

He kaupapa nui te whakaora i ngā taiao ki Aotearoa, otirā ki te ao whānui. Kei te raru haere ō tātou manga, ō tātou roto, otirā ngā taiao katoa, ko te parahanga te take nui.

Kei te tūhura mātou i te ora o te manga e noho tata ana ki tō mātou kura, ko Maringi-ā-wai tōna ingoa. I ngā tau o mua, he repo tōna hanga, haere te wā, haere te wā, ka whakarerekē te hanga o te manga nei. I tini katoa tana hanga, ā, he pāmu e takoto ana ki te wāhi i tū ai te repo ināianei, ā, ko Maringi-ā-wai noa tētehi manga iti e rere ana i te taha o te pāmu.

Ko te take nui o tēnei tūhuratanga, kia whakatairite i ngā manga, ngā awa e rua e noho ana ki Ōtaki, tōna taumata ora. E whakatairite ana ngā awa o Ōtaki ki Pukehīnau, otirā o Maringiā wai.

Ōtaki ki Pukehīnau – He awa makariri, he awa ataahua te awa nei. E noho ana tēnei wāhangā o te awa ki ngā pae maunga o Tararua, ā, he pari ki ūna taha, kua kīkī rawa me ngā kōhatu nui, me te one. Ki au nei, e ora ana te wai ki Pukehīnau.

Maringiāwai – I ngā tau tata nei kua kaha whakarauora tō mātou kura i tēnei manga.

Ko te taurangi e whakatairite ana ahau ko te pH. He inenga te pH e ine i te taumata o te waikawa, te waipāhua rānei o ngā awa. Inā e noho ana te taumata i raro i te 6.5, ka kawa ake te wai, ki te noho ki runga ake i te 7.5 ka pāhua ake te wai. Ko ngā inenga e whakaatu i te wai māori, e noho ana ki waenga i te 6.5 me te 7.5. Ko ētehi āhuatanga e tīni haere te pH, ko te mahana. Inā e mahana te huarere ka kawa te wai, inā e makariri ana te huarere ka pāhua te wai. Ki te kawa, ki te pāhua rānei te wai, ka kore ngā kararehe, ngā tipu hoki e ora. Nā reira ko te whāinga kia māori te āhuatanga o te wai.

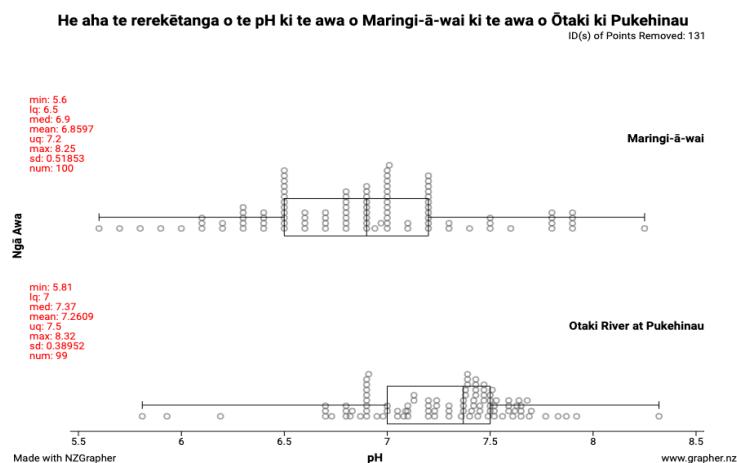
Tukua o pātai rangahau – He aha te rerekētanga o te pH ki te awa o Maringi-ā-wai ki te awa o Ōtaki ki Pukehīnau, ā ,he aha tōna āhuatanga?

Ko ngā raraunga e whakamahi ana e au, kua kohi i a STATS NZ, ko ngā “Data river Sets”. Kei roto i te kohinga raraunga nei ngā kohinga i ngā awa puta noa i Aotearoa. Kāore he raraunga kua kohia i a Maringi-ā-wai, nā konā i whakamahi ngā raraunga o Maringiāwai i kohia e te a koranga pūtaiao o tō mātou kura. E 3 ngā wāhangā i kohi i ngā raraunga i te manga nei, ki te piriti, te puna wai, otirā ki te wāhangā pāmu

I whakamahi au te taupānga Nzgrapher hei whai kōwhiringa mō aku raraunga, ā, ka māwehe ki ngā momo awa, ā, ka whiriwhiria kia 100 o ngā kohinga, kia whakatīnana pai i te taupori.

Kei te whakatairite au i te taumata pH ki ngā awa o Maringi-ā-wai me te awa o Ōtaki ki Pukehīnau. Ko te pH he inenga e ine i te waikawa, me te waipāhua. Mehemea e rahi ake te pH i te 9.5, he iti iho 6.5 ka matemate haere ngā tipu me ngā kararehe. Nā, ko ngā taumata pai ki waenga i te 6.5 me te 8, e mea ana ngā kōrero he waimāori tēnei momo wai.

Tau Waenga – E 6.9 pH te tau waenga o Maringi-ā-wai, ā, 7.37 pH te tau waenga o te awa o Ōtaki ki Pukehinau.



o Maringiāwai, ā, e noho pātata ana ngā raraunga o Pukehinau ki te tau waenga.

Te Īnaki - He āhua ōrite te rahinga o ngā awa e rua, he 2.4 mo Maringiāwai, ā, he 2.5 mo Pukehinau.

He rahi ake te 75% o ngā raraunga o Pukehinau ki te 50% o Maringiāwai.

Te Hanga – He hikuwaru (irregular) te hanga o ngā raraunga o Maringiāwai, ā, he āhua tuari Māori mā Pukehinau. Inā e rahi ake ngā raraunga, ka tino kite i te tuari māori ki roto i ngā raraunga.

Mōwaho – ko ngā mōwaho e kaha kite i te kōwhiringa nei ko ngā mōkito o pukehinau te 5.8 me 5.9. Ki te mahana haere te wai ka kawa ake te wai, koinei pea te take e pēnei inenga.

Hei whakakapinga, he nui ake te tau waenga o Pukehinau, ā, e noho tata ana hoki ngā raraunga ki te tau waenga. Kua marara haere ngā raraunga o Maringiāwai, ā, ko te take i pēnā pea i te mea i kohi ngā inenga, ngā raraunga i wāhi rerekē, te wāhi e puta ana te puna wai, te pāmu, otirā ki te taha o te piriti ki muri i te kura, ā, he āhua paru te wāhangā o te piriti, mā reira ka rerekē ngā raraunga.

Nā, i ngā kōwhiringa i whakamahia e au, e taea te kī he nui ake te pH o Pukehinau ki tērā o Maringiāwai. E mea ana tēnei he māori ake te wai, i te mea te nuinga e noho ki waenga i te 7 me te 8.

E mea ana tēnei e nui ake te toharite o te pH ki te awa o Pukehinau ki roto i tēnei kōwhiringa. Ko te rerekētanga ki waenga i ngā mea e rua ko te 0.47pH.

Rahinga – Ko te rahinga-ā-hauhātanga o Maringi-ā-wai ko te 7.2-6.5 = 0.7, ā, e 7.5-7 = 0.5 mo Pukehinau.

Kua horapa haere ngā raraunga