SHORT FORM AGREEMENT FOR CONSULTANT ENGAGEMENT (COMMERCIAL)

BETWEEN: OPUHA WATER LIMITED
Totara Valley Irrigation Scheme
(client)

AND: Environmental Consultancy Services Ltd
(consultant)

Project:	Location:
TOTARA VALLEY IRRRIGATION SCHEME. FLOW AND CONSENT COMPLIANCE MONITORING	**VARIOUS SITES AS SPECIFIED IN SCHEDULE 1 ATTACHED**

SCOPE & NATURE OF THE SERVICES:

AS SPECIFIED IN SCHEDULE 1

PROGRAMME FOR THE SERVICES:

ONGOING MONTHLY, FOR A PERIOD OF THREE YEARS FROM THE DATE OF COMMENCEMENT.

FEES & TIMING OF PAYMENTS:

MONTHLY AS PER SCHEDULE 2 ATTACHED

INFORMATION OR SERVICES TO BE PROVIDED BY THE CLIENT:

AS SPECIFIED IN SCHEDULE 1 ATTACHED

The Client engages the Consultant to provide the services described above and the Consultant agrees to perform the services for the remuneration provided above. Both parties agree to be bound by the provision of the Short Form Model Conditions of Engagement (overleaf) including clauses 1 and 7, and any variations noted below. Once signed, this agreement, together with the conditions overleaf and any attachments, will replace all or any oral agreement previously reached between the parties.

CLIENT AUTHORISED SIGNATORY(IES):	CONSULTANTS AUTHORISED SIGNATORY(IES):
PRINT NAME: Stephen Pagan (OWL)	PRINT NAME: Richard de Joux
DATE: 9/9/14	DATE: 9/9/14

1. Operation and data collection from hydrometric monitoring stations

(as required by resource consents CRC083710.1, CRC083714, and CRC103544.1)

Table 1 : Consents covered in this proposal

Consent	Purpose
CRC083710.1	To divert water from the Opuha River to the Opihi River, take water from the Opihi River and from Totara Valley Creek, and use water for irrigation of land.
CRC083714	To discharge water from the Totara Valley Irrigation race into the Tengawai River
CRC103544.1	To dam water adjacent Totara Valley Road (Condition 19, monitor storage level)

The instrumentation installed on the Totara Valley Irrigation Main Race Intake is linked to hydraulic gate controls that can be remotely operated using telemetry. The gate control equipment and software have been provided by NIWA. Environmental Consultancy Services Ltd can provide routine checks and maintenance on this equipment, but the scope of this proposal does not include operation and maintenance of gate control systems.

a. Services provided

The Client owns and operates the following hydrometric sites:

Site	Map Reference	System requirements
Main Race Intake	J38:4945-6810	Flow / Telemetry / Gate control
Main Race discharge to Tengawai River	J38:5828-6014	Flow / Telemetry
Dam water (Gardner's Pond)	J38:6160-7290	Telemetry (Water Level)

Conditions 9, 10, 11, 12 & 13 of consent CRC083714 specify that water quality samples are required to be taken from the following sites at monthly intervals whenever water is being taken:

Site	Location	Sample for
Main Race immediately below Intake	J38:4950-6800	NNN, NH4N, DIN, DRP, Ecoli, Turbidity, Temp, DO
Race discharge prior to entry to Tengawai River	J38:5829-6012	NNN, NH4N, DIN, DRP, Ecoli, Turbidity, Temp, DO
Tengawai River upstream of discharge	J38:5833-6019	NNN, NH4N, DIN, DRP, Ecoli, Turbidity, Temp, DO
Tengawai River downstream of the discharge	J38:5861-6042	NNN, NH4N, DIN, DRP, Ecoli, Turbidity, Temp, DO

With respect to the operation of hydrometric sites, the Contractor is responsible for data collection, carrying out minor site maintenance, an annual site inspection, and site checks after flood events. The Contractor is also responsible for the provision of consumables such as log books etc.

The Contractor shall prepare a provisional rating curve for each of the telemetered sites within one month of initial startup.

The Client is responsible for the costs of servicing, repair and/or replacement of all site instrumentation and recording structures.

The Client shall maintain any necessary agreements or contracts with landowners that relate to access onto private land, and shall ensure that the Contractor has full and reasonable access to all sites to enable the carrying out of the duties and functions referred to in this contract.

In addition to the outlined work programme, extra field work required to measure rates of flow losses/gains in races, associated data processing and/or analysis will be based on actual time and costs as detailed in Schedule 2.

b. Standards

The Contractor supplies to the Client the real time data on the basis that it is the best estimate available at the time. It is recognised that hydrological data can be subject to rapid and frequent changes during flood events, or can change over time due to weed growth within distribution races. The accuracy of the data collected can only be verified at a later date once sufficient data can be obtained to adequately describe the stage/discharge rating. The provision of standard weir/gate structures, which are present on Main Race Intake and Tengawai River discharge help to stabilise the flow rating.

1. Field work and data processing shall be carried out in accordance with the relevant procedures set out in sections 2, 3, 4 and 5 of the NIWA "Hydrologist's Field Manual" and sections 2.1, 2.2, and 3 of the NIWA "Office Practice Manual", respectively.

2. Installed equipment and operating procedures for water level stations shall be such as to ensure that 95% of instantaneous water level measurements are resolved to within ± 5mm for capacitive sensors, and to within ± 3mm for encoder sensors.

3. At any site there should not be more than 4% (approx. 14 days) missing record in a given calendar year. Incidents beyond the Contractors control (eg vandalism or major storm event) may require this standard to be temporarily foregone for the period of affected record.

4. Flow gaugings shall be carried out in accordance with International Standard ISO 748:1997(E). For all flow measurements carried out using an electronic gauging logger which records the RMS variation of velocity, the velocity of water at each point of observation shall be measured for a minimum of 30 seconds provided that the RMS variation of velocity is less than 1%. If the RMS variation of velocity exceeds 1%, or is not monitored, the minimum observation period shall be 40 seconds.

5. Flows shall be measured at a frequency specified by reference to flood event frequency, bed stability, and historical evidence.

6. At any one measuring station, 90% of all flows estimated from a stage record with a rating applied shall be within ± 8% of the actual values.

c. Frequency of site visits

All water level recording sites shall be routinely visited once per month during each irrigation season, and gauged as required to maintain a flow rating. A total of eight (8) site visits per season are required. Any costs for additional site visits to re-establish ratings are provided in Schedule 2.

d. Availability of data

Data will be available on a provisional basis using Environmental Consultancy Services Ltd's existing telemetry system. The Contractor shall notify the Client of the accuracy of the current stage/discharge rating data at regular intervals, and the data will be classified as provisional until sufficient flow gaugings have been carried out to accurately define the stage/discharge rating.

It is the Consultants responsibility to ensure that all data, ratings and variables as provided to the Client are at all times the most recently accurate values obtainable.

e. Annual data reporting to Environment Canterbury

The rate at which water is taken from the Opihi River and the rate at which water is discharged into the Tengawai River are required to be recorded and reported annually to Environment Canterbury.

Water use reports will be prepared by the Consultant and forwarded to the Client and to Environment Canterbury at the relevant time periods. The preparation of such reports may require additional data processing and will therefore be invoiced annually based on actual time required to produce the reports.

2. Remote Access (Telemetry) Services

a. Services Provided

1. The Contractor shall provide the necessary computer hardware and associated telemetry software (FLOSYS / TIDEDA / HILLTOP) to enable the automated remote access of data from the hydrometric sites, and arrange to provide the real time data to the Client and to Environment Canterbury if required.

2. The Contractor will ensure that the Client is provided with real time telemetry access to the telemetered data via an internet link to the Contractor's web site.

3. Data transfer fees imposed by Vodafone / Telecom apply throughout the year regardless of whether water is being taken or not. Telemetry fees are based on annual charges which are then "annualised" into 8 monthly payments.

b. Standards and frequency of information

1. All hydrometric sites operated for the Client will be automatically polled at ½ hourly intervals and the information will be available on the Contractor's computer system. Data is displayed as New Zealand Standard Time.

2. The Contractor supplies the real time data on the basis that it is the best estimate available at the time. It is recognised that hydrological data can be subject to rapid and frequent changes caused by flood events, and that the integrity of the data can only be verified at a later date once sufficient data can be obtained to adequately describe the stage/discharge rating.

3. Water Quality Sampling
(as required by conditions 9, 10, 11, 12 & 13 of resource consent CRC083714)

a. Services Provided

1. The Contractor shall arrange for the collection of water samples, which shall be sent to an independently accredited laboratory for the required analyses. The Contractor shall ensure that the results provided from the laboratory are forwarded to the Client within 2 working days of receipt.

b. Standards and frequency of information

1. All laboratory analyses and reporting shall be undertaken by an independently accredited laboratory. Any field meters used for water quality parameters shall be calibrated prior to use. Records of calibrations shall be kept in accordance with Good Laboratory Practices (GLP) guidelines.

2. All results and reports shall be made available to the Client within 2 working days of receipt.

4. Other Services

The Consultant shall, from time to time, carry out other duties related to resource consent monitoring and/or operational matters as requested by the Client. Such services shall be provided on a time and cost basis at the rates provided in Schedule 2 of this contract.

SCHEDULE 2 COSTS AND PAYMENT

The following costs will be paid by the Client to the Consultant for the provision of services indicated in Schedule 1 of this contract for the months of September to April of the following year inclusive. All costs are exclusive of GST.

1. Routine operation of 3 hydrometric sites / Laboratory / courier fees $1695.40 per month
2. Telemetry operation $255 per month
3. Provision of miscellaneous or additional services at $95/hour (field work), $145/hour (technical/resource management services), vehicle $1.10/km and materials at cost plus 10%

TERMS:

Payment for services provided under items 1 and 2 above shall be invoiced in equal amounts of **$1950.40** plus GST per month for eight months each water year (1st July to the following 30th June).

Payment shall be made by the Client in accordance with clause 5 of the Short Form Model Conditions of Engagement (appended) and shall be directly credited to the nominated bank account of the Consultant.

All services provided under item 3 above will be invoiced at the completion of the month in which costs are incurred. Payment shall be made by the Client in accordance with clause 5 of the Short Form Model Conditions of Engagement (appended) and shall be directly credited to the nominated bank account of the Consultant.

Default interest shall be charged on overdue amounts at the rate of 2.5% compounding monthly.

SHORT FORM MODEL CONDITIONS OF ENGAGEMENT

1. The Consultant shall perform the Services as described in the attached documents. The Client and the Consultant agree that the Services are acquired for the purposes of a business and that the provisions of the Consumer Guarantees Act 1993 are excluded in relation to the services.

2. In providing the Services the Consultant shall exercise the degree of skill, care and diligence normally expected of a competent professional.

3. The Client shall provide to the Consultant, free of cost, as soon as practicable following any request for information, all information in his or her power to obtain which may pertain to the Services.
The Consultant shall not, without the Client's prior consent, use information provided by the Client for purposes unrelated to the Services. In providing the information to the Consultant, the Client shall ensure compliance with the Copyright Act 1994 and shall identify any proprietary rights that any other person may have in any information provided.

4. The Client shall pay the Consultant for the Services the amount of fees and expenses at the times and in the manner set out in the attached documents. Where this Agreement has been entered by an Agent (or a person purporting to act as Agent) on behalf of the Client, the Agent and Client shall be jointly and severally liable for payment of all accounts due to the Consultant under this Agreement.

5. All amounts payable by the Client shall be paid within twenty (20) working days of the relevant invoice being mailed to the Client. Late payment shall constitute a default and the Client shall pay default interest on overdue amounts from the date payment falls due to the date of payment at the rate set out in Schedule 2 of the attached documents.

6. Where services are carried out on a time charge basis, the Consultant may purchase such incidental goods and/or Services as are reasonably required for the Consultant to perform the Services. The cost of obtaining such incidental goods and/or Services shall not exceed the sum of $1000 per annum and shall be payable by the Client. The Consultant shall maintain records which clearly identify time and expenses incurred.

7. The liability of the Consultant to the Client in respect of his or her Services for the project shall be limited to the greater of five times the value of the fees (exclusive of GST and disbursements) or the sum of $100,000. The Consultant acknowledges that the Consultant currently holds a policy of Professional Indemnity Insurance for the greater amount of $NZI00,000 or five times the value of the fees (exclusive of GST and disbursements). The Consultant undertakes to take all reasonable endeavours to maintain a similar policy of insurance for six years after the completion of the services.

8. Neither the Client nor the Consultant shall be considered liable for any loss or damage resulting from any occurrence unless a claim is formally made on him or her within six years from completion of the Services.

9. The Consultant shall only be liable to the Client, either in contract or in tort, for direct loss or damage suffered by the Client as the result of a breach by the Consultant of his or her obligations under this Agreement.

10. The Client may order variations to the Services in writing or may request the Consultant to submit proposals for variation to the Services.

11. The Consultant shall retain copyright of all intellectual property prepared by the Consultant. The Client shall be entitled to use them or copy them only for the Works and the purpose for which they are intended. The ownership of data and factual information collected by the Consultant and paid for by the Client shall, after payment by the Client, lie with the Client. The Client may reproduce drawings, specifications and other documents in which the Consultant has copyright, as reasonably required in connection with the project but not otherwise. The Client shall have no right to use any of these

documents where any or all of the fees and expenses payable to the Consultant have not been paid in accordance with this Agreement. .

12. The Consultant has not and will not during the term of this Agreement or at any time after it, assume any obligation as the Client's Agent or otherwise which may be imposed upon the Client from time to time pursuant to the Health and Safety in Employment Act 1992 ("the Act") arising out of the engagement. The Consultant and the Client agree that, for the purpose of the Act, the Consultant will not be the person who controls the place of work in terms of the Act.

13. The Client may suspend all or part of the Services or terminate the Agreement by notice to the Consultant who shall immediately make arrangements to stop the Services and minimise further expenditure. Suspension or termination shall not prejudice or affect the accrued rights or claims and liabilities of the parties.

14. Disputes shall first be referred to conciliation for settlement. Unresolved disputes shall be referred to arbitration in accordance with the Arbitration Act 1908.

15. This Agreement is governed by the New Zealand law, the New Zealand courts have jurisdiction in respect of this Agreement, and all amounts are payable in New Zealand dollars.

16. The Contractor shall undertake all services described in the attached documents in a manner that at all times minimises the Client's costs. Activities that are not in accordance with this provision require the Client's prior approval in writing.

17. Addresses for any correspondence on any matters in relation to this contract shall be:

For the Client:	For the Contractor
Totara Valley Irrigation Ltd	Environmental Consultancy Services Ltd
c/- Opuha Water Ltd	Attention: R T de Joux
875 Arowhenua Road	P O Box 952
RD4	TIMARU
Timaru 7947	

18. This contract shall remain in force for a period of three years, with a right of renewal and shall expire on the date indicated on the attached Short Form Agreement for Consultant Engagement.