# The Geothermal Association of Ireland and The International Association of Hydro-Geologists

#### Blackstairs Mountains Field Trip

Commencing at Ballycarney Cross

Meet at the BallyCarney Inn Carpark at 9.45am

Tour commences at 10.00am

Date Friday 9th May 2014



## Blackstairs Mountains Field Trip Agenda

10.00 - Tour of the Teagasc Agricultural Catchments Programme Field Study in the Castledockrell Area – which is analysing the influence of agriculture on water quality in a tillage farming area on free draining soil. Six multi-level ground water wells and high resolution monitoring at the outfall to the Slaney River has provided detailed information on nutrient concentrations & loadings and both nutrient & hydrological pathways.

13.30 - Lunch at the Bunclody Golf & Fishing Club – (Menu prices from €5 to €10) www.bunclodygfc.ie

15.30 – Visit to Borris Lodge Nursing Home – Winner of the Installation of the Year Award for Geothermal Heating System less than 100kW thermal capacity in 2013

18.30 – Dinner at the Waterside Guesthouse in Graiguenamanagh – note Mountain biking available on Saturday morning for this who want to stay over. Rates noted at end of flier. <a href="http://www.watersideguesthouse.com/">http://www.watersideguesthouse.com/</a>



### Agricultural Catchments Programme

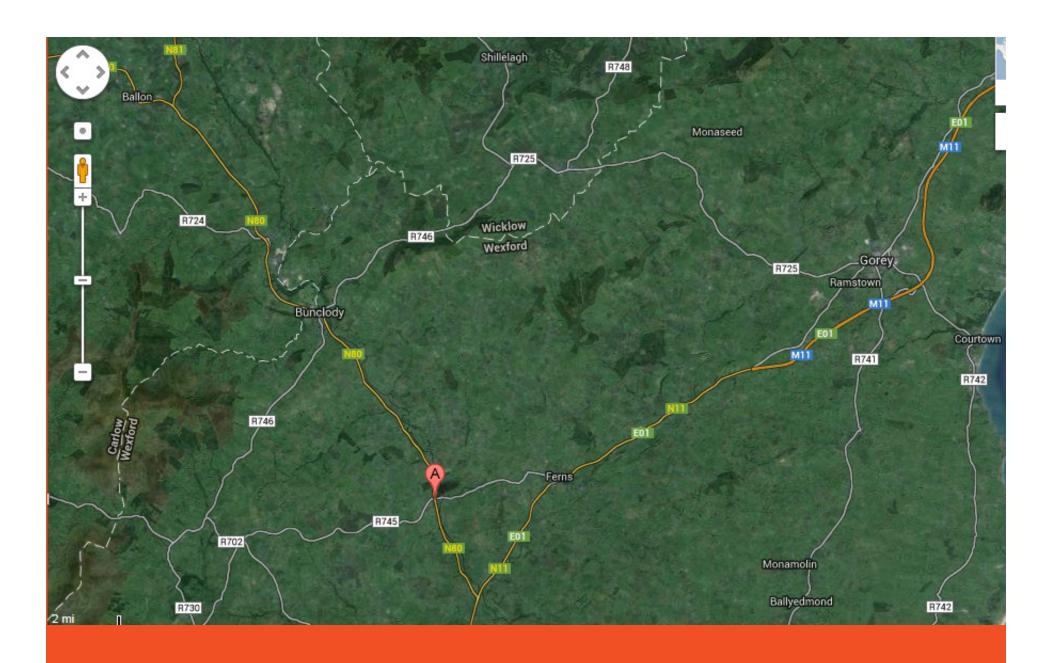
The ACP is studying the impact of the Nitrates Directive action plan on water quality in Ireland. The concept used in this research investigates nutrient transfers from a

- (1) Source,
- (2) Pathway and
- (3) Delivery

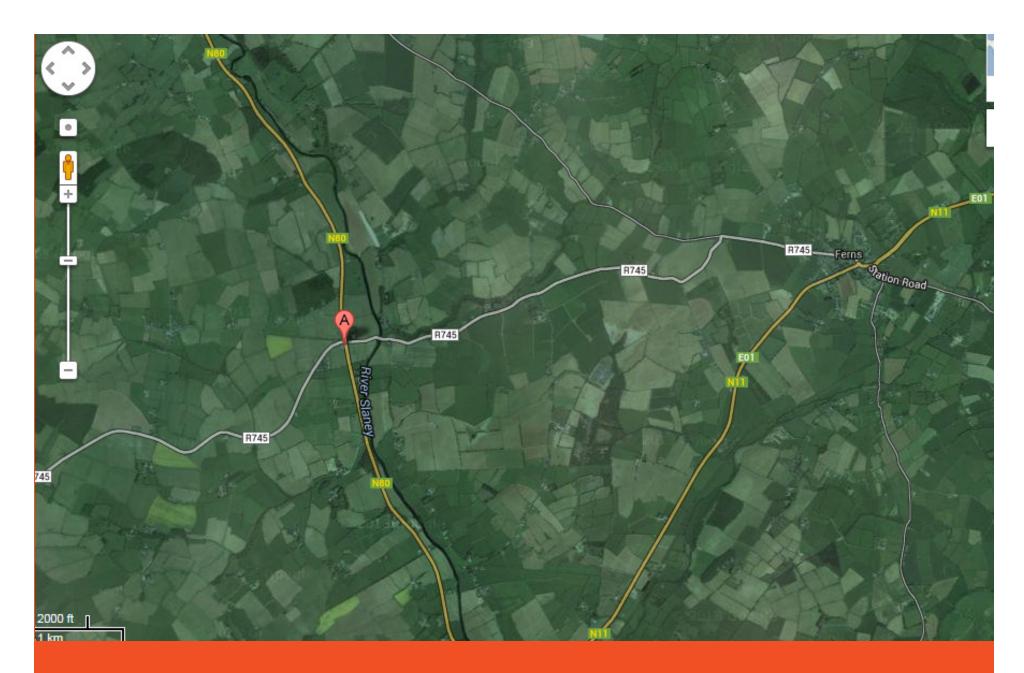
perspective in six catchment areas. The "Pathway" research findings are likely to be of most relevance to those on this field trip.

High resolution (every 10 minutes) monitoring at the outfall has facilitated an understanding and identification of the different pathways taken by both water and nutrients (Phosphorous and Nitrogen) getting into the stream. This method has been verified by "End Member Mixing Analysis" (EMMA). Hydrological pathways were categorised as (a) Quick flow (surface and shallow subsurface), (b) Inter flow (subsoil) and (c) Base flow (deeper ground water). Catchments of different soil types have very contrasting nutrient pathways that do not always mirror the hydrological pathway.

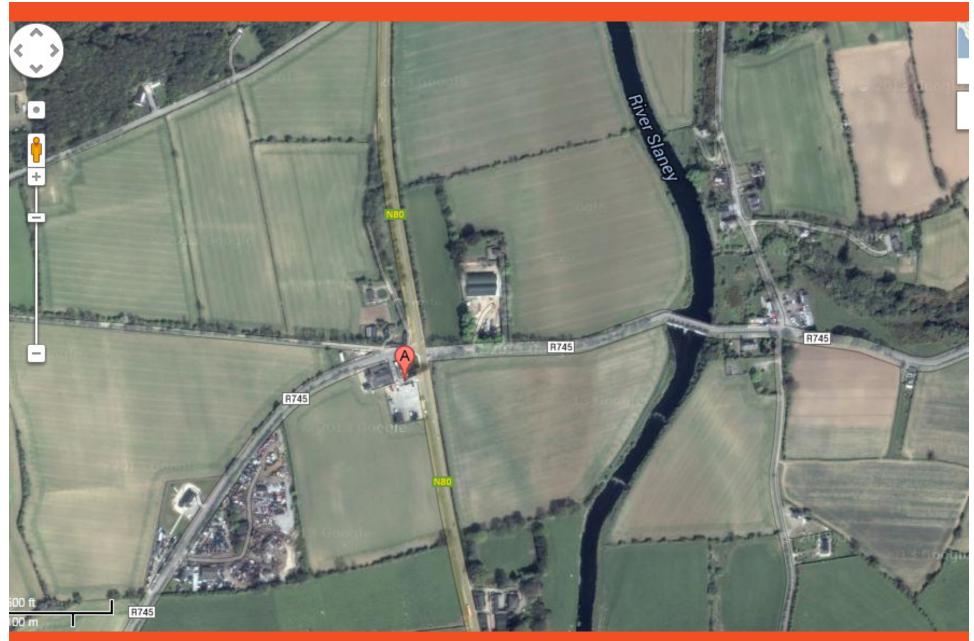








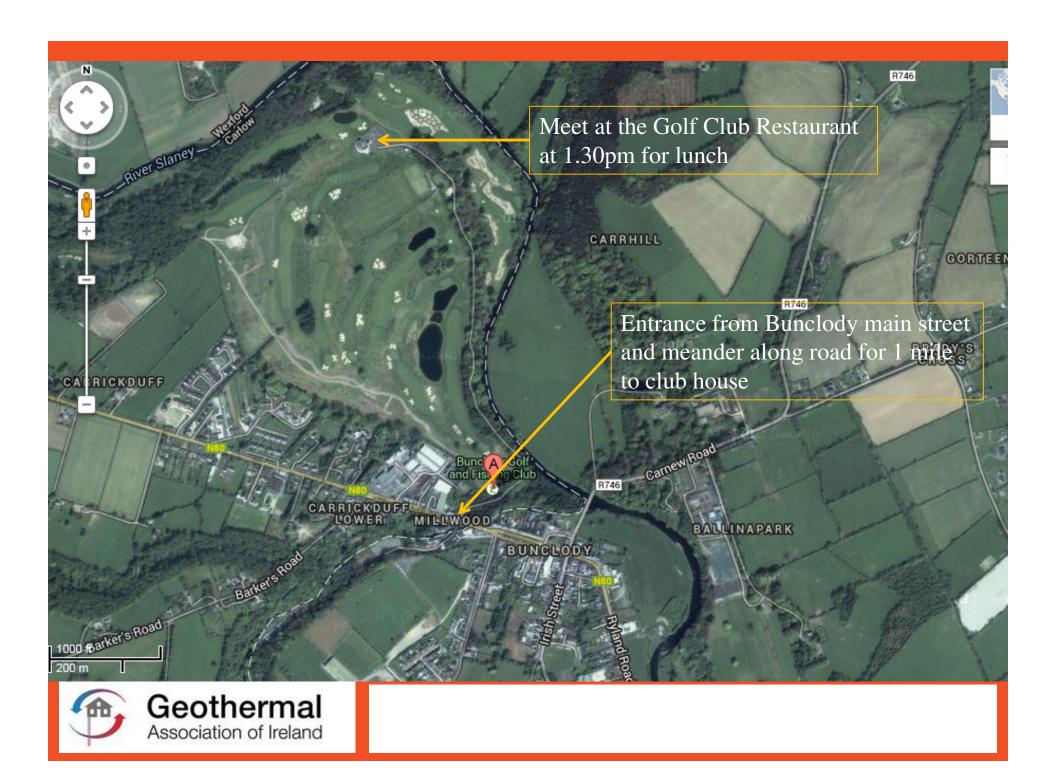


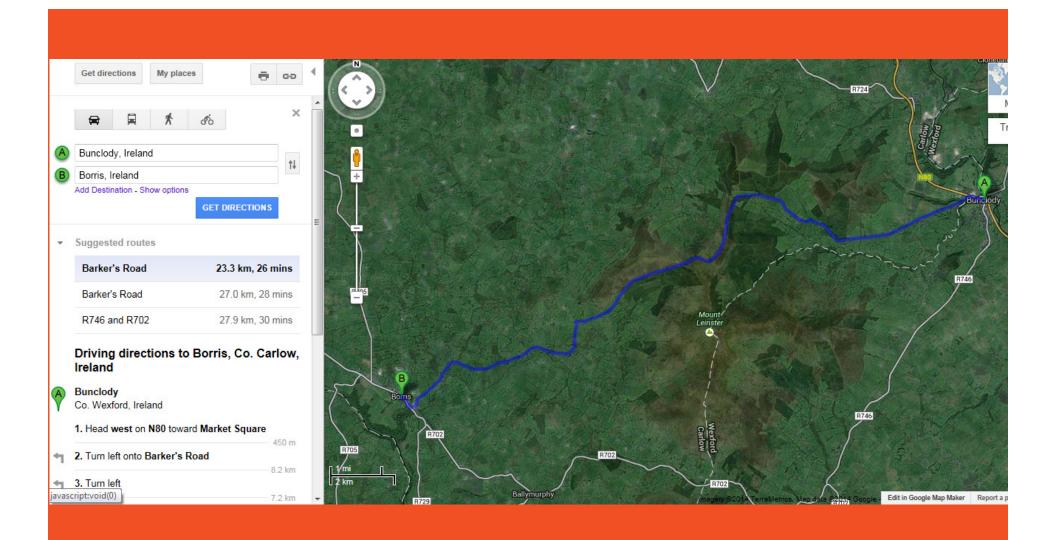






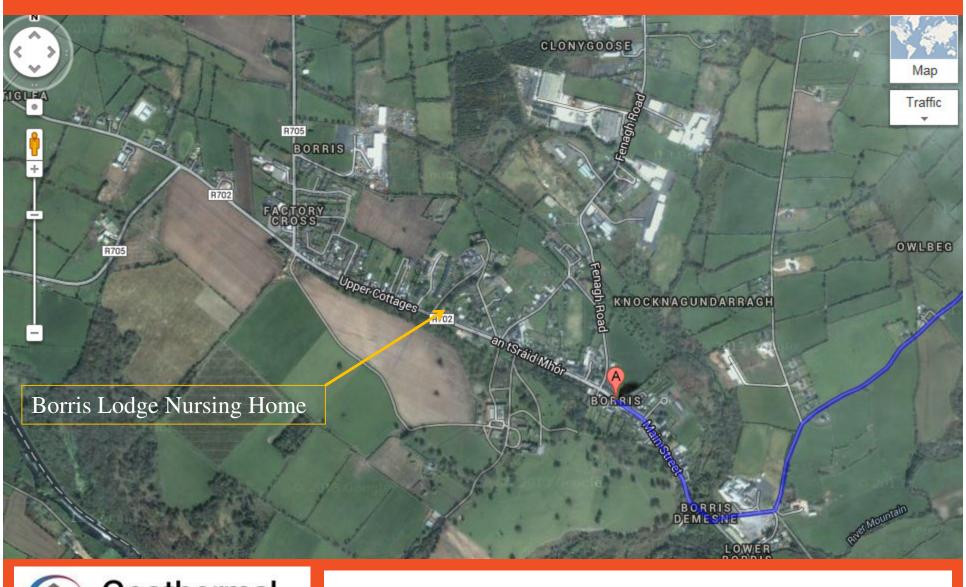




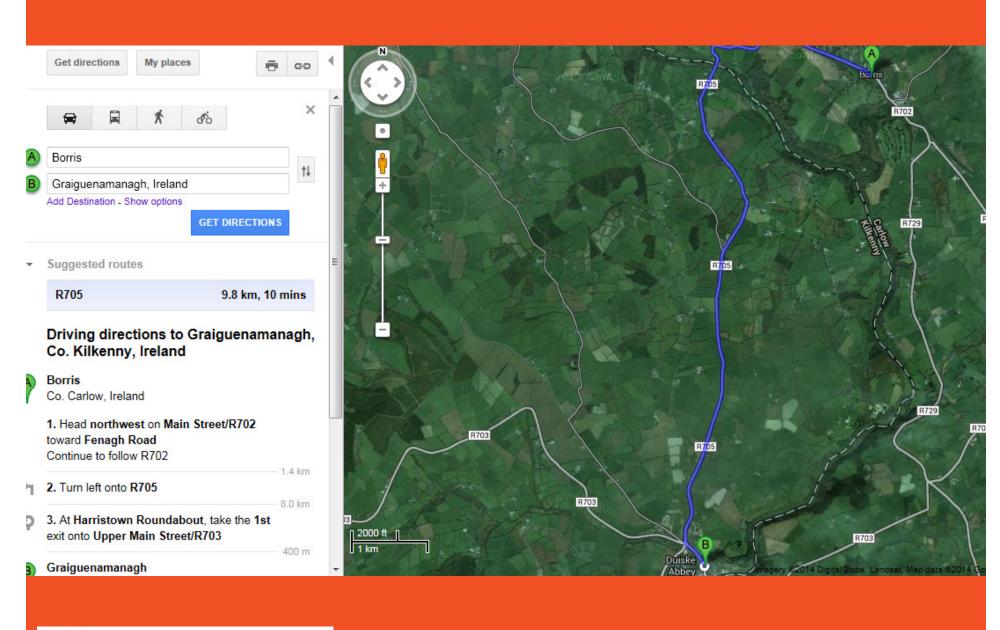




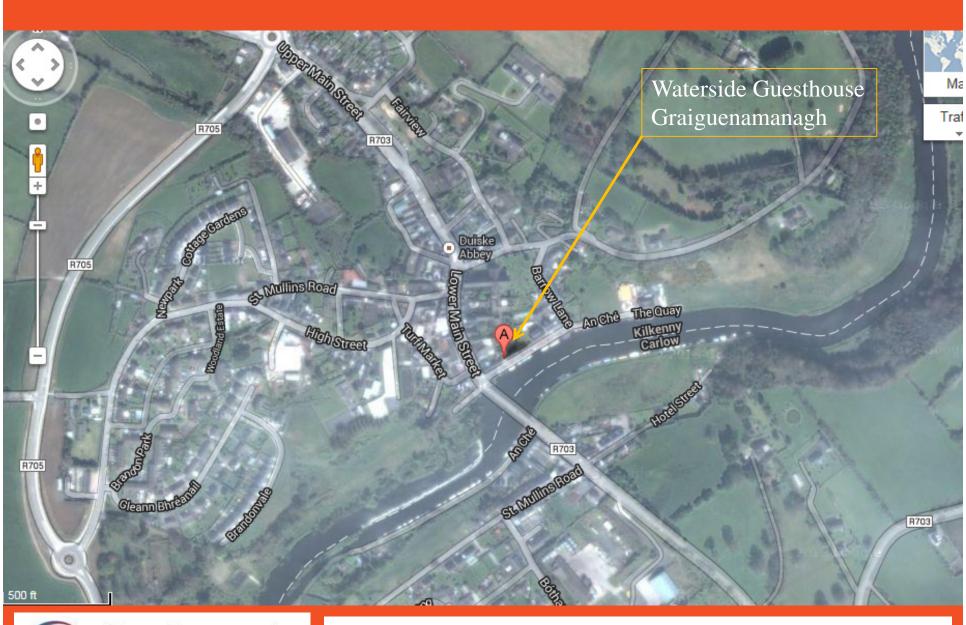
#### Meeting at Borris Lodge Nursing Home at 15.30













#### Waterside Guesthouse & Restaurant Rates

Bed and Breakfast, €39.00 per person sharing, ensuite and overlooking the river

Doubles can go as singles but they would be €59.00 bed and breakfast

Dinner €30 for a la carte starter/main/dessert/tea - coffee

Bike rental €15.00 per person for bike/helmet/hiviz vest

Package B&B/Dinner/Bike €75.00 per person sharing

Maximum numbers for dinner 40 seats

Maximum Rooms available 9 doubles

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