



## Haltwhistle Burn PhD Project

### Understanding Your Monitoring Preferences and Capabilities



- Do you want to be part of an innovative and pioneering research project that is directly related to contemporary issues and could change the way we monitor and manage our catchments across the UK?
- Do you want to understand and care for your local water environment?
- Are you interested in becoming a citizen scientist\*?

*\*A citizen scientist can be someone (in this case a member of a local community) who helps scientists and engineers to carry out research by collecting and sharing data about a natural phenomenon*

This project is encouraging the local community to connect with their local catchment by carrying out simple yet low-cost and innovative monitoring techniques. If you would like to take part in monitoring the water environment within the Haltwhistle Burn catchment then it would be extremely useful to understand what you might like to monitor, where you are able to monitor and when / how often you are willing to do this. By providing this information we can tailor monitoring plans around you and your preferences. A few questions are provided below in order to understand your monitoring preferences and capabilities. If you are **interested at this stage** in taking part in any monitoring activity then please fill out the form below. Contact details are simply required to keep track of preferences. By filling in this form you are not committed to anything – it will only be used to get an idea of what you might like to do.

**Please ensure you have signed the data consent section (at the end) and return any completed forms or direct queries to:** Eleanor Starkey

**By email:** [eleanor.starkey@ncl.ac.uk](mailto:eleanor.starkey@ncl.ac.uk)

**By Post:** School of Civil Engineering and Geosciences, PGR Centre (Room G.03), Cassie Building, Newcastle University, Newcastle upon Tyne, NE1 7RU

**River Watch Meeting:** Bring to the next River Watch meeting (printed forms will be available if you need one during this event)

**Thank you!**

## Understanding your monitoring preferences and capabilities

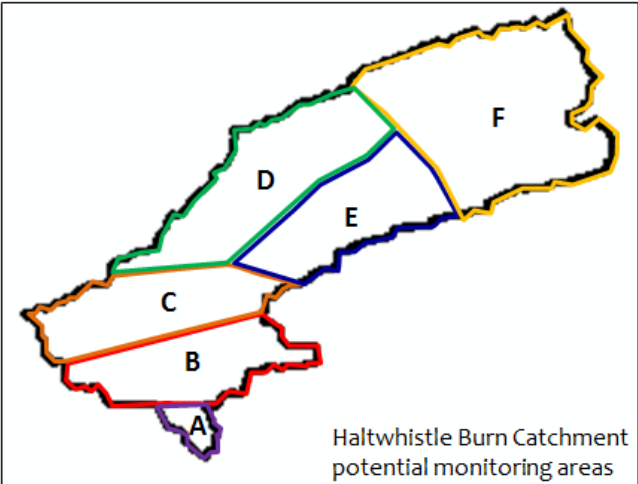
<b>Name:</b>	<b>Telephone / Mobile number:</b>	
<b>Address:</b>	<b>Role / Organisation / Group:</b>	
<b>Email:</b>	<b>Reason(s) for wanting to take part:</b>	

<b>1. What catchment issue(s) or parameter(s) would you be interested in monitoring?</b>  ➤ This might be something that you are interested in, directly affected by or perhaps you would like to learn more about it;  ➤ Remember that all monitoring techniques will be simple to perform, you will be provided with the relevant equipment and supported with training material (e.g. quick guides).	<b>A) Daily rainfall</b> ➤ Using a manual rain gauge in your backyard, in your garden or on your land within the catchment to capture microclimates.	Please tick <input type="checkbox"/>
	<b>B) Description of the weather and impacts</b> ➤ Using a 'weather story' book, Twitter, or choose from a pre-define list of answers	<input type="checkbox"/>
	<b>C) River level (depth)</b> ➤ By reading river level gauge boards, measuring using a ruler or by taking a photograph	<input type="checkbox"/>
	<b>D) River flow (speed)</b> ➤ By taking a video or using a simple float over a specified distance	<input type="checkbox"/>
	<b>E) Flood events and catchment issues</b> ➤ Take photographs and provide descriptions ( <b>e.g. build-up of rubble</b> )	<input type="checkbox"/>
	<b>F) Morphological (landform) change</b> ➤ For example take note of river bank erosion, collapse or sediment build-up by taking photographs and providing descriptions.	<input type="checkbox"/>
	<b>G) South Tyne gravel bars</b> ➤ Provide an indication of change using a reference point or photograph	<input type="checkbox"/>
	<b>H) Blockages under bridges</b> ➤ Take photographs at fixed points e.g. in the Townfoot area	<input type="checkbox"/>
	<b>I) Turbidity (water clarity / cloudiness)</b> ➤ By filling a plastic bottle with stream water, carrying out a visual	<input type="checkbox"/>

	inspection and compare against a chart	
	<b>J) Water colour</b> ➤ Visual inspection and compare against a colour chart for an indication of water quality (e.g. green for excessive algal growth)	<input type="checkbox"/>
	<b>K) Water temperature</b> ➤ Using a thermometer or temperature strips	<input type="checkbox"/>
	<b>L) Water chemistry (pH, nitrate, phosphorus and/or dissolved oxygen levels)</b> ➤ Take a water sample and dip in a test strip e.g. pH strip	<input type="checkbox"/>
	<b>M) Fish species count</b> ➤ Electrofishing activities led by Tyne Rivers Trust	<input type="checkbox"/>
	<b>N) Invertebrate (bug) and river habitat surveys</b> ➤ Activities led by Tyne Rivers Trust	<input type="checkbox"/>
	<b>O) Look out for native and invasive species</b> ➤ Visual inspection (e.g. Japanese knotweed)	<input type="checkbox"/>
	<b>P) Monitor the performance of natural runoff management features</b> ➤ Take photographs at fixed points and provide descriptions.	<input type="checkbox"/>

<p><b>2. Where in the catchment would you be willing to walk / travel to for monitoring purposes?</b></p> <p>➤ Think about where you live and whether you could tie any monitoring activities in with any regular journeys or walks you would normally take? For example do you take a specific and regular route to work, a school run or walk with your dog? Does your property overlook a watercourse within the catchment?</p> <p>➤ Most monitoring locations are likely to be along the watercourses (except for example, rainfall and weather monitoring which can fall outside the Haltwhistle Burn Catchment boundary);</p>	 <p>Haltwhistle Burn Catchment potential monitoring areas</p>
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<p>➤ Take a look at the Haltwhistle Burn catchment (to the right). Which area(s) would you be willing to monitor? A more detailed map of the catchment can be found at the end of this document.</p>	Any Area <input type="checkbox"/> Area A <input type="checkbox"/> Area B <input type="checkbox"/>	Area C <input type="checkbox"/> Area D <input type="checkbox"/>	Area E <input type="checkbox"/> Area F <input type="checkbox"/>
<p><b>3. Would you be willing to go out in the catchment when for example, it is raining to collect data during ‘extreme events’?</b></p> <p>➤ We can point you towards weather forecasts and warnings to keep you informed;</p> <p>➤ You could join up with other members of the community to do this;</p> <p>➤ Remember that extreme events do not usually occur as often and because of this any data collected helps us to understand how the catchment behaves during these events (for example during potential flood events).</p>	Yes <input type="checkbox"/>		No <input type="checkbox"/>
<p><b>4. When would you prefer to monitor?</b></p> <p>➤ Again you could tie this in with regular journeys or walks which you take.</p>	Morning <input type="checkbox"/>  Afternoon <input type="checkbox"/>		Evening <input type="checkbox"/>  Any / all <input type="checkbox"/>
<p><b>5. Typically how often would you be able to monitor?</b></p> <p>➤ Some parameters are extremely variable such as rainfall, river level and river flow. These parameters are usually monitored on a more frequent basis to capture any changes.</p>	More than once a day <input type="checkbox"/> Once a day <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/>		Seasonal <input type="checkbox"/> Annual <input type="checkbox"/> As a one-off activity <input type="checkbox"/> Other (please state) <input type="checkbox"/>
<p><b>6. How would you prefer to submit your data?</b></p> <p>➤ If you do not have a computer, smart phone, tablet or internet connection, you could arrange for another member of the group to submit your data;</p>	Daily / weekly using the Haltwhistle Burn website <input type="checkbox"/> Daily or real-time using Twitter <input type="checkbox"/> Real time using an Android app <input type="checkbox"/> Email your data <input type="checkbox"/> On paper and then post <input type="checkbox"/>		

<ul style="list-style-type: none"> <li>➤ If you have never used a particular method then please remember that full guidance will be provided to help you get started should you wish to try something new;</li> <li>➤ An Android smartphone or tablet is required to use the app. If you do not have one of these devices then we may be able to purchase a few tablets for use across the catchment for monitoring purposes.</li> </ul>	On paper and share during River Watch / community meetings <input type="checkbox"/>	
<p><b>7. Do you have any children, relatives or friends who may be interested in monitoring the catchment?</b></p> <ul style="list-style-type: none"> <li>➤ All age groups are welcome to take part and monitor as often or as little as they want.</li> <li>➤ The success of the project is dependent on public awareness. Please spread the word to family, friends and neighbours!</li> </ul>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If 'yes', please provide details:		
<p><b>Do you have any comments / suggestions?</b></p>		
<p style="text-align: center;"><b>Data consent</b></p>		
<p><b>I am aware that, by filling in and submitting this survey, I am participating in the PhD project carried out at Newcastle University. I acknowledge that any data or information that I provide will be treated with full confidentiality and that, if published or shared outside the research team, will not be identifiable as mine.</b></p>		I agree <input type="checkbox"/> Date: Signature:

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