoru.—Shingle and wire-net walls from right and left boulder-point on the right bank.
  6. Te Miro.—Short swift run ; channel right bank, stony bed left bank.
  7. Tunakotikoti No. 1.—Swift runs ; papa reef right bank, shingle-bed left bank ; stone wall from left bank.
  8. Tunakotikoti No. 2.—Swift runs ; papa reef right bank, shingle-bed left bank ; stone wall from left bank.
  9. Pokongaruru.—Swift run and shallow above ; shingle and wire-net walls from both banks ; boulders to remove from channel.
  10. Paehou.—Moderate run ; a large quantity of boulders have been blasted and removed from this rapid, as also from 11 to 13.  
Reach.—Stream on left bank.
  11. Kokirae.—Long swift run ; some large boulders on left bank ; boulders to remove.  
Reach.
  12. Pokaka.—Swift run ; large boulders on left bank ; boulders to remove.
  13. Whakatarino.—Long swift run ; channel right bank (may want wall).  
Reach.—A stream on right bank at upper end.
  14. Towhenua.—Long, swift, rough run ; shingle and wire-net wall right bank. A large quantity of the papa reef has been blasted and removed from this rapid.
  15. Rakauwhakamatuku.—Stone wall from right bank and wire-net and shingle wall from left bank. A papa reef has been removed from channel. Wall required between Nos. 15 and 16 from right bank.
  16. Tauteti.—Swift run with sharp turn round boulders ; two shingle and wire-net walls from left bank and one from right bank. A large quantity of boulders have been blasted and removed from a point on the right bank. This has been one of the most troublesome places on the river, and has cost much time and money. It may yet be necessary to remove the boulder-point on the right bank, but there is a possibility, if this is done, of dropping the level of the water behind the rapid to disadvantage.
  17. Porokurangi.—Swift run ; boulders left bank, shingle-bed right bank ; shingle and wire-net wall from right bank. A large number of boulders have been blasted out and removed from the channel from Tauteti on to the next rapid below (Wairere). Wall required from left bank.
  18. Wairere.—Swift run ; large boulders here ; shingle-bed right bank ; shingle and wire-net wall from right bank.  
Reach.—Kahikatea-trees on right bank.
  19. Pataaia.—Broad, swift, shallow run ; shingle and wire-net walls from both banks.  
Reach.
  20. Raparua.—Swift run ; large boulders here on left bank ; large stream on left bank ; shingle and wire-net walls from both banks.  
Reach.
  21. Tapuirangi.—Moderate run.  
Reach.
  22. Hikamutu.—Swift shallow run ; shingle and wire-net walls from both banks.
  23. Titakataka.—Swift run ; a large stream on left bank ; shingle and wire-net walls from both banks.  
Short reach.
  24. Tehoraporoaki.—Swift run ; shingle and wire-net wall right bank. Large boulders have been blasted and removed from channel above and below ; wall required from left bank.
  25. Kaka.—Moderate run.
  26. Omaka.—Swift run ; flat papa reef left bank, an old kainga (Omaka) on right bank ; shingle and wire-net wall on left bank.  
Reach.—Originally a wall was constructed in mid-stream on the papa reef : this has since been removed. The great scour here caused the first wall put in to sink ; it is now resting on the papa, and a new wall has been constructed on top. This previously troublesome place is now a good channel.
  27. Auhauroa No. 1.—Long run ; wall of shingle and wire netting from right bank. A large number of boulders have been blasted and removed.
  28. Auhauroa No. 2.—Similar to No. 1.  
Reach.
  29. Kohatupiko.—Moderate run. A quantity of large boulders have been blasted and removed.  
Reach.—A quantity of boulders have been removed by blasting.
  30. Te Onepoto.—Swift run ; boulders have been blasted and removed ; a clump of kahikatea-trees on left bank ; stones to remove.  
Reach.
  31. Manawanawa.—Swift run, broad and shallow ; boulders removed ; some more should come out.  
Reach.

No.

32. Te Whakarae.—Swift run ; channel at right bank at papa reef in water. A portion of the papa reef on the right bank has been cut off to widen the channel.

Short reach.

33. Pouwhakamaru.—Swift run ; boulders have been removed ; two shingle and wire-net walls from right bank, and one from left bank.

34. Onetapo.—Channel right bank at papa reef ; swift run ; large shingle-bed at left bank with big boulder at upper end.

Reach.

35. Motutara.—Moderate run ; may require wall in future, probably from right bank.

36. Te Hinau.—Old kainga and stream (Motutara) on right bank ; moderate run ; may require training-wall in future.

37. Te Maire (132 miles from Wanganui).—Channel right bank, broad shallow run ; in shallow above training-wall may be required.

Reach.—Te Maire Stream and old kainga (Te Maire) left bank.

38. Te-rua-a-te-namu No. 1.—Rather shallow ; stones have been cleared from channel.

39. Te-rua-a-te-namu No. 2.—Similar to No. 1. It is possible that walls would benefit, as the runs are shallow.

40. Te Rata.—There are large boulders in the river here, but they do not interfere with navigation ; some of the smaller ones might be removed with advantage.

Good reach.

41. Otukitara.—At top of the shingle island ; swift run ; channel right bank.

42. Matawhero.—A long rapid ; channel on right bank ; swift run ; a large shingle-bank or island on left bank ; a stream (Matawhero) on right bank.

Reach.—Some large boulders in river.

43. Marekura No. 1.—Fairly swift run ; small papa reef in channel has been cut out ; a papa ledge on left bank.

44. Marekura No. 2.—Moderate run.

45. Otunui.—Papa ledges on both banks narrow the channel ; a hard papa face right bank at upper part of rapid ; a large stream called Otunui on the right bank over papa ledge. The papa ledge on the left bank extends up past the next two rapids ; shingle and wire-net wall right bank.

46. Te Pera.—Short moderate run. A quantity of boulders should be blasted and removed from channel.

47. Ohinepane.—Swift run against papa ledge right bank, shingle-bed left bank.

Reach.

48. Te-mihi-a-te-haururu No. 1.—Some papa reefs have been removed ; there is a supply of stones on left bank above rapid ; an old kainga on right bank above the rapid. A training-wall may be required in the future from the left bank.

Reach.

49. Te-mihi-a-te-haururu No. 2.—Moderate run.

Reach.

50. Taupiri.—Moderate run.

51. Omarutihona.—Shallow run ; a stream on right bank ; wall may be required ; boulders to be removed.

Long good reach.—A stream (Rakura) on right bank over a papa ledge ; old kainga (Arimatia) on left bank.

52. Waiari.—Short swift run ; channel right bank, shingle-bed left bank.

Short reach.

53. Te Aukopae.—Swift run to papa face left bank, channel left bank ; shingle-bed right bank, a shallow above. A Government road comes out here, and a landing-place has been put in. This place is very freely used by settlers for landing and shipping goods.

54. Oturoi.—Long run ; moderate current ; channel left bank, shingle-bed right bank ; may want wall from right bank.

Good reach.—Old kainga (Teoteo) on right bank.

55. Pohue.—Moderate run ; stones have been cleared from channel.

Good reach.

56. Taurakawau.—Stone reef point on right bank ; training-wall required from left bank.

Long good reach.—The name of this reach is Taurakawau. Boulders have been removed from mid-channel.

57. Toka-ate-atua.—Channel left bank against papa ledge, shingle-bed right bank ; swift run ; some papa has been removed from the channel.

58. Komako.—Long swift run ; channel right bank ; good stones for wall which is required on left bank. Nukunuku and old kainga on right bank.

59. Ohiepueru.

Good reach.—An old kainga (Whenuatere) on left bank.

No.

60. Tiwhapaua.—Swift run ; channel in middle ; papa ledge right bank.  
Good reach.—Stones on left bank.
61. Paparua.—Swift run between rocky islet and a papa ledge on right bank. A very considerable quantity of the papa ledge on right bank has been removed to widen the channel, and boulders taken out of the channel. There is a large waterfall on the right bank. This channel was previously almost impassable in low river, but is now an easy and excellent passage.
62. Waiwhakaata.—Narrow run between boulders on left bank and papa ledge on right bank.
63. Takapauopuhi.—Stones on right and left banks.  
Good reach, called Waikirikiri.
64. Whatanuku.—Stones on right bank, channel on left bank ; moderate run.  
Good reach.
65. Koiro (123 miles from Wanganui).—Swift run ; channel left bank, shingle-bed right bank ; an old kainga (Koiro) on right bank, shingle and wire-net wall left bank.
66. Owata.—Swift run ; channel right bank, old kainga right bank ; a small stream (Oringaputangaa) on left bank, a training-wall left bank.
67. Arataua.—Swift run ; rather shallow, and continues to above an old kainga left bank ; channel cleared of boulders ; wall required from left bank.  
Short reach.
68. Poukaria.—Swift run ; Ohata, an old kainga, on left bank.  
Short reach.
69. Otutekawa.—Swift run ; channel from left bank at top to right bank below ; wall from left bank.
70. Tokapihepihe.—Swift run ; the run extends above.  
Reach continues.—Stones available on left bank.  
Reach with moderate current.—Old kainga on left bank called Te Ohu, and stream of same name left bank over papa ledge ; a large rock on left bank, called Tokapihepihe (a taniwha).
71. Te Ohu.—Moderate run ; channel left bank ; boulders have been removed.  
Reach.
72. Te Ruawhakakainga.—Swift run ; old kainga left bank ; shallow run may require wall from left bank later. A large stream (Ruawhakainga) on left bank.  
Long shallow reach.—May want training-wall in future ; an old kainga (Auroa) on left bank.
73. Te Auroa.—A long shallow run ; training-wall in future may improve.  
Short reach.
74. Whakapaenoa.—Swift run ; channel right bank ; sharp turn against papa face.  
Good reach.
75. He Repu.—Shallow run ; training-wall of shingle and wire net from right bank requires repairs.  
Good reach.
76. Otuiti.—Moderate run.  
Good reach.—Otuiti Stream and waterfall over papa ledges right bank.
77. Owahawe.—Channel right bank, shingle-bank left bank ; swift run.  
Good reach.
78. Kairakau No. 1.—Swift run.  
Short reach.
79. Kairakau No. 2.—Swift run ; shingle-bed right bank keeps water over to channel.  
Good reach.—At top large shingle-bed right bank, and stones available for walls on left bank.
80. Kirikau.—Shingle-bed below rapid ; channel left bank ; swift run ; some stones are available on left bank, upper part.  
Good reach.—Waterfall over two papa ledges left bank, called Kokakoriki. Some stones available for walls at bank above the fall.
81. Kokakoriki.—Swift run ; channel left bank at papa face ; a moderate run extends above.  
Good reach continues.
82. Whakapiri.—A moderate run in this reach.  
Good reach.—Te Puha ; old kainga left bank.
83. Te Puha.—Swift run ; channel left bank, shingle right bank.  
Good reach.—Some stones for walls available right bank, and old kainga (Pehimaka) left bank.
84. Ruangarahu.—Broad shallow run ; shingle and wire-net wall left bank.  
Short reach.

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85. Awamate No. 1.—Channel at centre at top, and turns sharply to papa face at right bank at foot ; swift run ; some stones available for walls on left bank just above rapid.
86. Awamate No. 2.—Channel left bank at stones and goes to right bank at top, with shingle-bed and stream left bank.  
Good reach.
87. Kakahi.—Swift run ; channel right bank, shingle left bank.  
Good reach.—Old kainga (Kakahi) right bank.
88. Tutaehua.—Channel right bank, shingle left bank ; swift run.
89. Te Kapara.—Moderate run ; small stream left bank over papa ; some way up supply of stones on right bank.  
Good reach.
90. Ohinemanuhiri.—Moderate run just above the Ohura.  
Ohura River, right bank.—Houseboat moored here (114 miles from Wanganui).  
Good reach.—Old kainga (Maraekowhai) right bank.
91. Kahuitara.—Broad run, rather swift ; best water right bank, shingle and wire-net wall left bank ; short wall required at foot of rapid from right bank.  
Good reach continues.
92. Oetea.—Slight run in this reach.  
Good long reach.—Some stones along banks are available. The name of this reach is Ngatukuwaru.
93. Ohuraite.—Stiff run ; stream right bank with stones at mouth ; channel right bank ; the shallow goes over the rapid ; stones have been removed. Stone wall right bank, shingle and net wall left bank.
94. Taurimu.—Channel left bank, shingle right bank ; short swift run.
95. Waikutapara.—Small rapid.  
Good reach.—Tawhata kainga left bank.
96. Te Hue.—Channel left bank ; stones have been blasted and removed.  
Good reach.—Some stones available for walls on the banks.
97. Mangaohutu.—Stream of the same name on left bank. A landing here badly wanted.  
Short reach.
98. Mahoronui.—Swift run ; channel left bank, shingle-bed right bank.  
Short reach.
99. Papanui.—A stream of the same name on the right bank, with stones.  
Short reach.
100. Waikukutea.—Long shallow run ; shingle and wire-net walls from both banks.
101. Otahapa.—Channel left bank, shingle right bank ; shingle and wire-net wall from right bank.  
Short reach.
102. Mangaaukawkau.—A stone ledge on left bank just below.  
Good reach continues, and is called Waipahihi. On the banks stones are available. A salt spring out of the papa face on right bank in this reach ; a stream on the left bank, with papa ledge below.
103. Waimanu.—A slight run in this reach.  
Good reach.
104. Makomako.—A shallow run ; shingle and wire-net walls from both banks require repairs.  
Retaruke River, left bank (108 miles from Wanganui).
105. Whakatara.—Long shallow run ; shingle and wire-net wall from left bank.  
Short reach.
106. Kaiwhakauka.—An old kainga of the same name on right bank, and stream on left bank ; a stiff run ; channel left bank ; old eel-pas in stream.  
Good reach.
107. Taurakawa.—A stream on left bank with stones ; a wall may be necessary.  
Good reach.
108. Otahua.—Shallow run ; stone wall right bank, shingle and wire-net wall left bank.
109. Mangapapa.—Easy run in this reach ; the river narrows just above the papa ledge ; a stream and stones on left bank.  
Good long reach.—A small waterfall on right bank, with papa ledge below. This reach is called Mangapapa.
110. Waikoriri.—Two large shell rocks in the river just below should be removed, but good channel past them. This is an easy rapid.
111. Kowhaiturua.—Stream right bank ; a wide run ; a long run above is shallow, and training-walls may be required in future.

- No.
112. Otawa.—Channel left bank, shingle-bed right bank.  
Reach.
113. Te Haukopai.—Channel left bank, shingle-bed right bank; sharp turn below to papa face on right bank.  
Good reach.
114. Ngararanui.—Short quick run; channel left bank, shingle-bed right bank.  
Good reach.
115. Otupea.—Short quick run.  
Short deep pool.
116. Owairua (at a bend).—Channel right bank; a long swift run; old kainga left bank; a snag requires removal.
117. Mangapapa.—Short run; channel left bank; papa ledge at top on left bank.  
Short reach.
118. Ohei.—Channel right bank, shingle left bank. These two rapids are close to each other.
119. Wairingia.—Long run; stones have been cleared from channel; only a narrow neck of land between this and No. 126 below. Channel has been cleared of boulders.  
Good reach.—A large papa bluff on right bank resembles an ironclad ship. This is called Koinaki. A long reach.
120. Kokiri.—Small run; shingle on left bank, channel at papa face right bank.
121. Kirikiriroa.—Short run (100 miles from Wanganui).  
Good reach.—An old kainga (Kirikiriroa) on left bank, large shingle-bed on left bank. This is at a point of a long bend in the river.
122. Horowhenua.—Shallow wide run. A training-wall urgently required; the material is on the ground, and the wall will be constructed next working season.
123. Ohuaiti.—Swift run, extends above.  
Good reach.
124. Tapuitopo.—A wide run.
125. Otuhoē.—Stiff run; channel left bank.
126. Te Maai.—Wide run; there is a narrow neck of land here between the river some distance above at a neck of a large bend of the river (see No. 119 previously referred to).  
Long reach.—In part of it two shell-rock ledges jut out from either side, narrowing the channel. This is called Waitaiti.
127. Mamakutapu.—Short swift run at papa face left bank, shingle-bed right bank.
128. Tarepokiore.—There has been a large landslip formerly on the left bank; a narrow clear run against a papa face on the right bank. A large quantity of the cliff on the right bank has been removed, and also the point on the left bank below. In flood-time this was previously a dangerous place, as a whirlpool existed. This has been minimized by the works effected, and the channel is now a fairly good one in conditions of water other than in high flood. A further quantity of stone might be removed with advantage. It is interesting to note that within the memory of an old Native it is reported that when the slip came down from the left bank at this place years ago it completely blocked the river.
129. Tahereaka.—An old kainga on left bank. It is noteworthy that at one time an immense nest of snags existed here and at the foot of Tarepokiore. These two places were a menace to navigation, even for canoes, in the earlier history of the work.
130. Opakua.—Channel right bank; swift run; stream right bank; old kaingas both banks, with poplar-trees.  
Short reach.
131. Matapihi.—A stream on left bank; boulders have been removed here.  
Good reach.
132. Raratu.—A stream right bank; a wall may be necessary later.  
Good reach.
133. Paparangiora.—Easy run.  
Good reach.
134. Tautarakapua.—Swift run; channel in middle, shingle-beds both sides.
135. Ohineika.—Broad shallow run; small stream over papa on right bank; stone walls from both banks.  
Good reach.
136. Kakanohue.—Swift run; channel right bank against papa face.
137. Otawhare.—Long run; rather shallow.  
Good reach, called Tamatea's Reach.
138. Arawhata.—Short run,

- No.  
 139. Ohauora.—Swift run ; channel left bank, shingle-bed right bank ; an old kainga (Ohauora) and a stream on left bank.  
 Good reach.—The straight of the river, called Otaihanga, ends.
140. Whaokete No. 1.—Short swift run ; channel right bank, shingle-bed left bank.
141. Whaokete No. 2.—Wide run ; rather shallow ; small waterfall right bank.  
 Good reach.
142. Auroa.—Swift run ; channel right bank, shingle-bed left bank.  
 Good reach.
143. Whatakiwi.—Easy run.
144. Otumape.—Channel left bank, shingle-bed right bank ; swift run.
145. Whakawatea.—Channel left bank, shingle-bed right bank.  
 Good reach continues.
146. Parikaranga.—Easy run.
147. Pokorua.—Easy run.
148. Oputara.—Easy run.  
 Good reach.—Part of Otaihanga ; narrow between papa faces.
149. Opuraha.—Shingle-bed in middle ; stiff run ; there is a stone wall on right bank.  
 Long good reach.—The straight of the river, called Otaihanga, begins.
150. Te Miro.—Easy run ; rather shallow ; may require training-wall.
151. Nikotapu.—Easy run ; stream on left bank above it.  
 Good reach.
152. Kaiwaka.—Channel right bank, shingle-bed left bank ; long run ; stream on left bank.
153. Hemotuke.—Moderate run.
154. Tokakutuku.  
 Good reach.
155. Reperepe.—Swift run ; channel right bank, shingle-bed left bank ; snags at head of rapid require removal.
156. Kaiaroa.—Swift run ; shingle-bed on right bank ; an old kainga (Puketapu) on right bank.
157. Kauwaehare.—Stone training-wall from left bank.
158. Kawhakarewa.—Sharp run along shingle-spit and strikes to papa face on right bank ; shingle-bed left bank.  
 Tangarakau River joins on right bank (85 miles from Wanganui).
159. Tahuna-roa.
160. Otapapa.
161. Omarukiha.
162. Mangatoatoa.
163. Te Kowhai.
164. Te Moari.  
 Whangamomona River joins from right bank.
165. Teauropae.
166. Tehikuotemotu.
167. Matawhero.
168. Whatakaka No. 1.
169. Whatakaka No. 2.
170. Okareroa.
171. Otaraiti.
172. Oapehu.
173. Otai Pohata.
174. Houtaua.
175. Papakino.
176. Mangapurua.—Mangapurua Stream left bank.
177. Opopo.
178. Oparea.
179. Tangahoe.—Wall from left bank required.
180. Otaiko.—Stone walls from right and left banks.
181. Aratini.—Parinui and Utapu Pas on right bank (69 miles from Wanganui).
182. Pouwhawha.
183. Ramanui.—Stone wall right bank, Tieke Pa left bank.
184. Omaika.—Stone wall from right bank.
185. Puahue.—Stone wall from right bank.
186. Arawhata.—Landing here serving River Trust 10,000-acre endowment block on left bank.  
 Manganui-a-te-ao River joins left bank (62 miles from Wanganui).
187. Matariwa.—Stone wall from right bank.
188. Parakiwai.—Stone wall required from right bank.



- No.  
 189. Ngaporo (upper).—Stone wall right bank, shingle and wire-net wall left bank, as also between here and next rapid (190). This has always been a difficult place to navigate in any conditions of river. The works effected at different times have resulted in a fair channel.  
 190. Ngaporo (lower).  
 191. Mangaio.

The Caves.—Right bank.

192. Ruahinetoro.—Stone wall right bank.  
 193. Aratira.  
 194. Autapu.—Stone wall from right bank.  
 195. Te Aute Mutu.—Stone wall from right bank.  
 196. Paparaoa (upper). A very large quantity of papa reef has been blasted and removed from these  
 197. Paparaoa (lower). two rapids on the left bank. These are specially swift runs; the channel, however, is a good one. Some papa lumps to remove.

Pipiriki (55 miles from Wanganui).—There are two substantially built wharves here. Pipiriki House—a tourist resort—is here. This is the stopping-place for boats up and down stream. The coach-road connecting with the Main Trunk Railway line goes through Raetihi and connects at Ohakune. A Native settlement on both sides of river.

198. Matangawa.—Papa reef left bank; swift run.  
 199. Mangatinoka.  
 200. Te Puha No. 1.  
 201. Te Puha No. 2.  
 203. Tahuerapa.

Iruharama (Jerusalem) (49 miles from Wanganui).—Kainga on left bank, Catholic church and mission-house and school. A fairly large settlement.

204. Kukupai.  
 205. Kauaeroa.—Long swift run; sharp turns to left and right banks. Kauaeroa, an old kainga, on right bank.  
 206. Haumoana.—Channel left bank; swift run; long stone wall from right bank.

Tawhitinui.—Kainga right bank.

207. Moutoa.—Long swift run; channel right bank, two stone walls from left bank. Moutoa Island left side of walls.

Ranana (London).—Kainga on left bank. Catholic church and school; a fairly large settlement; a landing in course of construction.

208. Kaitete.  
 209. Orongatea.  
 210. Kaiwaka.—Swift run; channel left bank.  
 211. Parangarahu.—Shingle and wire-net wall right bank, stone wall left bank.  
 212. Matahiwi.—Stone walls from both right and left banks. Government road into the Ohotu Block comes out on left bank. A landing is necessary here. There is considerable settlement depending on the river as a highway for passengers and cargo. A good stock-road from here to Wanganui on left bank.  
 213. Ruapirau.—Stone wall from left bank, channel right bank; swift run.  
 214. Te Ngaue.

Koroniti (Corinth).—Kainga left bank. Schoolhouse and Technical School for Native children here (now unused).

215. Otawa.  
 216. Te Ariro.  
 217. Opohe.  
 218. Te Punga.  
 219. Otumaire.  
 220. Ahuahu.—Stream of same name right bank; good landing and wharf; Government road comes out serving the Te Tuhi Block; considerable settlement in country behind.

221. Ngapurua.  
 222. Umutapi.—Stone wall from left bank.

Atene (Athens).—Kainga left bank (29 miles from Wanganui).

223. Pokaetorongu.  
 224. Te Pahi.  
 225. Kairakau.—Swift run.  
 226. Kahikatoa.  
 227. Tauterata.  
 228. Upukupoito.—Island in mid-stream; stone wall at head of island from left bank closes channel previously left bank; stone wall from right and left banks at foot of island. (Note.—A large deposit of shingle on this island in floods; care will have to be exercised in dealing with this place. It would be of benefit to lengthen the walls at foot.)  
 229. Auokura.—Stone wall from left bank.

Te Rimu.—Left bank.

No.

230. Te Rewa.

231. Whakaruawaka.—Swift run.

232. Ohaoa.—Two stone walls from right bank, one stone wall from left bank.

Parikino.—Kainga left bank (22 miles from Wanganui).

233. Huiarere.—Stone walls from right and left banks.

234. Pungarehu.

235. Tupapa.—Stone walls from right and left banks.

236. Punakawhita.—Stone wall from left bank.

237. Te Kohai.

238. Kanihinihi.—Stone wall right bank.

239. Auohina.

Raorakia (Laodicea).—Kainga left bank (14 miles from Wanganui); Kaurapoa Stream  
left bank. Wanganui River Trust's jurisdiction ends.

The Quarries.

Upokongaro.

Railway-bridge.

Aramoho.

Wanganui.

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