

Monitoring Plan Form

Monitoring programme name: _____

Developed by: _____ Date: _____

1. What are your goals for monitoring? *Example given*

A. Assess an impact: determine whether land uses upstream of site Hutt001 is having an impact on.

2. Identify organisations (and individuals if possible) that you plan to share your data with. For example, a local environmental care group, school, council, etc.

3. Identify the specific roles in your programme and the individuals responsible for these roles.

Example given

Role	Responsibilities	Person responsible
<i>Project co-ordinator</i>	<i>Design monitoring plan, recruit volunteers, set dates for monitoring, liaise with regional council</i>	<i>Sara Rogers</i>

4. List each monitoring site, its location and the type it represents (impact, control or reference site). Landmarks and access details may include land owners, fences to be crossed, side roads or tracks, and landmarks like bridges or tall trees. Also note locations of nearby flow monitoring sites from which you can estimate streamflow or water level (flow condition) at your sites. *Example given*

Site name	Description	Coordinates		Site type	Landmarks and access details
		Northing	Easting		
<i>Hutt001</i>	<i>Hutt River at Poet's Park</i>	<i>41°7'7" S</i>	<i>175°2'32" E</i>	<i>Impact</i>	<i>100 m upstream of carpark, opposite lone willow</i>

5. Check all variables to be monitored in this programme

Water quality

- Water clarity
- Temperature
- Conductivity
- Dissolved oxygen
- Nitrate
- Phosphate
- E. coli*

Stream life

- Periphyton
- Macrophytes
- Benthic macroinvertebrates
- Fish

Stream habitat

- Velocity and streamflow
- Stream bed composition
- Stream habitat
- Rubbish

6. List what methods you will use for each variable. If your methodology changes over time, list the new method and the date at which the change is made. *Example given*

Variable	Method	Date started
<i>Visual clarity</i>	<i>Clarity tube</i>	<i>9 April 2018</i>
<i>E. coli</i>	<i>MCM E. coli plates</i>	<i>9 April 2018</i>
<i>Visual clarity</i>	<i>Black disc viewer, due to water being too clear for clarity tube</i>	<i>27 July 2018</i>

7. Record how long you plan on monitoring for (e.g., 6 months, 1 year, 5 years) and your anticipated monitoring schedule. Your estimated monitoring date(s) may change with weather conditions but it is still best to plan early. *Example given*

Monitoring programme start date:		Expected duration:	
Monthly monitoring variables:			
Annual monitoring variables:			
Month	Date (estimate)	Date (actual)	Variables
<i>April 2018</i>	<i>9-10 April</i>	<i>10 April</i>	<i>Temperature, visual clarity, E. coli Benthic macroinvertebrates, stream bed composition</i>

8. Data management plan, including how and where you will store maps, background information and data sheets (e.g., someone’s house, website, a shared computer drive) and who will be responsible for data entry and data entry verification.

Where will you store paper copies (maps, data sheet etc.)?	
Will you be entering your data into a database? If so, which one	
How will you ensure accurate data entry in the field?	
How will you ensure the data uploaded to the database are accurate?	
Who is responsible for data entry and data checking?	

Describe how you will use photographs or experts to help verify the accuracy of taxonomic or sample identifications (for *E. coli*, periphyton, benthic macroinvertebrate, fish, and rubbish indicators). *Example given*

Indicator	Photographs or expert identification
<i>E. coli</i>	<i>Photograph of every sample plate.</i>

Attach additional sheet or expand this template as necessary

Attach a map of your sites to your monitoring plan