Version No: Issue Date: Portfolio:

## Horizons Regional Council

# Hydrology Operations Manual



## **Hydrology Field Photos**

regional council

#### Overview:

This is <u>Supplementary</u> to the Station Survey Photos (5-year Survey) or photos taken when modifying sites and installation, which is included in the Station Survey Requirements.

The on-going collection and archiving of photos provides visual insight into the changes to stations over time. The purpose of this SOP is to provide a list of the *minimum* photo requirements that should be taken at every hydrometric site and their storage for long term and multi-purpose access.

Station photos should ideally be taken at similar locations to provide clear presentation of the **Environmental Variable** being measured or at indicative points in the data for the measured parameter.

Please note in the Survey123 app that photos have been taken

### <u>Minimum/Ideal Requirements:</u>

#### Water Level, Flow and Water Quality sites:

- Annual Reach photos (ideally at summer low flows):
  - o Upstream,
  - o Downstream & Control & Recorder Sections,
  - o Bank Vegetation,

*Why: this enables some form of visualisation of the changes over time to the reach that is being measured; and hopefully isolation of significant modification of controls (in-stream & flood).* 

- Ideally Photos should cover over the measurement range:
  - Extreme events (Flood flows & low flows),
  - Mid-range flows (One offs),
  - o Of the section at the time of survey work, ESGs, Orifice Changes (before/after).

*Why: This has the potential to develop a pictorial of flow conditions; which will aid with visualisation over range and possible web tools in the future.* 

#### Rainfall, Met, Air Quality sites:

- Annual Panoramic :
  - Undertaken during summer months.

*Why: to enable isolation of changes (vegetation / buildings) that might influence/effect the Data.* 

• Overgrown rain-gauge enclosures (and blocked Instruments / Primary Reference).

*Why: to enable assessment of influence/effect on the Data and required correction processes. This will aid with decision on keeping records or generating Synthetic Data.* 

### <u>Storage (Final Archiving) Geo-Reference.</u>

All photos will be stored in \\ARES\Hydrology\Hydrology Sites\[Sitename]\Photos\

Sensible name and date the photos; this will make life a little easier for future use.

Consider referencing Stage values at the time of Flood (or mid-range flows) photos. Check that Geo-Reference (location information) and the date taken are correct.

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