

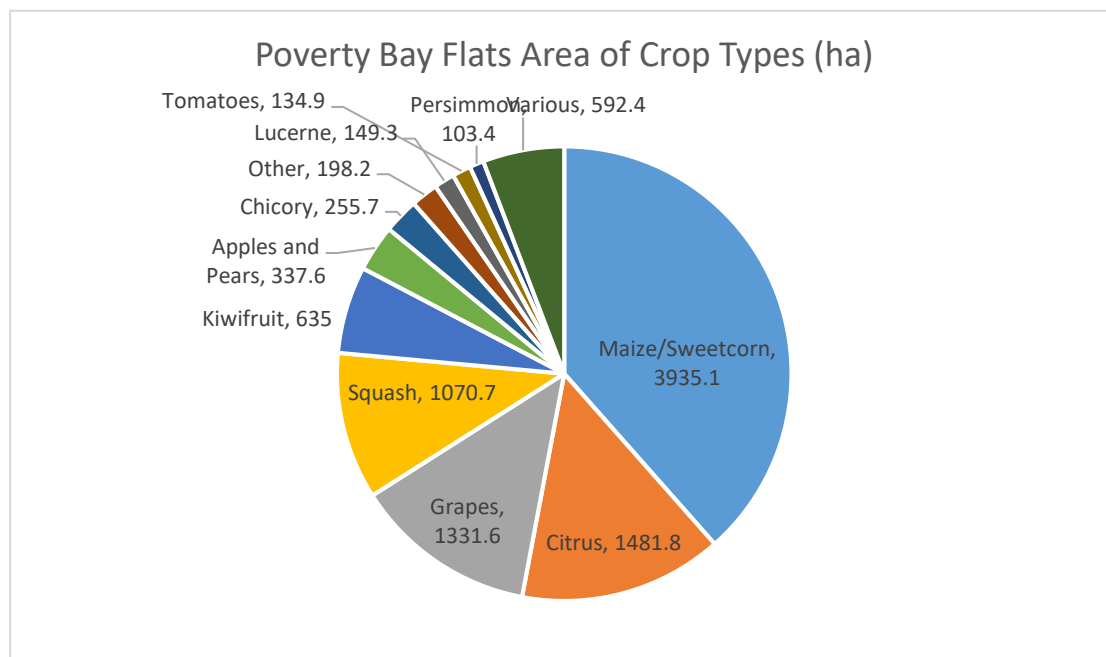
# State of our Environment – Summer Crop Survey 2020/21 Executive Summary

## CROPPING

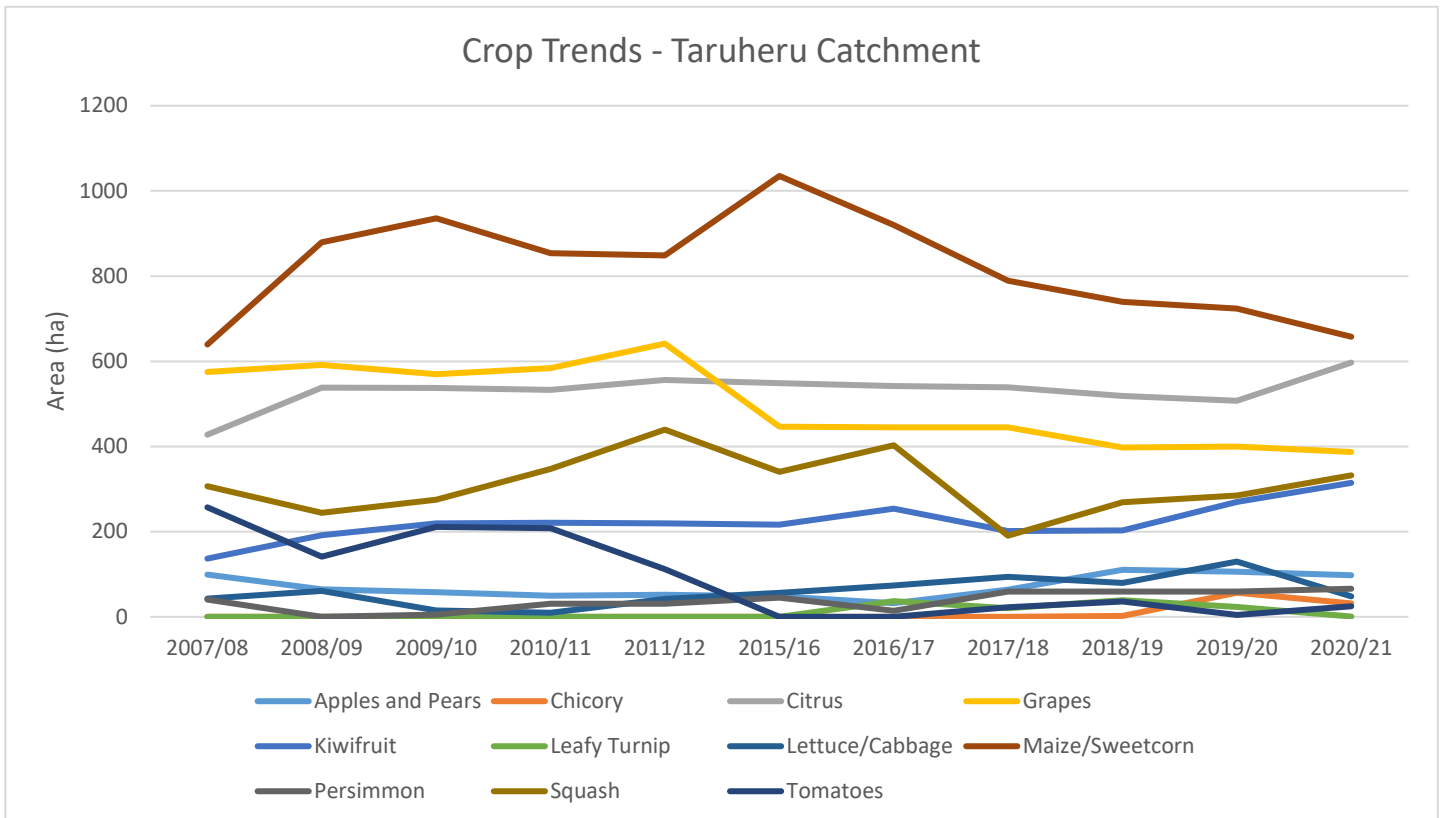
### Horticulture trends on the Poverty Bay Flats

Gently rolling fertile land, the Poverty Bay Flats being the largest area of high-quality fertile soils but also some of the most erodible soils in New Zealand, this being the motivating factors of determining the land use for the Summer Crop Survey. Summer crop trends on the Poverty Bay Flats have been monitored since summer 2007-08. Over this period there have been significant changes to crop types with 'high-value' crops such as kiwifruit, apples, persimmons and citrus displacing lower valued crops.

Poverty Bay Flats have the largest area of cropped land (10,225.8 ha) in the Gisborne District with the most diverse summer crop varieties. The abundant crop type found in the Poverty Bay Flats was Maize and Sweetcorn with 3,935.1 hectares. Citrus was the second most abundant crop in this area with 1,481.8 hectares followed by Grapes with 1,331.6 hectares then Squash with 1,070.7 hectares. Lastly, Kiwifruit was found to be the fifth most common crop in the region covering 635 hectares of land.

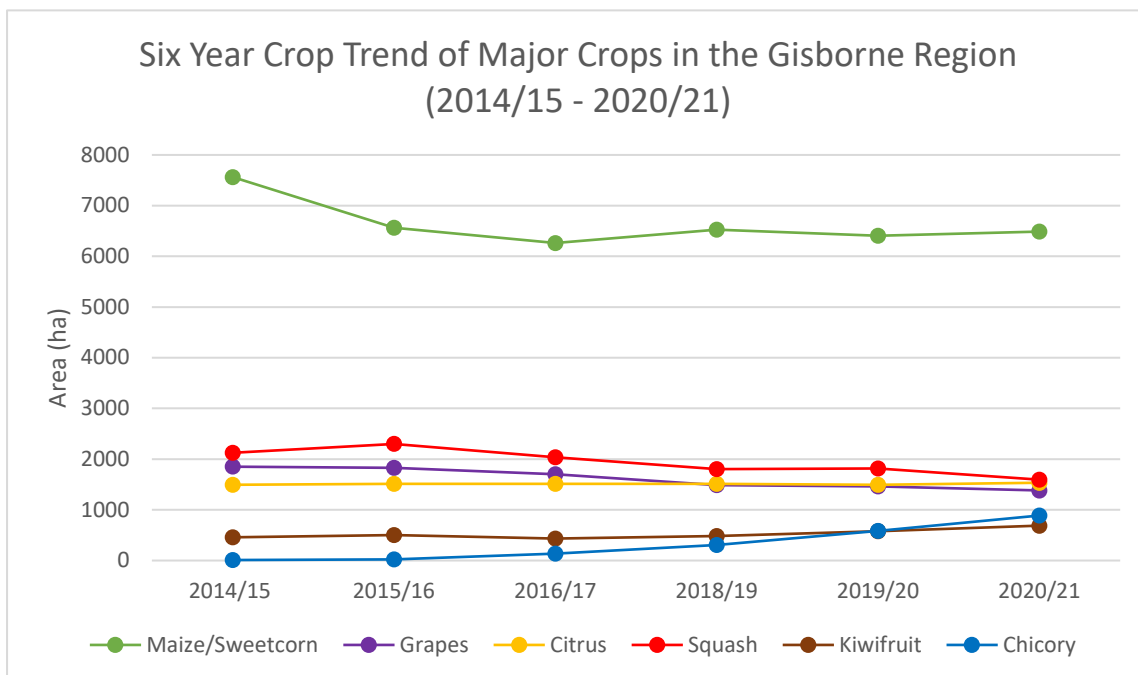
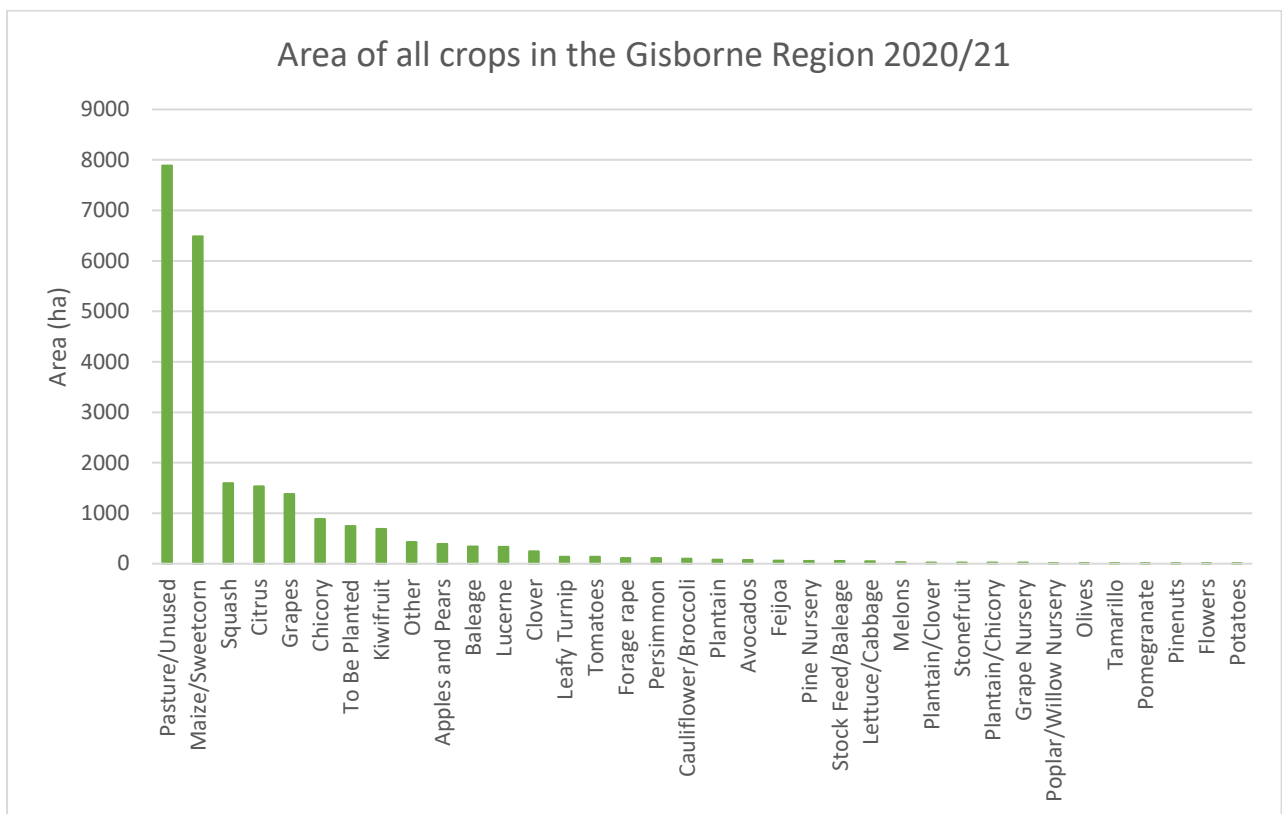


Focus was also taken with the potential water quality and quantity threat that crops have to water ways in the Taruheru Catchment. This initiated from the Tairāwhiti Resource Management Plan (TRMP) rules for protecting freshwater which come into effect on May 1<sup>st</sup> 2021 that relate directly to intensively farmed stock, winter intensive grazing and commercial vegetable growing. Different crop types will have varying impacts on water ways due to higher irrigation and fertilizer requirements, this recognised in the crop survey.



### Summer Crops

The 2020-21 Summer Crop Survey is the sixth survey to detail the type, location and total area of different summer crops in the Gisborne District. A total of 24,068.4 hectares was surveyed, of which 15,432.6 hectares was recorded as summer crops (pasture and tilled land were excluded from this value). Maize and Sweetcorn were the most dominant crop types (6,485.5 ha), followed by Squash (1,595.1 ha), Citrus (1,534.4 ha), Grapes (1,382.5 ha), Chicory (888 ha), and kiwifruit (688.5 ha).



Summer crop trends have been monitored over the whole of the Gisborne District since summer 2014-15, including as far inland as Motu and Matawai, and as far north up the East Cape as Tikitiki. Crops areas outside of the Poverty Bay Flats were the East Coast/Tolaga/Tokomaru which had the second largest area (2,094.5 ha), followed by Te Karaka/Whatatutu (1,915.7 ha), East Cape/Ruatoria (1,014.5 ha), and Motu/Matawai (182.2 ha).

Areas posing a threat to water quality were identified across the region and were classified under the rules in the Freshwater chapter (6) of the TRMP. In the survey these threats were classified as; cultivation within 5 meters of a waterway, cultivation within 10 meters of a waterway, modified watercourses and paddock drains. Water

threatened areas accounted for approximately 437.8 hectares of the total area, amounting to only 1.8% of the total land surveyed.

### **Most Abundant Crop**

Maize and Sweetcorn were the most abundant crop types present in the Gisborne region. Maize and Sweetcorn account for 42.02% of all crops recorded in the Gisborne region (excluding pasture and tilled land), covering 6,485.5 hectares of land. Maize and Sweetcorn were grouped together for the purpose of analysis as they were difficult to identify separately in juvenile form and pose very similar impacts on the environment and waterways.

Overall the trend for Maize and Sweetcorn is decreasing, with a major drop from 2015 to 2016. The trend appears to be plateauing around approximately 6,500 hectares. These trends could be attributed to a large proportion of crop land transitioning to Citrus and Kiwifruit orchards, and other crops particularly around the Poverty Bay Flats.