

Waimarino Acclimatisation Society

Report on the Pollution of the Mangateitei Stream - Ohakune

On 24 April 1970 a serious fish kill occurred in the above stream. Samples of water and dead trout were sent to this Department for analysis. Examination of the dead fish revealed no physical evidence to the cause of death. Conflicting reports from the area, gave rise to suspect that leaking oil from a tractor left standing near the stream for approximately four days, was the pollution source.

Water samples collected from the stream on 29 April gave a strong indication that cement might be the cause of the fish kill. These samples were collected when the pouring of cement, during the construction of a new road bridge, was taking place. At the time when the samples were collected large quantities of cement washings were entering the stream. (An estimated 2,000 gallons of water and cement.) When samples were checked by this Department the cement had set in the bottom of the jars.

Further sampling was carried out by this Department on 15 May. Tests on the stream revealed a pH of well over 11.0 (At the time of testing the equipment being used only gave readings up to 11.0. Later testing of the water at the Laboratory gave a reading of 11.6, at this time the suspended solids had settled out.) where concrete washings were entering the stream, and 9.3 about one mile below the works in the Ohakune town park. Results of pH sampling can be seen on Table 1.

It is now certain that the concrete spillage was responsible for the fish kill that occurred in the stream. At the same time the oil leakage cannot be overlooked (this leakage occurred above the bridge construction site), and the Society should approach the persons concerned to see that such pollution, however minor, should not take place again.

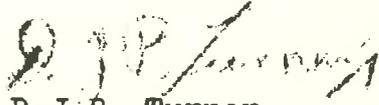
Recommendations

- (1) The society ask the bridge contractor to clean up the present concrete spillage. (If further spillage occur, resulting in a fish kill, the society should then consider taking legal action against the firm concerned.)
- (2) The Society approach the contractor and ask that some form of compensation be made towards the re-stocking of the stream.
- (3) That a check be kept on the construction site to see that Society requests have been carried out, particularly as the spawning season is now under way and further spillages of concrete could result in stopping fish movement upstream, together with the destruction of Trout ova in any redds.

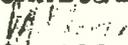
- (4) A report of the fish kill be sent to the Pollution Advisory Council, giving details of how and when the fish kill occurred, together with information on what action has been taken to alleviate further occurrences.

Acknowledgments

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Results of pH testing Mangateitei Stream - 15.5.70

Above construction site	pH	7.5
At site	pH	11.6*
50 yds. below site	pH	10.0
Town park - Ohakune	pH	9.3

* This reading established, from tests
carried out in the Laboratory on
22 May 1970.

TABLE I