

Form ES2 Open channel water measuring device installation, commissioning and verification



Post to:
 Environment Southland
 Private Bag 90116
 Invercargill 9840
 Attn: Compliance Water Metering

or Email to:
 escompliance@es.govt.nz

Phone: 0800 76 88 45
 www.es.govt.nz

This form must be completed by the equipment installer or person verifying the device

Consent number:		
Name of consent holder:		
Address of consent holder:		
GPS location of monitoring station (NZTM format):	Easting:	Northing:
GPS location of take (NZTM format):	Easting:	Northing:
Location of take (if different from monitoring station):		
Verification date:	DD / MM / YYYY	

Monitoring station

Control structure

Type (weir, gate, etc):	
Dimensions:	
Maximum flow expected:	
Installer:	

Water level sensor

Type:	
Make and model:	
Range:	
Installer:	

Datalogger

Make and model:	
Serial Number:	
Recording interval (minutes):	
Data types logged (state units):	
Installer:	

Telemetry

Telemetry installed for consent compliance? Yes No

Data hosted by:

Telemetered daily to ES? Yes No

Commissioning – proceed to next section if already commissioned

Commissioning date: DD / MM / YYYY

Name of person/company commissioning:

Were you able to complete the flow verification at the time of the installation and commissioning?

Yes - Please complete the flow verification details below

No - Please advise the date the flow verification will be completed by:

DD / MM / YYYY

Post commissioning inspection and maintenance

Sensor - Calibration checked? Yes No

Structure - Checked for weed/algae growth, damage to banks, weir damage and leaks? Yes No

Reference levels - Staff gauge zero unchanged? Yes No

Reference levels - Sensor agrees with observed level? Yes No

Review and comment on the appropriateness of inspection and maintenance records:

Comment on any factors that may affect the accuracy of recordings:

Flow verification details

Method:

Equipment used:

Type (Select one):

Commissioning verification (minimum three flow verifications)

Re-verification (minimum one flow verification)

Flume/sensor – calibration/verification

	Water level (mm)	Sensor level (mm)	Sensor distance (mm)
Dry flume test:			

	Water level (mm)	Sensor level (mm)	Sensor distance (mm)	Sensor flow (l/s)	Verification flow (l/s)	Accuracy (%)
Flow rate 1:						
Flow rate 2:						
Flow rate 3:						

Required documents

- Sensor calibration certificate
- Stage to flow rating table
- Results of flow calibration – with calibration certificates of meters used
- Photographs of station showing control and measurement structure
- As-built diagram of station configuration (commissioning only) / or diagram if any changes to original configuration
- Copy of Accreditation Certification (if achieved)

Certification (Select one):

- I/we certify that the above water measuring device has been verified and the measured flow is within 10% of the verification device.
- I/we have found that the installed water measuring device deviates more than 10% from the verified flow.

Recommend remedial action:

Verified by:

Company:

Signed (by verifier):

Email:

Phone:

Date: DD / MM / YYYY

Is the person/company accredited by the National Water Measurement and Reporting – Industry Accreditation Programme?

- Yes
- No