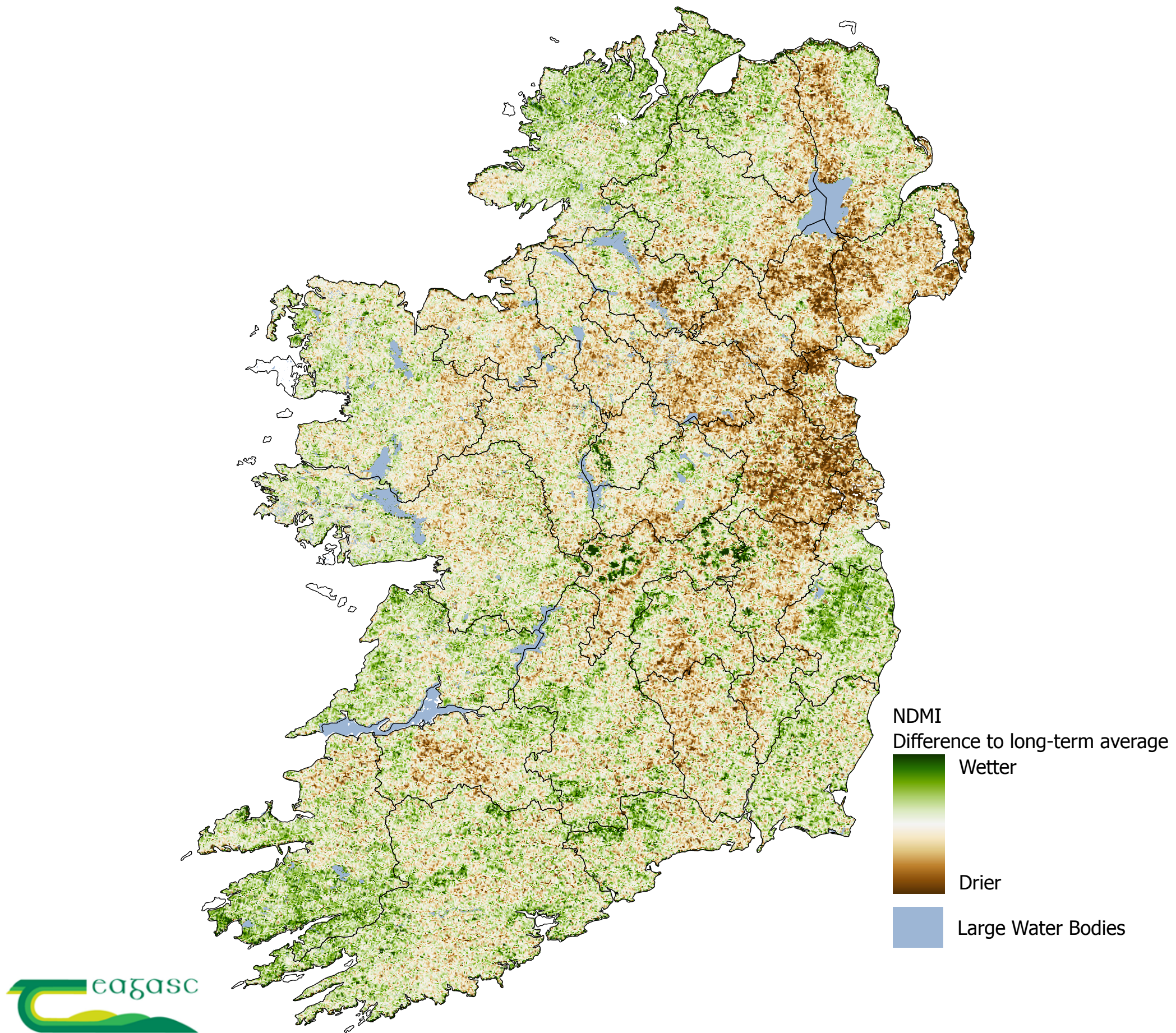


Drought stress following low rainfall levels in late spring 2020



Large parts of Ireland have experienced low rainfalls in the months of April and May. The effects can already be felt and farmers are voicing concerns regarding the prolonged dry spell (Agriland, 5th May 2020).

Indicators calculated from earth observation satellites can be used as proxy for the effects of the drought. The Normalized Difference Moisture Index (NDMI) is an indicator of plant water content. In this map we compare the average NDMI for the month of May between 2020 and a long-term average between 2009 and 2019, where brown tones represent dryer usual plant conditions (and potentially drought stress) and green tones indicates a wetter than usual conditions. The map shows that in general the north-east is most affected by the drought, while the south west is wetter than usual.

Drivers of the spatial variation are likely soils (with heavier soils holding water longer under dry conditions) and weather patterns, but also irrigation practices will increase the NDMI.

Projection: Irish Transverse Mercator

Datasets used:
MODIS MOD09A1 8-day Surface reflectance

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