

*Captain Fairchild.*

12th June, 1882.

*Captain FAIRCHILD, examined.*

25. *The Chairman.*] Have you had any experience of the Buller Bar?—Yes; considerable.
26. *Mr. Wright.*] How long is it since you were last at Westport?—Two and a half months. On that occasion I was on the bar in a boat, and not in a vessel.
27. Can you say whether the channel over the bar is tolerably permanent, or whether it is very shifty?—It is not a very shifty channel. In fact it is the least shifty of any bar on the West Coast.
28. To what do you attribute that?—It is not so exposed to the prevailing winds, as it is sheltered by Cape Foulwind. But when it does shift, the alteration that takes place is tremendous. At the same time, things go on for years without a shift taking place.
29. Have you formed any opinion as to the length of training-wall that would be necessary to fix the channel?—It would take a very long distance to make the bar a fixture. The wall would have to be run out a long way on the east side.
30. Do you think that one training-wall on the Western Spit would have any decided effect in improving the channel?—No, I do not think so; the water has a tendency to run to the east. My opinion is that the wall should be on the east side, unless, of course, you are going to have two walls.
31. If you had only one wall, and that on the east side, would not the sand from the westward be driven into the channel by the prevailing winds?—No, I do not think so; because the Steeples and the Cape would cut off the worst of the wind. The south-west is the prevailing wind.
32. What length of training-wall or mole do you think would be necessary to effect any sensible improvement on the bar?—I think the wall should be at least 1,000 feet in length on the eastern side. Anything less than that could not greatly improve the bar.
33. *Mr. Fergus.*] What depth on the bar at spring tide would a wall 1,000 feet long on the eastern side give?—I should say we ought to reckon on 16 or 17 feet. We get 15 feet now, and we have an average of about 12 feet.
34. You think that by extending this wall on the western side 1,000 feet, you would get 16 feet at spring tides?—Yes.
35. You do not think that a wall on the other side is absolutely necessary?—No, I do not. I do not think a wall on the western side would deepen the bar at all, though it might prevent it from getting shallow. On the east side there is a very good bottom for building a wall on.
36. *Mr. Wright.*] What do you consider to be a safe margin between a vessel's bottom and the sand on that bar?—Very little depth is safe. I have frequently touched on the bar. Two-thirds of the time the water is smooth, and a steam collier drawing within a foot of the water on the bar could get in.
37. *Mr. Fish.*] What is the nature of the bar?—It is pretty soft, and if a vessel were to drag a little it would not hurt her.
38. What is the width of the bar?—It is very narrow—not the length of a ship—and a vessel is very soon over it.
39. *Mr. Macandrew.*] Could the bar be dredged at all?—No. All you could take away in six months would be replaced in one night.
40. *Mr. Fish.*] What, in your opinion, would be necessary to make the bar permanently deeper than it is; for instance, would the construction of these walls on the east and west sides make the bar permanently deeper?—I think that if the east wall were run further out it might have that effect, but I doubt whether the channel would be permanently deeper.
41. Do you think it would be necessary to make a wall on the west side?—I do not think there would be any great benefit from doing so. It is the wall on the east side that we want.
42. You do not seem to anticipate any difficulty in shutting out the accumulation of sand from the westward?—The sand does not come in that way, because it is sheltered by the Cape, and the land does not allow the sea to cross the bar to any great extent. I do not think that the westward sand is ever thrown much into the mouth of the harbor. Heavy freshes in the river cause the bar to shift, but I do not attribute the shifting of the bar to the action of the sea at all. I think that most of the deposit we get on the bar at the Buller comes down the river.
43. *Mr. Fergus.*] If you continued the eastern wall for 20 chains, do you think it would make a permanent improvement on the bar?—I should think 12 or 14 feet ought to be depended on.
44. Then what length of wall do you think would be necessary to get vessels drawing 16 feet in?—I am afraid it would be a very hard job to get vessels drawing 16 feet in at all periods of the year. That could be done at spring tide.
45. *Mr. Wright.*] This bar is formed by the sand and shingle brought down the river?—Yes.
46. If piers were put out on each side of the channel would they not have the effect of carrying the drift out to deep water?—Yes, I think it would have the effect of deepening the channel a little, but not sufficiently to admit of the passage of a vessel drawing 16 feet at all times of the year.
47. *The Chairman.*] Have you ever seen a heavy flood in the Buller River?—No, not a heavy one. I may remark that the training-walls in New Zealand have not got on very well. They have been tried at Patea, Napier, and other places, but they have not been satisfactory.

WEDNESDAY, 14TH JUNE, 1882. (Mr. MUNRO in the Chair.)

*Mr. THOMAS MACKAY, examined.*

*Mr. Mackay.*

14th June, 1882.

48. *The Chairman.*] Mr. Mackay, will you give us what information you can with regard to the Westport Coal Field?—Witness produced a map, and having explained it to the Committee, said the lease of the Westport Company has been delayed for the purpose of adding on another block. Altogether that company have close on 1,500 acres on what is called the Waimangaroa Basin. They have three separate blocks averaging about 500 acres each, they have two blocks now, and one they are to get, two are contiguous and the third is adjacent. I should say that all the tinged blocks on this map represent the coal area so far as can be ascertained. The company have only a small section of the Waimangaroa part of