

Translating Soils Information into Better Land Planning Decisions: An Example from the Peel-Harvey Catchment Western Australia

HEATHER PERCY¹, ANDREW DEL MARCO², TOM LERNER³ AND BRETT FLUGGE³

¹Department of Primary Industries and Regional Development, 1 Verschuer Place, Bunbury WA 6230, Australia

²Peel-Harvey Catchment Council, 58 Sutton Street, Mandurah WA 6210, Australia

³Shire of Murray, 1915 Pinjarra Road, Pinjarra WA 6208, Australia

State planning policy for the Peel-Harvey coastal plain catchment requires decision makers to consider land suitability when assessing proposals for intensive agriculture including for horticulture. This information is not accessible or easily understood by land use planners. We will describe how we translated this information into a model Local Planning Policy (LPP) for the Peel-Harvey. The Peel-Yalgorup system located near Mandurah in the Peel region of Western Australia, is recognised as a wetland of international importance under the Ramsar Convention. Its shallow estuaries, coastal saline lakes and freshwater marshes include the Peel Inlet, Harvey Estuary, Lake McLarty, Lake Mealup and ten wetlands in the Yalgorup National Park. Land clearing, drainage and agricultural development of the Peel-Harvey coastal plain catchment substantially increased nutrient loads in the Peel-Yalgorup system, leading to toxic algal blooms and fish deaths. In response, the state government imposed stringent environmental and planning policies to the Peel-Harvey coastal plain catchment, developed water quality improvement plans and water quality targets for the Peel-Harvey catchment, engineered the Dawesville Cut and supported research and extension on improved fertilisers and soil testing. Perth's vegetable growing areas are progressively rezoned for housing, leading some growers to seek new land in the Shire of Murray (SoM). The SoM had limited experience in assessing horticultural proposals and relied on advice from state agencies such as the Department of Primary Industries and Regional Development (DPIRD) and the Department of Water and Environment Regulation (DWER). The Peel Technical Working Group for Sustainable Agriculture, chaired by the SoM and the Peel-Harvey Catchment Council, worked with local governments in the Peel, DPIRD, DWER and the Peel Development Commission, to develop and test a model Local Planning Policy (LPP) for new and expanded horticulture in the Peel-Harvey. The model LPP used regional soil-landscape mapping, based on the Mandurah Murray land capability study (Wells 1989), and interpreted phosphorus export hazard information and land capability to determine the suitability of each map unit for horticulture. This information was presented in simplified tables in the model LPP. Most local governments in the Peel either use the model LPP or have adopted their own LPP based on the model version. The land suitability and soil-landscape information was adapted for a brochure, developed with vegetables WA, to guide growers seeking to invest to the most suitable land in the catchment.