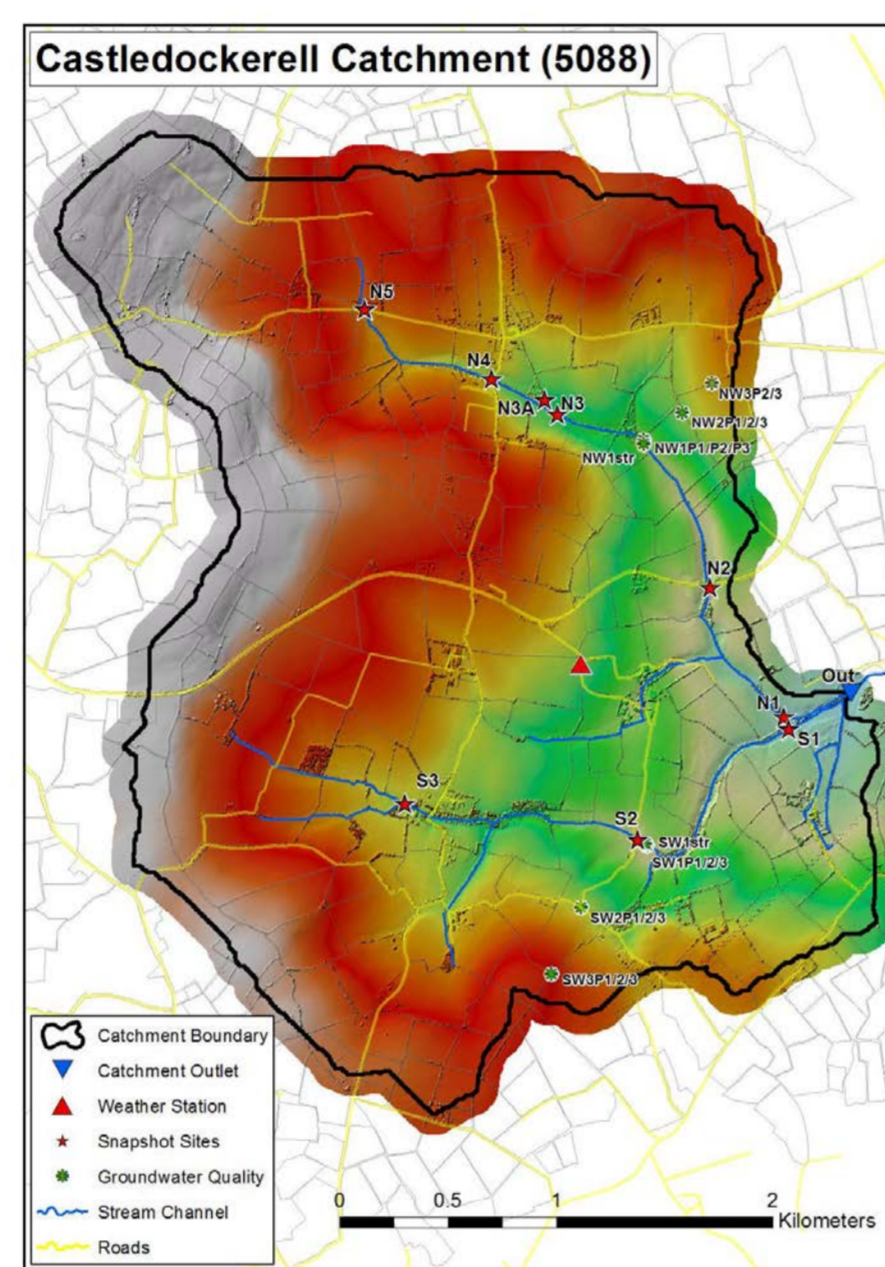
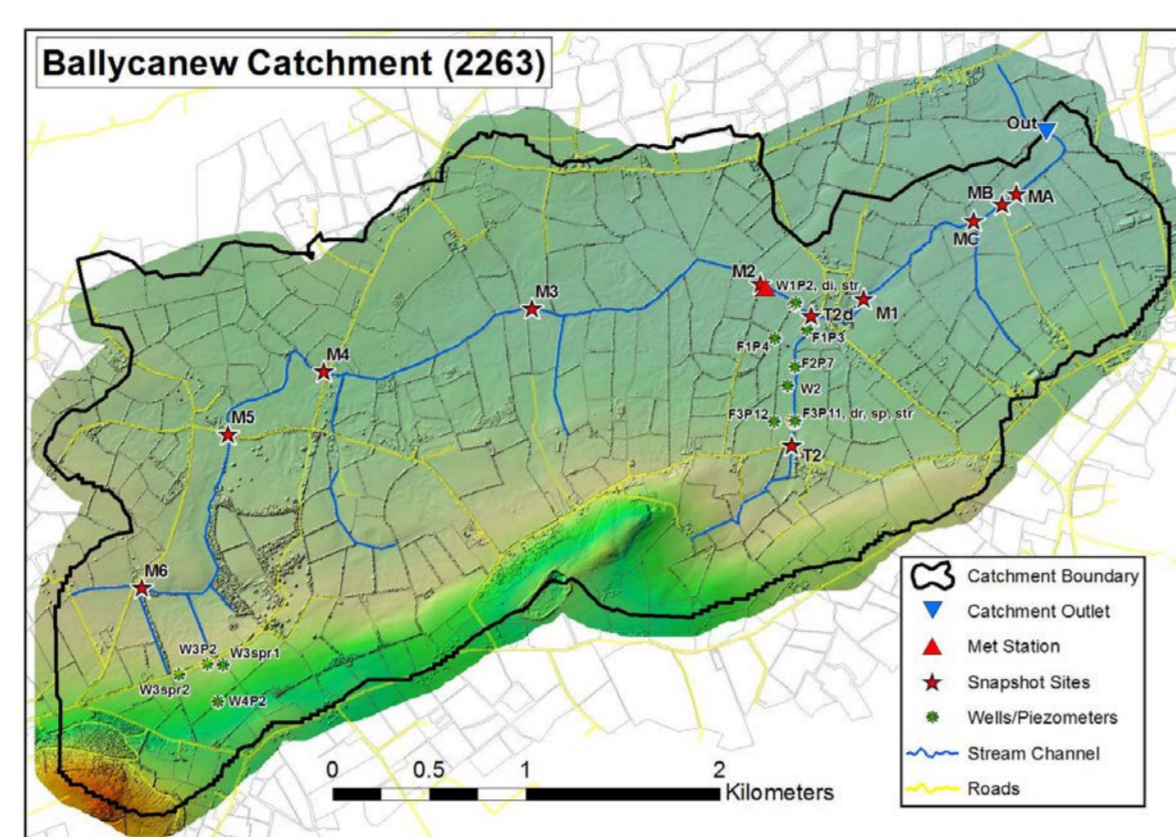
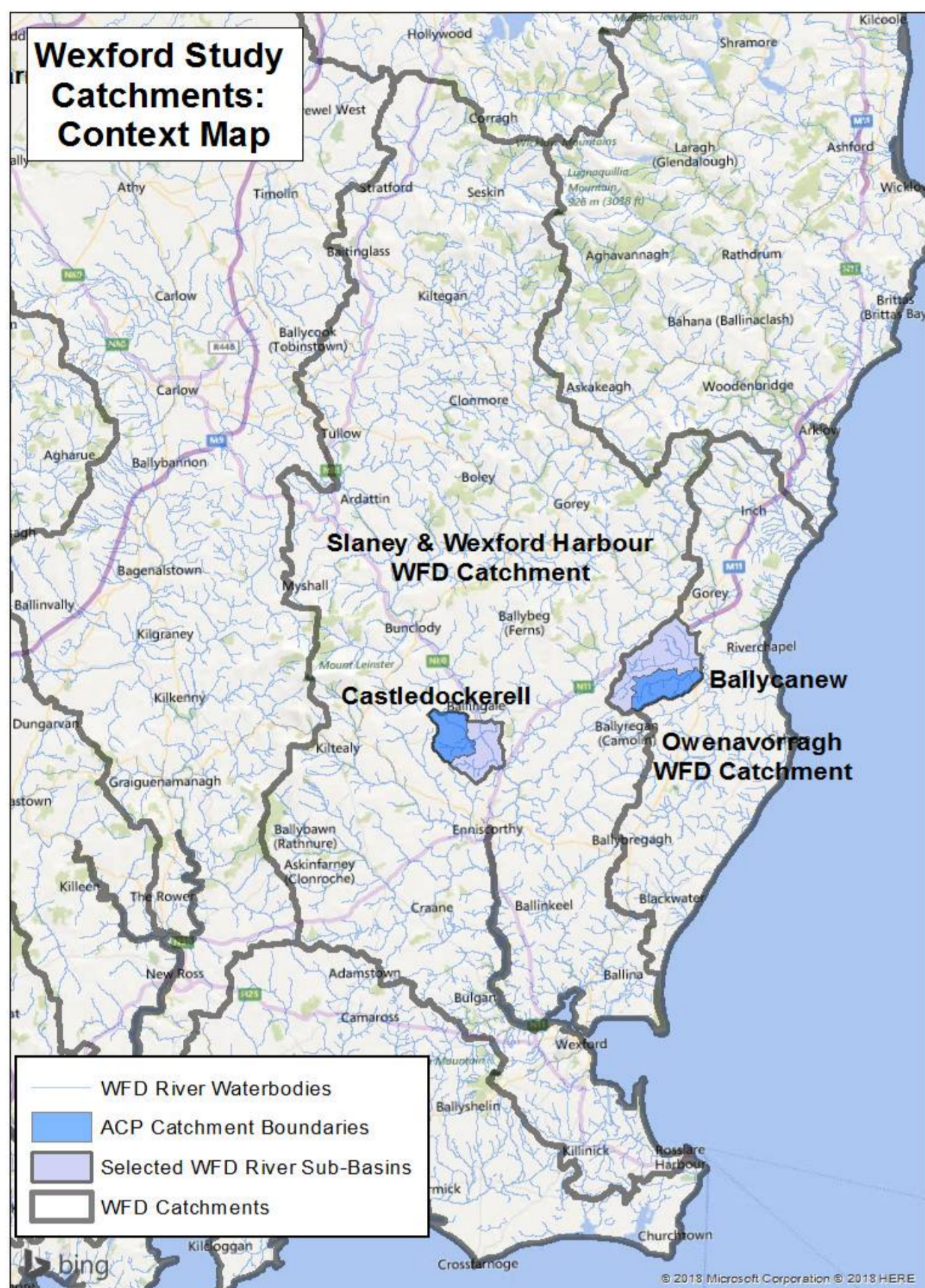




**THE CATCHMENT**

- Farmland in the south-east of Ireland with a maritime temperate climate
- Studies on two data rich catchments: Ballycanew and Castledockerell



**AGRICULTURAL ACTIVITIES**



- Castledockerell catchment is used for agriculture, primarily for cereal crop production, with the remainder used for grass-based production



- Ballycanew catchment is used for agriculture, mostly for grass-based production, with the remainder used for arable crops

**LOCAL CHALLENGES**

The drinking water resources are threatened by

- Nutrients from inorganic/organic fertilisers as well as point sources (e.g. farmyards and septic tanks)
- Pesticides and metabolites from crop production
- Microbials and emerging organic contaminants from organic fertilisers and septic tanks

**MITIGATION MEASURES & BMP's**

- The Good Agricultural Practice (GAP) since 2006 include:
  - Minimum storage requirement for all animal manures and soiled water
  - Obligated buffer strips for water courses
  - "Closed periods" for land spreading
  - Restrictions on the maximum input of nitrogen from livestock manure
  - Restrictions on fertiliser application rates
  - No external nutrient inputs are allowed on the most critical soils
- New measures will be assessed

**PROJECT IMPACT**



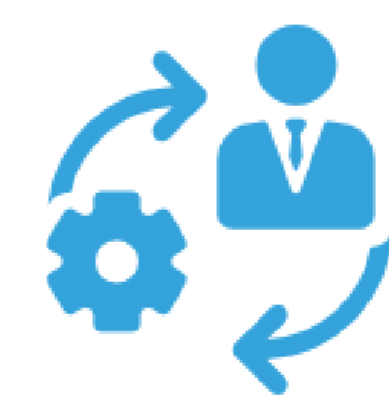
Trends towards better water quality: by awareness and education about nitrate and pesticides, in particular MCPA.



Information stands at college open days, engagement with farmers and householders (private well owners) in discussion groups and meetings, engagement with state bodies, regulators and industries.



A prototype collaborative interactive webtool has been developed to allow individuals to view and interpret waterquality parameters and hence identify problem areas.



35 respondent surveys were completed by farmers during discussion groups, whereby their attitudes to 32 BMP's were assessed indicating the ease and barriers to their implementation.



Collation of existing data from local authorities, service providers and national agencies and the harmonisation with current and future WaterProtect research data (private well sampling, passive river sampling and pesticide field trials).



Irish Water, EPA, Wexford County Council, LAWCO, Government departments (DAFM, DHPLG and DCCAE), Teagasc, National Federation of Group Water Scheme and Landowners (farmers and householders).

**GOVERNANCE**

Legislative steps have been taken to govern the sale and use of PPPs on a European and Irish level. In Ireland, the main regulations that control the marketing and use of PPPs include the Sustainable Use of Pesticides Regulations and the Plant Protection Products Regulations. Pesticides are regulated in Ireland by three closely linked divisions of the Department of Agriculture, Food & the Marine. At present there is a consultation document of the Irish National Action Plan for the Sustainable Use of Pesticides (May 2018) in progress. Training for farmers and other professional users on the protection of drinking water from pesticides is provided. Only a trained and registered professional user can apply pesticides authorised for professional use.

