Interreg
Latvija–Lietuva
European Regional Development Fund

EUROPEAN UNION

Ecological flow estimation in Latvian – Lithuanian Transboundary river basins (ECOFLOW), LLI-249

First Field Survey Report: Venta River Basin District 2017-2019 Latvia and Lithuania (updated version)

ECOflow

February 2019

ABBREVIATIONS

E-Flow	Ecological Flow
EU	European Union
FFS	First Field Survey
HPP	Hydropower Plant
GU	Geomorphic Unit
LAS	Latvian Elevetion System
LEGMC	Latvian Environment, Geology and Meteorology Centre
MS	Monitoring station
RB	River Basin
RBD	River Basin District
WFD	Water Framework Directive

TABLE OF CONTENTS

1. INTRODUCTION

The main objective of the First Field Surveys (FFS) is to cover the data gaps in the assessment of HPP pressure and river habitat estimation within trans-boundary Venta RBD, in order to evaluate ecological flow (E-flow) based on the principles and approaches of the EU Water Framework Directive (WFD), and create the WFD compliant Methodology for E-flow calculation in Latvia and Lithuania.

E-flow will be evaluated using biological communities (fish), hydro-morphological indicators (daily water discharge and morphological parameters) and by means of habitat indices derived from a meso-scale habitat simulation model (MESOHABSIM).

First Field Surveys were organized in the following pilot rivers of Venta RBD:

Venta: Lithuanian part of trans-boundary Venta River Basin, upper stretches;

Bartuva: Lithuanian part of trans-boundary Bartuva River Basin, upper stretches;

Ciecere: Latvian part of trans-boundary Venta River Basin, right bank tributary;

Eda: Latvian part of trans-boundary Venta River Basin, right bank tributary;

Vanka: Užava River Basin (part of Venta RBD), right bank tributary.

4 field surveys were carried out within each pilot basin, totally 12 in Latvian part of Venta RBD and 12 in Lithuanian part. The survey program included hydrological measurements (water discharge, water depth, flow velocity) and bed substrate composition in each measurement point within a given geomorphic unit, as well as geomorphic unit mapping and fish data collecting.

The FFS results have shown that HPP operation considerably affects the hydromorp-hological conditions of rivers. The most significant pressure identified within the scope of the field works is interruption of the river continuity by dams' construction itself. No fish pass was built in HPPs of the project case studies in Latvian part and 2 fish passes are in two case studies in Lithuania. HPP impact on river habitat and biological parameters (fish) through changes in hydrological regime will be analyzed later on and reported in the 2nd project period.

Due to weather conditions and particularly rainy summer some planned low flow surveys were postponed to the summer season 2018 to ensure habitat mapping during low flow period.

River Habitat – Water Flow rating curves for Venta RBD case studies has been built after those FSs using all available data. Collected fish data within species distribution area were used to validate the Fish Model.

2. OBJECTIVES OF THE FIELD SURVEY

The objectives of the FFS as stated in the Summary of ECOFLOW project are:

- To fill in the data gaps with respect to HPP influence on hydrological regime as well as baseline data required to build the River Habitat – Water Flow rating curves;
- To collect fish data in the case study rivers in order to validate the List of specific species in its distribution area for the Fish Model creating.

As already mentioned, the main objective of the FFSs was collection of the missing data for habitat mapping and building the rating curve of water flow and river habitat. In an ideal scenario, the FFSs should include the following two river reaches of every case study: a) HPP upstream section to demonstrate the reference conditions in each regulated river; b) HPP downstream sections to demonstrate the flow regime alterations and changes in the river habitat.
However, taking into account significant hydro-morphological pressures along the selected rivers like 1-2 additional HPPs or impoundments upstream the case study area, identification of reference conditions seems to be impossible.

3. CASE STUDIES, SURVEYS AND TIMELINE

3.1. Selection of case studies

3.1.1. Lithuania

European Union legislation requirements for 20% of energy production from renewable sources by 2020 (Directive 2009/28/EC on the promotion of the use of energy from renewable sources) have increased interest in hydropower in the Member States of EU. A surge in hydropower development was also taking place in Lithuania.

30 small hydropower plants (HPP) were constructed on 10 rivers of Venta RBD. Data of water discharge are available only for 5 of those rivers; however, the remaining 5 rivers were not investigated. Currently, water discharge measurements are carried out only in 2 rivers (where HPPs are operating) at 3 water gauging stations (WGS), (Table 3.1.1.1). These WGSs are located downstream HPP, and have a long data sets of water discharge.

For assessment of HPP impacts on flow regime alteration and on fish communities, three river sites were selected as the case studies, based on the level of their investigation (Fig. 3.1.1.1, Table 3.1.1.1, and Table 3.1.1.2). The first (I) case study is related to the Rudikiai HPP (Table 3.1.1.2) on the Venta River (Papilė WGS, Table 3.1.1.1), the second (II) case study – to the Kuodžiai HPP (Table 3.1.1.2) on the Venta River (Leckava WGS, Table 3.1.1.1) and the third (III) case study – to the Skuodas HPP (Table 3.1.1.2) on the Bartuva River (Skuodas WGS, Table 3.1.1.1). Two case studies (II and III) are located at the Lithuania-Latvia border.

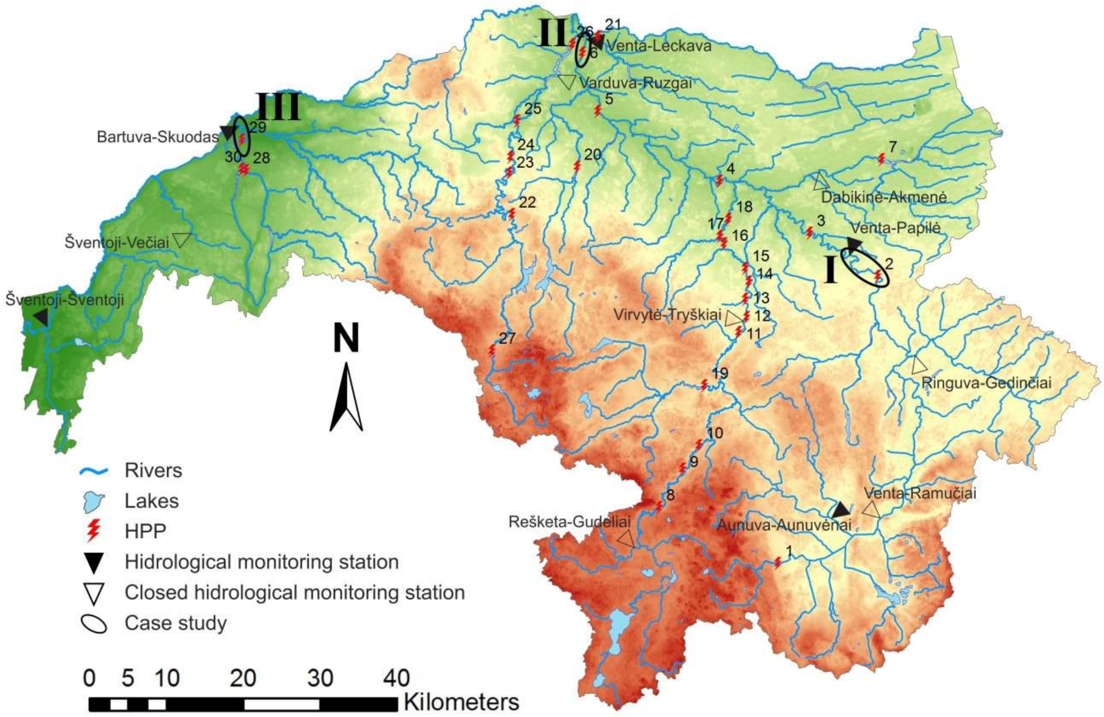


Figure 3.1.1.1. Case study sites in Venta RBD

Table 3.1.1.1.

Currently existing WGSs on the rivers selected for case studies

No	River	WGS	Distance from the mouth, km	Catchment area, km^2	Period of observations	Multi-year average discharge (Q), m^3/s
1	Venta	Papilė	252.1	1560	1949-2015	9.93
2	Venta	Leckava	186.2	4024	1949-2015	29.1
3	Bartuva	Skuodas	48.7	616.7	1957-2015	7.37

Table 3.1.1.2.

Small HPPs on the rivers selected for case studies

No	SHPP	River	Distance from the mouth, km	Catchment area, km^2	SHPP construction year	Installed capacity, kW
1	Rudikiai	Venta	261.2	1538	2002	70
2	Kuodžiai	Venta	188.9	4021	2005	600
3	Skuodas	Bartuva	52.8	259.6	2000	220

All hydropower plants on the rivers Venta and Bartuva were built after 2000. In order to assess the natural river runoff, i.e. without antropogenic (HPP) impact, the data sets of water discharge of 3 WGSs for the period of 1961-2004 were used.

Module coefficients (k) of water discharge were calculated for individual years. When the estimated values of modular coefficients ranged from 1.3 to 1.5, the year was accepted as a wet, when from 0.9 to 1.1 – normal year, and when from 0.5 to 0.7 – dry year. For each case study, 7 years were selected for every group of years: wet, normal, and dry (Table 3.1.1.3).

Table 3.1.1.3.

Module coefficients of water discharge of the natural river regime for wet, normal and dry years

No	River - WGS		Wet years (k=1.3-1.5)		Normal years (k=0.9-1.1)		Dry years (k=0.5-0.7)	
			Year	k	Year	k	Year	k
1	Venta – Papilė	1	1962	1.34	1967	1.05	1964	0.56
		2	1974	1.43	1982	0.91	1969	0.54
		3	1981	1.40	1988	1.00	1971	0.45
		4	1986	1.30	1989	0.94	1972	0.72
		5	1990	1.43	1991	1.03	1973	0.54
		6	1995	1.36	1997	0.97	1975	0.67
		7	1998	1.50	2001	1.08	1996	0.63
2	Venta – Leckava (Kuodžiai)	1	1974	1.38	1966	0.92	1964	0.53
		2	1978	1.44	1984	1.10	1965	0.70
		3	1983	1.32	1987	1.06	1971	0.53
		4	1985	1.43	1988	0.95	1973	0.60
		5	1990	1.42	1991	0.99	1975	0.69
		6	1995	1.30	1999	1.03	1996	0.60
		7	1998	1.38	2004	0.96	2003	0.60
3	Bartuva – Skuodas	1	1977	1.27	1963	1.03	1964	0.51
		2	1978	1.44	1970	0.97	1965	0.70
		3	1980	1.57	1974	0.99	1966	0.71
		4	1983	1.27	1989	1.05	1968	0.64
		5	1984	1.26	1991	1.10	1971	0.58
		6	1986	1.29	1993	0.93	1972	0.71
		7	1990	1.37	1995	1.08	1996	0.48

According to 7-year averaged daily water discharge data (Annex I, Tables 1-9) typical hydrographs for 3 WGSs were created for the wet, normal and dry years.

Venta River

The first and second case studies are in the Venta River, which is the third longest river both in Lithuania and in Latvia. The length of the Venta River in the territory of Lithuania is 159.1 km, the catchment area is 5140.4 km². The Lithuanian part of the Venta River catchment comprises 44% of its total area. Lake Medainis is considered as the source of the Venta River (5.6 ha), 180.2 m above sea level. The average bed slope of the Venta River in Lithuanian territory is 0.88 m/km. The upper reaches of the Venta River drain the north-eastern slopes of the Žemaičiai (Samogitian) Highland (Žemaičių aukštuma), so the bed slope of these reaches is high. At the upper reaches of the Venta River (from the source to the Žeberė River), the bed slope reaches 3.47 m/km. Further, the Venta River flows through the Lowland of the Venta River Middle Reaches and here its bed slope is rather low (0.49 m/km). Then, the Venta River leaves the territory of Lithuania and enters Latvia. The lower reaches of the river and its mouth are located in the territory of Latvia. The Venta River bed slope in the reach from the source to the Rudikiai HPP (case study I) is 1.21 m/km, while from the Rudikiai to Kuodžiai HPP (case study II) – 0.52 m/km.

The reach of the Venta River from case study I to case study and II is classified as water body of type 5 (Venta River Basin District Management plan, 2010).

The Venta River basin is dominated by low-permeable soils; therefore 55.8% of its surface is wet land. Meanwhile, the upper reaches of the river are dominated by gravely and sandy areas. 28% of the basin area is covered by forests, 1.5% by lakes, and 7.3% by swamps.

6 small hydropower plants are constructed on the River Venta in the Lithuanian territory. In most cases the power plants are located in the old mills. The river reach below Rudikiai HPP is selected as case study I, and below Kuodžiai HPP – as case study II.

Case study I. The hydropower plant of this study is Rudikiai HPP, which is located at the end of the upper reaches of the river. Rudikiai HPP was constructed in 2002, on previously created reservoir of Papartynė mill. Papilė WGS is 9.1 km downstream hydropower plant. There are no large tributaries between HPP and WGS, and catchment area of Rudikiai HPP is a little different from catchment area of Papilė WGS.

The surrounding area of the Venta River below Rudikiai HPP is a slightly hilly moraine plain. The Venta River valley *is trapezoid*-shaped. The right bank of the river is steep, with a height of up to 20 m, the left one is predominantly flat; both slopes are composed of morainic loams. The floodplain usually is on both sides of the river, but left-side one is more expressed. The floodplain is 50-100 m wide, somewhere overgrown with bushes and trees.

The riverbed is sandy-gravelled, somewhere mud. It is full of single large boulders. In summer, riverbed overgrows with dense aquatic vegetation. The banks are steep, up to 2-3 meters high.

Hydrological regime of the Venta River at Papilė WGS is characterised by spring flood, summer low flow and rain floods during autumn and winter seasons. Water discharge data of the Papilė WGS were analysed for preparation of runoff hydrographs of the Venta River at Papilė (Fig. 3.1.1.2). Typical runoff hydrographs were created for wet, normal and dry years, on the basis of daily discharges (Annex I, Table 1-3).

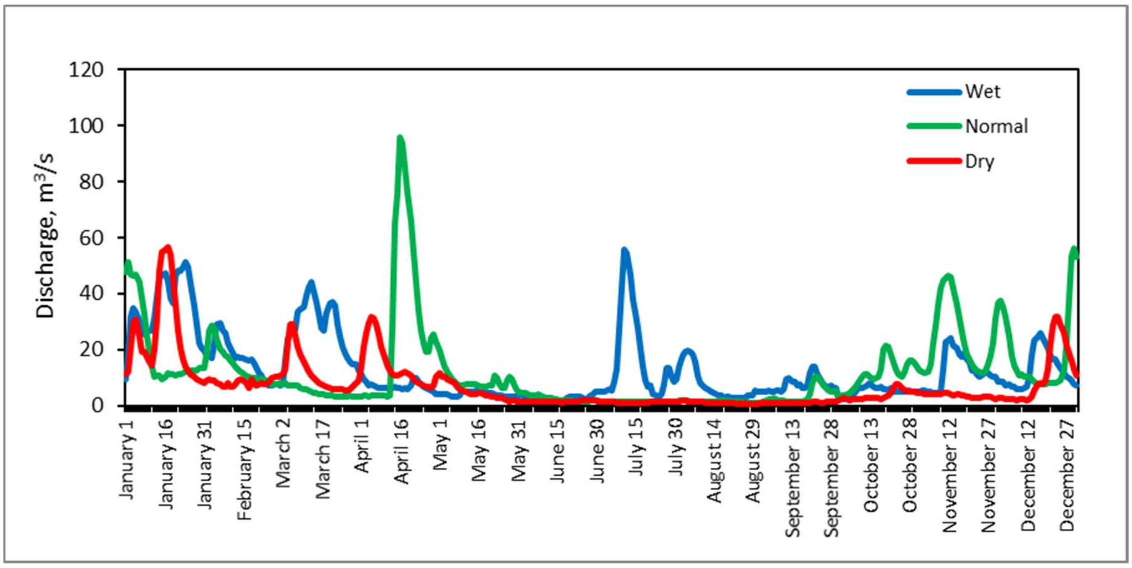


Figure 3.1.1.2. Hydrographs of Wet, Normal and Dry Years, Venta River-Papilė WGS

Hydrographs in Figure 3.1.1.2 indicate that in the Venta River at Papilė WGS, the biggest differences of runoff among wet, normal and dry years are in spring and autumn, while the differences are negligible during the summer low flow period.

Case study II. The hydropower plant of this study is Kuodžiai HPP (constructed in 2005). It is the last plant on the Venta River in the territory of Lithuania. Kuodžiai HPP is located 4.7 km upstream the border of a country, and 2.7 km upstream the Leckava WGS.

The surrounding area is a slightly hilly moraine plain, consisting of loams. The river flows in V-shaped valley. The slopes of the valley are composed of loams; the right slope is high, up to 15 m, the left one is smaller, up to 10 m. The width of the valley is up to 200 m.

A floodplain is alongside both banks of the river*;* at the right bank it is 50 m of width, while at the left bank it is wider, to 100 m.

The river is meandering. The riverbed is sandy, graveled with single large boulders. In summer, it overgrows with lush aquatic vegetation. The banks are steep, up to 5 m, sandy loamy and loamy, covered with dense bushes.

Hydrological regime of the Venta River at Levkava WGS is characterised by high spring flood, long-term summer low flow and rain floods during autumn and winter seasons (Fig. 3.1.1.3). Water discharge data of the Leckava WGS were analysed for preparation of runoff hydrographs of Venta River at Leckava. Typical runoff hydrographs were created for wet, normal and dry years (Fig. 3.1.1.3), on the basis of daily discharges (Annex I, Table 4-6).

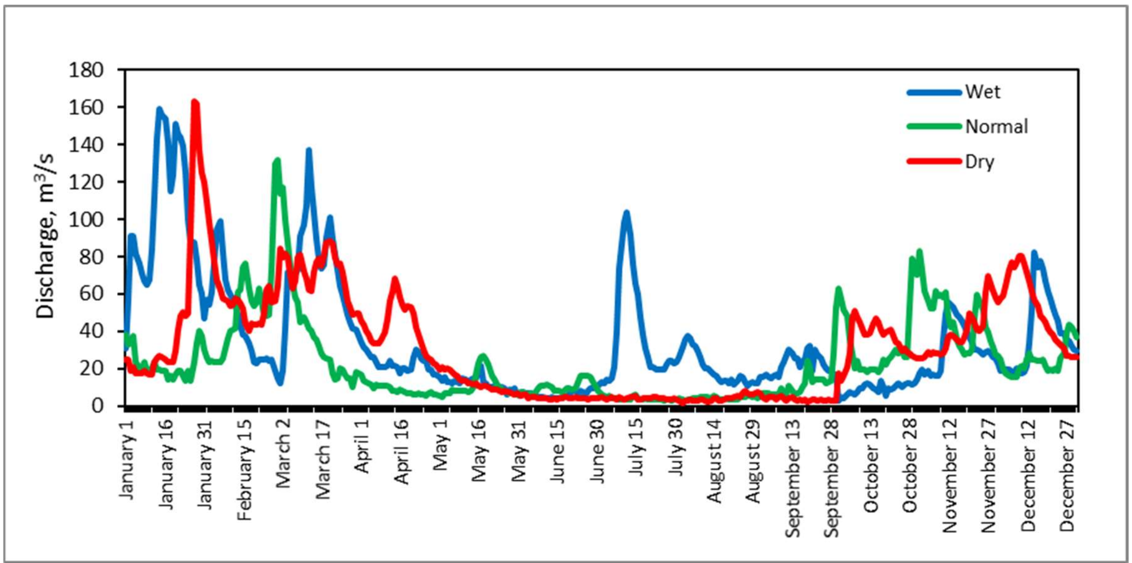


Figure 3.1.1.3. Hydrographs of Wet, Normal and Dry Years, Venta River-Leckava WGS

Hydrographs of the Venta River - Leckava WGS (Fig. 3.1.1.3.) illustrate large runoff differences between wet and dry year not only in spring and autumn, but in summer low flow period as well. During summer low flow period of wet year, river runoff is uneven, while in dry year it is quite uniform. The hydrographs of this WGS can be characterised as having a long low flow period (from May to

September). Especially long low flow period occurs during dry years (from May to November).

Bartuva River

The Bartuva River flows in the north-western part of Lithuania. The river originates in north-eastern part of Žemaičiai (Samogitian) Highland. The source of the river is situated at the altitude of 152.5 m above sea level. The upper reaches of the river drain the north-western slopes of this highland, and further it flows through the Coastal Lowland (Pajūrio žemuma). At 55.3 km from the source, the river leaves the territory of Lithuania and enters Latvia. In Latvia, the Bartuva (Barta) River flows into Liepaja Lake, which is connected with the Baltic Sea.

The total length of the Bartuva River is 101.3 km, the catchment area – 2020 km². The length of the river in the territory of Lithuania is 55.3 km, catchment area is 747.7 km². The Lithuanian part of the Bartuva River catchment comprises 37% of its total area. The average bed slope of the Bartuva River in Lithuanian territory is 2.58 m/km. Bed slope of the river is especially high at its upper reaches. From the river source to its left tributary the Eiškūnas River, the bed slope is 4.25 m/km. The network density of the rivers longer than 3 km is 0.66 km/km².

The Bartuva River is classified as water body of type 3 (Venta River Basin District Management plan, 2010).

The surrounding area below Skuodas HPP is an open plain of the Coastal Lowland, covered with loam and sandy loam soils. The river valley is not clearly expressed. A floodplain is open, alongside both banks of the river, broad (350-500 m), with flat surface. The riverbed is moderately winding, slightly deformed with sandy-muddy deposits, and sometimes pebbly, with individual boulders, and overgrown with dense aquatic vegetation in summer. The banks of the river are steep, with a height of 4-5 m, overgrown with bushes. The highly dense aquatic vegetation grows on the riverbed.

The Bartuva River catchment is dominated by low-permeable medium clay loams, with wetlands covering 85% of its area. However, there are relatively few swamps (4.6%) in the basin. Forests comprise only 3.2%, and the lakes – only 0.2% of the territory of catchment.

The Bartuva River is water-abundant and swiftly flowing river. 2 small hydropower plants were constructed on the Bartuva River: Puodkaliai HPP and Skuodas HPP.

Case study III. The hydropower plant of this case study is Skuodas HPP. It was constructed in 2000, on previously (in 1982) created reservoir. Skuodas HPP is located 6.3 km upstream the Skuodas WGS.

Hydrological regime of the Venta River at Kuodžiai WGS is characterised by rather low spring flood, very low summer flow and very high rain floods during autumn and winter seasons. Typical runoff hydrographs of the Bartuva River – Skuodas WGS were created for wet, normal and dry years (Fig. 3.1.1.4) on the basis of daily discharges (Annex I, Tables 7-9).

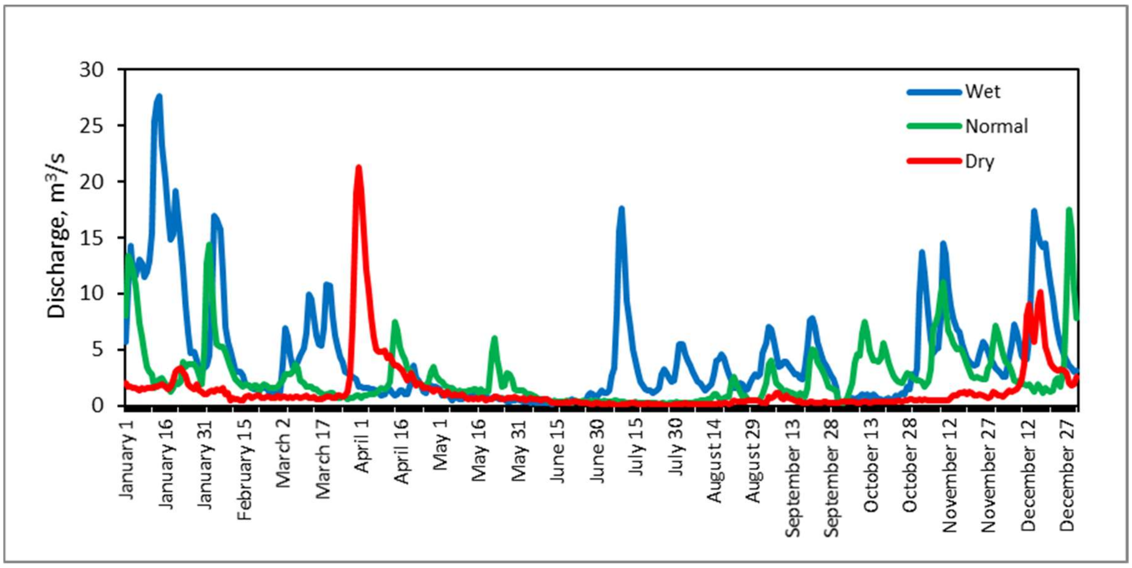


Figure 3.1.1.4. Hydrographs of Wet, Normal and Dry Years, Bartuva River-Skuodas WGS

Similar situation is observed in hydrographs of the Bartuva River (Fig. 3.1.1.4); only low flow period in this river lasts shorter, especially during wet year.

Prepared river hydrographs are going to be used for an assessment of E-flow patterns in Venta RBD.

3.1.2. Latvia

The case studies of regulated rivers have been selected taking into account the severity of hydrological regime alterations or number of HPPs on the river, as well as knowledge on fish species presence and water body type. In Venta RBD, 3 type specific case studies were selected for assessment of HPP impact on river ecosystem and E-flow evaluation: Ciecere, Vanka and Eda rivers (Fig. 3.1.2.1.).

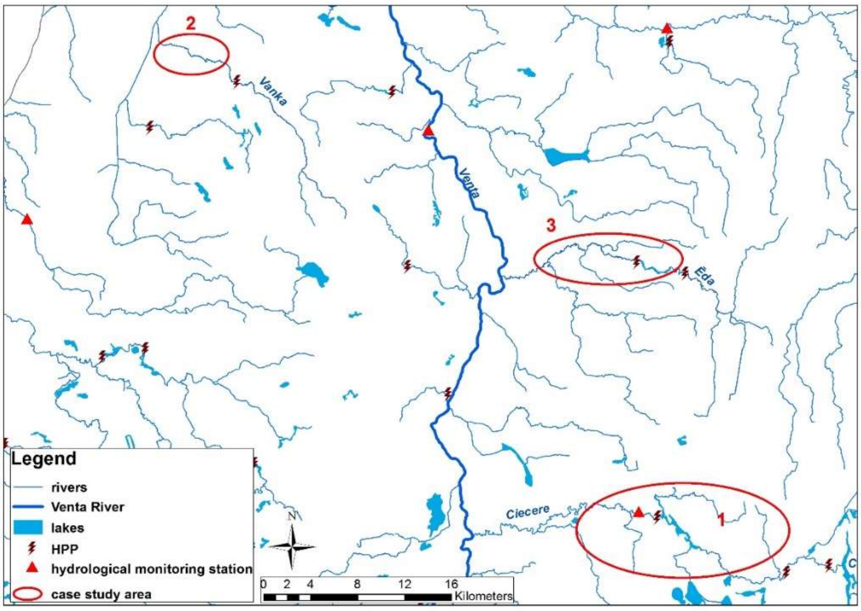


Figure 3.1.2.1. Case study territories in Venta RBD, Latvia

1.Ciecere River

Ciecere River outflows from Ciecere Lake and inflows to Venta River. River basin is 539 km^2. It is 51 km long; river bed gradient is 1.7 m/km in upper stretch and 1.0 m/km in lower stretch. Elevation is 23 – 101 m LAS.

Ciecere River is classified as water body of type 3.

River has small U- and V- shaped (in upper reach) valley, 150 – 200 m wide. River banks are sandy loam, moderate slope, overgrown with shrubs. In some places, there are outcrops of bedrock.

Floodplain is also sandy loam, covered by shrub and meadow vegetation, inundated.

Channel is sinuous, 10 m width in average and 0.3-0.6 m depth. There are bars and artificial riffles in the upper stretch near Saldus.

River bed substrate: boulders, cobbles, gravel and mud.

Fish species: trout, roach, perch, pike, burbot and others.

3 hydropower plants are located on the river:

HPP Pakuli that was constructed in 1958 and operated until 1987. From 1988 to 1995 this HPP wasn't operated, but in 1996 it has been renovated.

Ciecere HPP is operating from 1996, and Dzirnavnieku HPP is operating from 1999. Only HPP Pakuli has a reservoir. All 3 hydropower plants are working in inflow regime.

Hydrological regime is characterised by spring flood, summer low flow and rain flood during winter and autumn seasons. Water runoff data of Ciecere – Pakuli HPP for period of 2008-2015 were analysed taking into consideration lack of data for period 1988-2007 and construction of two additional hydropower plants upstream Pakuli HPP in 1996 and 1999. Hydrological regime is regulated by Ciecere Lake and hydropower plants.

Water runoff data of Riva-Pieviki monitoring station for period of 1961-2015 were analysed for preparing of Ciecere River hydrographs upstream Pakuli HPP. However this flow modelling results do not include impact of two HPPs upstream.

Hydrograph of Wet Year (Fig. 3.1.2.2., Table 1 in Annex II) was created on the base of daily discharge for 3 wet years with module coefficient higher than 1.20. There are high spring floods from S to the end of May and high rain floods from September to December.

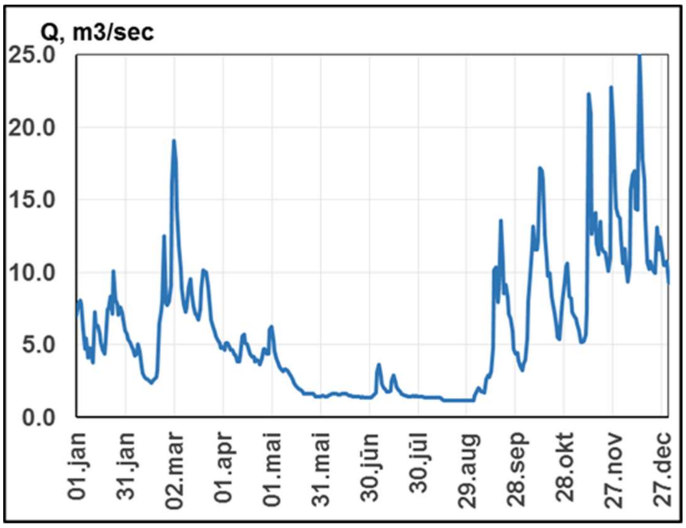


Figure 3.1.2.2. Hydrograph of Wet Year, Ciecere River

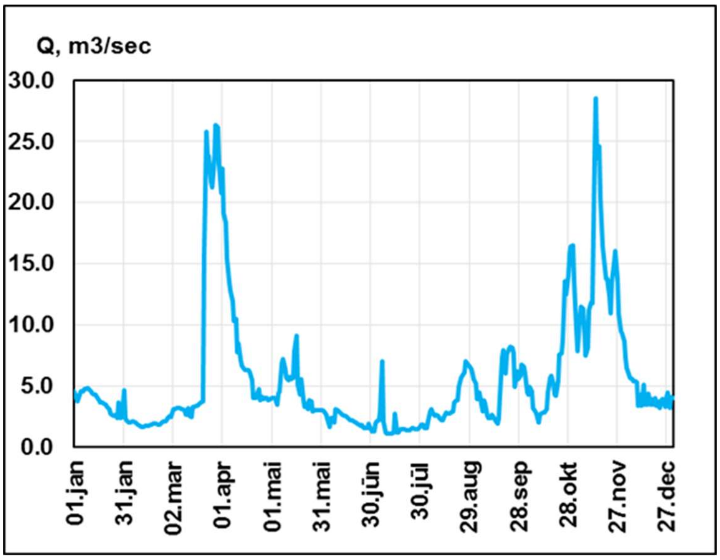
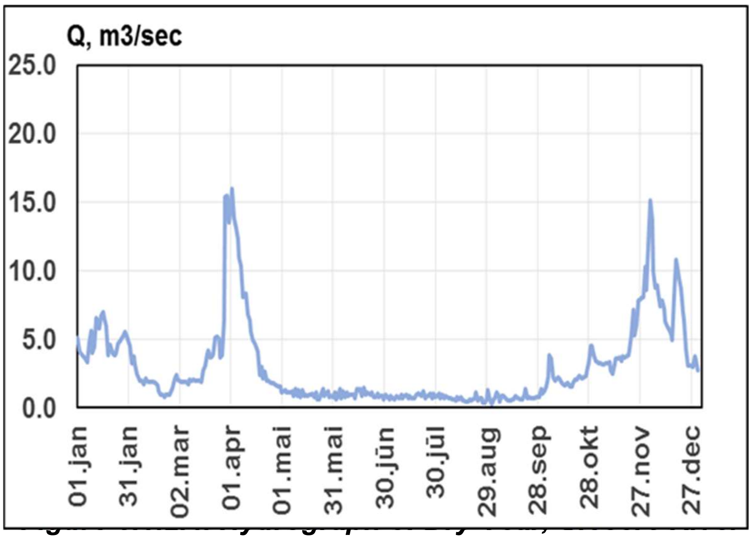


Figure 3.1.2.3. Hydrograph of Normal Year, Ciecere River

Hydrograph of Normal Year (Fig. 3.1.2.3., Table 2 in Annex II) is based on daily discharge data of 2 years with runoff module coefficient 0.93-1.10.

The spring flood in normal year starts in the beginning of March and usually lasts 2-2.5 months. It has not many rains during summer season but quite high rain floods in late autumn and in winter season.



Data of three dry years with runoff module coefficient from 0.61 to 0.76 were used for creation of Dry Year Hydrograph of Ciecere River (Fig. 3.1.2.4., Table 3 in Annex II). A spring flood in dry years is not higher than rain flood in winter, and a low flow period lasts until late autumn almost without rains.

2. Vanka River

Vanka is a right bank tributary of Užava River. Basin area of Vanka River is 96.85 km^2, length – 30 km. Elevation of river basin is 11 – 93 m LAS. River bed average gradient is 2.7 m/km, in upper stretch – 4.9 m/km.

Vanka River is classified as water body of type 1. River has small U- and V-shaped (in upper reach) valley. Valley slopes are sandy, moderate, overgrown with coniferous forest. Floodplain is also sandy, covered by meadow vegetation. Channel is sinuous, 30% of river length are shortened. River bed substrate: gravel, sand and mud (organic). Fish species: trout and others.

Edole HPP is located in the middle stretch of Vanka River. HPP was constructed in 1999. Another impoundment and sluice on Vanka River is located near Ivande village (upstream from Edole) but no HPP has been constructed.

Hydrological regime is characterised by spring flood, summer low flow and rain flood during winter and autumn seasons. Water runoff data of Riva-Pieviki monitoring station for period of 1961-2015 were analysed to prepare Vanka River hydrographs upstream Edole HPP (Fig. 3.1.2.5).

For Hydrograph of Wet Year daily discharge data of 11 years with runoff module coefficient 1.27 – 1.65 were averaged. For calculation of Normal Year' Hydrograph data of 7 years with water runoff module coefficient 0.91-1.07 were taken into account, but for Dry Year' Hydrograph – data of 6 years with water runoff module coefficients 0.51-0.60. Data tables in Annex II include daily discharge of Wet (Table 4), Normal (Table 5) and Dry (Table 6) Years.

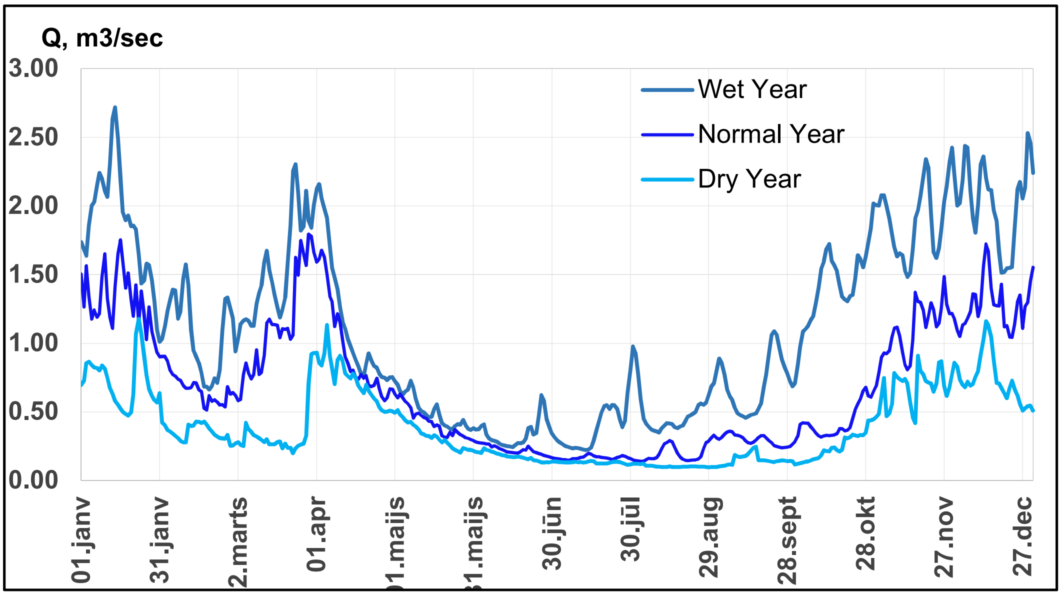


Figure 3.1.2.5. Wet, Normal and Dry Years Hydrographs of Vanka River

3. Eda River.

The Eda River (in the middle and upper course also known as Skede River) originates on western slopes of the Eastern Kurzeme Upland and flows into the Venta River.

Catchment area of the Eda River is 303 km^2. River length is 46 km; stream gradient varies from 1.46 m/km in lower reach to 1.75 m/km in upper reach. Elevation is 16.4 – 92.0 m LAS.

Forests cover about 43%, lakes 0.2% and swamps 1.9% of the catchment area.

Water body *Eda* V046 is classified as a river of the type 3 (medium-sized rhithral type river).

Channel is mainly sinuous, only in upper course it is straight. Average width of the Eda River is 5-8 m and average depth 0.4-0.8 m. There are riffles downstream of HPP Skede.

Reclamation works were carried out on the floodplain of upper reach, therefore river valley is weakly expressed here, while in middle and lower reaches of the Eda River slopes of riverbanks are moderate steep to steep, overgrown with shrubs, broad-leaved forest and mixed forest.

Underlying bedrock of the Eda River catchment is mainly comprised of clay loam, sand clay and sand.

Dominant riverbed substrate: cobbles, gravel and sand.

Fish species: trout, grayling, pike, perch, roach and others.

There are 2 hydropower plants located in a stream: Spiki HPP and Skede HPP. Spiki HPP is operating from 1997, it was constructed on previously created reservoir. Skede HPP is operating from 1999.

Hydrological regime of the Eda River is characterized by spring flood, summer low flow and rainfall flood during autumn and winter seasons. Water runoff data of hydrological monitoring station on the Riva River, nearby Pieviki (catchment area 196 km^2) for the periods 1961-2015 were used and analysed to create hydrographs of the Eda River upstream from Spiki HPP (Fig. 3.1.2.6.).

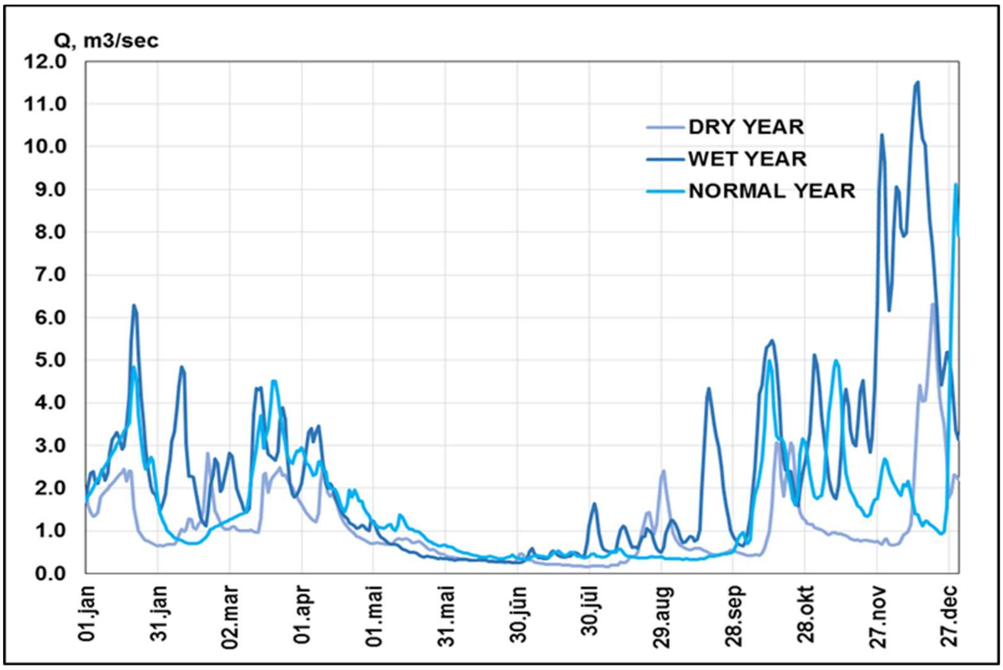


Figure 3.1.2.6. Hydrographs of Wet, Normal and Dry Years, Eda River

Hydrograph of Wet Year for Eda River was prepared on the base of daily discharge data for 2 years with water runoff module coefficient 1.63-1.88. There are high spring floods from the beginning of March till early May and rainfall floods from the end of July till December.

Hydrograph of Normal Year was created using daily discharge data for 9 years with runoff module coefficient 0.89-1.07. Spring flood in normal years lasts about 2 months (as in wet years) but rain floods are not so frequent - from mid-October till December.

Hydrograph of Dry Year is based on daily discharge data of 7 years with runoff module coefficient 0.50-0.73. The Dry Year is characterized by spring flood from the end of March till May, followed by low flow period, which in turn continues until late autumn almost without rains.

Data tables in Annex II include daily discharge of Wet (Table 7), Normal (Table 8) and Dry (Table 9) Years for Eda River.

3.2. Survey timeline

First Field Survey was carried out during summer – autumn – winter seasons 2017–2019. Four field measurements during two phases of hydrological regime (low flow and average flow periods) have been carried out for each case study. These four field measurements were intended to carry out under different hydrological conditions corresponding to the following water discharge:

- minimum of low flow period;
- average of low flow period;
- maximum of low flow period;
- annual water discharge.

Tables 3.2.1. and 3.2.2. show the dates of measurements and corresponding water flow ranges in Lithuania and Latvia.

In Lithuania, fish data collection for the Fish Model validation was carried out by Nature Research Centre (NRC) on 28–29 August 2017 in the Venta River and on 29 August 2017 in the Bartuva River.

In Latvia, fish data collection for the Fish Model validation was carried out by BIOR on 27 July 2017 in Vanka River and 15 August 2017 in Eda and Ciecere rivers.

Table 3.2.1.

Field measurements in Lithuania, 2017-2019

Lithuanian case studies			
Flow range	Venta River	Venta River	Bartuva River
	0.082 km downstream Rudikiai HPP	0.310 km downstream Kuodžiai HPP	1.276 km downstream Skuodas HPP
low flow min	01.08.2017	11.09.2018	29.08.2017
low flow average	28.08.2017	29.08.2017	02.08.2017
low flow max	15.01.2019	14.09.2017	12.09.2017
annual mean	25.09.2017	26.09.2017	23.10.2017

Table 3.2.2.

Field measurements in Latvia, 2017-2018

Latvian case studies			
Flow range	Vanka River	Eda River	Ciecere River
	0.18 km downstream Edole HPP	0.27 km downstream Skede HPP	0.2 km downstream Pakuli HPP
low flow min	30.08.2017	13.08.2018	04.07.2018
low flow average	25.07.2017	02.08.2017	10.08.2017
low flow max	22.10.2017	04.09.2017	31.10.2018
annual mean	19.09.2017	25.09.2017	28.09.2017

4. SURVEY RESULTS

This chapter includes information about FFS results, as well as short information about methods and equipment used for the field measurements in Latvia and Lithuania.

4.1. Lithuania

4.1.1. Habitat mapping and hydrological measurements

During the first field survey (FFS), the geomorphic units were mapped 12 times: 4 in the Venta at Rudikiai, 4 in the Venta at Kuodžiai and 4 in the Bartuva at Skuodas. According to the MESOHABSIM model requirements (reach length > 10 river widths), the surveyed reach lengths varied from 294 m in the Bartuva River to 418 m in the Venta River (at Kuodžiai). During each field survey, the length of the section varied in a small range. Total mapped area depended on the hydrological conditions (discharge) and the length of the reach. In average, the mapped area varied from 3705 m^2 to 12722 m^2 in the Venta at Rudikiai, from 11354 m^2 to 14690 m^2 in the Venta at Kuodžiai and from 1766 m^2 to 2650 m^2 in the Bartuva at Skuodas (Table 4.1.1.1.).

Table 4.1.1.1.

Case studies, geographical characteristics

River site	Length of surveyed reach, m	Mapped area, m^2	Distance to HPP, km
Venta – Rudikiai 1	392	3705	0.082
Venta – Rudikiai 2	396	8065	0.082
Venta – Rudikiai 3	396	12722	0.082
Venta – Rudikiai 4	396	9072	0.082
Venta – Kuodžiai 1	390	11713	0.310
Venta – Kuodžiai 2	414	13081	0.310
Venta – Kuodžiai 3	418	14690	0.310
Venta – Kuodžiai 4	418	11354	0.310
Bartuva 1	298	1777	1.276
Bartuva 2	294	1766	1.276
Bartuva 3	295	2156	1.276
Bartuva 4	299	2650	1.276

Distributions of geomorphic units (GU) surveyed within Venta RBD are illustrated in Fig. 4.1.1.1. At least 7 GUs (aquatic vegetation, cascade, flood lake, glide, pool, rapid and secondary channel) were mapped only in one site. These GUs were identified during the first field survey in the Venta at Rudikiai. The most frequent geomorphic unit was glide. Glides occupied from 47.5% to 70.9% of a total mapped area in the Venta at Kuodžiai, from 46.9% to 100% in the Bartuva at Skuodas and from 0.0 % to 18.8% in the Venta at Rudikiai. The second most frequent GU was rapid (indicated in 10 out of 12 field survey), the third was pool (in 9 out of 12 field survey) and the fourth was aquatic vegetation (in 6 out of 12 field survey). GUs of riffle, flood lake and secondary channel were indicated respectively 3 times in the selected Gus. Cascade was the rarest geomorphic unit identified during the FFS (only 2 times in Venta at Rudikiai). In the late autumn, high water level caused the decrease in number of GUs. The maps of GUs are presented in Annex III (Fig. 1 – 12).

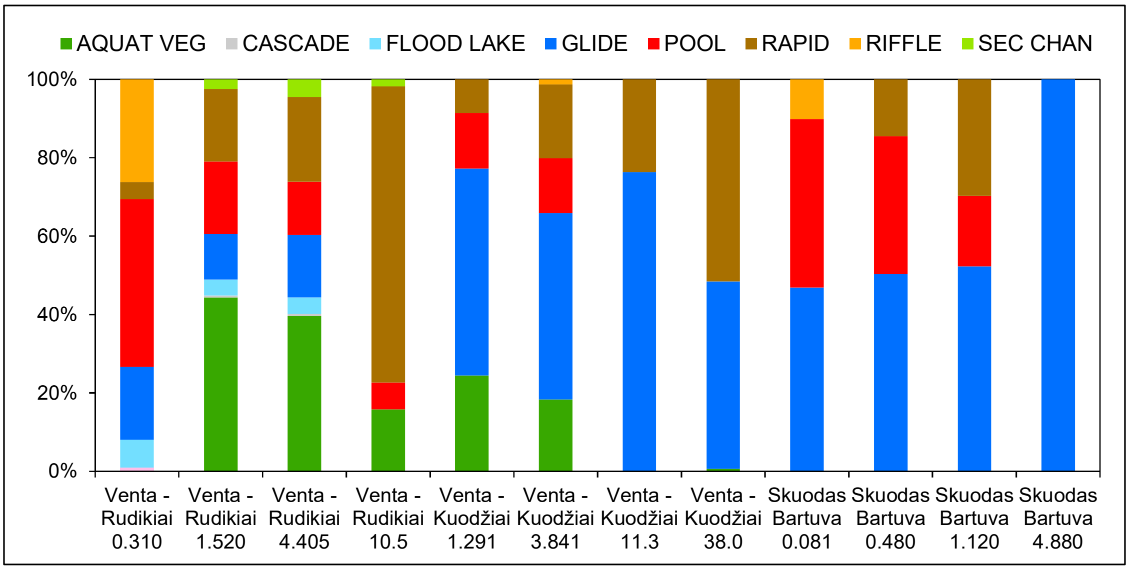


Figure 4.1.1.1. Distribution of geomorphic units in surveyed sites within Venta RBD (a number after river name corresponds to survey number)

According to the number of geomorphic units, the most homogeneous was the Bartuva at Skuodas, where 1-3 (in average 2.5) different units per site were found, 2-5 different GUs were observed in the Venta at Kuodžiai (in average 3.3) and 4-7 GUs in the Venta at Rudikiai (in average 5.8) (Fig. 4.1.1.2.).

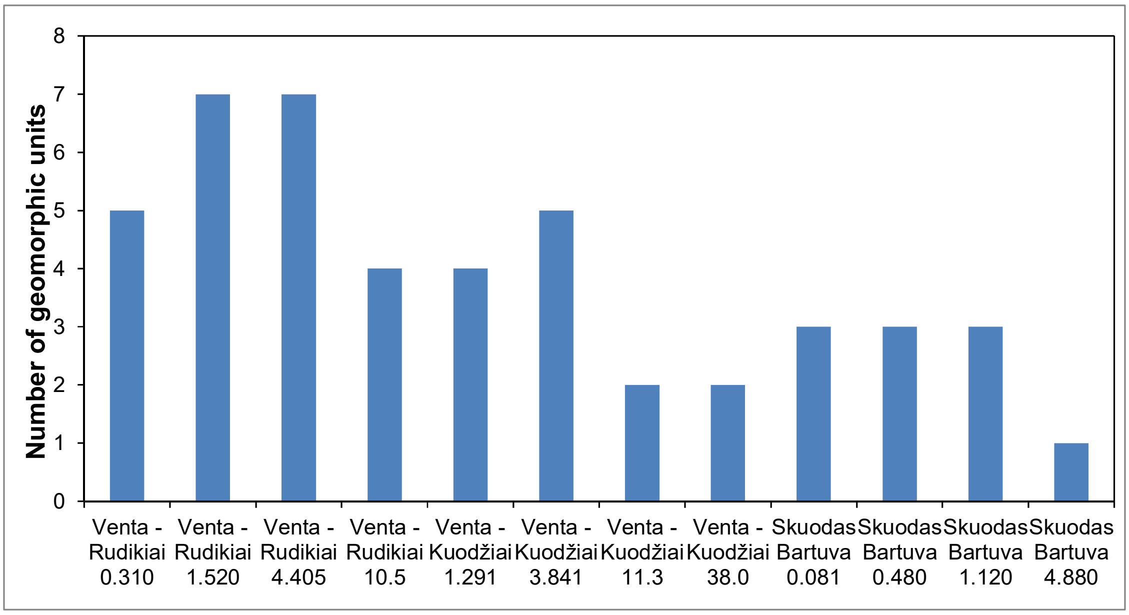


Figure 4.1.1.2. Number of geomorphic units per surveyed site in selected case studies

Eight different areas of GUs were identified during the FFS (Figure 4.1.1.3, Table 1, Annex III). According to the average area, GUs of glide (3313 m^2), rapid (2870 m^2), aquatic vegetation (2368 m^2) and pool (1133 m^2) were the largest. The average area of remaining five GUs (including backwater, flood lake, secondary channel, riffle and cascade) was less than 500 m^2. Different geomorphic elements within surveyed sites directly below HPP are shown in Table 1, Annex III.

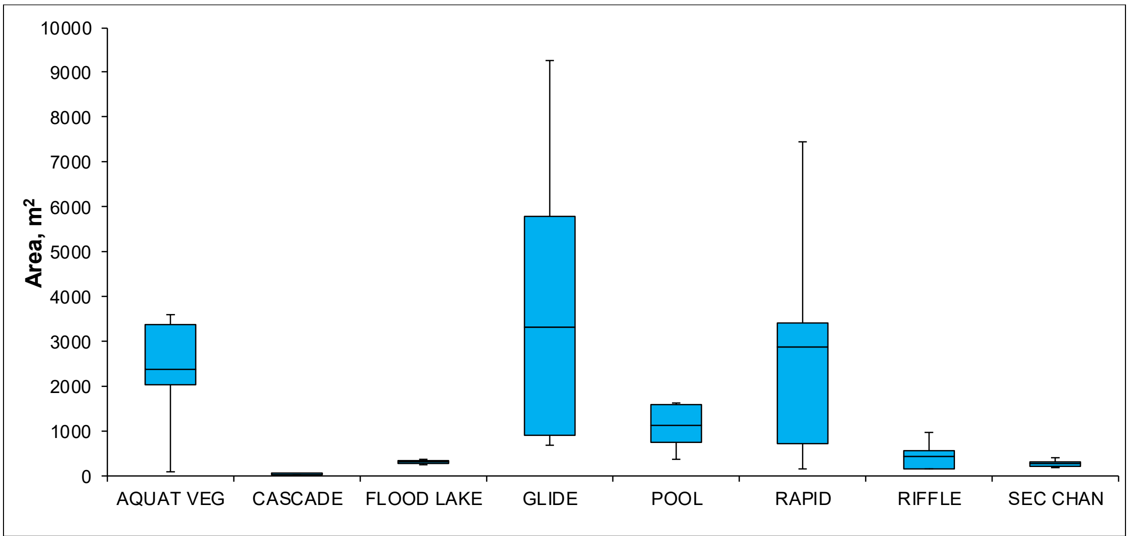


Figure 4.1.1.3. Area variation of geomorphic units within all studied rivers

In addition to the habitat mapping, the hydrometric measurements have been carried out in selected case study rivers during FFS. The hydrometric part of surveys consisted of measurements of water depth, flow velocity and discharge as well as determination of substrate type (granulometry). Determination of water depth, flow speed and substrate was made in representative points of each GU. In selected cross-sections, the measurements of water discharge were carried out once in each site per survey. Table 4.1.1.2. shows the water flow conditions during the FFSs.

Table 4.1.1.2.

Water flow below HPP during FFS vs non-regulated value

	Q m^3/s	low min	low average	low max	annual mean
Venta River	Observed	0.270	1.59	4.05	10.0
	0.082 km downstream Rudikiai HPP	0.310	1.52	4.05	14.3
Venta River	Observed	1.22	5.25	12.8	30.3
	0.310 km downstream Kuodžiai HPP	1.29	3.84	11.3	38.0
Bartuva River	Calculated	0.120	0.320	0.790	3.18
	1.276 km downstream Skuodas HPP	0.081	0.480	1.12	4.88

Habitat mapping have been carried out by using the rangefinder *TruPulse 360R* and field tablet *xTablet Flex 10A*, flow velocity measurements have been done with propeller flow meters, and water depth measurements have been done with a hydrological ruler. The measured water depths and flow velocities in representative points of each geomorphic unit can be found in Annex IV.

4.1.2. Fish data collecting

Fish sampling was accomplished in accordance with EU standard EN 14011 (CEN, 2003), using pulse current electric fishing gear IG200/2B supplied by 12V battery. Electric fishing has been performed by wading. Fish samples were collected separately in each of geomorphic units (GU), identified in a river stretch on a mesohabitat scale. Samples were collected at medium to low flow conditions (the Venta River stretches below Rudikiai HPP and Kuodžiai HPP) and at extremely low flow conditions (the Bartuva River stretch below Skuodas HPP).

In total, 21 fish species were caught (14-18 species per river stretch). Numbers of specimens caught in GUs of the same type in each of the sampled river stretches were summed up and after re-calculated to densities per area (100 m^2). As it could be expected, densities of typical rheophilic fish were the highest in the GUs which are characterized by higher water flow velocities (riffle, rapid), while eurytopic and lentic fish species were most abundant (or were recorded) in GUs characterized by low or no flow (glide or pool) (Table 4.1.2.1). Cascades (present in the Venta River stretch below Rudikiai HPP) were inhabited purely by rheophilc fish species and dominated by Bullhead (*Cottus gobio*). River stretches, covered by dense emerged aquatic vegetation were dominated by Roach (*Rutilus rutilus*) and Bitterling (*Rhodeus amarus*), while Bleak (*Alburnus alburnus*) was the most abundant species in the pools.

Although the distribution of rheophil and eurytopic (and lentic) fish species among the GUs of different types followed the same patterns in all three river stretches sampled, the some signs of disturbance (atypical distribution) were also present. For instance, density of Bleak, Chub (*Squalius cephalus*), Roach and Minnow (Phoxinus phoxinus) was unexpectedly high in a secondary channel of the Venta River stretch below Rudikiai HPP, which covers the smallest share of the total area of all GUs. It is possible that when the water level fell in the aftermath of a decrease in the flow from the reservoir, the fish were locked in the deeper place of the side channel of the river. Density of Roach and Bleak was unexpectedly high in the rapids in the Venta River stretch below Kuodžiai HPP. This could have been determined by fluctuation in the water level or the high density of individuals of those species in the river. Adults of Gudgeon (*Gobio gobio*) and Dace (*Leuciscus leuciscus*) have been found in considerable abundances in the pools and glides of the Bartuva River below Skuodas HPP, while shallow riffles were occupied only by juveniles of various fish species (Table 4.1.2.1). This might be the consequence of extreme decrease in water level.

Table 4.1.2.1. Density of individuals (ind./100m²) of different fish species in different geomorphic units in the stretches of Venta and Bartuva rivers below HPP dams (the highest densities are indicated in bold; atypically high densities in certain GUs are indicated in red).

Sampled stretch and geomorphic unit (GU)	Area, %	Av. depth, cm	Av. flow velocity, m/s	*Alburnoides bipunctatus*	*Alburnus alburnus*	*Barbatulus barbatulus*	*Blicca bjoerkna*	*Carassius gibelio*	*Cobitis taenia*	*Cottus gobio*	*Esox lucius*	*Gasterosteus aculeatus*	*Gobio gobio*	*Gymnocephalus cernuus*	*Leuciscus leuciscus*	*Lota lota*	*Misgurnus fossilis*	*Perca fluviatilis*	*Phoxinus phoxinus*	*Rhodeus amarus*	*Rutilus rutilus*	*Scardinius erythrophthalmus*	*Squalius cephalus*	*Vimba vimba*
Venta, Rudikiai HPP																								
AQUAT_VEG	45	48	0.05															0.1		10.3	**56.1**			
POOL	18	101	0.15	0.1	**19.5**		0.1	0.1				0.8		0.1				1.7	1.1		9.0	0.1	0.4	
GLIDE	12	66	0.30	2.5	7.9					0.7	0.1							3.9	28.7		12.2		0.2	0.1
RAPID	19	48	0.54	**31**	4.38	**6.47**				**4.6**	0.1	0.8	0.7					1.86	**125**		3.83		0.26	**1.5**
CASCADE	4	52	1.04			**15.8**				**29.4**					6.8				42.9					
SEC_CHAN	3	65	0.18	1.0	12.9	1.0				2.0		1.5	0.5					2.5	44.3		20.4		5.5	
Venta, Kuodžiai HPP																								
AQUAT_VEG	18	47	0.13		5.9								0.7					0.5	1.2	6.2	**37.7**		1.7	0.4
POOL	14	101	0.07		**55.7**		**0.5**														13.3			
GLIDE	48	64	0.25	1.2	9.2	0.6	0.1				0.1	0.1	3.4		0.3			0.6	1.3		**43.9**		1.5	0.8
RIFFLE	1	27	0.41			**11.9**				2.0			1.3*		**4.6***				**10.6**				1.3*	
RAPID	19	54	0.49	**11.8**	22.6	**19.3**				1.8		2.3	**46.2**		**2.5**			0.9	**7.6**		78.7		1.1	**3.7**
Bartuva, Skuodas HPP																								
POOL	43	47	0.01		**3.0**	0.8			**2.2**		0.1		23.3		13.5	0.1	0.1	0.2	6.0	0.8	**18.2**		1.3*	
GLIDE	47	33	0.03	0.1	**4.2**	1.1			**3.2**				21.1		14.5			1.3	20.9	**15.5**	**13.4**		2.4*	
RIFFLE	10	13	0.20	**2.1***	0.7*	**73.7***			0.3*				**115.6***		12.7*				**53.8***				4.2*	

* - juveniles

The influence of HPP on fish communities can be assessed by modeling dependence of the distribution of fish species upon changes in water depth and flow velocity at various sites of the river channel. The composition of the bottom substrate, the presence of aquatic vegetation and other morphological characteristics that can determine the presence of a species or the number of individuals should also be taken into account. However, for the development of equations that relate biology with hydromorphology, hundreds of hydromorphological measurements and fish samplings should be performed in different geomorphic units of undisturbed rivers. As an alternative requiring less time and attempt, conditional modeling can be used. It is based on characterization of a species-specific habitat using available data and expert assessments. Conditional models allow to predict the presence and/or abundance of a certain species in GU of a certain characteristics.

In the course of this project, conditional models were developed for fish species that should theoretically reside in the analyzed rivers and for which sufficient information on habitat preferences were collected. In total, conditional models were developed for 14 fish species (among them for adults and juveniles of 7 species, only for adults of 5 species and only for juveniles of 2 species). The models were developed by joint efforts of LT and LV experts, using the data available in both countries. The models are presented in the Table 1 of Annex V.

4.2. Latvia

4.2.1. Habitat mapping and hydrological measurements

Geomorphic units were mapped altogether in 10 sites: 4 in the Vanka River, 4 in the Eda River and 2 in the Ciecere River. Due to changes in methodological approach Eda_4 was not surveyed in summer 2018 ad data from this site were ot used in modelling. Surveyed reach length varied from 73 m in Eda River to 420 m in Ciecere River in accordance with MESOHABSIM model requirements (reach length > 10 river widths). For most sites, mapped river reach has more or less constant length, and changes in mapped area are related to changes in water level. Exceptions are sites 1 and 3 in the Eda River and site 4 in Vanka River, where reach length was increased during second and third surveys. Total mapped area depends on the length of the reach and river width. On average, mapped area varied from 2946 m^2 to 5280 m^2 in Ciecere River, from 376 m^2 to 915 m^2 in Eda River and from 478 m^2 to 834 m^2 in Vanka River (Table 4.2.1.1.).

Table 4.2.1.1.

Case studies, geographical characteristics

River site	Length of surveyed reach, m	Mapped area, m^2	Distance to HPP, km
Ciecere 1	420	4940 - 5620	0.35
Ciecere 2	266	2465 - 3427	2.8
Eda 1	109 (163)	723 - 1106	0.27

Eda 2	97	476 - 680	4.7
Eda 3	72 (150)	419 - 980	9.2
Eda 4	73	333 - 419	8.1
Vanka 1	124	657 - 1010	0.18
Vanka 2	86	440 - 555	4.2
Vanka 3	72	459 - 496	7.8
Vanka 4	80 (175)	841 - 947	8.8

At least 7 geomorphic units were mapped within one site: aquatic vegetation, backwater, glide, pool, rapid, riffle, and secondary channel. Meander pools were denoted as simple pools, runs as glides (fast flowing), and forced riffles as riffles, in accordance with available options of the used mapping software. The most frequent geomorphic units are glide and run (Fig. 4.2.1.1.). High water levels during late autumn led to increase of riffles (mostly forced riffles downstream woody debris or large emergent boulders) and decrease of pools. Riffles occupy from 2.7% to 40.6% of a total mapped area in Vanka River on average, 22.7% - 36.4% in Ciecere River and 37% in Eda River (found only in site 3). During different surveys, significant bed erosion (sediment movement) has been observed in shallow river reaches with soft substrate. River bed changes, new pools (behind logs or large boulders) and bars were distinguished during different surveyed periods. After rain flood events, lots of mid-channel bars were washed off and therefore side channels also disappeared. Maps of GU-s can be found in Annex VI.

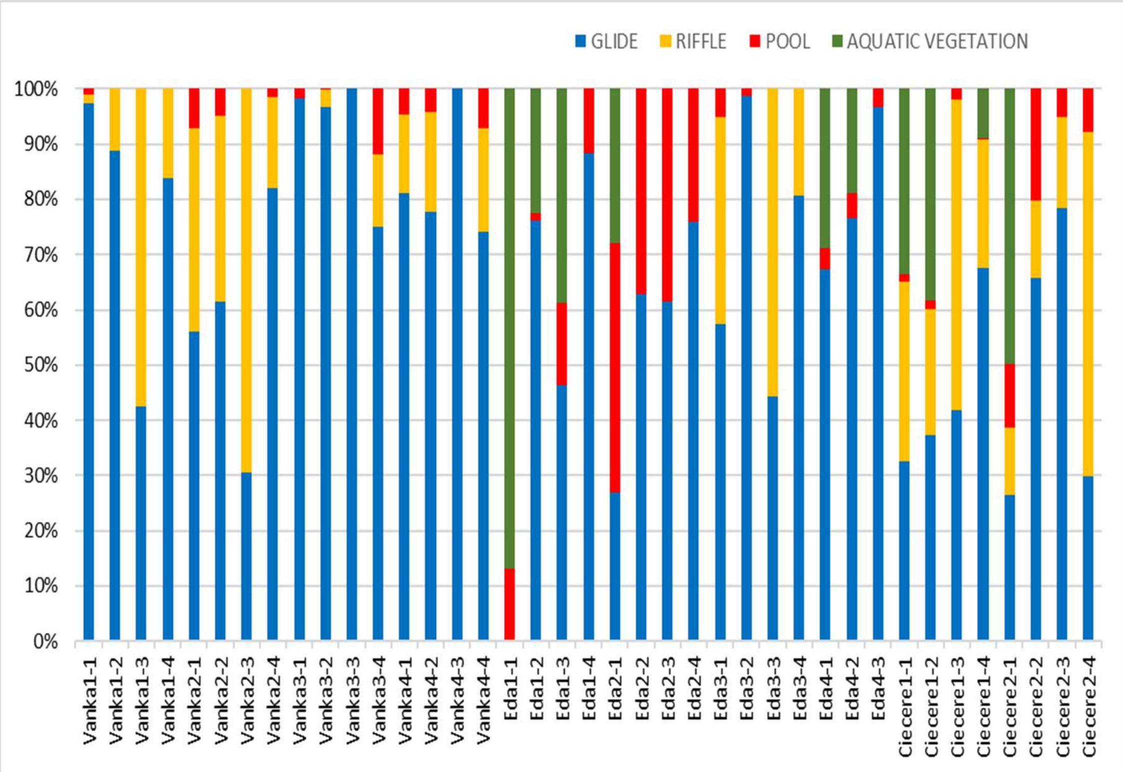


Figure 4.2.1.1. Distribution of geomorphic units in surveyed sites within Venta RBD (first number after river name corresponds to site number and second - to survey number)

Geomorphic units "Aquatic vegetation" mostly were formed by dense *Potomogeton perfoliatus*, *Sparganium sp*. and *Nuphar lutea* stands. Large boulders were present in all three rivers. In rivers Vanka and Ciecere, boulders and cobbles were extensively covered with red algae *Hildebrandia rivularis,* especially directly below HPPs.

Distribution of GU-s in each reach was clearly associated with bed slope. For example, in site Eda 2 (slope ~0.7 m/km) the most common geomorphic units were slow flowing glides and pools, while in site Eda 3 (slope ~1.1 m/km) riffles and faster glides were dominating.

According to the type of geomorphic units, the most homogeneous was Eda River, where only 3-4 (only in one site) different units per site were found, 3-5 GU-s were observed in Vanka River and 6 GU-s in Ciecere River (Fig. 4.2.1.2.).

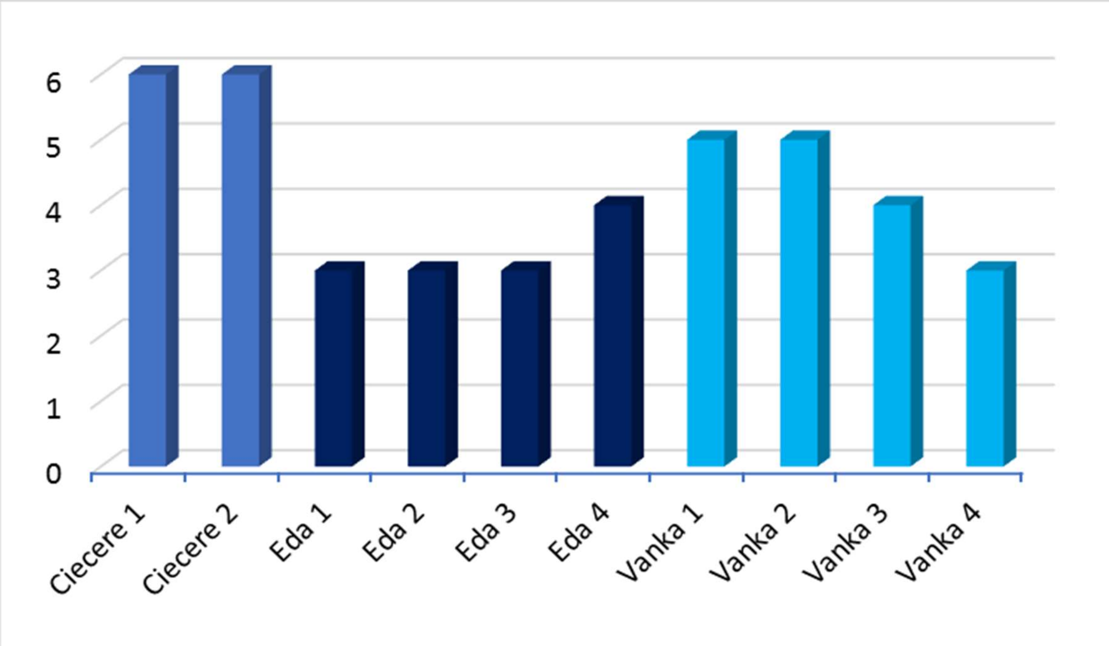


Figure 4.2.1.2. Number of geomorphic units per surveyed site in selected case studies

Aquatic vegetation was a largest GU with average mapped area 457 m^2, also glides (179 m^2) and riffles (208 m^2) were relatively large (Fig. 4.2.1.3.). Smallest GU-s were pools (large meander pools are included) and bars (mapped as artificial elements). Despite of recommendations for mapping only GUs with size > 5 m^2, some smaller GU-s have been mapped, because this threshold is too large for Latvian rivers with catchment area below 100 km^2. Presence and absence of different geomorphic elements within surveyed sites directly below HPP are shown in Table 1, Annex VI.

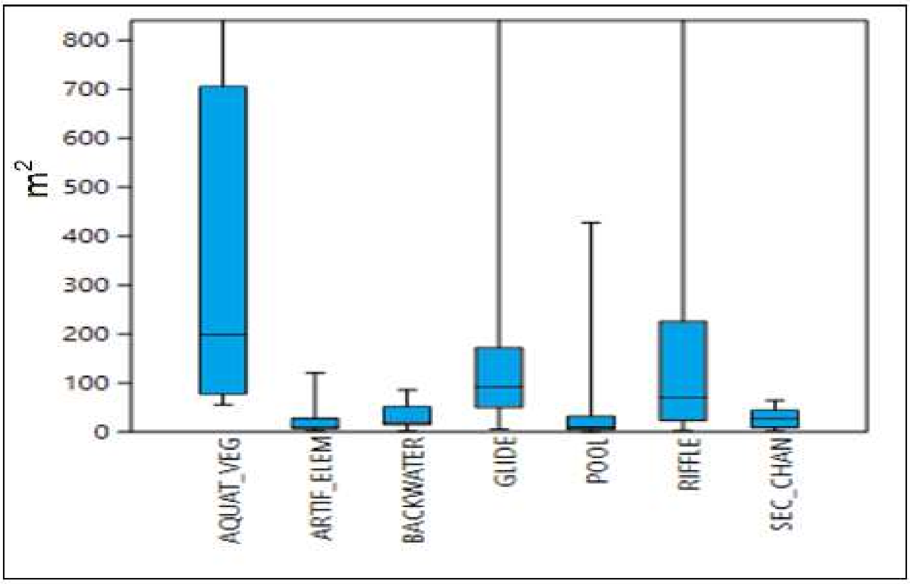


Figure 4.2.1.3. Area variation of geomorphic units within all studied rivers

In addition to the habitat mapping, point measurements have been carried out in 3 case study rivers during FFS. This part of surveys included water depth and flow velocity measurements as well as substrate size determination in representative points located proportionally within each GU. Number of measured points depends on the length of GU, however, in most cases it was not less than 7. Water discharge measurements (cross-sections) have been carried out in the beginning and in the end of each survey and in every site. Table 4.2.1.2. shows the water flow conditions in which the FFS were carried out.

Table 4.2.1.2.

Water flow below HPP during FFS vs non-regulated value

	Q m^3/s	low min	low average	low max	annual mean
Vanka River	Calculated	0.084	0.18	0.46	0.82
	0.18 km downstream Edole HPP	0.10	0.17	0.34	0.96
Eda River	Calculated	0.12	0.23	0.45	1.00
	0.27 km downstream Skede HPP	0.19	0.21	0.31	0.83
Ciecere River	Observed*	0.33	0.77	1.58	3.41
	0.2 km downstream Pakuli HPP	0.43	1.05	1.05	3.48

*Ciecere River discharge is compared with observations in MS Pakuli HPP

An example of the flow velocity distribution is shown on the Figure 4.2.1.4. Ciecere River below Pakuli HPP has heterogeneous structure with fast running riffles (blue color) and slow flowing glides and aquatic vegetation (orange to red color). Stretches covered with aquatic vegetation (mostly *Potamogeton sp.*) have lowest flow velocity.

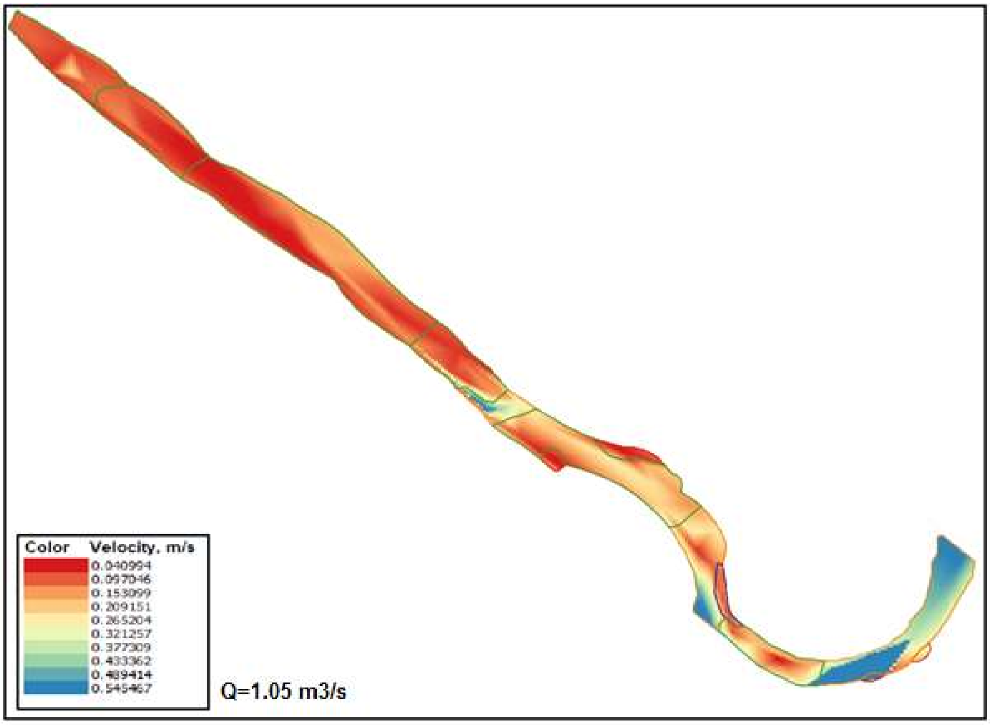


Figure 4.2.1.4. Distribution of flow velocity in Ciecere River (Ciecere1_1)

Habitat mapping have been carried out using the rangefinder TPuls 300, flow velocity measurements have been done using different flow meters (magnetic and propeller types).

Water depths and flow velocities measured in representative points in each geomorphic unit can be found in Annex VII.

4.2.2. Fish data collecting

Fish sampling was carried out in accordance with standard LVS EN 14011:2003 (Water quality – Fish sampling with electricity), derived from the EU standard (EN 14011; CEN, 2003).

Electrofishing has been performed by wading. Direct current electrofishing gear SAE300 with 2KW generator was used for fish sampling.

Dissolved oxygen, water temperature, pH and conductivity were measured by WTW Multi 340i analyzer probe. FP 201 Global Flow Probe meter was applied for the water flow measurements during the sampling.
The field work Protocol was used to record measured parameters (Annex VIII).

Fish species are given according to nomenclature proposed in the Handbook of European freshwater fishes (Kottelat, Freyhof, 2007).
One part of the caught fish (largest individuals) was measured in the field and released, but other was fixed in formalin solution and analysed later in laboratory. Adults with body length L>50 mm were measured individually with accuracy of 1 mm, young of a year old fish (juveniles) with body length L<50 mm were sorted by species, counted and weighted as pooled sample.

In accordance with the project activity WPT2, fish sampling was carried out in 3 project rivers: Ciecere, Eda and Vanka. Fish samples have been collected in 7 different river reaches (Table 4.2.2.1.) that include 13 geomorphic units classified as glide, pool, backwater, oxbow lake and riffle. Sampling effort usually depends on several factors but mainly on the fished area and amount of fish (table 4.2.2.1.). Glide has the most frequent occurrence among geomorphic units of fished area (2281 m^2), additionally one riffle and one oxbow lake were presented as well as a few different small sized pools.

Table 4.2.2.1.

Fish sampling effort in the river Venta RBD

River	Date	Sampling site	Geomorphic unit	Area (m^2)	Time of fishing (min)	Amount of fish caught
Vanka	27.07.	Vanka1	glide	500	33	118
	27.07.	Vanka2	glide	500	49	210
Ciecere	15.08.	Ciecere2	glide	495	32	150
	15.08.	Ciecere2	pool	120	73	96
	15.08.	Ciecere1	glide	231	31	372
	15.08.	Ciecere1	backwater	45	9	41
	15.08.	Ciecere1	riffle	80	18	192

Eda	15.08.	Eda1	glide	145	16	68
	15.08.	Eda1	glide	7.5	5	27
	15.08.	Eda1	pool	2	3	9
	15.08.	Eda2	pool	56	10	10
	15.08.	Eda2	glide	60	9	88
	15.08.	Eda3	glide	350	29	1297

In total 20 fish species represented by 2668 adults were caught in the rivers Ciecere, Eda and Vanka (Table 4.2.2.2).

Table 4.2.2.2.

Fish species in Ciecere, Vanka and Eda rivers

Scientificname	English	Latvian	Acronym
Abramis brama	Bream	Plaudis	ABRB
Alburnoides bipunctatus	Riffleminnow	Pavīķe	ALBB
Alburnus alburnus	Bleak	Vīķe	ALBA
Anguilla anguilla	Eel	Zutis	ANGA
Barbatula barbatula	Stoneloach	Bārdainais akmeņgrauzis	BARB
Blicca bjoerkna	Silverbream	Plicis	BLIB
Cobitis taenia	Loach	Akmeņgrauzis	COBT
Cottus gobio	Bullhead	Platgalve	COTG
Gobio gobio	Groundling	Grundulis	GOBG
Lampetra planeri	Brooklamprey	Strauta nēģis	LAMP
Leucaspius delineatus	Sunbleak	Ausleja	LEUD
Leuciscus leuciscus	Dace	Baltais sapals	LEUL
Perca fluviatilis	Perch	Asaris	PERF
Phoxinus phoxinus	Minnow	Mailīte	PHOP
Rhodeus sericeus	Bitterling	Spidiļķis	RHOS
Rutilus rutilus	Roach	Rauda	RUTR
Salmo trutta	Trout	Forele	SALT
Scardinius erythrophthalmus	Rudd	Rudulis	SCAE
Squalius cephalus	Chub	Sapals	SQUC
Vimba vimba	Vimba bream	Vimba	VIMV

Average fish density in the surveyed rivers varies from 53 to 244 adults per 100 m^2. The highest fish number is in the Eda River with abundance of minnow (Table 1 in Annex VIII). Average density of fish in geomorphic units varies from 18 to 450 adults per 100 m^2 (Table 2 in Annex VIII). Most frequently occurred and abundant species are roach (69%), minnow (46%), ground ling and stone loach (38%).

Species composition indicates water biological and hydromorphological conditions as follows:

- presence of standing water species as a bream, silver bream and rudd shows impact of HPP reservoirs upstream the fish sampling site;
- presence of sentinel species like a riffle minnow, bullhead, bitterling, brook lamprey, trout and high number of gravel spawners (especially minnow) is an evidence of good ecological conditions at least in some river stretches below HPP;
- presence of a trout, eel and vimba bream shows the accessibility for migratory fish also at least in some river stretches below HPP;
- presence of the big quantity of roach shows the eutrophication effect.

Only one of the sampled rivers belongs to the salmonid river type with dominating trout, minnow and stone loach in fish community. In the Eda River, number of trout was not large, however fish community in this river corresponds to fish community with dominating minnow and other gravel spawning species which are sensitive to oxygen depletion. Level of eutrophication of the Ciecere River is much higher than in other studied rivers, and its fish population by 50% consists of roach (Table 2 in Annex VIII).

5. CONCLUSIONS AND RECOMMENDATIONS

During FFS in Venta RBD, geomorphic units mapping, as well as river depth, water flow and substrate size measurements have been carried out in order to calculate the relationship between river habitat area and water discharge and to build the River Habitat – Water Flow rating curve for the flow rate from minimum low flow to annual flow. Surveys have been conducted in 3 regulated rivers on 235 GUs with total length of about 1.5 km and total area from 10 912 to 14 293 m^2 depending on water level (in Latvia). In Lithuania, 3 case studies were surveyed and results indicated 213 GUs with total length of about 4.4 km and total area 10768 m^2.

Due to weather conditions (wet summer and autumn) not all planned surveys were carried out in 2017, and the rest (in Eda River during low min flow conditions and in Ciecere River during low min & low max flow conditions) was conducted in the summer and autumn 2018. The same situation with planned surveys was in the Venta River – measurements during low min flow and low max flow conditions were conducted in 2018 and 2019, respectively.

The FFS reveal the necessity to have information from HPPs about their operational regime, in order to carry out the measurements for the specific flow amplitude in accordance with requirements of the MESOHABSIM method.

Habitat mapping upstream HPPs in some places does not ensure the reference conditions (e.g. 4-th site on Eda River) due to possible presence of additional hydro-morphological alterations (impoundment) and eutrophication due to wastewater treatment plant.

In presence of several HPPs along a river, the habitat mapping and E-flow evaluation should be done for all of them taking into account flow regime changes by each HPP operations.

Fish data collections in Latvia were carried out in the same rivers and regulated sites but on another dates. However, for the more precise results these surveys should be provided together with habitat mapping. Fish data collections in Lithuania were carried out in the same rivers and regulated sites on dates of FFS.

Latvian and Lithuanian lowland rivers have relatively low gradient and energy and in the future further work must be invested to fully adapt habitat mapping methodology to the local conditions. For instance, one of such adaptations could be development of new or adjusted geomorphic units list.

The results of 1-st round of the Field Surveys have been used for the Venta RBD habitat modelling and E-flow evaluation.

ANNEXES

ANNEX I

Table 1. Wet year daily discharge (m³/s), Venta River – Papilė WGS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	9.50	17.94	7.09	11.34	4.21	4.03	5.10	14.00	5.11	2.53	5.08	8.72
2	18.34	18.14	7.83	9.61	4.14	3.48	4.82	17.75	5.10	2.45	5.25	8.66
3	31.65	16.86	16.07	8.76	4.07	3.48	5.05	19.32	5.08	2.30	5.27	8.60
4	34.80	21.79	23.66	7.30	4.00	3.38	5.48	19.52	5.29	2.44	5.22	7.08
5	33.32	29.28	26.42	7.50	3.69	3.13	5.75	19.23	5.04	3.24	4.99	7.64
6	30.27	29.68	26.13	7.18	3.40	2.98	5.57	18.34	5.02	4.14	4.70	6.97
7	26.92	26.82	27.21	6.56	3.20	2.81	8.66	15.87	5.39	4.63	4.74	6.64
8	25.34	25.93	33.32	6.25	3.20	2.75	13.01	10.94	5.61	5.74	4.54	6.02
9	26.52	22.58	34.31	6.15	3.72	2.61	27.41	8.18	5.04	6.13	5.07	5.72
10	26.62	20.51	35.49	6.35	5.36	2.60	41.90	7.43	5.82	6.51	12.92	5.92
11	26.72	18.83	39.14	6.45	5.20	2.36	55.70	6.47	9.49	6.75	22.77	6.20
12	31.15	17.06	42.59	5.67	4.78	2.25	54.32	5.75	9.96	7.23	23.37	6.64
13	39.04	17.65	44.17	6.40	4.78	2.08	46.73	4.92	8.71	8.20	24.25	9.86
14	45.55	17.15	40.62	6.75	4.94	1.88	38.15	4.48	8.37	6.99	21.39	17.75
15	46.93	16.96	36.87	6.25	5.27	1.78	32.93	4.16	7.34	6.31	20.70	23.27
16	47.32	16.56	32.53	6.15	6.05	1.43	27.70	3.57	7.73	6.44	18.53	24.55
17	44.17	16.07	27.70	6.05	5.39	1.71	20.80	3.70	6.12	6.77	17.45	25.93
18	38.35	16.66	26.92	6.25	4.92	2.10	13.70	2.88	6.33	5.96	18.83	24.06
19	36.68	15.08	33.22	6.05	4.35	2.56	8.79	3.13	7.34	5.79	16.56	22.38
20	46.34	13.31	36.77	7.30	4.45	3.40	6.86	3.04	11.73	5.47	15.77	20.61
21	48.01	11.63	37.27	9.69	4.72	3.07	7.15	2.80	14.00	6.42	12.62	18.14
22	48.31	10.65	35.69	9.86	4.11	3.00	4.03	2.94	14.00	5.13	12.62	16.76
23	49.69	8.26	28.99	8.65	3.79	3.00	3.63	2.85	11.24	5.05	11.24	16.66
24	51.56	7.79	24.55	7.61	3.46	3.22	3.23	2.75	9.07	5.06	10.45	14.99
25	49.59	7.27	20.90	6.97	3.61	2.86	4.14	2.81	7.86	4.99	11.44	13.41
26	43.68	7.29	18.63	6.35	3.35	2.38	7.69	2.88	6.99	5.08	12.03	11.63
27	35.79	7.87	17.15	6.05	3.15	2.96	13.51	3.70	6.74	5.08	11.83	10.55
28	28.89	7.69	15.68	5.66	3.04	3.82	13.51	3.81	7.09	5.24	10.94	9.71
29	22.58		14.89	5.02	3.08	4.29	10.55	3.85	6.54	5.08	10.35	8.99
30	20.70		14.79	4.14	3.22	4.87	8.37	5.54	6.50	5.04	10.55	7.61
31	19.72		12.72		3.00		9.31	5.12		5.14		7.42

Table 2. Normal year daily discharge (m^3/s), Venta River – Papilė WGS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	47.72	18.73	7.92	3.35	19.52	4.62	1.67	1.71	1.19	3.42	12.62	36.77
2	51.56	26.92	7.73	3.47	16.46	4.73	1.60	1.89	1.32	3.56	12.03	37.37
3	47.03	28.49	7.90	3.44	13.70	4.62	1.59	1.94	1.67	3.44	11.83	35.49
4	46.34	27.80	7.33	3.17	12.13	3.89	1.53	1.81	2.18	3.98	12.23	31.55
5	47.03	23.66	7.25	3.62	10.75	3.52	1.51	1.63	2.48	4.64	14.79	24.65
6	44.07	20.11	7.30	3.54	9.37	3.67	1.45	1.49	2.71	5.26	22.28	18.14
7	38.55	19.13	7.29	3.49	8.44	3.86	1.31	1.43	2.38	6.46	28.69	14.49
8	32.73	18.14	7.14	3.55	7.82	3.89	1.37	1.38	2.06	7.87	36.38	12.62
9	25.14	17.45	6.42	3.70	7.22	3.66	1.29	1.42	1.82	9.12	41.80	10.75
10	19.13	16.07	5.77	3.44	7.03	3.29	1.28	1.33	1.69	10.25	44.46	11.04
11	13.80	15.08	5.82	3.16	7.85	2.82	1.24	1.32	1.49	11.14	45.65	10.25
12	10.45	14.00	5.37	3.70	7.80	2.78	1.26	1.32	1.49	11.24	46.24	10.55
13	10.75	12.82	4.97	28.20	7.63	2.57	1.31	1.35	1.47	10.25	45.84	10.45
14	10.84	12.03	4.64	64.58	7.65	2.42	1.36	1.43	1.35	9.27	41.90	9.47
15	9.60	11.63	4.39	75.91	7.85	2.27	1.49	1.57	1.31	9.83	36.38	8.35
16	10.45	10.75	4.17	95.93	7.27	2.08	1.52	1.72	1.26	10.15	31.35	7.77
17	11.63	10.25	4.16	93.46	6.79	1.97	1.50	1.75	1.35	13.11	26.42	7.74
18	11.04	10.06	4.03	85.08	6.66	1.83	1.51	1.71	1.68	20.11	21.99	7.79
19	11.34	10.06	3.81	76.41	6.92	1.78	1.42	1.64	2.34	21.49	18.53	7.85
20	10.94	9.72	3.69	66.25	7.44	1.70	1.46	1.57	4.16	20.90	16.37	8.06
21	11.04	8.65	3.62	55.11	7.04	1.70	1.51	1.41	7.97	18.44	14.69	8.08
22	11.24	9.35	3.30	44.17	10.75	1.64	1.48	1.38	10.15	15.58	13.31	8.20
23	11.83	9.45	3.31	33.91	10.06	1.60	1.57	1.31	10.15	12.82	12.62	8.19
24	11.93	8.82	3.40	26.62	7.84	1.54	1.60	1.27	8.55	11.34	12.23	8.50
25	12.23	8.32	3.39	22.38	6.32	1.59	1.59	1.22	7.15	10.55	11.83	8.80
26	12.72	7.89	3.30	19.42	6.48	1.53	1.52	1.10	6.43	12.13	12.52	12.52
27	12.72	7.76	3.38	19.32	8.96	1.56	1.52	1.29	5.39	14.79	14.79	22.48
28	12.72	7.79	3.44	24.25	10.45	1.86	1.51	1.13	5.17	16.07	18.04	38.06
29	13.41		3.37	25.63	9.66	1.80	1.44	1.04	5.14	16.17	22.18	53.63
30	13.61		3.36	22.87	7.44	1.71	1.56	1.12	5.32	15.18	31.15	56.20
31	13.61		3.34		5.57		1.53	1.04		13.90		52.94

Table 3. Dry year daily discharge (m^3/s), Venta River – Papilė WGS

	Jan.	**Feb.**	**Mar.**	**Apr.**	**May**	**June**	**July**	**Aug.**	**Sep.**	**Oct.**	**Nov.**	**Dec.**
1	11.04	8.85	10.75	14.10	11.54	1.60	1.53	1.50	0.85	2.02	4.60	2.57
2	12.03	9.64	11.04	20.90	10.45	1.57	1.61	1.72	0.96	2.41	4.34	2.55
3	20.41	9.08	13.21	26.03	10.15	1.59	1.56	1.67	0.90	2.56	4.00	2.73
4	29.48	8.99	22.28	29.58	9.67	1.55	1.26	1.60	0.94	2.32	3.95	2.54
5	31.06	7.92	29.08	31.75	9.17	1.53	1.23	1.64	1.00	2.09	3.92	2.28
6	24.45	7.67	29.18	31.45	8.77	1.53	1.36	1.60	1.07	2.28	4.19	2.22
7	19.42	6.64	25.04	29.08	8.16	1.49	1.34	1.49	1.09	2.23	3.91	2.17
8	19.23	6.85	21.10	25.63	6.80	1.46	1.10	1.38	1.09	2.15	3.92	2.10
9	17.45	7.99	18.24	21.00	6.02	1.39	0.99	1.28	1.09	2.45	4.00	2.14
10	15.68	6.94	15.68	16.96	5.40	1.36	1.08	1.22	1.12	2.45	4.61	2.19
11	14.39	6.96	13.80	14.30	4.79	1.30	1.10	1.16	1.12	2.58	4.55	2.14
12	20.01	7.52	12.32	12.42	4.48	1.35	1.08	1.08	1.14	2.73	4.46	2.08
13	31.06	9.07	10.94	11.34	4.27	1.34	1.07	1.01	1.11	2.70	4.24	2.38
14	48.11	9.52	9.96	10.84	4.09	1.25	1.08	0.93	1.08	2.77	3.86	3.32
15	54.91	9.04	9.02	10.75	4.23	1.33	1.15	0.92	1.10	2.66	3.93	5.44
16	55.70	8.39	8.25	11.04	4.54	1.40	1.14	0.89	1.12	2.80	3.90	7.66
17	56.49	6.12	7.69	11.73	4.48	1.15	1.11	0.87	1.18	2.45	3.68	7.99
18	53.83	9.32	7.04	12.13	4.26	1.38	1.12	0.77	1.18	2.80	3.77	7.67
19	45.55	7.49	6.63	11.54	3.85	1.26	1.13	0.87	1.14	3.06	3.41	9.10
20	35.99	7.12	6.41	10.65	3.47	1.37	1.21	0.79	1.15	3.59	3.12	13.11
21	26.72	7.77	6.02	9.50	3.20	1.38	1.27	0.80	1.26	4.45	2.91	22.08
22	20.41	8.04	5.91	8.62	3.08	1.46	1.34	0.78	1.26	6.17	2.93	28.49
23	16.56	7.85	6.07	8.12	2.95	1.58	1.42	0.65	1.22	7.83	2.94	31.94
24	14.10	7.87	5.90	7.75	2.69	1.75	1.55	0.77	1.17	7.63	2.92	31.65
25	12.42	8.65	5.77	7.35	2.55	1.79	1.62	0.76	1.17	6.12	3.15	29.28
26	11.24	10.06	5.54	6.84	2.16	1.89	1.60	0.78	1.24	5.24	3.25	26.03
27	10.25	10.25	5.60	6.62	1.81	1.92	1.49	0.76	1.26	5.23	3.25	21.30
28	9.49	10.55	5.83	6.35	1.61	1.84	1.41	0.74	1.43	4.98	3.07	18.73
29	9.11		6.87	7.17	1.73	1.77	1.41	0.73	1.52	4.80	2.99	16.07
30	8.68		8.14	10.25	1.71	1.74	1.49	0.72	1.45	4.89	2.48	13.01
31	8.33		9.13		1.64		1.41	0.72		4.42		10.75

Table 4. Wet year daily discharge (m^3/s), Venta River – Leckava WGS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	30.80	57.20	12.40	34.00	15.40	5.69	10.60	26.20	15.20	2.61	17.40	23.10
2	56.50	54.50	19.10	31.30	13.40	7.20	12.70	31.30	15.70	4.73	19.40	19.10
3	91.10	61.00	41.80	29.90	15.60	7.11	11.90	35.50	16.60	4.03	17.00	20.40
4	90.90	76.90	71.80	28.30	13.10	7.15	14.10	37.50	15.40	6.44	18.60	19.60
5	81.50	94.20	69.90	26.50	12.60	7.01	13.80	36.10	14.80	7.47	16.40	19.80
6	76.40	98.90	67.20	25.90	12.50	5.70	14.60	33.00	15.90	6.78	16.70	18.40
7	70.70	82.20	71.20	23.40	13.20	5.02	20.60	32.00	16.90	6.30	16.50	18.20
8	66.80	67.80	73.20	21.00	12.80	4.58	39.70	29.60	15.70	7.63	15.90	20.40
9	65.30	62.20	90.80	21.00	12.10	4.58	73.80	26.00	20.90	9.69	18.60	17.70
10	67.50	59.50	96.90	21.00	14.60	4.67	86.30	22.20	23.80	9.30	35.90	17.70
11	83.60	57.70	107.00	21.20	14.20	4.08	98.30	20.00	27.00	11.30	49.70	18.00
12	112.00	53.70	137.00	24.00	12.50	4.11	104.00	20.30	29.90	12.30	55.60	21.70
13	143.00	49.10	118.00	21.50	14.50	5.06	91.50	18.10	28.20	11.80	54.30	33.30
14	159.00	43.50	104.00	21.50	15.00	4.47	76.10	17.10	25.80	9.62	52.90	51.00
15	156.00	38.20	89.90	20.60	14.70	4.13	65.80	16.40	25.40	8.94	48.90	82.10
16	154.00	37.40	79.00	17.70	18.80	3.85	59.90	14.10	21.10	7.27	47.50	74.40
17	141.00	33.60	73.70	20.30	21.50	3.91	47.50	12.90	24.00	13.20	45.30	77.40
18	115.00	29.50	75.60	20.30	12.80	4.91	38.00	13.50	25.10	10.50	43.20	73.90
19	124.00	23.50	90.30	18.90	11.90	5.41	30.80	13.80	31.10	5.37	39.80	67.00
20	151.00	22.70	101.00	19.60	10.30	5.27	26.40	12.20	32.20	9.78	37.10	61.70
21	146.00	24.90	89.50	26.10	10.20	8.87	20.80	14.10	18.60	8.65	34.00	57.50
22	144.00	25.10	81.10	30.50	10.60	7.93	20.80	11.50	30.20	9.42	30.40	52.70
23	139.00	24.90	73.00	29.00	10.80	6.72	19.80	13.30	27.60	10.80	30.20	48.90
24	125.00	25.60	64.60	25.70	8.69	8.30	19.80	15.90	25.30	12.00	29.30	45.80
25	99.60	23.90	59.40	24.40	9.90	7.60	19.40	15.40	22.30	9.97	27.60	39.00
26	87.80	24.60	54.10	24.00	9.60	6.49	19.80	12.90	20.40	11.80	28.90	38.90
27	87.90	18.60	49.20	19.60	6.35	7.91	22.50	11.00	18.70	12.00	29.30	35.40
28	78.30	14.60	44.60	19.40	8.70	9.42	24.30	12.20	18.90	12.00	28.10	35.20
29	65.30		41.50	17.10	8.41	9.40	24.10	12.70	17.00	11.80	26.10	32.00
30	60.50		40.80	17.10	9.41	10.40	23.10	12.20	16.90	12.40	25.50	30.20
31	46.80		37.60		6.41		23.30	12.40		14.20		29.30

Table 5. Normal year daily discharge (m^3/s), Venta River – Leckava WGS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	26.80	38.40	40.50	114.00	17.50	5.31	5.91	8.20	4.17	4.31	63.20	70.20
2	25.10	32.90	37.90	117.00	16.90	5.15	7.51	5.88	3.38	5.21	57.40	83.00
3	20.30	34.50	30.40	99.50	13.50	6.66	7.29	5.64	3.02	6.64	51.80	72.70
4	17.60	37.50	26.10	87.80	12.60	6.59	6.40	5.04	3.25	6.51	48.10	61.70
5	15.90	23.80	23.40	75.20	12.40	7.02	6.44	5.41	3.61	6.82	35.70	56.10
6	15.70	20.50	24.20	65.80	11.30	8.99	6.67	4.36	4.32	5.83	28.20	52.60
7	15.40	20.20	23.80	58.30	9.43	8.36	6.28	4.21	4.04	5.91	19.90	52.60
8	15.40	23.80	23.80	55.80	11.50	7.96	7.43	4.12	4.22	6.43	24.40	61.70
9	20.00	19.10	23.80	44.60	11.00	8.31	9.21	3.60	4.52	6.07	19.60	58.80
10	21.30	19.10	25.30	47.80	11.00	8.22	10.60	3.64	5.02	9.22	19.60	59.30
11	20.00	20.50	31.20	45.00	10.70	8.04	10.90	3.64	5.12	6.36	19.30	58.40
12	25.20	23.80	36.20	41.90	11.00	7.71	11.40	3.62	4.73	6.36	17.90	60.80
13	28.30	19.40	40.50	40.10	9.88	8.23	10.80	3.67	4.24	11.10	19.60	48.10
14	24.90	19.30	40.80	37.10	8.35	9.85	9.94	5.43	5.26	8.39	19.30	42.20
15	24.70	19.10	41.40	35.40	8.14	16.90	8.24	6.20	4.68	6.30	19.30	44.90
16	24.40	18.70	61.10	32.00	7.69	22.60	8.50	4.28	3.55	6.94	18.20	35.40
17	24.20	14.10	62.30	28.40	8.62	25.90	8.12	3.51	3.42	7.60	20.00	32.50
18	24.70	16.00	74.10	26.10	7.93	26.80	7.59	3.73	3.78	9.90	24.80	30.00
19	21.80	14.40	76.30	25.30	7.31	24.60	7.99	4.09	4.10	12.00	22.40	27.30
20	19.00	17.00	62.80	24.90	6.83	22.50	9.43	3.73	3.59	23.90	24.80	27.90
21	19.50	18.70	56.30	17.60	6.60	16.40	9.36	3.39	3.58	20.20	26.30	28.50
22	19.00	18.70	53.90	14.40	6.25	14.00	8.70	3.20	3.64	12.80	28.30	30.50
23	20.20	16.30	55.40	14.70	6.38	11.40	9.22	3.38	3.50	14.10	30.30	46.30
24	19.10	13.80	63.30	20.20	6.55	10.10	12.90	3.66	5.07	14.10	27.90	59.50
25	25.30	18.70	56.80	19.80	6.16	8.57	16.20	3.51	5.08	13.90	29.90	56.10
26	28.40	13.80	48.50	16.70	6.25	7.85	16.40	3.15	4.82	14.10	26.00	51.40
27	39.20	23.40	48.20	15.10	5.57	7.52	16.30	3.30	5.65	11.90	26.40	42.30
28	43.70	33.30	48.70	14.60	6.96	7.11	16.20	3.66	5.52	12.80	53.20	39.30
29	42.30		73.10	9.86	7.36	6.64	15.80	2.89	4.72	13.50	78.80	34.80
30	40.10		130.00	18.40	6.22	6.02	12.90	3.32	5.54	27.40	72.60	31.30
31	36.60		132.00		6.06		11.10	3.82		52.70		27.30

Table 6. Dry year daily discharge (m^3/s), Venta River – Leckava WGS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	25.20	110.00	84.50	45.60	19.50	5.76	3.89	2.52	7.10	17.20	25.40	55.80
2	24.60	98.30	79.70	43.70	20.60	5.84	4.84	1.16	4.58	13.80	25.50	57.30
3	18.90	88.40	82.00	40.40	19.60	5.89	4.02	2.86	3.67	16.30	26.40	58.70
4	20.80	77.90	79.90	38.20	20.10	4.40	3.72	3.06	4.95	20.70	28.60	64.30
5	17.30	67.80	70.10	35.10	19.40	4.67	3.93	3.82	5.12	28.00	27.70	73.00
6	17.30	62.00	62.80	33.70	17.90	4.90	4.76	3.00	4.59	46.80	29.20	76.90
7	17.20	57.90	66.90	33.40	17.00	4.83	3.97	2.69	3.81	50.70	28.00	74.40
8	18.80	57.10	79.50	33.30	16.10	4.12	3.69	2.49	4.88	47.80	28.30	77.20
9	17.80	56.10	81.20	35.70	14.00	3.83	4.75	3.56	5.72	44.90	27.50	80.40
10	16.90	53.80	72.30	39.70	13.60	4.06	3.93	3.22	3.83	41.80	27.90	80.10
11	17.10	54.30	68.50	46.20	13.50	4.12	3.53	2.85	3.01	38.30	31.00	76.60
12	23.30	57.50	62.60	56.20	12.40	3.76	4.04	2.39	3.85	38.40	36.60	71.90
13	25.40	57.10	61.60	60.80	12.30	3.51	4.50	3.12	4.54	38.70	38.00	67.30
14	26.80	54.90	71.50	68.50	11.80	4.42	4.61	4.19	3.75	44.40	37.90	61.60
15	26.40	52.00	77.00	64.60	12.30	3.78	5.74	4.17	2.98	46.90	35.60	56.70
16	25.10	44.40	79.20	58.30	11.00	4.17	3.16	3.01	3.18	45.00	34.20	53.50
17	23.50	40.20	75.10	54.00	10.50	4.48	3.78	3.12	2.98	41.10	34.00	48.60
18	23.30	44.20	80.50	51.90	10.90	4.54	3.91	3.46	3.55	38.40	36.60	46.60
19	23.40	43.60	87.40	53.60	10.80	4.72	4.43	4.23	2.25	39.80	40.70	44.90
20	29.30	43.40	88.30	52.80	9.98	3.86	4.44	4.01	2.73	40.10	49.30	41.80
21	41.20	44.30	87.00	49.30	9.16	4.48	4.33	4.23	3.53	40.60	47.60	39.80
22	48.30	43.90	79.50	42.10	8.86	4.87	4.63	4.76	3.57	37.80	44.60	38.30
23	50.20	49.70	75.80	38.10	8.62	4.08	4.50	5.55	2.71	34.40	40.70	35.80
24	48.40	62.00	76.40	34.50	8.15	4.14	4.21	4.77	3.27	33.50	40.20	34.40
25	49.80	64.60	71.90	30.50	7.66	3.87	4.25	6.82	2.92	29.40	42.90	33.00
26	92.50	55.30	64.40	26.70	8.23	4.35	4.21	8.19	2.96	30.70	61.10	31.00
27	163.0	56.40	56.50	25.70	7.50	3.77	3.65	6.63	3.41	28.80	69.50	26.70
28	162.0	64.40	52.80	24.80	7.30	4.15	3.21	6.47	3.05	28.10	65.90	26.90
29	137.0	74.50	48.80	23.10	7.08	3.91	3.34	5.98	3.02	27.20	61.90	26.20
30	125.0		49.30	22.20	6.30	4.47	4.05	7.07	3.07	26.00	58.30	25.90
31	120.0		49.60		6.60		3.69	7.58		25.60		26.10

Table 7. Wet year daily discharge (m³/s), Bartuva River – Skuodas WGS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	5.72	3.63	1.25	1.65	1.46	0.44	0.95	5.47	2.84	0.22	9.97	3.19
2	10.60	4.46	3.69	1.62	0.90	0.37	1.33	5.47	4.71	0.23	13.68	2.92
3	14.31	9.09	6.94	1.57	1.16	0.40	1.13	4.63	5.55	0.40	11.87	2.60
4	11.53	16.92	6.19	1.53	1.22	0.48	1.11	4.05	7.03	0.48	8.16	2.57
5	11.57	16.66	4.46	1.51	0.85	0.29	1.41	3.55	6.82	0.60	5.98	4.33
6	13.05	15.78	3.53	1.47	0.49	0.38	2.73	3.03	5.81	0.64	4.71	5.43
7	12.75	11.87	3.43	1.41	0.89	0.27	3.35	2.55	4.71	0.53	5.05	7.28
8	11.53	7.07	3.93	1.16	0.74	0.21	8.12	2.18	3.53	0.71	5.13	6.65
9	11.95	5.68	4.50	0.97	0.59	0.25	15.57	2.06	3.62	0.75	7.83	5.55
10	12.92	4.92	5.13	1.06	0.61	0.25	17.67	1.74	3.96	1.07	14.48	4.50
11	15.44	4.09	6.52	1.43	0.75	0.23	13.89	1.35	3.87	0.97	13.51	4.11
12	25.38	3.14	9.93	1.43	1.01	0.22	9.43	1.58	3.56	1.08	10.60	4.11
13	27.06	3.01	9.51	1.16	0.70	0.17	6.90	1.94	3.11	0.73	8.88	6.06
14	27.69	2.99	7.83	0.87	0.95	0.30	5.09	2.76	2.81	1.00	7.79	11.74
15	23.27	2.75	6.23	0.99	1.09	0.25	4.01	4.08	2.78	0.75	6.82	17.42
16	20.11	1.96	5.47	1.36	1.07	0.21	3.00	4.20	2.47	0.58	6.61	15.23
17	17.17	1.81	5.34	1.33	1.08	0.24	2.18	4.59	2.35	0.57	5.55	14.52
18	14.81	1.62	6.90	1.07	0.90	0.26	1.86	4.29	3.32	0.42	4.88	14.18
19	15.32	1.45	10.86	0.98	0.92	0.28	1.43	3.49	5.18	0.58	4.25	14.56
20	19.23	1.46	10.69	2.13	0.58	0.35	1.39	2.81	7.57	0.64	3.89	12.54
21	16.83	1.39	8.04	3.59	0.74	0.62	1.34	2.26	7.83	0.49	3.73	10.90
22	14.69	1.54	6.27	2.43	0.80	0.32	1.09	1.62	6.99	0.62	3.58	9.59
23	12.16	1.59	5.26	2.21	0.67	0.34	1.38	1.57	5.68	0.91	3.70	7.79
24	9.01	1.62	4.33	1.81	0.54	0.29	1.58	2.07	4.63	0.79	4.63	6.52
25	6.65	1.21	3.87	1.29	0.70	0.30	2.81	1.94	3.89	1.09	5.72	5.47
26	4.71	1.20	3.08	1.19	0.56	0.38	3.29	1.38	3.56	1.07	5.39	4.50
27	4.80	1.18	2.94	1.95	0.39	0.91	2.93	1.51	3.14	1.67	4.76	4.04
28	3.98	1.15	2.74	1.85	0.40	1.18	2.42	2.01	2.65	1.49	4.17	3.58
29	3.38		2.57	1.66	0.43	1.06	2.14	2.43	2.34	2.78	3.77	3.37
30	3.11		2.31	1.67	0.50	0.73	2.25	2.77	1.69	2.40	3.40	3.04
31	3.35		1.65		0.58		3.58	2.63		3.42		3.16

Table 8. Normal year daily discharge (m³/s), Bartuva River – Skuodas WGS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	8.00	12.75	1.99	0.72	2.20	1.33	0.35	0.30	0.61	0.35	2.20	6.52
2	13.42	14.35	2.20	0.90	2.09	1.31	0.37	0.27	1.03	0.23	2.11	5.47
3	12.83	10.94	2.82	0.96	1.86	1.17	0.47	0.24	2.00	0.24	1.70	4.59
4	11.95	7.36	2.85	1.05	1.72	0.98	0.33	0.28	3.68	0.72	2.13	3.94
5	10.73	5.43	2.80	1.04	1.63	0.98	0.32	0.26	3.99	1.37	3.31	3.56
6	7.41	5.26	3.03	0.99	1.56	0.92	0.33	0.29	3.02	2.05	6.94	3.04
7	6.10	5.30	3.69	1.11	1.39	0.82	0.51	0.37	2.02	3.80	7.41	2.25
8	4.67	4.80	3.35	1.37	1.22	0.61	0.49	0.35	1.85	4.63	8.21	2.18
9	3.50	4.15	2.26	1.59	1.31	0.58	0.35	0.43	1.56	4.46	9.93	2.22
10	3.08	3.47	2.02	1.47	1.22	0.62	0.35	0.42	1.09	6.44	11.03	1.89
11	2.78	2.93	1.72	1.65	1.28	0.53	0.34	0.48	1.32	7.53	8.67	1.89
12	1.56	2.35	1.65	2.17	1.41	0.34	0.28	0.53	1.28	6.44	6.69	1.83
13	2.13	2.09	1.66	4.76	1.38	0.39	0.22	0.68	1.14	4.88	6.23	1.89
14	2.39	1.89	1.51	7.49	1.52	0.48	0.21	1.06	1.01	4.03	5.64	1.54
15	2.52	1.71	1.42	6.73	1.47	0.32	0.35	1.03	0.72	4.05	5.01	1.27
16	1.97	1.94	1.26	5.30	1.17	0.32	0.24	0.66	1.16	3.96	5.13	1.97
17	1.71	1.82	1.12	4.59	1.49	0.40	0.23	0.57	1.06	4.21	4.88	1.54
18	1.25	1.59	0.92	4.12	1.21	0.34	0.26	0.69	0.82	5.60	4.38	1.17
19	1.58	1.78	1.06	3.41	1.23	0.43	0.28	0.79	1.59	4.80	3.67	1.57
20	2.16	1.79	1.11	3.05	1.21	0.31	0.28	0.77	4.11	3.91	3.09	1.33
21	1.97	1.21	1.10	2.50	4.84	0.30	0.29	2.05	5.05	3.27	2.61	1.30
22	2.19	1.74	0.89	2.03	6.06	0.42	0.27	2.60	4.97	2.66	2.49	1.38
23	3.89	1.90	0.74	2.05	4.17	0.40	0.21	1.68	3.93	2.32	2.62	2.20
24	3.53	1.78	0.69	1.92	3.01	0.40	0.18	1.23	3.37	2.10	2.42	2.50
25	3.67	1.63	0.80	1.55	1.70	0.52	0.27	0.76	2.89	2.01	2.35	1.74
26	3.69	1.53	0.75	1.86	1.86	0.37	0.24	0.92	2.40	2.51	2.40	3.69
27	3.70	1.54	0.59	2.12	2.92	0.37	0.19	0.60	1.64	2.88	3.32	9.80
28	3.34	1.64	0.74	3.08	2.80	0.45	0.21	0.48	1.63	2.86	3.75	17.51
29	2.66		0.73	3.45	2.33	0.40	0.22	0.43	1.45	2.63	5.64	15.70
30	1.91		0.91	2.75	1.50	0.51	0.29	0.45	1.35	2.34	7.11	10.39
31	4.76		0.92		1.41		0.35	0.44		2.26		7.83

Table 9. Dry year daily discharge (m^3/s), Bartuva River – Skuodas WGS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	2.02	0.99	0.66	19.19	1.40	0.63	0.26	0.15	0.31	0.30	0.60	0.87
2	1.70	1.29	0.76	15.65	1.09	0.69	0.16	0.15	0.30	0.31	0.48	0.86
3	1.64	1.33	0.83	12.12	0.97	0.52	0.14	0.21	0.30	0.31	0.53	0.80
4	1.59	1.20	0.73	10.27	1.27	0.56	0.13	0.16	0.78	0.31	0.47	1.03
5	1.55	1.45	0.84	7.95	1.01	0.64	0.20	0.12	0.72	0.38	0.49	1.33
6	1.32	1.34	0.71	6.10	0.96	0.58	0.15	0.13	0.85	0.32	0.45	1.25
7	1.56	1.53	0.81	5.05	1.07	0.59	0.10	0.11	1.16	0.31	0.44	1.37
8	1.49	1.08	0.82	4.76	0.96	0.58	0.08	0.12	1.12	0.30	0.52	1.42
9	1.59	1.12	0.66	4.84	0.91	0.48	0.08	0.11	0.64	0.29	0.48	1.81
10	1.58	0.48	0.78	4.97	1.04	0.53	0.16	0.15	0.62	0.38	0.48	2.39
11	1.57	0.68	0.94	4.21	0.71	0.63	0.14	0.11	0.90	0.32	0.50	3.73
12	1.70	0.62	0.68	4.46	0.63	0.49	0.18	0.09	0.69	0.31	0.50	8.08
13	1.66	0.56	0.72	3.88	0.67	0.26	0.20	0.09	0.57	0.30	0.72	9.01
14	1.80	0.43	0.83	3.55	0.63	0.21	0.25	0.10	0.43	0.31	0.93	6.82
15	1.94	0.48	0.62	3.55	0.66	0.20	0.27	0.17	0.38	0.32	0.91	5.68
16	1.72	0.80	0.62	3.32	0.59	0.21	0.19	0.24	0.43	0.33	1.09	9.05
17	1.52	0.88	0.61	3.14	0.65	0.21	0.17	0.19	0.30	0.33	1.16	10.18
18	1.69	0.64	0.72	2.71	0.69	0.28	0.15	0.22	0.27	0.33	1.25	7.45
19	2.26	0.76	0.85	2.22	0.52	0.31	0.16	0.20	0.26	0.32	1.04	5.22
20	3.06	0.92	0.80	2.87	0.63	0.20	0.24	0.19	0.37	0.31	1.28	4.59
21	3.25	0.93	0.71	2.34	0.63	0.31	0.11	0.27	0.38	0.34	1.09	3.79
22	3.34	0.66	0.71	1.78	0.82	0.33	0.15	0.48	0.25	0.32	0.88	3.48
23	3.08	0.64	0.86	2.00	0.82	0.32	0.11	0.41	0.21	0.36	0.97	3.30
24	2.68	0.75	0.97	1.97	0.65	0.29	0.13	0.36	0.22	0.46	1.03	3.17
25	1.97	0.76	0.83	1.59	0.57	0.30	0.10	0.33	0.35	0.38	0.96	3.22
26	1.65	0.69	0.86	1.56	0.63	0.25	0.08	0.37	0.34	0.52	0.78	3.10
27	1.50	0.66	1.27	1.56	0.66	0.29	0.08	0.52	0.21	0.49	0.71	2.89
28	1.97	0.89	2.61	1.48	0.74	0.13	0.08	0.45	0.22	0.53	0.80	2.02
29	1.35		7.32	1.20	0.66	0.15	0.08	0.44	0.20	0.60	1.24	1.85
30	1.26		18.98	1.46	0.80	0.23	0.11	0.48	0.21	0.48	1.19	1.93
31	1.00		21.29		0.65		0.12	0.46		0.51		2.56

ANNEX II

Table 1. Wet Year daily discharge (m^3/s), Ciecere River – Pakuli HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	6.99	5.74	16.19	4.88	6.27	1.50	1.38	1.43	1.15	3.54	8.18	13.70
2	7.88	5.42	19.09	4.65	5.34	1.50	1.46	1.42	1.17	3.27	7.30	12.32
3	8.06	5.18	17.60	5.11	4.61	1.46	1.59	1.40	1.49	3.63	7.00	10.60
4	7.81	4.86	14.37	5.15	4.04	1.41	1.73	1.40	1.79	3.97	6.80	11.63
5	6.08	4.74	11.83	4.88	3.75	1.50	3.09	1.38	2.02	5.43	6.50	10.52
6	4.70	4.25	10.28	4.65	3.52	1.59	3.63	1.38	1.95	7.99	6.00	9.34
7	5.44	4.38	8.90	4.65	3.34	1.66	2.88	1.38	1.76	9.85	5.20	10.50
8	4.13	5.04	7.81	4.33	3.16	1.61	2.29	1.37	1.77	11.71	5.20	15.75
9	4.76	4.52	7.29	4.31	3.29	1.66	2.02	1.37	1.73	13.21	5.25	16.73
10	4.42	3.43	7.63	3.84	3.32	1.61	1.88	1.34	2.63	11.58	5.70	16.98
11	3.77	3.02	8.97	3.86	3.20	1.54	1.79	1.36	2.91	11.55	7.35	14.38
12	7.24	2.79	9.54	4.33	3.04	1.57	1.77	1.37	2.77	12.16	22.30	14.35
13	6.24	2.63	8.70	5.58	2.82	1.61	1.86	1.37	3.16	17.18	20.99	25.00
14	6.36	2.61	7.65	5.74	2.57	1.66	2.54	1.26	4.81	17.00	12.62	23.31
15	5.77	2.50	7.13	5.15	2.39	1.66	2.88	1.14	10.16	16.39	13.73	17.88
16	5.18	2.41	7.04	5.06	2.18	1.61	2.45	1.15	10.37	12.60	14.12	16.36
17	4.68	2.52	6.72	4.59	2.04	1.57	2.09	1.16	7.94	10.84	11.97	13.63
18	4.36	2.63	7.49	4.41	2.00	1.52	1.88	1.17	8.91	9.74	11.23	10.67
19	5.27	2.79	8.86	4.16	1.91	1.48	1.75	1.17	13.60	9.96	13.51	10.23
20	7.49	3.22	10.15	4.16	1.79	1.46	1.66	1.17	10.70	8.33	11.79	10.73
21	7.46	6.50	10.06	3.86	1.63	1.41	1.59	1.17	8.56	7.92	11.46	10.27
22	8.33	7.35	10.01	3.97	1.64	1.43	1.49	1.17	9.12	7.17	11.37	10.00
23	7.15	8.00	9.04	3.86	1.65	1.41	1.50	1.18	8.27	6.27	10.94	9.96
24	10.08	12.53	7.54	3.63	1.64	1.41	1.46	1.18	7.13	5.56	10.07	13.12
25	8.12	7.85	6.72	4.04	1.62	1.38	1.47	1.17	6.82	5.38	11.00	11.58
26	7.79	7.71	6.24	4.72	1.61	1.41	1.46	1.17	5.91	7.30	22.80	12.47
27	7.08	7.98	5.86	4.74	1.61	1.36	1.48	1.17	4.73	8.03	20.22	11.44
28	7.58	9.10	5.58	4.36	1.47	1.36	1.47	1.17	4.38	9.12	16.02	10.48
29	7.20		5.34	4.36	1.46	1.36	1.48	1.17	4.43	10.43	14.43	10.48
30	6.72		5.13	6.04	1.43	1.38	1.44	1.17	3.91	10.63	13.92	10.76
31	5.97		4.77		1.46		1.44	1.16		8.34		9.28

Table 2. Normal Year daily discharge (m^3/s), Ciecere River – Pakuli HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	4.57	2.36	2.47	22.78	4.02	3.01	1.27	1.79	5.59	6.52	13.55	8.63
2	4.04	2.20	3.05	19.12	4.02	2.88	1.29	1.57	5.16	6.01	9.60	7.31
3	3.77	2.02	3.12	18.30	4.00	2.67	1.93	1.57	3.87	4.44	7.83	6.45
4	4.25	2.02	3.22	15.43	3.43	2.26	2.10	2.09	4.49	4.25	10.51	5.93
5	4.54	2.06	3.18	13.49	4.38	1.62	2.13	2.88	3.91	4.89	11.51	5.61
6	4.59	2.11	3.15	12.77	4.57	2.33	2.78	3.04	2.89	4.59	11.33	5.54
7	4.72	2.00	3.08	11.90	6.84	2.34	7.01	2.82	3.78	3.15	9.56	5.38
8	4.77	1.91	3.07	10.34	7.19	1.98	2.11	2.52	3.50	2.91	7.49	5.34
9	4.81	1.82	3.04	10.52	6.33	3.07	1.13	2.66	2.55	2.73	8.10	5.29
10	4.74	1.73	2.66	7.74	5.65	2.97	1.11	2.54	2.39	2.01	11.17	3.39
11	4.59	1.66	3.21	8.45	5.45	2.86	1.11	2.34	2.35	2.65	11.85	4.24
12	4.36	1.63	2.51	7.10	5.72	2.72	1.11	2.16	2.64	2.68	11.72	3.39
13	4.31	1.68	2.46	6.63	5.52	2.63	1.11	2.18	2.40	2.84	23.68	5.13
14	4.25	1.70	3.31	6.38	5.63	2.57	1.16	2.47	2.14	2.82	28.57	3.48
15	4.13	1.75	3.30	6.31	7.80	2.50	2.75	2.82	1.86	3.12	23.66	3.41
16	3.79	1.79	3.40	6.29	9.09	2.43	1.13	2.68	2.36	4.43	24.61	4.34
17	3.63	1.82	3.32	6.27	5.06	2.27	1.20	2.68	4.15	5.61	20.41	3.45
18	3.61	1.86	3.54	6.13	4.27	2.14	1.41	2.84	7.40	5.81	16.44	3.94
19	3.54	1.91	3.61	5.47	5.58	2.14	1.48	2.93	7.91	5.09	15.50	3.45
20	3.48	1.91	3.75	3.98	3.84	2.06	1.46	3.67	6.03	4.31	13.74	3.99
21	3.27	1.82	15.75	3.98	3.30	1.95	1.41	3.84	7.60	4.16	13.78	3.40
22	3.09	1.82	25.77	4.22	3.55	1.86	1.38	3.83	8.03	5.34	12.30	3.77
23	2.70	1.95	23.99	4.72	3.11	1.82	1.36	4.93	8.18	7.54	10.96	3.22
24	2.63	2.04	23.78	3.84	3.82	1.73	1.36	5.67	8.14	7.67	13.46	3.87
25	2.57	2.11	21.70	4.13	3.70	1.81	1.50	5.85	7.61	8.64	15.05	3.87
26	2.66	2.18	21.21	3.90	2.87	1.50	1.54	6.10	4.87	13.58	16.03	3.23
27	2.31	2.34	23.62	3.99	3.00	1.54	1.48	7.04	6.18	12.49	13.78	4.09
28	3.60	2.57	26.31	4.02	3.03	1.52	1.48	6.73	5.56	14.05	10.94	4.43
29	2.31		26.20	3.85	3.01	1.88	1.48	6.69	5.87	15.74	9.49	3.21
30	2.55		23.18	3.91	3.02	1.48	1.59	6.34	6.74	16.44	9.29	4.05
31	4.60		20.82		3.02		1.82	6.00		16.51		4.02

Table 3. Dry Year daily discharge (m^3/s), Ciecere River – Pakuli HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	5.09	4.51	2.06	15.06	1.16	1.13	0.95	1.05	0.32	1.05	3.45	8.65
2	4.20	3.22	1.95	15.97	1.23	0.65	0.77	0.67	0.60	1.20	3.36	11.98
3	4.00	3.79	1.88	13.84	1.33	0.88	0.62	0.93	0.72	1.52	3.29	15.13
4	3.87	3.16	1.87	13.22	1.14	1.41	0.88	0.70	1.11	2.20	3.29	13.70
5	3.67	2.47	1.87	12.37	1.15	0.73	0.74	0.84	0.84	3.85	3.20	10.00
6	3.63	2.18	1.87	11.01	1.13	1.26	0.60	0.77	0.48	3.60	3.16	8.81
7	3.35	2.00	1.76	10.38	1.22	0.77	0.88	0.73	0.90	2.23	3.25	8.98
8	4.74	1.95	2.10	8.06	0.90	1.17	0.80	0.68	0.90	1.98	3.27	8.32
9	5.60	1.69	1.98	8.17	1.36	0.92	0.74	0.64	0.68	2.04	3.32	7.46
10	4.01	2.18	2.06	8.38	0.86	0.99	0.94	0.59	0.59	2.20	2.71	7.88
11	4.48	1.98	2.02	6.79	1.32	0.95	0.72	0.57	0.57	2.04	2.51	7.22
12	6.54	1.88	2.02	6.40	0.77	0.94	0.85	0.82	0.57	1.86	3.16	6.33
13	6.44	1.91	2.01	5.56	1.28	0.69	0.97	0.62	0.59	1.75	3.58	6.02
14	5.80	1.88	1.99	4.96	0.92	1.38	0.68	0.77	0.61	1.66	3.61	5.74
15	6.75	1.88	1.92	4.74	0.95	1.29	0.86	0.52	0.87	1.80	3.65	5.40
16	6.98	1.82	2.71	4.56	0.85	1.38	0.72	0.50	0.68	1.85	3.40	4.95
17	6.58	1.63	3.09	4.09	0.94	0.91	0.72	0.48	0.68	1.54	3.75	8.10
18	5.98	1.23	3.97	2.38	0.96	1.44	0.67	0.48	0.64	1.59	3.64	10.84
19	3.86	1.00	4.23	3.03	1.06	0.95	0.97	0.63	0.66	1.84	3.77	10.42
20	4.61	0.95	3.65	2.12	0.78	1.14	1.07	0.51	0.95	2.11	3.88	9.42
21	4.36	0.80	3.76	2.63	1.12	1.09	0.95	0.63	1.38	2.06	4.29	8.66
22	3.93	0.98	3.93	2.00	0.64	0.95	0.89	0.72	0.68	2.30	5.40	6.96
23	3.81	1.00	5.09	1.94	0.64	1.10	1.18	1.13	0.77	2.31	7.20	6.38
24	4.02	1.00	5.25	1.90	1.02	0.80	0.73	0.56	0.70	2.16	5.29	4.27
25	4.68	1.10	5.05	1.85	1.37	0.78	0.88	0.73	0.68	2.23	6.10	3.08
26	4.84	1.50	3.68	1.80	0.91	1.03	0.90	0.68	0.75	2.34	7.83	3.07
27	5.14	2.03	3.84	1.70	1.02	0.77	1.03	0.36	0.80	2.63	7.92	3.07
28	5.17	2.39	6.38	1.61	1.24	0.87	0.68	0.34	0.77	3.36	8.03	3.01
29	5.57		15.39	1.52	0.80	0.87	1.03	0.62	0.82	4.52	8.11	3.79
30	5.17		15.48	1.52	0.90	0.65	0.82	1.27	1.43	4.52	10.35	3.47
31	4.93		13.53		0.77		0.84	0.59		3.88		2.71

Table 4. Wet Year daily discharge (m^3/s), Vanka River – upstream Edole HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	1.74	1.03	0.94	2.12	0.72	0.37	0.32	0.93	0.81	0.71	2.00	2.23
2	1.68	1.13	1.03	2.16	0.70	0.37	0.29	0.78	0.89	0.85	2.00	2.00
3	1.64	1.23	1.14	2.06	0.65	0.40	0.28	0.59	0.85	0.97	2.08	2.02
4	1.86	1.32	1.17	1.98	0.63	0.41	0.27	0.45	0.77	1.09	2.08	2.19
5	2.00	1.39	1.17	1.91	0.65	0.33	0.25	0.42	0.67	1.10	2.00	2.44
6	2.03	1.39	1.17	1.71	0.66	0.31	0.25	0.39	0.61	1.13	1.91	2.42
7	2.15	1.18	1.13	1.55	0.73	0.29	0.24	0.37	0.59	1.17	1.80	2.11
8	2.24	1.23	1.13	1.48	0.68	0.29	0.23	0.36	0.53	1.20	1.70	1.91
9	2.20	1.47	1.29	1.39	0.60	0.28	0.24	0.36	0.49	1.30	1.63	1.81
10	2.11	1.57	1.37	1.26	0.53	0.27	0.24	0.35	0.48	1.41	1.66	2.01
11	2.07	1.42	1.42	1.16	0.51	0.26	0.23	0.38	0.47	1.54	1.64	2.30
12	2.31	1.10	1.59	1.10	0.50	0.25	0.22	0.40	0.46	1.60	1.53	2.36
13	2.63	0.95	1.67	1.03	0.48	0.25	0.22	0.42	0.47	1.69	1.48	2.20
14	2.72	0.90	1.53	0.98	0.46	0.25	0.22	0.42	0.48	1.72	1.51	2.12
15	2.49	0.86	1.44	0.93	0.46	0.24	0.24	0.41	0.48	1.60	1.68	2.11
16	2.21	0.79	1.36	0.88	0.52	0.26	0.29	0.39	0.49	1.57	1.91	1.97
17	1.95	0.68	1.26	0.83	0.55	0.27	0.37	0.38	0.52	1.52	1.97	1.89
18	1.90	0.68	1.19	0.78	0.48	0.27	0.43	0.39	0.56	1.43	2.07	1.67
19	1.93	0.66	1.24	0.76	0.42	0.28	0.50	0.40	0.69	1.34	2.22	1.52
20	1.85	0.69	1.33	0.85	0.40	0.30	0.54	0.43	0.77	1.32	2.34	1.52
21	1.86	0.74	1.58	0.93	0.39	0.38	0.55	0.47	0.91	1.31	2.28	1.55
22	1.83	0.71	1.86	0.87	0.38	0.39	0.52	0.47	1.06	1.34	1.95	1.55
23	1.65	0.80	2.25	0.84	0.37	0.34	0.55	0.49	1.09	1.35	1.66	1.56
24	1.43	1.09	2.30	0.82	0.40	0.35	0.55	0.50	1.06	1.47	1.62	1.83
25	1.46	1.32	2.10	0.78	0.41	0.48	0.52	0.55	0.97	1.64	1.69	2.12
26	1.58	1.33	1.82	0.75	0.41	0.62	0.45	0.56	0.88	1.61	1.83	2.17
27	1.57	1.25	1.85	0.75	0.44	0.58	0.39	0.55	0.82	1.55	2.03	2.05
28	1.46	1.18	2.11	0.73	0.40	0.45	0.44	0.57	0.78	1.63	2.14	2.13
29	1.30		1.89	0.75	0.38	0.39	0.64	0.62	0.72	1.73	2.32	2.53
30	1.10		1.84	0.76	0.37	0.34	0.81	0.69	0.69	1.84	2.42	2.46
31	1.01		2.01		0.38		0.98	0.71		2.02		2.24

Table 5. Normal Year daily discharge (m^3/s), Vanka River – upstream Edole HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	1.50	0.90	0.62	1.59	0.63	0.28	0.16	0.15	0.31	0.28	0.69	1.18
2	1.27	0.90	0.58	1.61	0.60	0.28	0.16	0.14	0.30	0.32	0.78	1.09
3	1.56	0.87	0.59	1.68	0.63	0.27	0.16	0.14	0.31	0.41	0.89	1.05
4	1.34	0.80	0.77	1.62	0.60	0.27	0.15	0.14	0.34	0.42	0.93	1.13
5	1.18	0.77	0.86	1.50	0.58	0.27	0.15	0.15	0.35	0.42	0.92	1.14
6	1.24	0.76	0.78	1.34	0.56	0.27	0.15	0.16	0.36	0.42	0.94	1.18
7	1.19	0.74	0.74	1.30	0.53	0.25	0.15	0.16	0.36	0.39	1.04	1.23
8	1.21	0.73	0.77	1.12	0.45	0.25	0.16	0.16	0.33	0.37	1.11	1.36
9	1.48	0.69	0.95	1.21	0.48	0.25	0.16	0.17	0.33	0.34	1.12	1.36
10	1.65	0.67	0.77	1.15	0.49	0.23	0.16	0.19	0.32	0.32	1.05	1.19
11	1.32	0.67	0.79	1.02	0.48	0.23	0.17	0.23	0.31	0.32	0.94	1.27
12	1.19	0.68	0.91	0.90	0.46	0.22	0.17	0.27	0.29	0.33	0.85	1.56
13	1.11	0.71	1.15	0.86	0.45	0.21	0.18	0.28	0.28	0.33	0.81	1.72
14	1.41	0.71	1.18	0.79	0.43	0.20	0.20	0.29	0.27	0.33	0.84	1.67
15	1.65	0.66	1.13	0.80	0.43	0.20	0.19	0.28	0.28	0.33	1.02	1.40
16	1.75	0.65	1.14	0.75	0.39	0.20	0.18	0.24	0.30	0.33	1.37	1.28
17	1.60	0.52	1.13	0.74	0.40	0.20	0.17	0.20	0.31	0.34	1.30	1.27
18	1.40	0.51	1.04	0.77	0.40	0.21	0.17	0.17	0.33	0.38	1.30	1.27
19	1.51	0.62	1.11	0.75	0.33	0.23	0.17	0.16	0.33	0.38	1.24	1.43
20	1.32	0.58	1.10	0.76	0.32	0.22	0.17	0.15	0.31	0.36	1.12	1.12
21	1.20	0.59	1.11	0.69	0.31	0.25	0.16	0.15	0.29	0.37	1.19	1.13
22	1.43	0.57	1.03	0.68	0.35	0.23	0.16	0.15	0.28	0.39	1.29	1.04
23	1.15	0.55	1.06	0.69	0.33	0.21	0.15	0.15	0.25	0.45	1.24	1.04
24	1.38	0.55	1.62	0.75	0.37	0.20	0.16	0.15	0.25	0.51	1.12	1.14
25	1.21	0.54	1.50	0.67	0.35	0.20	0.17	0.16	0.24	0.56	1.15	1.30
26	1.03	0.68	1.75	0.61	0.33	0.19	0.17	0.17	0.24	0.60	1.25	1.35
27	1.27	0.63	1.65	0.58	0.32	0.18	0.18	0.23	0.24	0.65	1.49	1.11
28	1.09	0.64	1.57	0.60	0.31	0.18	0.18	0.28	0.24	0.68	1.28	1.27
29	1.01		1.79	0.67	0.31	0.17	0.17	0.29	0.25	0.62	1.21	1.30
30	0.93		1.78	0.67	0.30	0.17	0.16	0.31	0.26	0.61	1.22	1.46
31	0.90		1.66		0.29		0.15	0.33		0.65		1.55

Table 6. Dry Year daily discharge (m^3/s), Vanka River – upstream Edole HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	1.53	0.58	0.25	0.74	0.50	0.28	0.12	0.10	0.09	0.13	0.21	0.69
2	1.53	0.86	0.31	0.74	0.53	0.28	0.12	0.10	0.09	0.13	0.23	0.63
3	1.17	0.88	0.30	0.85	0.49	0.27	0.12	0.10	0.09	0.14	0.26	0.54
4	1.15	0.87	0.31	1.07	0.69	0.28	0.12	0.10	0.10	0.14	0.29	0.52
5	1.10	0.86	0.49	1.07	0.68	0.27	0.12	0.10	0.10	0.15	0.28	0.55
6	1.08	0.81	0.47	0.89	0.63	0.26	0.11	0.10	0.11	0.15	0.29	0.57
7	1.07	0.70	0.45	0.81	0.59	0.25	0.11	0.10	0.11	0.15	0.32	0.59
8	0.95	0.61	0.44	0.77	0.55	0.23	0.11	0.10	0.11	0.15	0.33	0.60
9	0.97	0.52	0.46	0.93	0.52	0.22	0.11	0.09	0.11	0.16	0.50	0.63
10	1.15	0.51	0.47	0.89	0.50	0.21	0.09	0.09	0.11	0.16	0.54	0.75
11	0.81	0.49	0.45	0.85	0.49	0.20	0.09	0.10	0.11	0.16	0.49	0.78
12	0.69	0.46	0.41	0.78	0.50	0.20	0.09	0.09	0.11	0.16	0.50	0.77
13	0.61	0.44	0.38	0.76	0.57	0.19	0.09	0.09	0.11	0.16	0.50	0.75
14	0.54	0.40	0.36	0.74	0.61	0.18	0.09	0.09	0.11	0.16	0.50	0.73
15	0.82	0.39	0.34	0.85	0.52	0.18	0.08	0.09	0.11	0.16	0.49	0.74
16	0.71	0.40	0.33	0.82	0.49	0.17	0.08	0.09	0.12	0.16	0.45	0.68
17	0.62	0.40	0.33	0.80	0.48	0.17	0.08	0.09	0.12	0.17	0.43	0.67
18	0.56	0.39	0.33	0.91	0.45	0.17	0.08	0.09	0.12	0.17	0.51	0.66
19	0.54	0.36	0.31	0.84	0.43	0.16	0.08	0.09	0.12	0.18	0.61	0.65
20	0.55	0.35	0.32	0.76	0.40	0.16	0.08	0.09	0.13	0.18	0.64	0.63
21	0.67	0.35	0.30	0.72	0.33	0.15	0.08	0.09	0.13	0.18	0.78	0.63
22	1.08	0.33	0.31	0.83	0.32	0.15	0.08	0.09	0.13	0.19	0.99	0.56
23	1.19	0.33	0.29	0.89	0.32	0.15	0.08	0.09	0.13	0.19	0.93	0.46
24	1.11	0.33	0.31	0.80	0.30	0.14	0.09	0.09	0.13	0.19	0.90	0.61
25	1.04	0.32	0.32	0.69	0.28	0.13	0.09	0.09	0.13	0.19	0.94	0.53
26	1.00	0.35	0.33	0.63	0.36	0.13	0.09	0.10	0.13	0.19	0.93	0.49
27	0.80	0.28	0.32	0.64	0.33	0.13	0.09	0.09	0.14	0.19	0.83	0.46
28	0.72	0.30	0.35	0.64	0.31	0.12	0.10	0.09	0.14	0.20	0.76	0.42
29	0.66		0.44	0.53	0.29	0.12	0.10	0.09	0.14	0.20	0.75	0.42
30	0.59		0.59	0.50	0.29	0.12	0.11	0.09	0.14	0.20	0.74	0.41
31	0.58		0.69		0.28		0.10	0.09		0.20		0.39

Table 7. Wet Year daily discharge (m^3/s), Eda River – upstream from Spiki HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	1.78	1.47	2.57	2.10	1.22	0.34	0.26	1.64	1.09	0.66	5.12	7.42
2	2.05	1.64	2.82	2.51	1.06	0.33	0.28	1.47	1.25	0.64	4.88	6.16
3	2.36	1.87	2.74	2.88	0.95	0.32	0.31	0.95	1.24	0.72	4.29	6.80
4	2.39	2.26	2.31	3.30	0.86	0.31	0.33	0.67	1.15	0.97	3.71	8.00
5	2.17	2.66	1.99	3.40	0.82	0.32	0.51	0.58	1.01	1.32	3.16	9.06
6	2.11	3.11	1.81	3.08	0.78	0.33	0.59	0.54	0.85	1.80	2.64	8.94
7	2.34	3.33	1.63	3.30	0.73	0.33	0.48	0.52	0.72	2.44	2.22	8.11
8	2.44	3.91	1.49	3.45	0.69	0.32	0.40	0.49	0.74	3.45	1.94	7.90
9	2.19	4.40	1.44	3.13	0.69	0.32	0.37	0.50	0.79	4.20	1.79	7.97
10	2.36	4.84	1.53	2.54	0.69	0.31	0.36	0.55	0.88	4.41	1.76	8.72
11	2.81	4.70	2.25	2.10	0.66	0.30	0.34	0.78	0.85	5.03	2.07	9.97
12	3.13	3.04	3.74	1.99	0.62	0.31	0.34	1.02	0.76	5.30	2.91	10.61
13	3.23	2.28	4.33	2.11	0.58	0.31	0.36	1.12	0.80	5.35	3.88	11.42
14	3.31	2.28	4.30	1.99	0.56	0.32	0.49	1.07	1.02	5.47	4.32	11.52
15	3.16	2.26	4.35	1.77	0.53	0.31	0.53	0.89	1.94	5.36	3.92	10.74
16	2.91	1.89	3.77	1.66	0.50	0.31	0.47	0.70	3.04	4.89	3.37	10.19
17	2.99	1.54	3.16	1.51	0.49	0.30	0.43	0.61	4.13	4.07	3.06	10.03
18	3.49	1.32	2.80	1.41	0.49	0.29	0.40	0.62	4.34	3.27	2.99	9.28
19	4.18	1.18	2.75	1.33	0.48	0.29	0.39	0.59	3.93	2.66	3.43	8.27
20	5.43	1.11	2.71	1.28	0.44	0.29	0.39	0.71	3.48	2.43	4.26	7.68
21	6.28	1.42	2.65	1.19	0.40	0.28	0.41	0.85	3.24	2.40	4.53	7.09
22	6.10	2.07	2.85	1.16	0.38	0.28	0.41	0.88	2.96	2.38	3.98	6.17
23	5.14	2.32	3.57	1.12	0.40	0.28	0.45	1.05	2.49	2.14	3.23	4.91
24	4.16	2.69	3.88	1.06	0.40	0.28	0.50	1.01	2.01	1.78	2.84	4.42
25	3.47	2.57	3.60	1.08	0.39	0.28	0.47	0.93	1.61	1.59	3.18	4.79
26	2.92	1.92	2.80	1.14	0.38	0.28	0.43	0.75	1.29	1.96	4.40	5.19
27	2.43	1.99	2.13	1.11	0.37	0.27	0.40	0.59	1.02	2.36	6.36	5.18
28	2.04	2.29	1.86	1.03	0.35	0.26	0.42	0.52	0.87	2.64	8.96	4.66
29	1.91		1.78	1.01	0.36	0.26	0.74	0.49	0.78	2.90	10.29	3.87
30	1.85		1.85	1.22	0.34	0.26	1.11	0.63	0.70	3.29	9.64	3.34
31	1.64		1.93		0.34		1.39	0.92		4.32		3.14

Table 8. Normal Year daily discharge (m^3/s), Eda River – upstream from Spiki HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	1.70	1.41	1.23	2.96	1.19	0.62	0.35	0.45	0.34	0.91	1.80	2.64
2	1.80	1.25	1.26	2.80	1.13	0.62	0.35	0.41	0.34	0.97	1.75	2.37
3	1.90	1.12	1.29	2.59	1.08	0.61	0.33	0.40	0.35	0.84	1.81	2.20
4	2.01	1.01	1.31	2.53	1.07	0.58	0.33	0.39	0.34	0.70	1.83	2.11
5	2.11	0.95	1.34	2.41	1.06	0.54	0.36	0.38	0.35	0.79	2.22	2.00
6	2.21	0.91	1.37	2.29	1.08	0.52	0.40	0.41	0.34	1.43	3.24	1.89
7	2.31	0.83	1.40	2.33	1.14	0.50	0.43	0.44	0.33	1.85	3.75	1.82
8	2.41	0.81	1.42	2.61	1.15	0.48	0.41	0.51	0.34	2.05	4.24	2.09
9	2.51	0.80	1.45	2.64	1.06	0.47	0.42	0.52	0.35	2.28	4.83	2.05
10	2.62	0.78	1.83	2.41	1.01	0.46	0.41	0.49	0.33	2.67	5.00	2.16
11	2.72	0.74	2.20	2.39	1.14	0.44	0.41	0.57	0.33	3.46	4.85	1.89
12	2.82	0.72	2.58	2.10	1.37	0.43	0.38	0.57	0.33	4.38	4.09	1.69
13	2.92	0.71	2.95	2.00	1.32	0.43	0.38	0.49	0.33	4.99	3.04	1.39
14	3.02	0.70	3.33	1.98	1.18	0.41	0.42	0.44	0.34	4.73	2.36	1.38
15	3.12	0.70	3.70	1.98	1.10	0.39	0.49	0.41	0.35	3.88	2.09	1.24
16	3.23	0.70	2.94	1.84	1.04	0.39	0.50	0.40	0.35	3.24	1.94	1.11
17	3.33	0.72	3.19	1.63	1.04	0.39	0.54	0.38	0.38	3.14	1.83	1.23
18	3.43	0.74	3.41	1.53	1.01	0.40	0.49	0.38	0.41	3.17	1.69	1.22
19	3.53	0.79	3.99	1.45	0.98	0.40	0.44	0.37	0.40	3.06	1.59	1.15
20	4.17	0.85	4.51	1.64	0.98	0.38	0.43	0.36	0.40	2.85	1.54	1.12
21	4.84	0.91	4.51	1.95	0.93	0.37	0.44	0.36	0.43	2.32	1.46	1.07
22	4.52	1.04	4.16	1.78	0.88	0.35	0.50	0.36	0.44	2.01	1.35	1.02
23	3.74	1.07	3.80	1.96	0.82	0.34	0.49	0.36	0.46	1.76	1.33	0.95
24	3.14	1.09	3.37	1.87	0.76	0.34	0.45	0.39	0.46	1.61	1.40	0.93
25	2.63	1.12	3.06	1.70	0.74	0.36	0.41	0.41	0.46	1.91	1.59	0.98
26	2.45	1.15	2.78	1.69	0.71	0.38	0.40	0.38	0.48	2.80	1.73	1.54
27	2.56	1.18	2.64	1.55	0.68	0.41	0.38	0.38	0.47	3.15	1.76	3.43
28	2.72	1.20	2.57	1.43	0.65	0.44	0.37	0.39	0.52	3.07	1.99	6.01
29	2.65		2.73	1.35	0.65	0.39	0.38	0.40	0.64	2.80	2.43	8.22
30	2.14		2.87	1.25	0.67	0.37	0.41	0.37	0.80	2.33	2.68	9.11
31	1.65		2.86		0.67		0.45	0.35		1.99		7.92

Table 9. Dry Year daily discharge (m^3/s), Eda River – upstream from Spiki HPP

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	1.89	0.67	1.03	1.62	0.70	0.41	0.46	0.17	1.62	0.47	1.08	0.82
2	1.60	0.65	1.04	1.51	0.72	0.39	0.46	0.17	1.20	0.45	1.06	0.69
3	1.43	0.67	1.09	1.43	0.72	0.38	0.38	0.17	0.96	0.44	1.04	0.67
4	1.34	0.68	1.09	1.36	0.71	0.36	0.34	0.17	0.82	0.43	1.02	0.67
5	1.36	0.68	1.04	1.28	0.70	0.36	0.31	0.17	0.72	0.43	0.98	0.69
6	1.44	0.68	1.01	1.24	0.69	0.35	0.30	0.15	0.66	0.43	0.93	0.70
7	1.78	0.69	1.00	1.20	0.68	0.35	0.28	0.16	0.62	0.44	0.90	0.78
8	1.85	0.78	1.01	1.42	0.69	0.34	0.26	0.20	0.59	0.44	0.94	0.90
9	1.91	0.91	1.01	2.09	0.70	0.33	0.26	0.20	0.58	0.43	0.97	0.95
10	1.98	1.03	1.01	2.56	0.77	0.32	0.24	0.19	0.56	0.47	0.95	0.99
11	2.04	0.98	1.02	2.27	0.81	0.30	0.23	0.20	0.57	0.61	0.93	1.15
12	2.11	1.04	0.99	1.91	0.81	0.30	0.22	0.27	0.59	0.75	0.93	1.62
13	2.18	1.29	0.96	1.81	0.79	0.30	0.22	0.26	0.59	0.99	0.91	2.78
14	2.24	1.27	0.96	1.89	0.81	0.31	0.22	0.26	0.59	1.59	0.89	3.93
15	2.31	1.07	1.30	1.78	0.81	0.33	0.22	0.30	0.57	2.32	0.85	4.41
16	2.37	1.03	2.31	1.59	0.77	0.32	0.22	0.41	0.53	3.07	0.82	4.04
17	2.44	1.17	2.36	1.38	0.73	0.30	0.22	0.41	0.51	3.02	0.80	4.05
18	2.17	1.20	1.90	1.28	0.72	0.28	0.21	0.41	0.48	2.28	0.78	4.44
19	2.40	1.46	2.18	1.17	0.74	0.27	0.20	0.49	0.46	1.81	0.79	5.34
20	2.38	2.28	2.26	1.10	0.75	0.27	0.19	0.70	0.44	2.16	0.75	6.31
21	1.55	2.82	2.33	1.04	0.73	0.27	0.19	1.01	0.44	2.69	0.78	6.30
22	1.20	2.31	2.41	0.99	0.67	0.28	0.19	1.24	0.43	3.07	0.78	5.04
23	1.01	1.78	2.48	0.93	0.62	0.27	0.18	1.41	0.44	2.97	0.77	4.15
24	0.91	1.47	2.30	0.88	0.58	0.27	0.17	1.43	0.46	2.26	0.75	3.83
25	0.82	1.33	2.31	0.85	0.56	0.26	0.17	1.12	0.49	1.67	0.76	3.49
26	0.78	1.19	2.21	0.81	0.57	0.28	0.17	0.93	0.52	1.43	0.74	2.71
27	0.75	1.09	2.11	0.80	0.53	0.26	0.17	1.15	0.55	1.31	0.75	1.77
28	0.73	1.04	2.01	0.75	0.48	0.25	0.16	1.80	0.54	1.24	0.73	1.91
29	0.71		1.92	0.72	0.46	0.27	0.16	2.23	0.52	1.17	0.68	2.32
30	0.66		1.82	0.70	0.45	0.37	0.16	2.40	0.50	1.15	0.80	2.30
31	0.65		1.72		0.43		0.17	2.04		1.15		2.20

ANNEX III

Table 1. **Presence (T) and absence (F) of different elements within GU-s in the first field survey sites below HPP (Lithuania)**

RIVER	DATE	HMU_TYPE	SHAD	OVERHA_VEG	SUBMV	BOULD	EMERGV	UNDB	WOOD
Venta at Rudikiai 1	01.08.2017	RIFFLE	F	F	T	T	T	F	F
	01.08.2017	RIFFLE	F	F	T	T	F	F	F
	01.08.2017	GLIDE	F	F	T	T	T	F	F
	01.08.2017	POOL	F	T	T	T	T	F	F
	01.08.2017	RIFFLE	F	F	T	T	T	F	F
	01.08.2017	GLIDE	F	F	T	T	T	F	F
	01.08.2017	POOL	F	F	T	T	F	F	F
	01.08.2017	GLIDE	F	F	T	T	F	F	F
	01.08.2017	RAPID	F	F	T	T	F	F	F
	01.08.2017	RAPID	F	F	F	T	F	F	F
	01.08.2017	POOL	F	F	F	T	F	F	F
	01.08.2017	RIFFLE	T	F	T	T	T	F	F
	01.08.2017	POOL	F	T	T	T	F	F	F
	01.08.2017	POOL	F	T	T	T	F	F	F
	01.08.2017	FLOOD_LAKE	F	T	F	F	F	F	F
Venta at Rudikiai 2	28.08.2017	POOL	F	T	T	T	F	F	F
	28.08.2017	SEC_CHAN	F	F	F	F	T	F	F
	28.08.2017	AQUAT_VEG	F	F	F	F	T	F	F
	28.08.2017	RAPID	F	F	F	T	T	F	F
	28.08.2017	AQUAT_VEG	F	F	F	F	T	F	F
	28.08.2017	AQUAT_VEG	F	F	F	T	T	F	F
	28.08.2017	RAPID	F	F	F	T	T	F	F
	28.08.2017	GLIDE	F	F	F	T	T	F	T
	28.08.2017	AQUAT_VEG	F	F	F	T	T	F	F
	28.08.2017	POOL	F	T	F	F	T	F	F
	28.08.2017	AQUAT_VEG	F	F	F	F	F	F	F
	28.08.2017	RAPID	F	F	F	T	T	F	F

RIVER	DATE	HMU_TYPE	SHAD	OVERHA_VEG	SUBMV	BOULD	EMERGV	UNDB	WOOD
	28.08.2017	FLOOD_LAKE	F	T	F	F	F	F	F
	28.08.2017	AQUAT_VEG	F	F	F	T	T	F	F
	28.08.2017	AQUAT_VEG	F	F	F	T	T	F	F
	28.08.2017	GLIDE	F	F	F	T	T	F	F
	28.08.2017	POOL	F	F	T	T	F	F	F
	28.08.2017	AQUAT_VEG	F	F	F	F	T	F	F
	28.08.2017	AQUAT_VEG	F	F	F	F	T	F	F
	28.08.2017	AQUAT_VEG	F	F	F	T	T	F	F
	28.08.2017	GLIDE	F	F	T	T	F	F	F
	28.08.2017	RAPID	F	F	T	T	F	F	F
	28.08.2017	CASCADE	F	F	F	T	F	F	F
	28.08.2017	RAPID	F	F	T	T	T	F	F
	28.08.2017	RAPID	T	F	T	T	T	F	F
	28.08.2017	POOL	F	F	T	T	F	F	F
	28.08.2017	AQUAT_VEG	F	F	F	T	T	F	F
Venta at Rudikiai 3	26.04.2018	RAPID	F	F	T	T	T	F	T
	26.04.2018	POOL	F	F	F	F	F	F	F
	26.04.2018	AQUAT_VEG	F	F	F	F	T	F	F
	26.04.2018	RAPID	F	F	T	T	T	F	F
	26.04.2018	AQUAT_VEG	F	F	T	F	T	F	F
	26.04.2018	AQUAT_VEG	F	F	T	F	T	F	F
	26.04.2018	POOL	F	F	T	F	T	F	F
	26.04.2018	RAPID	F	F	T	T	T	F	F
	26.04.2018	AQUAT_VEG	F	F	F	T	T	F	F
	26.04.2018	AQUAT_VEG	F	F	F	T	T	F	T
	26.04.2018	RAPID	T	F	T	T	T	F	F
	26.04.2018	SEC_CHAN	F	F	T	T	T	F	F
	26.04.2018	AQUAT_VEG	F	F	F	T	T	F	T
Venta at Rudikiai 4	15.01.2019	POOL	F	T	T	T	F	F	F
	15.01.2019	SEC_CHAN	F	F	F	F	T	F	F
	15.01.2019	AQUAT_VEG	F	F	F	F	T	F	F
	15.01.2019	RAPID	F	F	T	T	T	F	F

RIVER	DATE	HMU_TYPE	SHAD	OVERHA_VEG	SUBMV	BOULD	EMERGV	UNDB	WOOD
	15.01.2019	AQUAT_VEG	F	F	F	F	T	F	F
	15.01.2019	AQUAT_VEG	F	F	F	T	T	F	F
	15.01.2019	GLIDE	F	F	T	T	T	F	T
	15.01.2019	POOL	F	T	T	T	T	F	F
	15.01.2019	AQUAT_VEG	F	F	F	F	T	F	F
	15.01.2019	RAPID	F	F	T	T	T	F	F
	15.01.2019	FLOOD_LAKE	F	T	F	F	F	F	F
	15.01.2019	AQUAT_VEG	F	F	F	T	T	F	F
	15.01.2019	AQUAT_VEG	F	F	F	T	T	F	F
	15.01.2019	GLIDE	F	F	T	T	T	F	F
	15.01.2019	AQUAT_VEG	F	F	F	F	T	F	F
	15.01.2019	RAPID	F	F	T	T	F	F	F
	15.01.2019	CASCADE	F	F	F	T	F	F	F
	15.01.2019	RAPID	T	F	T	T	T	F	F
	15.01.2019	POOL	F	F	T	T	F	F	F
	15.01.2019	AQUAT_VEG	F	F	F	T	T	F	F
	15.01.2019	AQUAT_VEG	F	F	T	F	T	F	F
	15.01.2019	SEC_CHAN	F	F	T	T	T	F	F
Venta at Kuodžiai 1	29.08.2017	AQUAT_VEG	F	F	F	F	T	F	F
	29.08.2017	GLIDE	F	T	T	T	T	F	F
	29.08.2017	RAPID	T	F	F	T	F	T	F
	29.08.2017	GLIDE	F	F	T	F	T	F	F
	29.08.2017	RAPID	F	F	F	T	F	F	F
	29.08.2017	GLIDE	F	T	T	T	F	F	F
	29.08.2017	AQUAT_VEG	F	F	T	F	T	F	F
	29.08.2017	RAPID	T	F	T	T	F	F	F
	29.08.2017	AQUAT_VEG	F	F	F	F	T	F	F
	29.08.2017	AQUAT_VEG	F	T	T	T	T	F	F
	29.08.2017	GLIDE	F	T	T	F	T	F	F
	29.08.2017	GLIDE	F	T	F	T	T	F	F
	29.08.2017	AQUAT_VEG	F	F	F	F	T	F	F
	29.08.2017	POOL	F	T	T	T	F	F	F

RIVER	DATE	HMU_TYPE	SHAD	OVERHA_VEG	SUBMV	BOULD	EMERGV	UNDB	WOOD
	29.08.2017	AQUAT_VEG	F	T	T	T	T	F	F
	29.08.2017	RAPID	F	F	T	T	F	F	F
	29.08.2017	AQUAT_VEG	F	T	T	F	F	F	F
	29.08.2017	POOL	F	T	T	T	T	F	F
	29.08.2017	GLIDE	F	T	T	T	F	F	F
	29.08.2017	RIFFLE	F	T	F	T	F	F	F
	29.08.2017	RAPID	F	F	T	T	F	F	F
	29.08.2017	POOL	F	T	F	F	T	F	F
	29.08.2017	AQUAT_VEG	F	F	T	T	T	F	F
	29.08.2017	POOL	F	T	T	T	F	F	F
	29.08.2017	RAPID	F	T	T	T	T	F	F
	29.08.2017	AQUAT_VEG	T	F	T	T	T	F	F
	29.08.2017	RAPID	F	F	T	T	T	F	F
	29.08.2017	GLIDE	F	F	T	T	T	F	F
Venta at Kuodžiai 2	14.09.2017	GLIDE	F	F	T	T	F	F	F
	14.09.2017	GLIDE	F	F	T	T	F	F	F
	14.09.2017	GLIDE	F	F	T	T	F	F	T
	14.09.2017	RAPID	T	F	T	T	F	F	T
	14.09.2017	GLIDE	T	F	T	T	T	T	T
	14.09.2017	GLIDE	F	F	T	T	F	T	F
	14.09.2017	GLIDE	F	F	T	T	F	F	F
	14.09.2017	RAPID	F	F	T	T	F	F	F
	14.09.2017	RAPID	F	F	T	T	F	F	F
	14.09.2017	RAPID	T	F	T	T	F	F	F
Venta at Kuodžiai 3	26.09.2017	GLIDE	F	F	T	T	F	F	F
	26.09.2017	RAPID	F	F	T	T	F	F	F
	26.09.2017	RAPID	F	F	T	T	F	F	T
	26.09.2017	GLIDE	T	F	T	T	T	T	T
	26.09.2017	GLIDE	F	F	T	T	F	T	F
	26.09.2017	GLIDE	F	F	T	T	F	F	F
	26.09.2017	RAPID	F	F	T	T	F	F	F
	26.09.2017	RAPID	F	F	T	T	F	F	F

RIVER	DATE	HMU_TYPE	SHAD	OVERHA_VEG	SUBMV	BOULD	EMERGV	UNDB	WOOD
	26.09.2017	RAPID	T	F	T	T	F	F	F
	26.09.2017	AQUAT_VEG	F	F	T	F	T	F	F
Venta at Kuodžiai 4	11.09.2018	GLIDE	F	T	T	T	T	F	F
	11.09.2018	GLIDE	T	F	F	T	F	T	F
	11.09.2018	GLIDE	F	F	F	T	F	F	F
	11.09.2018	GLIDE	F	T	T	T	F	F	F
	11.09.2018	AQUAT_VEG	F	F	T	F	T	F	F
	11.09.2018	RAPID	T	F	T	T	F	F	F
	11.09.2018	AQUAT_VEG	F	F	F	F	T	F	F
	11.09.2018	GLIDE	F	T	T	F	T	F	F
	11.09.2018	GLIDE	F	T	F	T	T	F	F
	11.09.2018	POOL	F	T	T	T	F	F	F
	11.09.2018	AQUAT_VEG	F	T	T	T	T	F	F
	11.09.2018	RAPID	F	F	T	T	F	F	F
	11.09.2018	AQUAT_VEG	F	T	T	F	F	F	F
	11.09.2018	POOL	F	T	T	T	T	F	F
	11.09.2018	AQUAT_VEG	F	T	T	T	F	F	F
	11.09.2018	AQUAT_VEG	F	F	T	T	T	F	F
	11.09.2018	POOL	F	T	T	T	F	F	F
	11.09.2018	RAPID	F	T	T	T	T	F	F
	11.09.2018	AQUAT_VEG	T	F	T	T	T	F	F
	11.09.2018	GLIDE	F	F	T	T	T	F	F
	11.09.2018	GLIDE	F	F	T	T	T	F	F
Bartuva 1	02.08.2017	GLIDE	T	T	F	F	F	F	T
	02.08.2017	GLIDE	T	T	F	F	F	F	F
	02.08.2017	POOL	F	F	F	F	F	F	T
	02.08.2017	GLIDE	T	T	F	F	F	F	T
	02.08.2017	POOL	T	F	F	F	F	F	T
	02.08.2017	RAPID	F	F	F	T	F	F	F
	02.08.2017	GLIDE	F	T	F	F	T	F	F
	02.08.2017	POOL	F	T	T	F	T	F	F

RIVER	DATE	HMU_TYPE	SHAD	OVERHA_VEG	SUBMV	BOULD	EMERGV	UNDB	WOOD
	02.08.2017	RAPID	F	T	F	F	T	F	T
	02.08.2017	POOL	F	T	F	F	T	F	F
	02.08.2017	RAPID	F	F	F	F	T	F	T
	02.08.2017	POOL	F	F	T	F	F	F	F
	02.08.2017	RAPID	T	T	F	F	F	F	T
	02.08.2017	GLIDE	F	T	F	F	T	F	T
	02.08.2017	POOL	F	T	F	F	T	F	T
	02.08.2017	RAPID	F	F	T	T	T	F	T
	02.08.2017	GLIDE	T	T	F	F	T	F	T
	02.08.2017	RAPID	F	T	F	T	T	F	T
	02.08.2017	GLIDE	F	F	T	F	T	F	F
	02.08.2017	RAPID	F	F	T	F	T	F	F
	02.08.2017	GLIDE	T	T	T	F	T	F	T
	02.08.2017	RAPID	T	F	T	F	T	F	T
	02.08.2017	GLIDE	T	F	F	F	F	F	F
	02.08.2017	POOL	F	F	F	F	F	F	T
Bartuva 2	29.08.2017	POOL	T	T	F	F	T	F	T
	29.08.2017	GLIDE	F	T	F	F	F	F	F
	29.08.2017	POOL	F	F	F	F	F	F	T
	29.08.2017	GLIDE	F	T	F	F	F	F	F
	29.08.2017	POOL	F	F	F	F	F	F	F
	29.08.2017	RIFFLE	F	F	F	F	F	F	F
	29.08.2017	POOL	F	T	T	F	T	F	F
	29.08.2017	RIFFLE	F	T	F	F	T	F	F
	29.08.2017	GLIDE	F	T	T	F	F	F	F
	29.08.2017	RAPID	F	F	F	F	T	F	F
	29.08.2017	POOL	F	T	F	F	F	F	F
	29.08.2017	RIFFLE	F	F	T	F	F	F	F
	29.08.2017	POOL	F	T	F	T	T	F	T
	29.08.2017	GLIDE	F	T	T	T	T	F	F
	29.08.2017	RAPID	F	F	F	F	T	F	F
	29.08.2017	GLIDE	T	T	F	T	T	F	F

RIVER	DATE	HMU_TYPE	SHAD	OVERHA_VEG	SUBMV	BOULD	EMERGV	UNDB	WOOD
	29.08.2017	RIFFLE	T	F	F	F	T	F	F
	29.08.2017	GLIDE	T	F	F	F	F	F	F
Bartuva 3	12.09.2017	GLIDE	F	F	F	F	T	T	F
	12.09.2017	POOL	F	F	T	F	F	F	F
	12.09.2017	GLIDE	F	F	F	F	F	F	F
	12.09.2017	POOL	F	F	F	F	F	T	F
	12.09.2017	GLIDE	F	F	T	F	F	T	F
	12.09.2017	POOL	F	F	F	F	F	F	F
	12.09.2017	RAPID	F	F	F	F	F	F	T
	12.09.2017	GLIDE	F	F	T	F	F	T	F
	12.09.2017	RAPID	F	F	T	F	T	F	F
	12.09.2017	GLIDE	F	F	T	F	F	T	T
	12.09.2017	POOL	F	F	T	T	F	T	T
	12.09.2017	RAPID	F	F	T	F	T	T	T
	12.09.2017	GLIDE	T	F	T	F	T	T	T
	12.09.2017	RAPID	F	F	T	F	T	T	T
	12.09.2017	GLIDE	T	F	T	F	F	F	F
Bartuva 4	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F
	23.10.2017	GLIDE	F	F	F	F	F	F	F

*HMU_TYPE – hydro morphological unit type, SHAD – canopy shading, OVERHA_VEG – overhanging vegetation, SUBMV – submerged vegetation, BOULD – boulders, EMERGV – emergent vegetation, UNDB – undercut banks, WOOD – woody debris

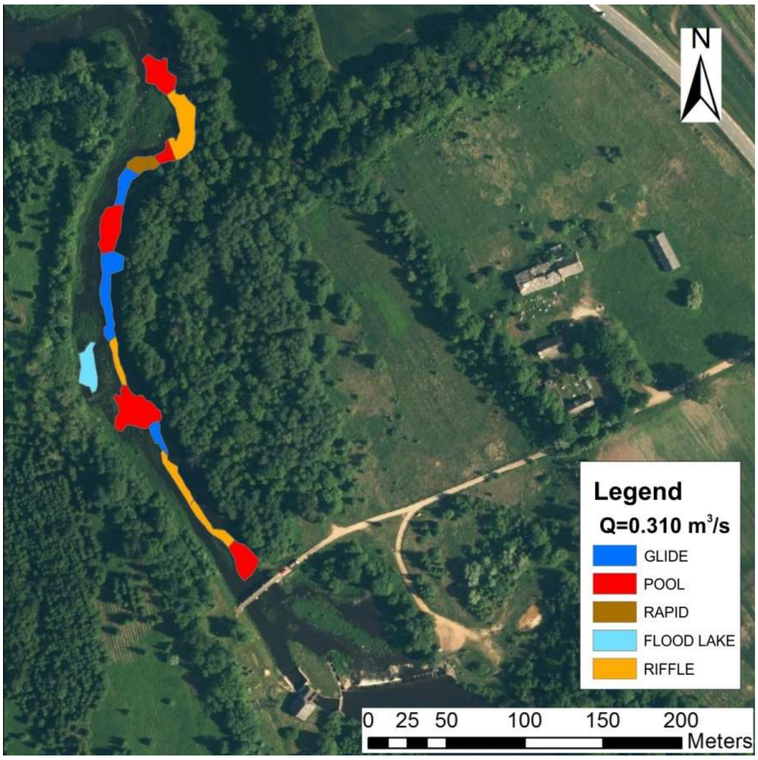


Fig. 1. Geomorphic unit map of Venta (at Rudikiai) River directly below HPP (01.08.2017)

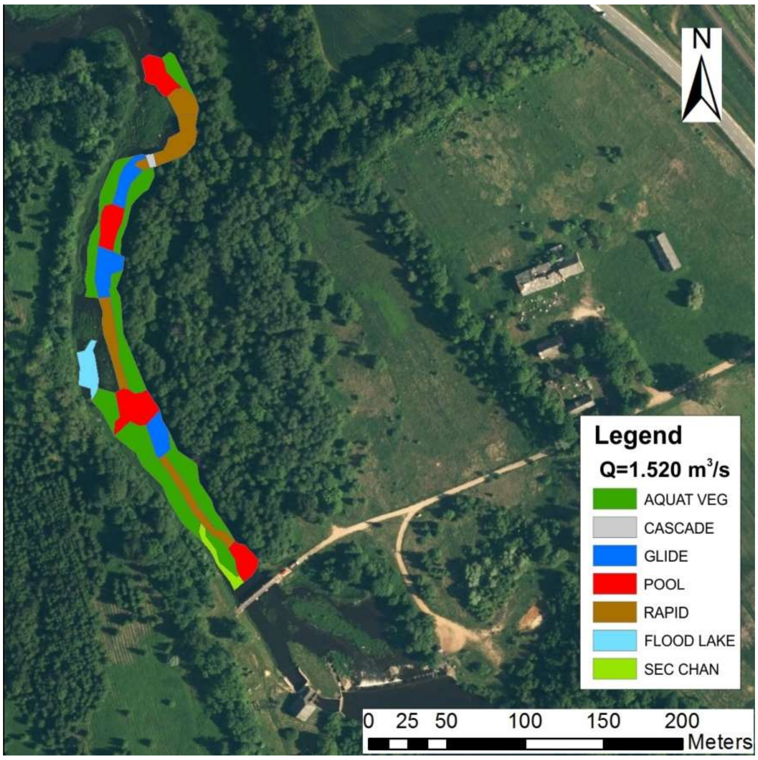


Fig. 2. Geomorphic unit map of Venta (at Rudikiai) River directly below HPP (28.08.2017)

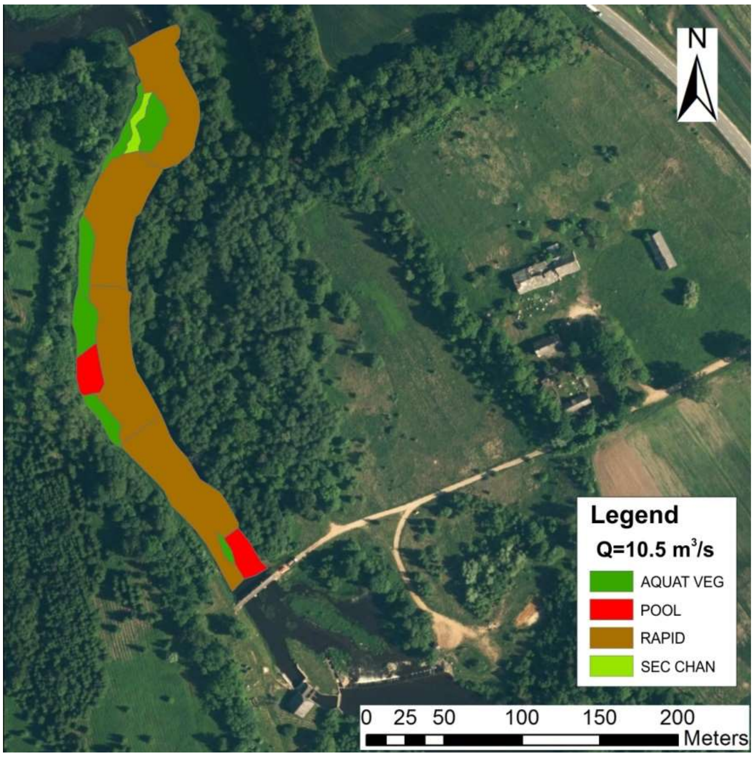


Fig. 3. Geomorphic unit map of Venta (at Rudikiai) River directly below HPP (26.04.2018)

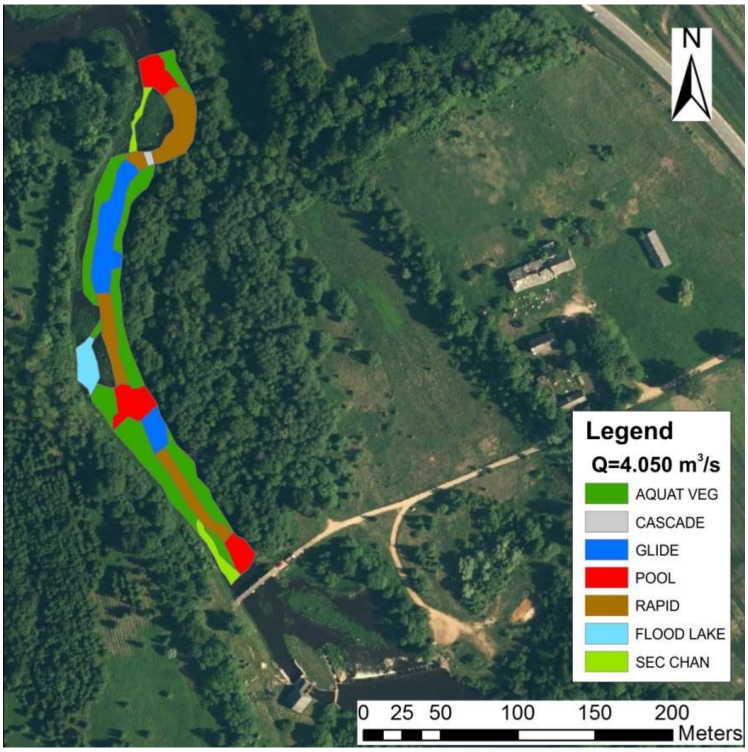


Fig. 4. Geomorphic unit map of Venta (at Rudikiai) River directly below HPP (15.01.2019)

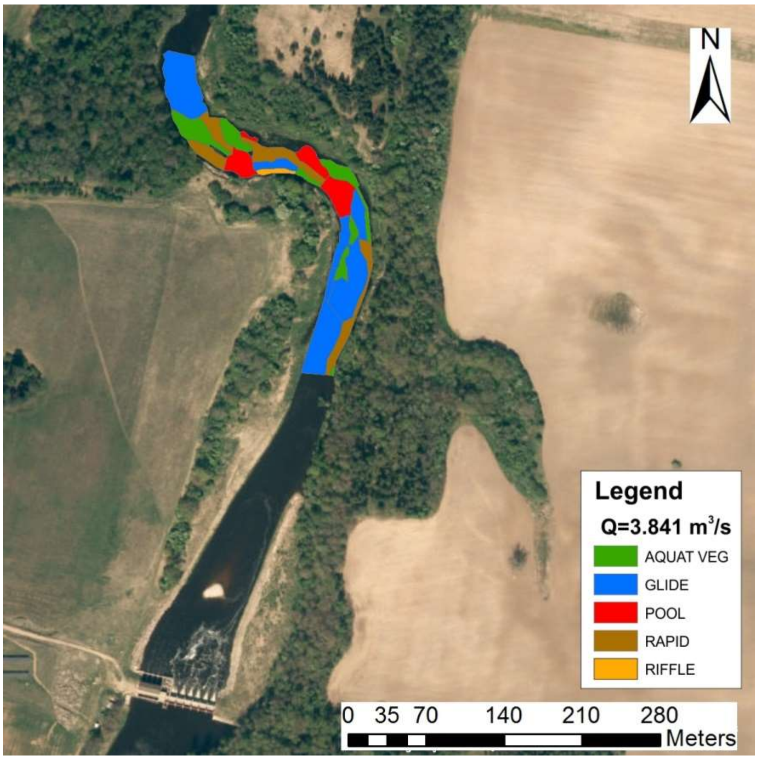


Fig. 5. Geomorphic unit map of Venta (at Kuodžiai) River directly below HPP (29.08.2017)

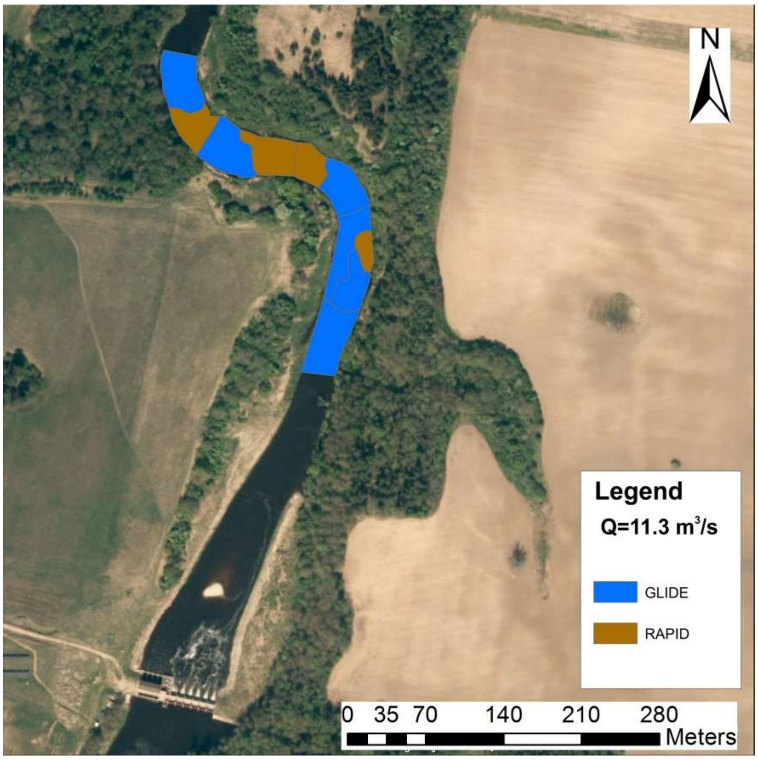


Fig. 6. Geomorphic unit map of Venta (at Kuodžiai) River directly below HPP (14.09.2017)

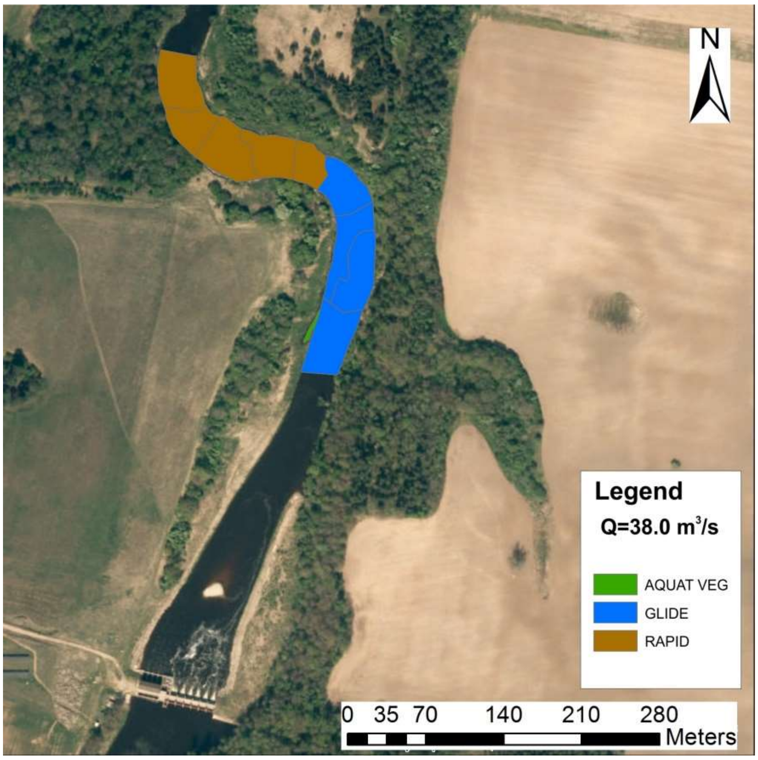


Fig. 7. Geomorphic unit map of Venta (at Kuodžiai) River directly below HPP (26.09.2017)

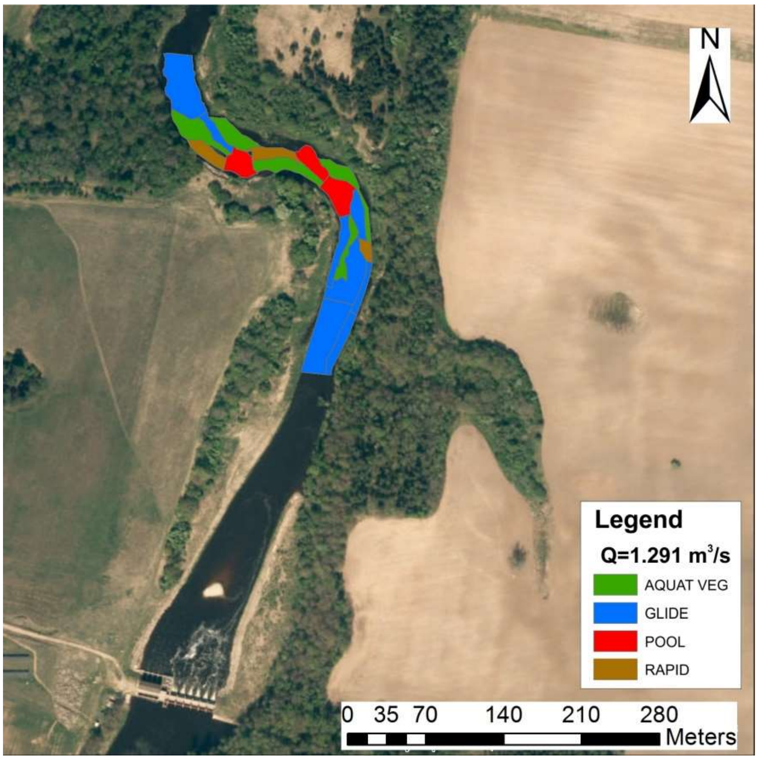


Fig. 8. Geomorphic unit map of Venta (at Kuodžiai) River directly below HPP (11.09.2018)

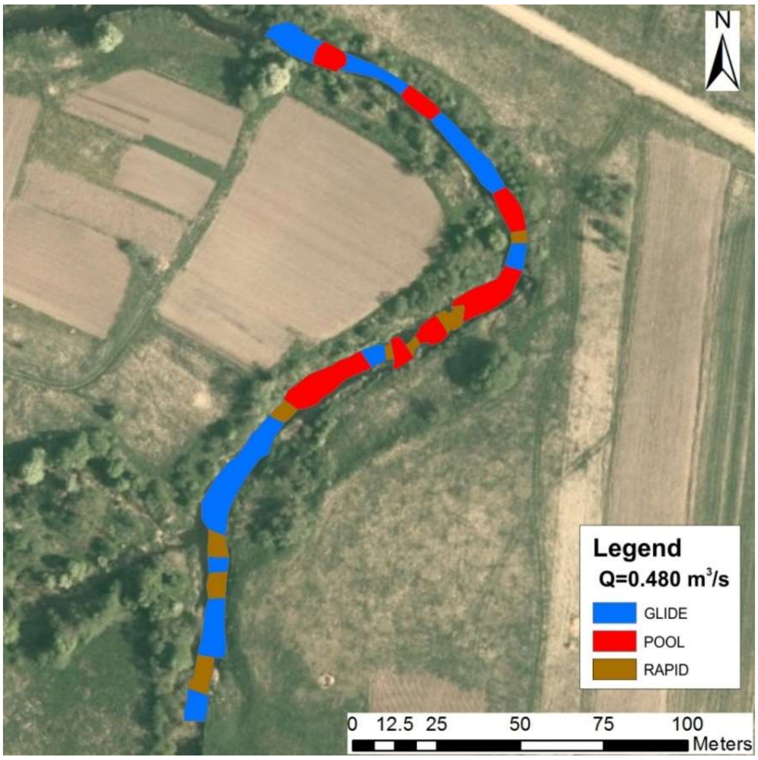


Fig. 9. Geomorphic unit map of Bartuva River directly below HPP (02.08.2017)

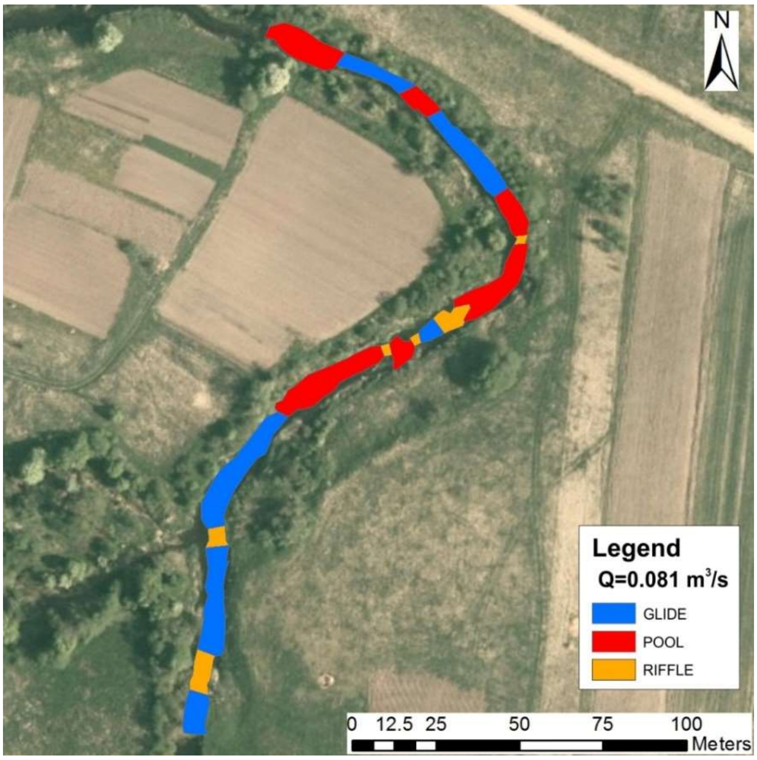


Fig. 10. Geomorphic unit map of Bartuva River directly below HPP (29.08.2017)

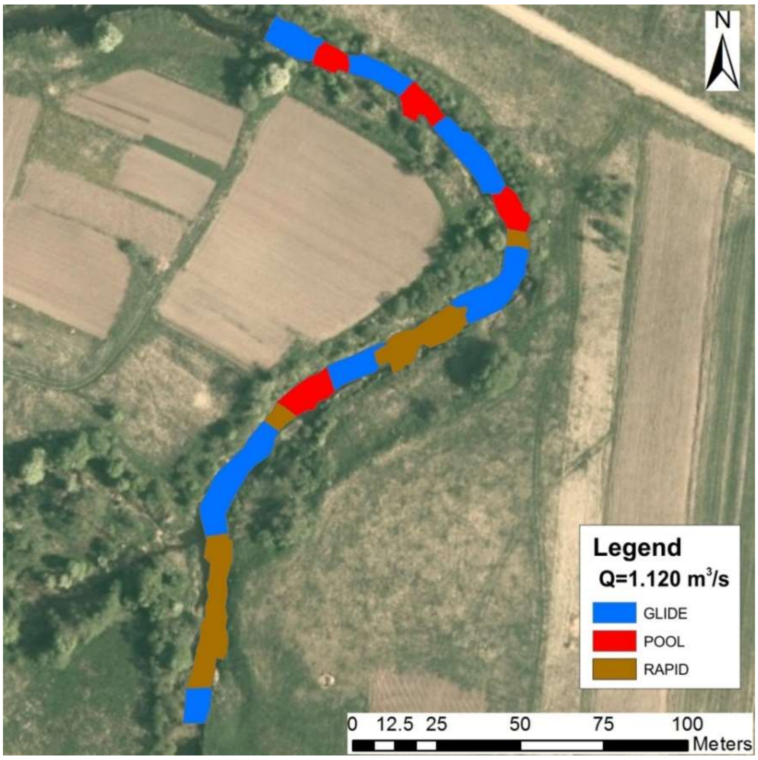


Fig. 11. Geomorphic unit map of Bartuva River directly below HPP (12.09.2017)

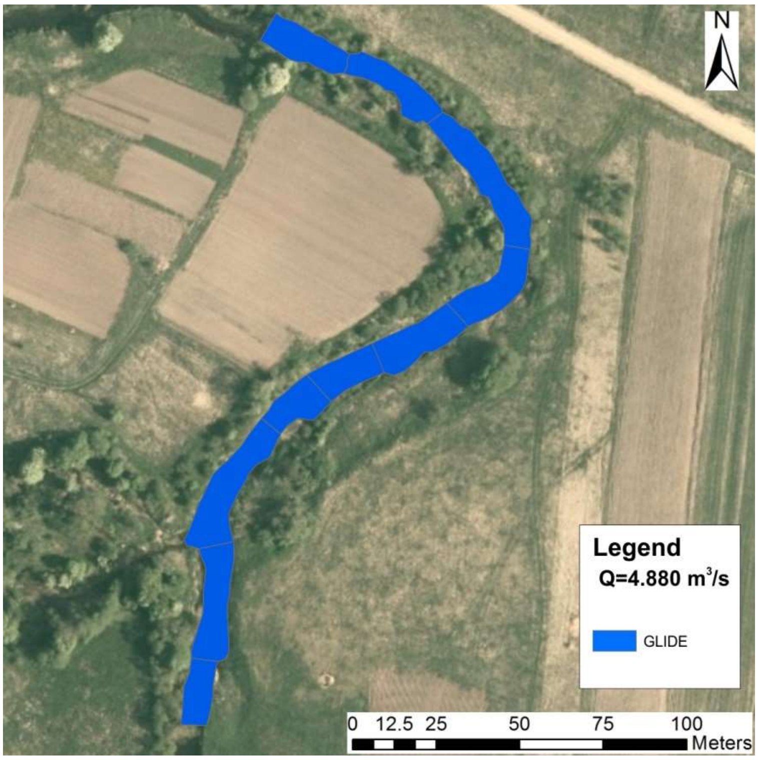


Fig. 12. Geomorphic unit map of Bartuva River directly below HPP (23.10.2017)

ANNEX IV

Depths and flow velocities at geomorphic unit representative points (Lithuania)

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
Venta at Rudikiai 1					
1	POOL	1	0.89	0.000	MACROLITHAL
1	POOL	2	1.02	0.000	MACROLITHAL
1	POOL	3	0.80	0.018	MACROLITHAL
1	POOL	4	0.81	0.000	MACROLITHAL
1	POOL	5	0.92	0.000	MESOLITHAL
1	POOL	6	0.90	0.000	MESOLITHAL
1	POOL	7	0.76	0.020	MESOLITHAL
1	POOL	8	1.14	0.000	MICROLITHAL
1	POOL	9	0.78	0.000	MICROLITHAL
1	POOL	10	0.50	0.021	AKAL
2	RIFFLE	1	0.06	0.291	MACROLITHAL
2	RIFFLE	2	0.31	0.263	MACROLITHAL
2	RIFFLE	3	0.15	0.275	MESOLITHAL
2	RIFFLE	4	0.21	0.198	MESOLITHAL
2	RIFFLE	5	0.26	0.183	MESOLITHAL
2	RIFFLE	6	0.09	0.211	MESOLITHAL
2	RIFFLE	7	0.12	0.313	MESOLITHAL
2	RIFFLE	8	0.30	0.279	MESOLITHAL
2	RIFFLE	9	0.28	0.295	MESOLITHAL
2	RIFFLE	10	0.24	0.157	MICROLITHAL
3	RIFFLE	1	0.15	0.225	MACROLITHAL
3	RIFFLE	2	0.25	0.297	MACROLITHAL
3	RIFFLE	3	0.13	0.341	MESOLITHAL
3	RIFFLE	4	0.16	0.332	MESOLITHAL
3	RIFFLE	5	0.24	0.353	MESOLITHAL
3	RIFFLE	6	0.25	0.335	MESOLITHAL
3	RIFFLE	7	0.10	0.453	MESOLITHAL
3	RIFFLE	8	0.12	0.246	MESOLITHAL
3	RIFFLE	9	0.11	0.349	MESOLITHAL
3	RIFFLE	10	0.13	0.332	MICROLITHAL
4	GLIDE	1	0.24	0.104	MACROLITHAL
4	GLIDE	2	0.50	0.186	MACROLITHAL
4	GLIDE	3	0.33	0.175	MESOLITHAL
4	GLIDE	4	0.48	0.111	MESOLITHAL
4	GLIDE	5	0.50	0.134	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
4	GLIDE	6	0.41	0.145	MESOLITHAL
4	GLIDE	7	0.30	0.126	MESOLITHAL
4	GLIDE	8	0.29	0.167	MESOLITHAL
4	GLIDE	9	0.31	0.187	MESOLITHAL
4	GLIDE	10	0.42	0.171	MICROLITHAL
5	POOL	1	0.50	0.020	MACROLITHAL
5	POOL	2	0.45	0.018	MACROLITHAL
5	POOL	3	0.70	0.000	MESOLITHAL
5	POOL	4	0.71	0.000	MESOLITHAL
5	POOL	5	0.68	0.000	MESOLITHAL
5	POOL	6	0.58	0.019	MESOLITHAL
5	POOL	7	0.48	0.020	MESOLITHAL
5	POOL	8	0.50	0.000	MESOLITHAL
5	POOL	9	0.55	0.000	MICROLITHAL
5	POOL	10	0.54	0.000	AKAL
6	RIFFLE	1	0.08	0.332	MACROLITHAL
6	RIFFLE	2	0.07	0.279	MACROLITHAL
6	RIFFLE	3	0.46	0.385	MESOLITHAL
6	RIFFLE	4	0.12	0.302	MESOLITHAL
6	RIFFLE	5	0.16	0.317	MESOLITHAL
6	RIFFLE	6	0.13	0.285	MESOLITHAL
6	RIFFLE	7	0.30	0.269	MESOLITHAL
6	RIFFLE	8	0.10	0.214	MESOLITHAL
6	RIFFLE	9	0.09	0.311	MESOLITHAL
6	RIFFLE	10	0.16	0.303	MICROLITHAL
7	GLIDE	1	0.52	0.151	MACROLITHAL
7	GLIDE	2	0.50	0.197	MACROLITHAL
7	GLIDE	3	0.46	0.128	MESOLITHAL
7	GLIDE	4	0.31	0.118	MESOLITHAL
7	GLIDE	5	0.34	0.123	MESOLITHAL
7	GLIDE	6	0.16	0.162	MESOLITHAL
7	GLIDE	7	0.25	0.145	MESOLITHAL
7	GLIDE	8	0.30	0.139	MESOLITHAL
7	GLIDE	9	0.19	0.097	MESOLITHAL
7	GLIDE	10	0.15	0.199	MICROLITHAL
8	POOL	1	0.56	0.000	MACROLITHAL
8	POOL	2	0.58	0.000	MACROLITHAL
8	POOL	3	0.46	0.020	MESOLITHAL
8	POOL	4	0.60	0.018	MESOLITHAL
8	POOL	5	0.42	0.000	MESOLITHAL
8	POOL	6	0.50	0.000	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
8	POOL	7	0.40	0.018	MESOLITHAL
8	POOL	8	0.53	0.000	MESOLITHAL
8	POOL	9	0.42	0.019	MICROLITHAL
8	POOL	10	0.47	0.000	AKAL
9	GLIDE	1	0.17	0.185	MACROLITHAL
9	GLIDE	2	0.26	0.167	MACROLITHAL
9	GLIDE	3	0.20	0.144	MESOLITHAL
9	GLIDE	4	0.25	0.106	MESOLITHAL
9	GLIDE	5	0.11	0.117	MESOLITHAL
9	GLIDE	6	0.16	0.192	MESOLITHAL
9	GLIDE	7	0.14	0.201	MESOLITHAL
9	GLIDE	8	0.17	0.148	MESOLITHAL
9	GLIDE	9	0.10	0.166	MESOLITHAL
9	GLIDE	10	0.19	0.182	MICROLITHAL
10	RAPID	1	0.19	0.342	MACROLITHAL
10	RAPID	2	0.23	0.416	MACROLITHAL
10	RAPID	3	0.16	0.285	MESOLITHAL
10	RAPID	4	0.20	0.198	MESOLITHAL
10	RAPID	5	0.24	0.218	MESOLITHAL
10	RAPID	6	0.24	0.241	MESOLITHAL
10	RAPID	7	0.21	0.491	MESOLITHAL
10	RAPID	8	0.22	0.465	MESOLITHAL
10	RAPID	9	0.16	0.415	MESOLITHAL
10	RAPID	10	0.15	0.311	MICROLITHAL
11	RAPID	1	0.13	0.532	MACROLITHAL
11	RAPID	2	0.29	0.477	MACROLITHAL
11	RAPID	3	0.25	0.481	MACROLITHAL
11	RAPID	4	0.21	0.395	MACROLITHAL
11	RAPID	5	0.24	0.384	MACROLITHAL
11	RAPID	6	0.11	0.408	MACROLITHAL
11	RAPID	7	0.13	0.415	MACROLITHAL
11	RAPID	8	0.19	0.381	MESOLITHAL
11	RAPID	9	0.16	0.501	MESOLITHAL
11	RAPID	10	0.17	0.505	MESOLITHAL
12	POOL	1	0.62	0.000	MACROLITHAL
12	POOL	2	0.43	0.000	MACROLITHAL
12	POOL	3	0.20	0.000	MACROLITHAL
12	POOL	4	0.34	0.000	MACROLITHAL
12	POOL	5	0.30	0.000	MESOLITHAL
12	POOL	6	0.37	0.000	MESOLITHAL
12	POOL	7	0.16	0.020	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
12	POOL	8	0.14	0.019	MESOLITHAL
12	POOL	9	0.13	0.012	MICROLITHAL
12	POOL	10	0.18	0.000	MICROLITHAL
13	RIFFLE	1	0.15	0.277	MACROLITHAL
13	RIFFLE	2	0.32	0.314	MACROLITHAL
13	RIFFLE	3	0.20	0.216	MACROLITHAL
13	RIFFLE	4	0.27	0.246	MESOLITHAL
13	RIFFLE	5	0.26	0.268	MESOLITHAL
13	RIFFLE	6	0.29	0.305	MESOLITHAL
13	RIFFLE	7	0.32	0.309	MESOLITHAL
13	RIFFLE	8	0.16	0.311	MESOLITHAL
13	RIFFLE	9	0.30	0.281	MICROLITHAL
13	RIFFLE	10	0.19	0.208	MICROLITHAL
14	POOL	1	0.79	0.000	MACROLITHAL
14	POOL	2	0.73	0.000	MACROLITHAL
14	POOL	3	0.80	0.000	MACROLITHAL
14	POOL	4	0.74	0.000	MESOLITHAL
14	POOL	5	0.76	0.000	MESOLITHAL
14	POOL	6	0.70	0.020	MESOLITHAL
14	POOL	7	0.89	0.000	MESOLITHAL
14	POOL	8	0.88	0.000	MESOLITHAL
14	POOL	9	0.71	0.000	MESOLITHAL
14	POOL	10	0.67	0.018	MICROLITHAL
15	FLOOD_LAKE	1	1.03	0.000	PELAL
15	FLOOD_LAKE	2	1.17	0.000	PELAL
15	FLOOD_LAKE	3	1.09	0.000	PELAL
15	FLOOD_LAKE	4	1.07	0.000	PELAL
15	FLOOD_LAKE	5	0.99	0.000	PELAL
15	FLOOD_LAKE	6	1.10	0.000	PELAL
15	FLOOD_LAKE	7	1.11	0.000	PELAL
15	FLOOD_LAKE	8	0.97	0.000	PELAL
15	FLOOD_LAKE	9	1.00	0.000	PSAMMAL
15	FLOOD_LAKE	10	1.14	0.000	PSAMMAL
Venta at Rudikiai 2					
1	POOL	1	1.20	0.084	MACROLITHAL
1	POOL	2	1.34	0.091	MACROLITHAL
1	POOL	3	1.12	0.078	MACROLITHAL
1	POOL	4	1.14	0.095	MACROLITHAL
1	POOL	5	1.23	0.079	MESOLITHAL
1	POOL	6	1.19	0.083	MESOLITHAL
1	POOL	7	1.05	0.084	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
1	POOL	8	1.45	0.079	MICROLITHAL
1	POOL	9	1.07	0.081	MICROLITHAL
1	POOL	10	0.78	0.095	AKAL
2	SEC_CHAN	1	0.65	0.175	MESOLITHAL
2	SEC_CHAN	2	0.57	0.186	MESOLITHAL
2	SEC_CHAN	3	0.71	0.163	MESOLITHAL
2	SEC_CHAN	4	0.62	0.173	MESOLITHAL
2	SEC_CHAN	5	0.58	0.159	MESOLITHAL
2	SEC_CHAN	6	0.60	0.164	MESOLITHAL
2	SEC_CHAN	7	0.63	0.205	MICROLITHAL
2	SEC_CHAN	8	0.64	0.201	MICROLITHAL
2	SEC_CHAN	9	0.47	0.144	AKAL
2	SEC_CHAN	10	0.73	0.167	PSAMMAL
3	AQUAT_VEG	1	0.27	0.050	MACROLITHAL
3	AQUAT_VEG	2	0.37	0.079	MACROLITHAL
3	AQUAT_VEG	3	0.20	0.043	MACROLITHAL
3	AQUAT_VEG	4	0.33	0.062	MACROLITHAL
3	AQUAT_VEG	5	0.28	0.055	MACROLITHAL
3	AQUAT_VEG	6	0.29	0.049	MACROLITHAL
3	AQUAT_VEG	7	0.34	0.050	MESOLITHAL
3	AQUAT_VEG	8	0.20	0.051	MESOLITHAL
3	AQUAT_VEG	9	0.19	0.057	MESOLITHAL
3	AQUAT_VEG	10	0.17	0.044	MESOLITHAL
4	RIFFLE	1	0.35	0.526	MACROLITHAL
4	RIFFLE	2	0.65	0.263	MACROLITHAL
4	RIFFLE	3	0.45	0.388	MESOLITHAL
4	RIFFLE	4	0.49	0.554	MESOLITHAL
4	RIFFLE	5	0.56	0.435	MESOLITHAL
4	RIFFLE	6	0.39	0.554	MESOLITHAL
4	RIFFLE	7	0.41	0.313	MESOLITHAL
4	RIFFLE	8	0.62	0.411	MESOLITHAL
4	RIFFLE	9	0.60	0.432	MESOLITHAL
4	RIFFLE	10	0.55	0.395	MICROLITHAL
5	AQUAT_VEG	1	0.42	0.137	MACROLITHAL
5	AQUAT_VEG	2	0.41	0.141	MACROLITHAL
5	AQUAT_VEG	3	0.37	0.079	MACROLITHAL
5	AQUAT_VEG	4	0.50	0.116	MACROLITHAL
5	AQUAT_VEG	5	0.48	0.179	MACROLITHAL
5	AQUAT_VEG	6	0.39	0.183	MACROLITHAL
5	AQUAT_VEG	7	0.44	0.098	MACROLITHAL
5	AQUAT_VEG	8	0.46	0.094	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
5	AQUAT_VEG	9	0.48	0.113	MESOLITHAL
5	AQUAT_VEG	10	0.37	0.105	MESOLITHAL
6	AQUAT_VEG	1	0.47	0.035	MACROLITHAL
6	AQUAT_VEG	2	0.58	0.052	MACROLITHAL
6	AQUAT_VEG	3	0.50	0.022	MACROLITHAL
6	AQUAT_VEG	4	0.51	0.043	MACROLITHAL
6	AQUAT_VEG	5	0.48	0.045	MACROLITHAL
6	AQUAT_VEG	6	0.46	0.052	MACROLITHAL
6	AQUAT_VEG	7	0.57	0.038	MACROLITHAL
6	AQUAT_VEG	8	0.53	0.039	MESOLITHAL
6	AQUAT_VEG	9	0.50	0.045	MESOLITHAL
6	AQUAT_VEG	10	0.49	0.041	MESOLITHAL
7	RIFFLE	1	0.45	0.485	MACROLITHAL
7	RIFFLE	2	0.56	0.297	MACROLITHAL
7	RIFFLE	3	0.42	0.469	MESOLITHAL
7	RIFFLE	4	0.48	0.332	MESOLITHAL
7	RIFFLE	5	0.56	0.353	MESOLITHAL
7	RIFFLE	6	0.53	0.335	MESOLITHAL
7	RIFFLE	7	0.40	0.453	MESOLITHAL
7	RIFFLE	8	0.41	0.482	MESOLITHAL
7	RIFFLE	9	0.44	0.349	MESOLITHAL
7	RIFFLE	10	0.42	0.332	MICROLITHAL
8	GLIDE	1	0.55	0.382	MACROLITHAL
8	GLIDE	2	0.82	0.322	MACROLITHAL
8	GLIDE	3	0.60	0.516	MESOLITHAL
8	GLIDE	4	0.79	0.310	MESOLITHAL
8	GLIDE	5	0.81	0.357	MESOLITHAL
8	GLIDE	6	0.70	0.347	MESOLITHAL
8	GLIDE	7	0.59	0.415	MESOLITHAL
8	GLIDE	8	0.58	0.402	MESOLITHAL
8	GLIDE	9	0.63	0.389	MESOLITHAL
8	GLIDE	10	0.72	0.373	MICROLITHAL
9	AQUAT_VEG	1	0.57	0.050	MACROLITHAL
9	AQUAT_VEG	2	0.49	0.046	MACROLITHAL
9	AQUAT_VEG	3	0.50	0.035	MACROLITHAL
9	AQUAT_VEG	4	0.47	0.057	MACROLITHAL
9	AQUAT_VEG	5	0.56	0.044	MACROLITHAL
9	AQUAT_VEG	6	0.54	0.033	MACROLITHAL
9	AQUAT_VEG	7	0.53	0.048	MESOLITHAL
9	AQUAT_VEG	8	0.60	0.050	MESOLITHAL
9	AQUAT_VEG	9	0.61	0.041	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
9	AQUAT_VEG	10	0.48	0.043	MESOLITHAL
10	POOL	1	0.80	0.176	MACROLITHAL
10	POOL	2	0.78	0.153	MACROLITHAL
10	POOL	3	1.03	0.150	MESOLITHAL
10	POOL	4	1.02	0.250	MESOLITHAL
10	POOL	5	0.99	0.206	MESOLITHAL
10	POOL	6	0.87	0.159	MESOLITHAL
10	POOL	7	0.76	0.167	MESOLITHAL
10	POOL	8	0.83	0.149	MESOLITHAL
10	POOL	9	0.86	0.152	MICROLITHAL
10	POOL	10	0.88	0.148	AKAL
11	AQUAT_VEG	1	0.63	0.000	MACROLITHAL
11	AQUAT_VEG	2	0.60	0.000	MACROLITHAL
11	AQUAT_VEG	3	0.64	0.000	MACROLITHAL
11	AQUAT_VEG	4	0.58	0.000	MACROLITHAL
11	AQUAT_VEG	5	0.57	0.000	MACROLITHAL
11	AQUAT_VEG	6	0.49	0.000	MESOLITHAL
11	AQUAT_VEG	7	0.48	0.000	MESOLITHAL
11	AQUAT_VEG	8	0.51	0.000	MESOLITHAL
11	AQUAT_VEG	9	0.56	0.000	MESOLITHAL
11	AQUAT_VEG	10	0.55	0.000	AKAL
12	RIFFLE	1	0.38	0.538	MACROLITHAL
12	RIFFLE	2	0.34	0.645	MACROLITHAL
12	RIFFLE	3	0.80	0.410	MESOLITHAL
12	RIFFLE	4	0.40	0.554	MESOLITHAL
12	RIFFLE	5	0.46	0.400	MESOLITHAL
12	RIFFLE	6	0.44	0.620	MESOLITHAL
12	RIFFLE	7	0.62	0.528	MESOLITHAL
12	RIFFLE	8	0.39	0.748	MESOLITHAL
12	RIFFLE	9	0.37	0.491	MESOLITHAL
12	RIFFLE	10	0.49	0.485	MICROLITHAL
13	FLOOD_LAKE	1	1.30	0.000	PELAL
13	FLOOD_LAKE	2	1.46	0.000	PELAL
13	FLOOD_LAKE	3	1.03	0.000	PELAL
13	FLOOD_LAKE	4	1.35	0.000	PELAL
13	FLOOD_LAKE	5	1.28	0.000	PELAL
13	FLOOD_LAKE	6	1.26	0.000	PELAL
13	FLOOD_LAKE	7	1.40	0.000	PELAL
13	FLOOD_LAKE	8	1.04	0.000	PELAL
13	FLOOD_LAKE	9	1.29	0.000	PSAMMAL
13	FLOOD_LAKE	10	1.25	0.000	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
14	AQUAT_VEG	1	0.39	0.106	MACROLITHAL
14	AQUAT_VEG	2	0.42	0.216	MACROLITHAL
14	AQUAT_VEG	3	0.38	0.167	MACROLITHAL
14	AQUAT_VEG	4	0.37	0.173	MACROLITHAL
14	AQUAT_VEG	5	0.42	0.158	MACROLITHAL
14	AQUAT_VEG	6	0.41	0.164	MACROLITHAL
14	AQUAT_VEG	7	0.47	0.205	MACROLITHAL
14	AQUAT_VEG	8	0.35	0.211	MACROLITHAL
14	AQUAT_VEG	9	0.38	0.203	MACROLITHAL
14	AQUAT_VEG	10	0.40	0.116	MACROLITHAL
15	AQUAT_VEG	1	0.45	0.000	MACROLITHAL
15	AQUAT_VEG	2	0.39	0.000	MACROLITHAL
15	AQUAT_VEG	3	0.42	0.000	MACROLITHAL
15	AQUAT_VEG	4	0.47	0.000	MACROLITHAL
15	AQUAT_VEG	5	0.35	0.000	MACROLITHAL
15	AQUAT_VEG	6	0.41	0.000	MACROLITHAL
15	AQUAT_VEG	7	0.44	0.000	MESOLITHAL
15	AQUAT_VEG	8	0.49	0.000	MESOLITHAL
15	AQUAT_VEG	9	0.37	0.000	MESOLITHAL
15	AQUAT_VEG	10	0.38	0.000	PSAMMAL
16	GLIDE	1	0.82	0.263	MACROLITHAL
16	GLIDE	2	0.81	0.197	MACROLITHAL
16	GLIDE	3	0.74	0.128	MESOLITHAL
16	GLIDE	4	0.65	0.247	MESOLITHAL
16	GLIDE	5	0.69	0.479	MESOLITHAL
16	GLIDE	6	0.67	0.404	MESOLITHAL
16	GLIDE	7	0.70	0.200	MESOLITHAL
16	GLIDE	8	0.71	0.228	MESOLITHAL
16	GLIDE	9	0.73	0.097	MESOLITHAL
16	GLIDE	10	0.75	0.199	MICROLITHAL
17	POOL	1	0.87	0.194	MACROLITHAL
17	POOL	2	0.89	0.175	MACROLITHAL
17	POOL	3	0.76	0.040	MESOLITHAL
17	POOL	4	0.89	0.109	MESOLITHAL
17	POOL	5	0.73	0.059	MESOLITHAL
17	POOL	6	0.80	0.131	MESOLITHAL
17	POOL	7	0.69	0.194	MESOLITHAL
17	POOL	8	0.84	0.162	MESOLITHAL
17	POOL	9	0.73	0.147	MICROLITHAL
17	POOL	10	0.76	0.183	AKAL
18	AQUAT_VEG	1	0.52	0.000	MACROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
18	AQUAT_VEG	2	0.48	0.000	MACROLITHAL
18	AQUAT_VEG	3	0.54	0.000	MACROLITHAL
18	AQUAT_VEG	4	0.50	0.000	MACROLITHAL
18	AQUAT_VEG	5	0.49	0.000	MACROLITHAL
18	AQUAT_VEG	6	0.50	0.000	MACROLITHAL
18	AQUAT_VEG	7	0.51	0.000	MESOLITHAL
18	AQUAT_VEG	8	0.55	0.000	MESOLITHAL
18	AQUAT_VEG	9	0.46	0.000	MESOLITHAL
18	AQUAT_VEG	10	0.47	0.000	MESOLITHAL
19	AQUAT_VEG	1	0.46	0.051	MACROLITHAL
19	AQUAT_VEG	2	0.43	0.044	MACROLITHAL
19	AQUAT_VEG	3	0.48	0.059	MACROLITHAL
19	AQUAT_VEG	4	0.45	0.063	MACROLITHAL
19	AQUAT_VEG	5	0.44	0.061	MACROLITHAL
19	AQUAT_VEG	6	0.39	0.058	MACROLITHAL
19	AQUAT_VEG	7	0.36	0.051	MESOLITHAL
19	AQUAT_VEG	8	0.38	0.072	MESOLITHAL
19	AQUAT_VEG	9	0.41	0.048	MESOLITHAL
19	AQUAT_VEG	10	0.44	0.049	MESOLITHAL
20	AQUAT_VEG	1	0.42	0.000	MACROLITHAL
20	AQUAT_VEG	2	0.40	0.000	MACROLITHAL
20	AQUAT_VEG	3	0.38	0.000	MACROLITHAL
20	AQUAT_VEG	4	0.33	0.000	MACROLITHAL
20	AQUAT_VEG	5	0.31	0.000	MACROLITHAL
20	AQUAT_VEG	6	0.40	0.000	MACROLITHAL
20	AQUAT_VEG	7	0.38	0.000	MESOLITHAL
20	AQUAT_VEG	8	0.36	0.000	MESOLITHAL
20	AQUAT_VEG	9	0.37	0.000	MESOLITHAL
20	AQUAT_VEG	10	0.39	0.000	MESOLITHAL
21	GLIDE	1	0.49	0.394	MACROLITHAL
21	GLIDE	2	0.56	0.313	MACROLITHAL
21	GLIDE	3	0.51	0.360	MESOLITHAL
21	GLIDE	4	0.53	0.519	MESOLITHAL
21	GLIDE	5	0.41	0.397	MESOLITHAL
21	GLIDE	6	0.47	0.482	MESOLITHAL
21	GLIDE	7	0.44	0.513	MESOLITHAL
21	GLIDE	8	0.46	0.388	MESOLITHAL
21	GLIDE	9	0.38	0.231	MESOLITHAL
21	GLIDE	10	0.50	0.278	MICROLITHAL
22	RAPID	1	0.50	0.664	MACROLITHAL
22	RAPID	2	0.50	0.416	MACROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
22	RAPID	3	0.47	0.618	MESOLITHAL
22	RAPID	4	0.49	0.543	MESOLITHAL
22	RAPID	5	0.56	0.598	MESOLITHAL
22	RAPID	6	0.53	0.573	MESOLITHAL
22	RAPID	7	0.50	0.491	MESOLITHAL
22	RAPID	8	0.51	0.465	MESOLITHAL
22	RAPID	9	0.46	0.415	MESOLITHAL
22	RAPID	10	0.44	0.493	MICROLITHAL
23	CASCADE	1	0.44	0.751	MACROLITHAL
23	CASCADE	2	0.60	1.329	MACROLITHAL
23	CASCADE	3	0.50	1.055	MACROLITHAL
23	CASCADE	4	0.53	1.181	MACROLITHAL
23	CASCADE	5	0.56	0.963	MACROLITHAL
23	CASCADE	6	0.41	1.190	MACROLITHAL
23	CASCADE	7	0.45	0.864	MACROLITHAL
23	CASCADE	8	0.47	0.983	MESOLITHAL
23	CASCADE	9	0.44	0.893	MESOLITHAL
23	CASCADE	10	0.46	0.815	MESOLITHAL
24	RAPID	1	0.31	0.723	MACROLITHAL
24	RAPID	2	0.36	0.485	MACROLITHAL
24	RAPID	3	0.47	0.695	MACROLITHAL
24	RAPID	4	0.38	0.350	MESOLITHAL
24	RAPID	5	0.40	0.563	MESOLITHAL
24	RAPID	6	0.36	0.441	MESOLITHAL
24	RAPID	7	0.42	0.689	MESOLITHAL
24	RAPID	8	0.44	0.363	MESOLITHAL
24	RAPID	9	0.39	0.504	MICROLITHAL
24	RAPID	10	0.37	0.567	MICROLITHAL
25	RIFFLE	1	0.45	0.557	MACROLITHAL
25	RIFFLE	2	0.63	0.626	MACROLITHAL
25	RIFFLE	3	0.51	0.518	MACROLITHAL
25	RIFFLE	4	0.56	0.563	MESOLITHAL
25	RIFFLE	5	0.57	0.473	MESOLITHAL
25	RIFFLE	6	0.60	0.591	MESOLITHAL
25	RIFFLE	7	0.59	0.485	MESOLITHAL
25	RIFFLE	8	0.44	0.461	MESOLITHAL
25	RIFFLE	9	0.61	0.518	MICROLITHAL
25	RIFFLE	10	0.46	0.623	MICROLITHAL
26	POOL	1	1.10	0.196	MACROLITHAL
26	POOL	2	1.05	0.173	MACROLITHAL
26	POOL	3	1.11	0.104	MACROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
26	POOL	4	1.03	0.118	MACROLITHAL
26	POOL	5	1.04	0.167	MESOLITHAL
26	POOL	6	0.99	0.095	MESOLITHAL
26	POOL	7	1.21	0.099	MESOLITHAL
26	POOL	8	1.19	0.187	MESOLITHAL
26	POOL	9	1.05	0.165	MESOLITHAL
26	POOL	10	0.96	0.174	MESOLITHAL
27	AQUAT_VEG	1	0.58	0.000	MACROLITHAL
27	AQUAT_VEG	2	0.65	0.000	MACROLITHAL
27	AQUAT_VEG	3	0.62	0.000	MACROLITHAL
27	AQUAT_VEG	4	0.60	0.000	MACROLITHAL
27	AQUAT_VEG	5	0.59	0.000	MACROLITHAL
27	AQUAT_VEG	6	0.57	0.000	MACROLITHAL
27	AQUAT_VEG	7	0.64	0.000	MESOLITHAL
27	AQUAT_VEG	8	0.63	0.000	MESOLITHAL
27	AQUAT_VEG	9	0.59	0.000	MESOLITHAL
27	AQUAT_VEG	10	0.56	0.000	MESOLITHAL
Venta at Rudikiai 3					
1	RAPID	1	0.91	0.769	MACROLITHAL
1	RAPID	2	0.83	0.852	MACROLITHAL
1	RAPID	3	0.95	0.805	MACROLITHAL
1	RAPID	4	0.88	0.699	MACROLITHAL
1	RAPID	5	0.81	0.868	MESOLITHAL
1	RAPID	6	0.59	0.759	MESOLITHAL
1	RAPID	7	0.87	0.602	MESOLITHAL
1	RAPID	8	0.71	0.622	MESOLITHAL
1	RAPID	9	0.75	0.709	MESOLITHAL
1	RAPID	10	0.81	0.512	MESOLITHAL
1	RAPID	11	0.67	0.677	MESOLITHAL
1	RAPID	12	0.66	0.623	MICROLITHAL
1	RAPID	13	0.62	0.650	MICROLITHAL
1	RAPID	14	0.75	0.488	AKAL
1	RAPID	15	0.73	0.523	PSAMMAL
2	POOL	1	1.43	0.457	MACROLITHAL
2	POOL	2	1.62	0.345	MACROLITHAL
2	POOL	3	1.39	0.478	MACROLITHAL
2	POOL	4	1.44	0.421	MACROLITHAL
2	POOL	5	1.51	0.553	MESOLITHAL
2	POOL	6	1.44	0.324	MESOLITHAL
2	POOL	7	1.31	0.399	MESOLITHAL
2	POOL	8	1.73	0.302	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
2	POOL	9	1.34	0.426	MICROLITHAL
2	POOL	10	1.02	0.503	AKAL
3	AQUAT_VEG	1	0.65	0.273	MACROLITHAL
3	AQUAT_VEG	2	0.59	0.225	MACROLITHAL
3	AQUAT_VEG	3	0.47	0.206	MACROLITHAL
3	AQUAT_VEG	4	0.61	0.197	MACROLITHAL
3	AQUAT_VEG	5	0.55	0.284	MACROLITHAL
3	AQUAT_VEG	6	0.53	0.265	MACROLITHAL
3	AQUAT_VEG	7	0.62	0.237	MESOLITHAL
3	AQUAT_VEG	8	0.47	0.322	MESOLITHAL
3	AQUAT_VEG	9	0.45	0.177	MESOLITHAL
3	AQUAT_VEG	10	0.44	0.214	MESOLITHAL
4	RAPID	1	1.06	0.539	MACROLITHAL
4	RAPID	2	1.04	0.621	MACROLITHAL
4	RAPID	3	1.29	0.403	MACROLITHAL
4	RAPID	4	1.09	0.638	MACROLITHAL
4	RAPID	5	1.12	0.512	MACROLITHAL
4	RAPID	6	0.64	0.768	MESOLITHAL
4	RAPID	7	0.60	0.843	MESOLITHAL
4	RAPID	8	1.06	0.662	MESOLITHAL
4	RAPID	9	0.66	0.901	MESOLITHAL
4	RAPID	10	0.72	0.835	MESOLITHAL
4	RAPID	11	0.67	0.751	MESOLITHAL
4	RAPID	12	0.73	0.849	MESOLITHAL
4	RAPID	13	0.61	0.818	MESOLITHAL
4	RAPID	14	0.64	0.904	MICROLITHAL
4	RAPID	15	0.66	0.899	AKAL
5	AQUAT_VEG	1	0.86	0.136	MACROLITHAL
5	AQUAT_VEG	2	0.90	0.095	MACROLITHAL
5	AQUAT_VEG	3	0.92	0.124	MACROLITHAL
5	AQUAT_VEG	4	0.84	0.132	MACROLITHAL
5	AQUAT_VEG	5	0.81	0.113	MACROLITHAL
5	AQUAT_VEG	6	0.75	0.108	MESOLITHAL
5	AQUAT_VEG	7	0.74	0.144	MESOLITHAL
5	AQUAT_VEG	8	0.78	0.129	MESOLITHAL
5	AQUAT_VEG	9	0.81	0.110	MESOLITHAL
5	AQUAT_VEG	10	0.79	0.127	AKAL
6	AQUAT_VEG	1	0.65	0.156	MACROLITHAL
6	AQUAT_VEG	2	0.78	0.107	MACROLITHAL
6	AQUAT_VEG	3	0.84	0.143	MACROLITHAL
6	AQUAT_VEG	4	0.75	0.116	MACROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
6	AQUAT_VEG	5	0.74	0.109	MACROLITHAL
6	AQUAT_VEG	6	0.77	0.148	MESOLITHAL
6	AQUAT_VEG	7	0.63	0.152	MESOLITHAL
6	AQUAT_VEG	8	0.81	0.163	MESOLITHAL
6	AQUAT_VEG	9	0.90	0.155	MESOLITHAL
6	AQUAT_VEG	10	0.64	0.135	AKAL
7	POOL	1	1.88	0.092	MACROLITHAL
7	POOL	2	1.72	0.089	MACROLITHAL
7	POOL	3	1.28	0.104	MESOLITHAL
7	POOL	4	1.64	0.111	MESOLITHAL
7	POOL	5	1.56	0.095	MESOLITHAL
7	POOL	6	1.64	0.078	PELAL
7	POOL	7	1.66	0.105	PELAL
7	POOL	8	1.30	0.091	PELAL
7	POOL	9	1.58	0.075	PSAMMAL
7	POOL	10	1.57	0.087	PSAMMAL
8	RAPID	1	1.07	0.755	MACROLITHAL
8	RAPID	2	1.00	0.697	MACROLITHAL
8	RAPID	3	0.91	0.733	MACROLITHAL
8	RAPID	4	0.95	0.824	MACROLITHAL
8	RAPID	5	0.93	0.802	MACROLITHAL
8	RAPID	6	1.06	0.637	MESOLITHAL
8	RAPID	7	1.14	0.579	MESOLITHAL
8	RAPID	8	0.97	0.712	MESOLITHAL
8	RAPID	9	1.05	0.646	MESOLITHAL
8	RAPID	10	0.90	0.879	MESOLITHAL
8	RAPID	11	0.85	0.833	MESOLITHAL
8	RAPID	12	0.73	0.891	MESOLITHAL
8	RAPID	13	0.74	0.973	MESOLITHAL
8	RAPID	14	0.77	0.887	MICROLITHAL
8	RAPID	15	0.71	0.912	AKAL
9	AQUAT_VEG	1	0.72	0.126	MACROLITHAL
9	AQUAT_VEG	2	1.08	0.131	MACROLITHAL
9	AQUAT_VEG	3	0.68	0.184	MACROLITHAL
9	AQUAT_VEG	4	0.72	0.135	MACROLITHAL
9	AQUAT_VEG	5	0.67	0.106	MACROLITHAL
9	AQUAT_VEG	6	0.73	0.137	MACROLITHAL
9	AQUAT_VEG	7	0.70	0.125	MESOLITHAL
9	AQUAT_VEG	8	0.71	0.094	MESOLITHAL
9	AQUAT_VEG	9	0.62	0.111	MESOLITHAL
9	AQUAT_VEG	10	0.59	0.130	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
10	AQUAT_VEG	1	0.45	0.051	MACROLITHAL
10	AQUAT_VEG	2	0.65	0.000	MACROLITHAL
10	AQUAT_VEG	3	0.72	0.000	MACROLITHAL
10	AQUAT_VEG	4	0.68	0.000	MACROLITHAL
10	AQUAT_VEG	5	0.53	0.000	MACROLITHAL
10	AQUAT_VEG	6	0.49	0.056	MACROLITHAL
10	AQUAT_VEG	7	0.37	0.052	MACROLITHAL
10	AQUAT_VEG	8	0.55	0.000	MESOLITHAL
10	AQUAT_VEG	9	0.29	0.000	MESOLITHAL
10	AQUAT_VEG	10	0.33	0.000	MESOLITHAL
11	RAPID	1	0.68	1.142	MACROLITHAL
11	RAPID	2	0.79	0.984	MACROLITHAL
11	RAPID	3	0.81	1.109	MACROLITHAL
11	RAPID	4	0.91	0.992	MACROLITHAL
11	RAPID	5	0.72	0.953	MACROLITHAL
11	RAPID	6	1.23	0.897	MESOLITHAL
11	RAPID	7	1.07	0.888	MESOLITHAL
11	RAPID	8	1.37	0.907	MESOLITHAL
11	RAPID	9	1.24	0.862	MESOLITHAL
11	RAPID	10	1.22	0.814	MESOLITHAL
11	RAPID	11	0.89	1.081	MESOLITHAL
11	RAPID	12	0.91	0.913	MESOLITHAL
11	RAPID	13	0.88	0.968	MESOLITHAL
11	RAPID	14	0.84	0.935	MICROLITHAL
11	RAPID	15	0.87	0.899	MICROLITHAL
12	SEC_CHAN	1	0.58	0.535	MACROLITHAL
12	SEC_CHAN	2	0.45	0.479	MACROLITHAL
12	SEC_CHAN	3	0.34	0.463	MACROLITHAL
12	SEC_CHAN	4	0.51	0.522	MESOLITHAL
12	SEC_CHAN	5	0.39	0.438	MESOLITHAL
12	SEC_CHAN	6	0.46	0.489	MESOLITHAL
12	SEC_CHAN	7	0.55	0.531	MESOLITHAL
12	SEC_CHAN	8	0.47	0.507	MESOLITHAL
12	SEC_CHAN	9	0.37	0.412	MICROLITHAL
12	SEC_CHAN	10	0.45	0.387	AKAL
13	AQUAT_VEG	1	0.45	0.000	MACROLITHAL
13	AQUAT_VEG	2	0.38	0.058	MACROLITHAL
13	AQUAT_VEG	3	0.52	0.047	MACROLITHAL
13	AQUAT_VEG	4	0.46	0.000	MACROLITHAL
13	AQUAT_VEG	5	0.43	0.000	MACROLITHAL
13	AQUAT_VEG	6	0.55	0.054	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
13	AQUAT_VEG	7	0.52	0.000	MESOLITHAL
13	AQUAT_VEG	8	0.39	0.061	MESOLITHAL
13	AQUAT_VEG	9	0.48	0.000	AKAL
13	AQUAT_VEG	10	0.36	0.000	MESOLITHAL
Venta at Rudikiai 4					
1	POOL	1	1.33	0.231	MACROLITHAL
1	POOL	2	1.48	0.197	MACROLITHAL
1	POOL	3	1.24	0.324	MACROLITHAL
1	POOL	4	1.25	0.268	MACROLITHAL
1	POOL	5	1.33	0.202	MESOLITHAL
1	POOL	6	1.32	0.186	MESOLITHAL
1	POOL	7	1.24	0.278	MESOLITHAL
1	POOL	8	1.59	0.243	MICROLITHAL
1	POOL	9	1.15	0.211	MICROLITHAL
1	POOL	10	0.96	0.305	AKAL
2	SEC_CHAN	1	0.78	0.175	MESOLITHAL
2	SEC_CHAN	2	0.71	0.186	MESOLITHAL
2	SEC_CHAN	3	0.83	0.163	MESOLITHAL
2	SEC_CHAN	4	0.70	0.173	MESOLITHAL
2	SEC_CHAN	5	0.73	0.159	MESOLITHAL
2	SEC_CHAN	6	0.74	0.164	MESOLITHAL
2	SEC_CHAN	7	0.72	0.205	MICROLITHAL
2	SEC_CHAN	8	0.79	0.201	MICROLITHAL
2	SEC_CHAN	9	0.59	0.144	AKAL
2	SEC_CHAN	10	0.84	0.167	PSAMMAL
3	AQUAT_VEG	1	0.41	0.095	MACROLITHAL
3	AQUAT_VEG	2	0.52	0.108	MACROLITHAL
3	AQUAT_VEG	3	0.33	0.087	MACROLITHAL
3	AQUAT_VEG	4	0.42	0.113	MACROLITHAL
3	AQUAT_VEG	5	0.39	0.121	MACROLITHAL
3	AQUAT_VEG	6	0.42	0.096	MACROLITHAL
3	AQUAT_VEG	7	0.48	0.104	MESOLITHAL
3	AQUAT_VEG	8	0.36	0.137	MESOLITHAL
3	AQUAT_VEG	9	0.30	0.102	MESOLITHAL
3	AQUAT_VEG	10	0.29	0.118	MESOLITHAL
4	RAPID	1	0.49	0.558	MACROLITHAL
4	RAPID	2	0.77	0.673	MACROLITHAL
4	RAPID	3	0.55	0.727	MESOLITHAL
4	RAPID	4	0.62	0.496	MESOLITHAL
4	RAPID	5	0.67	0.648	MESOLITHAL
4	RAPID	6	0.52	0.704	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
4	RAPID	7	0.54	0.663	MESOLITHAL
4	RAPID	8	0.73	0.735	MESOLITHAL
4	RAPID	9	0.71	0.662	MESOLITHAL
4	RAPID	10	0.69	0.711	MICROLITHAL
5	AQUAT_VEG	1	0.55	0.203	MACROLITHAL
5	AQUAT_VEG	2	0.57	0.184	MACROLITHAL
5	AQUAT_VEG	3	0.49	0.179	MACROLITHAL
5	AQUAT_VEG	4	0.61	0.245	MACROLITHAL
5	AQUAT_VEG	5	0.63	0.223	MACROLITHAL
5	AQUAT_VEG	6	0.49	0.196	MACROLITHAL
5	AQUAT_VEG	7	0.58	0.278	MACROLITHAL
5	AQUAT_VEG	8	0.57	0.097	MESOLITHAL
5	AQUAT_VEG	9	0.63	0.241	MESOLITHAL
5	AQUAT_VEG	10	0.47	0.185	MESOLITHAL
6	AQUAT_VEG	1	0.69	0.149	MACROLITHAL
6	AQUAT_VEG	2	0.64	0.153	MACROLITHAL
6	AQUAT_VEG	3	0.73	0.108	MACROLITHAL
6	AQUAT_VEG	4	0.75	0.222	MACROLITHAL
6	AQUAT_VEG	5	0.59	0.137	MACROLITHAL
6	AQUAT_VEG	6	0.58	0.124	MACROLITHAL
6	AQUAT_VEG	7	0.70	0.095	MESOLITHAL
6	AQUAT_VEG	8	0.66	0.114	MESOLITHAL
6	AQUAT_VEG	9	0.64	0.148	MESOLITHAL
6	AQUAT_VEG	10	0.63	0.133	MESOLITHAL
7	GLIDE	1	0.69	0.489	MACROLITHAL
7	GLIDE	2	0.93	0.561	MACROLITHAL
7	GLIDE	3	0.74	0.602	MESOLITHAL
7	GLIDE	4	0.91	0.486	MESOLITHAL
7	GLIDE	5	0.96	0.554	MESOLITHAL
7	GLIDE	6	0.84	0.531	MESOLITHAL
7	GLIDE	7	0.79	0.625	MESOLITHAL
7	GLIDE	8	0.70	0.654	MESOLITHAL
7	GLIDE	9	0.79	0.483	MESOLITHAL
7	GLIDE	10	0.83	0.601	MICROLITHAL
8	POOL	1	0.95	0.284	MACROLITHAL
8	POOL	2	0.91	0.335	MACROLITHAL
8	POOL	3	1.15	0.257	MESOLITHAL
8	POOL	4	1.18	0.312	MESOLITHAL
8	POOL	5	1.10	0.276	MESOLITHAL
8	POOL	6	0.98	0.197	MESOLITHAL
8	POOL	7	0.89	0.326	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
8	POOL	8	0.97	0.268	MESOLITHAL
8	POOL	9	0.98	0.241	MICROLITHAL
8	POOL	10	1.00	0.211	AKAL
9	AQUAT_VEG	1	0.78	0.091	MACROLITHAL
9	AQUAT_VEG	2	0.77	0.101	MACROLITHAL
9	AQUAT_VEG	3	0.73	0.113	MACROLITHAL
9	AQUAT_VEG	4	0.72	0.083	MACROLITHAL
9	AQUAT_VEG	5	0.69	0.094	MACROLITHAL
9	AQUAT_VEG	6	0.64	0.107	MESOLITHAL
9	AQUAT_VEG	7	0.60	0.102	MESOLITHAL
9	AQUAT_VEG	8	0.69	0.096	MESOLITHAL
9	AQUAT_VEG	9	0.67	0.089	MESOLITHAL
9	AQUAT_VEG	10	0.64	0.095	AKAL
10	RAPID	1	0.53	0.589	MACROLITHAL
10	RAPID	2	0.47	0.603	MACROLITHAL
10	RAPID	3	0.91	0.678	MESOLITHAL
10	RAPID	4	0.56	0.731	MESOLITHAL
10	RAPID	5	0.58	0.786	MESOLITHAL
10	RAPID	6	0.55	0.714	MESOLITHAL
10	RAPID	7	0.73	0.682	MESOLITHAL
10	RAPID	8	0.51	0.635	MESOLITHAL
10	RAPID	9	0.49	0.586	MESOLITHAL
10	RAPID	10	0.64	0.688	MICROLITHAL
11	AQUAT_VEG	1	0.53	0.223	MACROLITHAL
11	AQUAT_VEG	2	0.55	0.198	MACROLITHAL
11	AQUAT_VEG	3	0.51	0.241	MACROLITHAL
11	AQUAT_VEG	4	0.49	0.237	MACROLITHAL
11	AQUAT_VEG	5	0.58	0.208	MACROLITHAL
11	AQUAT_VEG	6	0.54	0.186	MACROLITHAL
11	AQUAT_VEG	7	0.59	0.239	MACROLITHAL
11	AQUAT_VEG	8	0.48	0.242	MACROLITHAL
11	AQUAT_VEG	9	0.49	0.265	MACROLITHAL
11	AQUAT_VEG	10	0.53	0.204	MACROLITHAL
12	FLOOD_LAKE	1	1.43	0.094	PELAL
12	FLOOD_LAKE	2	1.59	0.000	PELAL
12	FLOOD_LAKE	3	1.16	0.087	PELAL
12	FLOOD_LAKE	4	1.49	0.000	PELAL
12	FLOOD_LAKE	5	1.40	0.000	PELAL
12	FLOOD_LAKE	6	1.39	0.106	PELAL
12	FLOOD_LAKE	7	1.58	0.095	PELAL
12	FLOOD_LAKE	8	1.18	0.084	PELAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
12	FLOOD_LAKE	9	1.44	0.000	PSAMMAL
12	FLOOD_LAKE	10	1.38	0.000	PSAMMAL
13	AQUAT_VEG	1	0.53	0.095	MACROLITHAL
13	AQUAT_VEG	2	0.48	0.104	MACROLITHAL
13	AQUAT_VEG	3	0.37	0.096	MACROLITHAL
13	AQUAT_VEG	4	0.52	0.084	MACROLITHAL
13	AQUAT_VEG	5	0.67	0.087	MACROLITHAL
13	AQUAT_VEG	6	0.44	0.092	MESOLITHAL
13	AQUAT_VEG	7	0.51	0.088	MESOLITHAL
13	AQUAT_VEG	8	0.63	0.096	MESOLITHAL
13	AQUAT_VEG	9	0.70	0.095	MESOLITHAL
13	AQUAT_VEG	10	0.69	0.104	AKAL
14	GLIDE	1	0.83	0.492	MACROLITHAL
14	GLIDE	2	0.85	0.508	MACROLITHAL
14	GLIDE	3	0.89	0.476	MESOLITHAL
14	GLIDE	4	1.01	0.538	MESOLITHAL
14	GLIDE	5	0.81	0.622	MESOLITHAL
14	GLIDE	6	0.92	0.397	MESOLITHAL
14	GLIDE	7	0.69	0.459	MESOLITHAL
14	GLIDE	8	0.63	0.572	MESOLITHAL
14	GLIDE	9	0.65	0.514	MICROLITHAL
14	GLIDE	10	0.59	0.461	AKAL
15	AQUAT_VEG	1	0.59	0.154	MACROLITHAL
15	AQUAT_VEG	2	0.52	0.136	MACROLITHAL
15	AQUAT_VEG	3	0.53	0.119	MACROLITHAL
15	AQUAT_VEG	4	0.59	0.184	MACROLITHAL
15	AQUAT_VEG	5	0.49	0.227	MACROLITHAL
15	AQUAT_VEG	6	0.52	0.172	MACROLITHAL
15	AQUAT_VEG	7	0.58	0.138	MESOLITHAL
15	AQUAT_VEG	8	0.61	0.205	MESOLITHAL
15	AQUAT_VEG	9	0.47	0.113	MESOLITHAL
15	AQUAT_VEG	10	0.55	0.108	PSAMMAL
16	AQUAT_VEG	1	0.65	0.212	MACROLITHAL
16	AQUAT_VEG	2	0.61	0.174	MACROLITHAL
16	AQUAT_VEG	3	0.66	0.163	MACROLITHAL
16	AQUAT_VEG	4	0.62	0.244	MACROLITHAL
16	AQUAT_VEG	5	0.60	0.221	MACROLITHAL
16	AQUAT_VEG	6	0.67	0.237	MACROLITHAL
16	AQUAT_VEG	7	0.61	0.209	MESOLITHAL
16	AQUAT_VEG	8	0.69	0.197	MESOLITHAL
16	AQUAT_VEG	9	0.58	0.234	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
16	AQUAT_VEG	10	0.62	0.243	MESOLITHAL
17	RAPID	1	0.62	0.787	MACROLITHAL
17	RAPID	2	0.66	0.649	MACROLITHAL
17	RAPID	3	0.59	0.732	MESOLITHAL
17	RAPID	4	0.61	0.748	MESOLITHAL
17	RAPID	5	0.71	0.684	MESOLITHAL
17	RAPID	6	0.63	0.639	MESOLITHAL
17	RAPID	7	0.62	0.593	MESOLITHAL
17	RAPID	8	0.69	0.805	MESOLITHAL
17	RAPID	9	0.58	0.782	MESOLITHAL
17	RAPID	10	0.55	0.796	MICROLITHAL
18	CASCADE	1	0.58	1.422	MACROLITHAL
18	CASCADE	2	0.71	1.043	MACROLITHAL
18	CASCADE	3	0.63	0.972	MACROLITHAL
18	CASCADE	4	0.65	0.991	MACROLITHAL
18	CASCADE	5	0.69	0.887	MACROLITHAL
18	CASCADE	6	0.55	0.924	MACROLITHAL
18	CASCADE	7	0.58	1.121	MACROLITHAL
18	CASCADE	8	0.59	0.962	MESOLITHAL
18	CASCADE	9	0.52	0.873	MESOLITHAL
18	CASCADE	10	0.58	0.819	MESOLITHAL
19	RAPID	1	0.56	0.801	MACROLITHAL
19	RAPID	2	0.76	0.735	MACROLITHAL
19	RAPID	3	0.63	0.742	MACROLITHAL
19	RAPID	4	0.69	0.768	MESOLITHAL
19	RAPID	5	0.67	0.623	MESOLITHAL
19	RAPID	6	0.49	0.686	MESOLITHAL
19	RAPID	7	0.55	0.697	MESOLITHAL
19	RAPID	8	0.53	0.721	MESOLITHAL
19	RAPID	9	0.51	0.733	MICROLITHAL
19	RAPID	10	0.49	0.709	MICROLITHAL
20	SEC_CHAN	1	0.32	0.362	MACROLITHAL
20	SEC_CHAN	2	0.39	0.388	MACROLITHAL
20	SEC_CHAN	3	0.45	0.289	MACROLITHAL
20	SEC_CHAN	4	0.52	0.264	MESOLITHAL
20	SEC_CHAN	5	0.33	0.371	MESOLITHAL
20	SEC_CHAN	6	0.37	0.401	MESOLITHAL
20	SEC_CHAN	7	0.42	0.422	MESOLITHAL
20	SEC_CHAN	8	0.38	0.338	MESOLITHAL
20	SEC_CHAN	9	0.39	0.367	MICROLITHAL
20	SEC_CHAN	10	0.44	0.246	AKAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
21	POOL	1	1.21	0.236	MACROLITHAL
21	POOL	2	1.19	0.194	MACROLITHAL
21	POOL	3	1.24	0.178	MACROLITHAL
21	POOL	4	1.18	0.224	MACROLITHAL
21	POOL	5	1.15	0.239	MESOLITHAL
21	POOL	6	1.12	0.227	MESOLITHAL
21	POOL	7	1.33	0.241	MESOLITHAL
21	POOL	8	1.35	0.196	MESOLITHAL
21	POOL	9	1.17	0.302	MESOLITHAL
21	POOL	10	1.09	0.275	MESOLITHAL
22	AQUAT_VEG	1	0.71	0.182	MACROLITHAL
22	AQUAT_VEG	2	0.77	0.197	MACROLITHAL
22	AQUAT_VEG	3	0.74	0.211	MACROLITHAL
22	AQUAT_VEG	4	0.71	0.228	MACROLITHAL
22	AQUAT_VEG	5	0.70	0.164	MACROLITHAL
22	AQUAT_VEG	6	0.68	0.107	MACROLITHAL
22	AQUAT_VEG	7	0.77	0.119	MESOLITHAL
22	AQUAT_VEG	8	0.76	0.232	MESOLITHAL
22	AQUAT_VEG	9	0.71	0.246	MESOLITHAL
22	AQUAT_VEG	10	0.69	0.255	MESOLITHAL
Venta at Kuodžiai 1					
1	AQUAT_VEG	1	0.35	0.000	MESOLITHAL
1	AQUAT_VEG	2	0.42	0.000	MESOLITHAL
1	AQUAT_VEG	3	0.38	0.000	MESOLITHAL
1	AQUAT_VEG	4	0.41	0.000	MICROLITHAL
1	AQUAT_VEG	5	0.36	0.000	MICROLITHAL
1	AQUAT_VEG	6	0.44	0.000	ACAL
2	GLIDE	1	0.72	0.109	MESOLITHAL
2	GLIDE	2	0.74	0.147	MESOLITHAL
2	GLIDE	3	0.63	0.081	MESOLITHAL
2	GLIDE	4	0.68	0.124	MESOLITHAL
2	GLIDE	5	0.71	0.137	MESOLITHAL
2	GLIDE	6	0.67	0.096	MICROLITHAL
2	GLIDE	7	0.66	0.087	MICROLITHAL
2	GLIDE	8	0.73	0.105	ACAL
2	GLIDE	9	0.62	0.102	PSAMMAL
3	RAPID	1	0.52	0.582	MESOLITHAL
3	RAPID	2	0.72	0.476	MESOLITHAL
3	RAPID	3	0.68	0.595	MESOLITHAL
3	RAPID	4	0.80	0.516	MESOLITHAL
3	RAPID	5	0.66	0.489	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
3	RAPID	6	0.73	0.567	MICROLITHAL
4	GLIDE	1	0.61	0.203	MESOLITHAL
4	GLIDE	2	0.63	0.303	MESOLITHAL
4	GLIDE	3	0.57	0.223	MESOLITHAL
4	GLIDE	4	0.58	0.250	MESOLITHAL
4	GLIDE	5	0.62	0.279	MESOLITHAL
4	GLIDE	6	0.60	0.300	MICROLITHAL
4	GLIDE	7	0.59	0.211	MICROLITHAL
4	GLIDE	8	0.55	0.272	ACAL
4	GLIDE	9	0.62	0.255	PSAMMAL
5	RIFFLE	1	0.58	0.623	MESOLITHAL
5	RIFFLE	2	0.56	0.476	MESOLITHAL
5	RIFFLE	3	0.51	0.488	MESOLITHAL
5	RIFFLE	4	0.52	0.521	MESOLITHAL
5	RIFFLE	5	0.57	0.533	MESOLITHAL
5	RIFFLE	6	0.61	0.598	MICROLITHAL
6	GLIDE	1	0.59	0.253	MESOLITHAL
6	GLIDE	2	0.60	0.134	MESOLITHAL
6	GLIDE	3	0.41	0.166	MESOLITHAL
6	GLIDE	4	0.62	0.156	MESOLITHAL
6	GLIDE	5	0.54	0.164	MESOLITHAL
6	GLIDE	6	0.55	0.221	MICROLITHAL
6	GLIDE	7	0.60	0.212	MICROLITHAL
6	GLIDE	8	0.62	0.203	ACAL
6	GLIDE	9	0.49	0.247	PSAMMAL
7	AQUAT_VEG	1	0.28	0.169	MESOLITHAL
7	AQUAT_VEG	2	0.35	0.106	MESOLITHAL
7	AQUAT_VEG	3	0.22	0.120	MESOLITHAL
7	AQUAT_VEG	4	0.31	0.103	MICROLITHAL
7	AQUAT_VEG	5	0.34	0.135	MICROLITHAL
7	AQUAT_VEG	6	0.26	0.140	MICROLITHAL
7	AQUAT_VEG	7	0.27	0.105	ACAL
7	AQUAT_VEG	8	0.25	0.127	ACAL
7	AQUAT_VEG	9	0.31	0.109	PSAMMAL
8	RAPID	1	0.80	0.654	MESOLITHAL
8	RAPID	2	0.44	0.310	MESOLITHAL
8	RAPID	3	0.40	0.626	MESOLITHAL
8	RAPID	4	0.64	0.562	MESOLITHAL
8	RAPID	5	0.73	0.373	MICROLITHAL
9	AQUAT_VEG	1	0.51	0.054	MESOLITHAL
9	AQUAT_VEG	2	0.34	0.061	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
9	AQUAT_VEG	3	0.45	0.000	MESOLITHAL
9	AQUAT_VEG	4	0.49	0.053	MICROLITHAL
9	AQUAT_VEG	5	0.37	0.049	MICROLITHAL
9	AQUAT_VEG	6	0.33	0.071	MICROLITHAL
9	AQUAT_VEG	7	0.50	0.065	ACAL
9	AQUAT_VEG	8	0.49	0.050	ACAL
9	AQUAT_VEG	9	0.44	0.044	PSAMMAL
10	AQUAT_VEG	1	0.31	0.147	MESOLITHAL
10	AQUAT_VEG	2	0.29	0.112	MESOLITHAL
10	AQUAT_VEG	3	0.33	0.121	MESOLITHAL
10	AQUAT_VEG	4	0.24	0.134	MICROLITHAL
10	AQUAT_VEG	5	0.32	0.137	MICROLITHAL
10	AQUAT_VEG	6	0.28	0.142	MICROLITHAL
10	AQUAT_VEG	7	0.26	0.106	ACAL
10	AQUAT_VEG	8	0.33	0.109	ACAL
10	AQUAT_VEG	9	0.30	0.105	PSAMMAL
11	GLIDE	1	0.34	0.194	MESOLITHAL
11	GLIDE	2	0.72	0.197	MESOLITHAL
11	GLIDE	3	0.40	0.259	MESOLITHAL
11	GLIDE	4	0.38	0.211	MESOLITHAL
11	GLIDE	5	0.47	0.260	MESOLITHAL
11	GLIDE	6	0.62	0.199	MICROLITHAL
11	GLIDE	7	0.58	0.185	MICROLITHAL
11	GLIDE	8	0.51	0.186	ACAL
11	GLIDE	9	0.49	0.179	PSAMMAL
12	GLIDE	1	0.86	0.529	MESOLITHAL
12	GLIDE	2	0.84	0.297	MESOLITHAL
12	GLIDE	3	0.76	0.432	MESOLITHAL
12	GLIDE	4	0.66	0.441	MESOLITHAL
12	GLIDE	5	0.84	0.311	MESOLITHAL
12	GLIDE	6	0.87	0.317	MESOLITHAL
12	GLIDE	7	0.91	0.268	MICROLITHAL
12	GLIDE	8	0.72	0.285	MICROLITHAL
12	GLIDE	9	0.82	0.329	ACAL
13	AQUAT_VEG	1	0.46	0.051	MESOLITHAL
13	AQUAT_VEG	2	0.37	0.055	MESOLITHAL
13	AQUAT_VEG	3	0.51	0.062	MESOLITHAL
13	AQUAT_VEG	4	0.48	0.067	MESOLITHAL
13	AQUAT_VEG	5	0.39	0.048	MICROLITHAL
13	AQUAT_VEG	6	0.49	0.041	MICROLITHAL
13	AQUAT_VEG	7	0.50	0.055	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
13	AQUAT_VEG	8	0.33	0.042	ACAL
13	AQUAT_VEG	9	0.39	0.053	PSAMMAL
14	POOL	1	0.95	0.297	MESOLITHAL
14	POOL	2	1.04	0.179	MESOLITHAL
14	POOL	3	0.88	0.188	MICROLITHAL
14	POOL	4	1.10	0.253	MICROLITHAL
14	POOL	5	0.99	0.266	ACAL
14	POOL	6	0.91	0.192	ACAL
14	POOL	7	0.96	0.201	PSAMMAL
14	POOL	8	0.87	0.231	PSAMMAL
14	POOL	9	0.94	0.209	PSAMMAL
15	AQUAT_VEG	1	0.75	0.067	MESOLITHAL
15	AQUAT_VEG	2	0.81	0.101	MICROLITHAL
15	AQUAT_VEG	3	0.66	0.055	MICROLITHAL
15	AQUAT_VEG	4	0.72	0.062	ACAL
15	AQUAT_VEG	5	0.83	0.053	ACAL
15	AQUAT_VEG	6	0.65	0.059	PSAMMAL
15	AQUAT_VEG	7	0.69	0.063	PSAMMAL
15	AQUAT_VEG	8	0.71	0.051	PSAMMAL
15	AQUAT_VEG	9	0.70	0.077	PSAMMAL
15	AQUAT_VEG	10	0.65	0.049	PELAL
16	RAPID	1	0.53	0.447	MESOLITHAL
16	RAPID	2	0.49	0.520	MESOLITHAL
16	RAPID	3	0.61	0.550	MESOLITHAL
16	RAPID	4	0.54	0.461	MESOLITHAL
16	RAPID	5	0.47	0.496	MESOLITHAL
16	RAPID	6	0.44	0.515	MICROLITHAL
17	AQUAT_VEG	1	0.51	0.148	MESOLITHAL
17	AQUAT_VEG	2	0.47	0.144	MESOLITHAL
17	AQUAT_VEG	3	0.53	0.132	MESOLITHAL
17	AQUAT_VEG	4	0.48	0.142	MESOLITHAL
17	AQUAT_VEG	5	0.52	0.150	MESOLITHAL
17	AQUAT_VEG	6	0.57	0.146	MESOLITHAL
17	AQUAT_VEG	7	0.46	0.123	MICROLITHAL
17	AQUAT_VEG	8	0.48	0.144	MICROLITHAL
17	AQUAT_VEG	9	0.47	0.132	ACAL
18	POOL	1	1.10	0.194	MESOLITHAL
18	POOL	2	0.99	0.115	MESOLITHAL
18	POOL	3	0.87	0.184	MESOLITHAL
18	POOL	4	1.02	0.123	MICROLITHAL
18	POOL	5	0.93	0.165	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
18	POOL	6	0.95	0.143	ACAL
18	POOL	7	0.76	0.152	PSAMMAL
18	POOL	8	0.98	0.160	PSAMMAL
19	GLIDE	1	0.39	0.263	MESOLITHAL
19	GLIDE	2	0.39	0.194	MESOLITHAL
19	GLIDE	3	0.42	0.198	MESOLITHAL
19	GLIDE	4	0.33	0.212	MESOLITHAL
19	GLIDE	5	0.40	0.242	MESOLITHAL
19	GLIDE	6	0.35	0.261	MESOLITHAL
19	GLIDE	7	0.38	0.250	MICROLITHAL
19	GLIDE	8	0.42	0.248	MICROLITHAL
19	GLIDE	9	0.36	0.211	ACAL
20	RIFFLE	1	0.40	0.466	MESOLITHAL
20	RIFFLE	2	0.17	0.288	MICROLITHAL
20	RIFFLE	3	0.25	0.479	MICROLITHAL
20	RIFFLE	4	0.22	0.311	MICROLITHAL
20	RIFFLE	5	0.31	0.423	ACAL
21	RAPID	1	0.63	0.447	MESOLITHAL
21	RAPID	2	0.69	0.304	MESOLITHAL
21	RAPID	3	0.57	0.342	MESOLITHAL
21	RAPID	4	0.62	0.411	MESOLITHAL
21	RAPID	5	0.63	0.391	MICROLITHAL
22	POOL	1	0.68	0.000	MESOLITHAL
22	POOL	2	0.54	0.000	MESOLITHAL
22	POOL	3	0.57	0.000	MICROLITHAL
22	POOL	4	0.71	0.000	MICROLITHAL
22	POOL	5	0.49	0.000	MICROLITHAL
22	POOL	6	0.59	0.000	ACAL
22	POOL	7	0.62	0.000	PSAMMAL
22	POOL	8	0.67	0.000	PSAMMAL
22	POOL	9	0.59	0.000	PSAMMAL
23	AQUAT_VEG	1	0.59	0.263	MESOLITHAL
23	AQUAT_VEG	2	0.42	0.211	MESOLITHAL
23	AQUAT_VEG	3	0.53	0.231	MESOLITHAL
23	AQUAT_VEG	4	0.51	0.250	MESOLITHAL
23	AQUAT_VEG	5	0.55	0.245	MICROLITHAL
23	AQUAT_VEG	6	0.48	0.201	MICROLITHAL
23	AQUAT_VEG	7	0.50	0.213	MICROLITHAL
23	AQUAT_VEG	8	0.46	0.198	ACAL
23	AQUAT_VEG	9	0.49	0.185	PSAMMAL
24	POOL	1	1.30	0.000	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
24	POOL	2	1.10	0.000	PSAMMAL
24	POOL	3	1.25	0.000	PSAMMAL
24	POOL	4	1.23	0.000	PSAMMAL
24	POOL	5	1.31	0.000	PSAMMAL
24	POOL	6	1.32	0.000	PSAMMAL
24	POOL	7	1.22	0.000	PSAMMAL
24	POOL	8	1.17	0.000	PSAMMAL
25	RAPID	1	0.25	0.413	MESOLITHAL
25	RAPID	2	0.47	0.382	MESOLITHAL
25	RAPID	3	0.50	0.397	MESOLITHAL
25	RAPID	4	0.61	0.293	MESOLITHAL
25	RAPID	5	0.38	0.389	MICROLITHAL
26	AQUAT_VEG	1	0.30	0.296	MESOLITHAL
26	AQUAT_VEG	2	0.45	0.250	MESOLITHAL
26	AQUAT_VEG	3	0.37	0.212	MESOLITHAL
26	AQUAT_VEG	4	0.44	0.243	MESOLITHAL
26	AQUAT_VEG	5	0.38	0.289	MICROLITHAL
26	AQUAT_VEG	6	0.33	0.201	MICROLITHAL
26	AQUAT_VEG	7	0.41	0.244	MICROLITHAL
26	AQUAT_VEG	8	0.43	0.198	ACAL
26	AQUAT_VEG	9	0.38	0.234	PSAMMAL
27	RAPID	1	0.49	0.407	MESOLITHAL
27	RAPID	2	0.55	0.585	MESOLITHAL
27	RAPID	3	0.40	0.523	MESOLITHAL
27	RAPID	4	0.51	0.422	MESOLITHAL
27	RAPID	5	0.48	0.481	MESOLITHAL
27	RAPID	6	0.37	0.502	MESOLITHAL
27	RAPID	7	0.52	0.515	MESOLITHAL
27	RAPID	8	0.42	0.465	MICROLITHAL
27	RAPID	9	0.47	0.421	MICROLITHAL
27	RAPID	10	0.45	0.443	ACAL
28	GLIDE	1	0.54	0.363	MESOLITHAL
28	GLIDE	2	0.80	0.285	MESOLITHAL
28	GLIDE	3	0.89	0.318	MESOLITHAL
28	GLIDE	4	1.11	0.251	MESOLITHAL
28	GLIDE	5	0.64	0.271	MICROLITHAL
28	GLIDE	6	0.78	0.348	MICROLITHAL
28	GLIDE	7	0.93	0.243	ACAL
28	GLIDE	8	0.88	0.332	PSAMMAL
28	GLIDE	9	0.59	0.285	PSAMMAL
28	GLIDE	10	0.68	0.297	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
Venta at Kuodžiai 2					
1	GLIDE	1	0.93	0.373	MESOLITHAL
1	GLIDE	2	0.91	0.515	MESOLITHAL
1	GLIDE	3	0.87	0.277	MESOLITHAL
1	GLIDE	4	0.92	0.435	MESOLITHAL
1	GLIDE	5	0.89	0.484	MESOLITHAL
1	GLIDE	6	0.87	0.324	MESOLITHAL
1	GLIDE	7	0.78	0.811	MESOLITHAL
1	GLIDE	8	0.93	0.762	MICROLITHAL
1	GLIDE	9	0.91	0.831	MICROLITHAL
1	GLIDE	10	1.01	0.727	ACAL
1	GLIDE	11	0.90	0.782	PSAMMAL
2	GLIDE	1	0.81	0.870	MESOLITHAL
2	GLIDE	2	0.76	0.669	MESOLITHAL
2	GLIDE	3	0.74	0.679	MESOLITHAL
2	GLIDE	4	0.75	0.721	MESOLITHAL
2	GLIDE	5	0.80	0.601	MESOLITHAL
2	GLIDE	6	0.83	0.472	MESOLITHAL
2	GLIDE	7	0.63	0.566	MESOLITHAL
2	GLIDE	8	0.84	0.552	MICROLITHAL
2	GLIDE	9	0.75	0.571	MICROLITHAL
2	GLIDE	10	0.77	0.529	ACAL
2	GLIDE	11	0.81	0.511	PSAMMAL
3	RAPID	1	1.01	0.911	MESOLITHAL
3	RAPID	2	0.64	0.876	MESOLITHAL
3	RAPID	3	0.85	0.783	MESOLITHAL
3	RAPID	4	0.94	0.713	MESOLITHAL
3	RAPID	5	0.71	0.705	MESOLITHAL
3	RAPID	6	0.58	0.648	MICROLITHAL
3	RAPID	7	0.71	0.620	MICROLITHAL
3	RAPID	8	0.59	0.668	MICROLITHAL
3	RAPID	9	1.07	0.711	ACAL
3	RAPID	10	1.01	0.721	PSAMMAL
4	GLIDE	1	0.55	0.517	MESOLITHAL
4	GLIDE	2	0.52	0.384	MESOLITHAL
4	GLIDE	3	0.59	0.422	MESOLITHAL
4	GLIDE	4	0.54	0.681	MESOLITHAL
4	GLIDE	5	0.91	0.691	MESOLITHAL
4	GLIDE	6	0.63	0.618	MICROLITHAL
4	GLIDE	7	1.05	0.739	MICROLITHAL
4	GLIDE	8	1.07	0.712	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
4	GLIDE	9	0.97	0.694	ACAL
4	GLIDE	10	1.07	0.593	PSAMMAL
5	GLIDE	1	1.16	0.712	MESOLITHAL
5	GLIDE	2	1.23	0.625	MESOLITHAL
5	GLIDE	3	1.12	0.653	MICROLITHAL
5	GLIDE	4	1.29	0.611	MICROLITHAL
5	GLIDE	5	1.22	0.642	ACAL
5	GLIDE	6	0.95	0.488	ACAL
5	GLIDE	7	1.04	0.451	PSAMMAL
5	GLIDE	8	0.91	0.474	PSAMMAL
5	GLIDE	9	0.93	0.510	PSAMMAL
5	GLIDE	10	1.06	0.624	PELAL
6	RAPID	1	0.77	0.711	MESOLITHAL
6	RAPID	2	0.72	0.731	MESOLITHAL
6	RAPID	3	0.81	0.767	MESOLITHAL
6	RAPID	4	0.74	0.520	MESOLITHAL
6	RAPID	5	0.69	0.508	MESOLITHAL
6	RAPID	6	0.75	0.463	MESOLITHAL
6	RAPID	7	1.33	0.477	MICROLITHAL
6	RAPID	8	1.19	0.398	MICROLITHAL
6	RAPID	9	1.12	0.643	ACAL
6	RAPID	10	1.25	0.455	PSAMMAL
7	RAPID	1	0.64	0.634	MESOLITHAL
7	RAPID	2	0.60	0.681	MESOLITHAL
7	RAPID	3	0.61	0.695	MESOLITHAL
7	RAPID	4	0.57	0.511	MESOLITHAL
7	RAPID	5	0.63	0.748	MESOLITHAL
7	RAPID	6	0.42	0.689	MESOLITHAL
7	RAPID	7	0.48	0.663	MICROLITHAL
7	RAPID	8	0.81	0.712	MICROLITHAL
7	RAPID	9	0.90	0.579	MICROLITHAL
7	RAPID	10	0.82	0.653	ACAL
8	GLIDE	1	0.79	0.633	MESOLITHAL
8	GLIDE	2	0.66	0.511	MESOLITHAL
8	GLIDE	3	0.73	0.549	MESOLITHAL
8	GLIDE	4	0.75	0.602	MESOLITHAL
8	GLIDE	5	1.50	0.513	MICROLITHAL
8	GLIDE	6	1.42	0.695	MICROLITHAL
8	GLIDE	7	1.44	0.651	ACAL
8	GLIDE	8	0.50	0.659	PSAMMAL
8	GLIDE	9	0.66	0.723	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
8	GLIDE	10	0.74	0.751	PSAMMAL
9	RAPID	1	0.54	0.711	MESOLITHAL
9	RAPID	2	0.66	0.605	MESOLITHAL
9	RAPID	3	0.58	0.512	MESOLITHAL
9	RAPID	4	0.67	0.579	MESOLITHAL
9	RAPID	5	0.62	0.679	MESOLITHAL
9	RAPID	6	0.70	0.648	MICROLITHAL
9	RAPID	7	0.78	0.814	MICROLITHAL
9	RAPID	8	0.63	0.728	MICROLITHAL
9	RAPID	9	0.72	0.661	ACAL
9	RAPID	10	0.71	0.768	PSAMMAL
10	GLIDE	1	0.71	0.691	MESOLITHAL
10	GLIDE	2	1.02	0.683	MESOLITHAL
10	GLIDE	3	1.08	0.605	MESOLITHAL
10	GLIDE	4	1.35	0.601	MESOLITHAL
10	GLIDE	5	0.88	0.652	MICROLITHAL
10	GLIDE	6	0.98	0.663	MICROLITHAL
10	GLIDE	7	1.12	0.681	ACAL
10	GLIDE	8	1.13	0.638	PSAMMAL
10	GLIDE	9	0.84	0.687	PSAMMAL
10	GLIDE	10	0.98	0.699	PSAMMAL
Venta at Kuodžiai 3					
1	GLIDE	1	1.63	0.504	MESOLITHAL
1	GLIDE	2	1.60	0.691	MESOLITHAL
1	GLIDE	3	1.59	0.382	MESOLITHAL
1	GLIDE	4	1.61	0.582	MESOLITHAL
1	GLIDE	5	1.58	0.648	MESOLITHAL
1	GLIDE	6	1.57	0.435	MESOLITHAL
1	GLIDE	7	1.52	1.088	MESOLITHAL
1	GLIDE	8	1.63	1.022	MICROLITHAL
1	GLIDE	9	1.60	1.113	MICROLITHAL
1	GLIDE	10	1.74	0.721	ACAL
1	GLIDE	11	1.63	1.046	PSAMMAL
2	GLIDE	1	1.51	1.004	MESOLITHAL
2	GLIDE	2	1.48	0.895	MESOLITHAL
2	GLIDE	3	1.46	0.915	MESOLITHAL
2	GLIDE	4	1.47	0.968	MESOLITHAL
2	GLIDE	5	1.52	0.805	MESOLITHAL
2	GLIDE	6	1.53	0.636	MESOLITHAL
2	GLIDE	7	1.33	0.758	MESOLITHAL
2	GLIDE	8	1.56	0.741	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
2	GLIDE	9	1.46	0.762	MICROLITHAL
2	GLIDE	10	1.48	0.711	ACAL
2	GLIDE	11	1.53	0.689	PSAMMAL
3	GLIDE	1	1.23	0.697	MESOLITHAL
3	GLIDE	2	1.25	0.513	MESOLITHAL
3	GLIDE	3	1.31	0.570	MESOLITHAL
3	GLIDE	4	1.25	0.911	MESOLITHAL
3	GLIDE	5	1.66	0.925	MESOLITHAL
3	GLIDE	6	1.30	0.826	MICROLITHAL
3	GLIDE	7	1.74	0.991	MICROLITHAL
3	GLIDE	8	1.77	0.951	MICROLITHAL
3	GLIDE	9	1.69	0.932	ACAL
3	GLIDE	10	1.76	0.797	PSAMMAL
4	GLIDE	1	1.88	0.955	MESOLITHAL
4	GLIDE	2	1.91	0.833	MESOLITHAL
4	GLIDE	3	1.83	0.876	MICROLITHAL
4	GLIDE	4	2.02	0.816	MICROLITHAL
4	GLIDE	5	1.95	0.865	ACAL
4	GLIDE	6	1.64	0.653	ACAL
4	GLIDE	7	1.76	0.608	PSAMMAL
4	GLIDE	8	1.60	0.634	PSAMMAL
4	GLIDE	9	1.62	0.686	PSAMMAL
4	GLIDE	10	1.75	0.837	PELAL
5	RAPID	1	1.49	0.955	MESOLITHAL
5	RAPID	2	1.41	0.981	MESOLITHAL
5	RAPID	3	1.53	1.030	MESOLITHAL
5	RAPID	4	1.42	0.698	MESOLITHAL
5	RAPID	5	1.40	0.894	MESOLITHAL
5	RAPID	6	1.45	0.952	MESOLITHAL
5	RAPID	7	2.02	0.632	MICROLITHAL
5	RAPID	8	1.91	0.921	MICROLITHAL
5	RAPID	9	1.84	0.863	ACAL
5	RAPID	10	1.93	0.602	PSAMMAL
6	RAPID	1	1.33	0.853	MESOLITHAL
6	RAPID	2	1.32	0.912	MESOLITHAL
6	RAPID	3	1.30	0.935	MESOLITHAL
6	RAPID	4	1.31	0.681	MESOLITHAL
6	RAPID	5	1.33	1.003	MESOLITHAL
6	RAPID	6	1.15	0.922	MESOLITHAL
6	RAPID	7	1.18	0.888	MICROLITHAL
6	RAPID	8	1.49	0.953	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
6	RAPID	9	1.62	0.774	MICROLITHAL
6	RAPID	10	1.55	0.872	ACAL
7	RAPID	1	1.51	0.842	MESOLITHAL
7	RAPID	2	1.40	0.689	MESOLITHAL
7	RAPID	3	1.41	0.733	MESOLITHAL
7	RAPID	4	1.43	0.804	MESOLITHAL
7	RAPID	5	2.19	0.683	MICROLITHAL
7	RAPID	6	2.12	0.932	MICROLITHAL
7	RAPID	7	2.13	0.875	ACAL
7	RAPID	8	1.23	0.884	PSAMMAL
7	RAPID	9	1.34	0.967	PSAMMAL
7	RAPID	10	1.43	1.002	PSAMMAL
8	RAPID	1	1.23	0.951	MESOLITHAL
8	RAPID	2	1.42	0.817	MESOLITHAL
8	RAPID	3	1.33	0.686	MESOLITHAL
8	RAPID	4	1.37	0.772	MESOLITHAL
8	RAPID	5	1.36	0.913	MESOLITHAL
8	RAPID	6	1.40	0.871	MICROLITHAL
8	RAPID	7	1.46	1.092	MICROLITHAL
8	RAPID	8	1.35	0.975	MICROLITHAL
8	RAPID	9	1.41	0.883	ACAL
8	RAPID	10	1.48	1.030	PSAMMAL
9	RAPID	1	1.45	0.925	MESOLITHAL
9	RAPID	2	1.73	0.912	MESOLITHAL
9	RAPID	3	1.78	0.817	MESOLITHAL
9	RAPID	4	2.04	0.807	MESOLITHAL
9	RAPID	5	1.60	0.872	MICROLITHAL
9	RAPID	6	1.61	0.881	MICROLITHAL
9	RAPID	7	1.85	0.912	ACAL
9	RAPID	8	1.87	0.853	PSAMMAL
9	RAPID	9	1.59	0.927	PSAMMAL
9	RAPID	10	1.66	0.935	PSAMMAL
10	AQUAT_VEG	1	0.45	0.000	MESOLITHAL
10	AQUAT_VEG	2	0.37	0.000	MESOLITHAL
10	AQUAT_VEG	3	0.51	0.000	MICROLITHAL
10	AQUAT_VEG	4	0.55	0.000	ACAL
10	AQUAT_VEG	5	0.48	0.000	PSAMMAL
Venta at Kuodžiai 4					
1	GLIDE	1	0.55	0.353	MESOLITHAL
1	GLIDE	2	0.69	0.115	MESOLITHAL
1	GLIDE	3	0.50	0.225	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
1	GLIDE	4	0.46	0.153	MESOLITHAL
1	GLIDE	5	0.49	0.213	MESOLITHAL
1	GLIDE	6	0.52	0.174	MICROLITHAL
1	GLIDE	7	0.47	0.341	MICROLITHAL
1	GLIDE	8	0.44	0.271	ACAL
1	GLIDE	9	0.69	0.197	PSAMMAL
2	GLIDE	1	0.55	0.332	MESOLITHAL
2	GLIDE	2	0.46	0.372	MESOLITHAL
2	GLIDE	3	0.40	0.341	MESOLITHAL
2	GLIDE	4	0.44	0.321	MESOLITHAL
2	GLIDE	5	0.48	0.313	MESOLITHAL
2	GLIDE	6	0.50	0.297	MICROLITHAL
3	GLIDE	1	0.41	0.302	MESOLITHAL
3	GLIDE	2	0.52	0.279	MESOLITHAL
3	GLIDE	3	0.37	0.334	MESOLITHAL
3	GLIDE	4	0.46	0.267	MESOLITHAL
3	GLIDE	5	0.41	0.322	MESOLITHAL
3	GLIDE	6	0.39	0.289	MICROLITHAL
4	GLIDE	1	0.38	0.209	MESOLITHAL
4	GLIDE	2	0.45	0.250	MESOLITHAL
4	GLIDE	3	0.52	0.244	MESOLITHAL
4	GLIDE	4	0.41	0.197	MESOLITHAL
4	GLIDE	5	0.48	0.215	MESOLITHAL
4	GLIDE	6	0.39	0.271	MICROLITHAL
4	GLIDE	7	0.42	0.189	MICROLITHAL
4	GLIDE	8	0.49	0.211	ACAL
4	GLIDE	9	0.50	0.232	PSAMMAL
5	AQUAT_VEG	1	0.21	0.092	MESOLITHAL
5	AQUAT_VEG	2	0.17	0.087	MESOLITHAL
5	AQUAT_VEG	3	0.12	0.102	MESOLITHAL
5	AQUAT_VEG	4	0.15	0.079	MICROLITHAL
5	AQUAT_VEG	5	0.14	0.066	MICROLITHAL
5	AQUAT_VEG	6	0.18	0.083	MICROLITHAL
5	AQUAT_VEG	7	0.17	0.109	ACAL
5	AQUAT_VEG	8	0.20	0.085	ACAL
5	AQUAT_VEG	9	0.18	0.091	PSAMMAL
6	RAPID	1	0.45	0.388	MESOLITHAL
6	RAPID	2	0.50	0.263	MESOLITHAL
6	RAPID	3	0.58	0.335	MESOLITHAL
6	RAPID	4	0.42	0.294	MESOLITHAL
6	RAPID	5	0.41	0.311	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
7	AQUAT_VEG	1	0.26	0.000	MESOLITHAL
7	AQUAT_VEG	2	0.28	0.000	MESOLITHAL
7	AQUAT_VEG	3	0.34	0.000	MESOLITHAL
7	AQUAT_VEG	4	0.23	0.000	MICROLITHAL
7	AQUAT_VEG	5	0.27	0.000	MICROLITHAL
7	AQUAT_VEG	6	0.19	0.000	MICROLITHAL
7	AQUAT_VEG	7	0.22	0.000	ACAL
7	AQUAT_VEG	8	0.27	0.000	ACAL
7	AQUAT_VEG	9	0.26	0.000	PSAMMAL
8	GLIDE	1	0.21	0.203	MESOLITHAL
8	GLIDE	2	0.20	0.256	MESOLITHAL
8	GLIDE	3	0.36	0.118	MESOLITHAL
8	GLIDE	4	0.47	0.173	MESOLITHAL
8	GLIDE	5	0.33	0.167	MESOLITHAL
8	GLIDE	6	0.26	0.185	MICROLITHAL
8	GLIDE	7	0.40	0.179	MICROLITHAL
8	GLIDE	8	0.37	0.197	ACAL
8	GLIDE	9	0.46	0.163	PSAMMAL
9	GLIDE	1	0.74	0.239	MESOLITHAL
9	GLIDE	2	0.69	0.226	MESOLITHAL
9	GLIDE	3	0.72	0.196	MESOLITHAL
9	GLIDE	4	0.63	0.185	MESOLITHAL
9	GLIDE	5	0.77	0.199	MESOLITHAL
9	GLIDE	6	0.64	0.222	MESOLITHAL
9	GLIDE	7	0.71	0.201	MICROLITHAL
9	GLIDE	8	0.75	0.203	MICROLITHAL
9	GLIDE	9	0.69	0.214	ACAL
10	POOL	1	0.67	0.153	MESOLITHAL
10	POOL	2	1.07	0.053	MESOLITHAL
10	POOL	3	0.97	0.122	MICROLITHAL
10	POOL	4	0.79	0.134	MICROLITHAL
10	POOL	5	0.90	0.110	ACAL
10	POOL	6	0.87	0.098	ACAL
10	POOL	7	0.68	0.093	PSAMMAL
10	POOL	8	0.77	0.116	PSAMMAL
10	POOL	9	0.96	0.127	PSAMMAL
11	AQUAT_VEG	1	0.62	0.000	MESOLITHAL
11	AQUAT_VEG	2	0.55	0.000	MICROLITHAL
11	AQUAT_VEG	3	0.54	0.000	MICROLITHAL
11	AQUAT_VEG	4	0.49	0.000	ACAL
11	AQUAT_VEG	5	0.63	0.000	ACAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
11	AQUAT_VEG	6	0.64	0.000	PSAMMAL
11	AQUAT_VEG	7	0.57	0.000	PSAMMAL
11	AQUAT_VEG	8	0.58	0.000	PSAMMAL
11	AQUAT_VEG	9	0.51	0.000	PSAMMAL
11	AQUAT_VEG	10	0.59	0.000	PELAL
12	RAPID	1	0.43	0.504	MESOLITHAL
12	RAPID	2	0.41	0.588	MESOLITHAL
12	RAPID	3	0.38	0.401	MESOLITHAL
12	RAPID	4	0.45	0.312	MESOLITHAL
12	RAPID	5	0.61	0.494	MICROLITHAL
13	AQUAT_VEG	1	0.48	0.115	MESOLITHAL
13	AQUAT_VEG	2	0.43	0.187	MESOLITHAL
13	AQUAT_VEG	3	0.39	0.206	MESOLITHAL
13	AQUAT_VEG	4	0.30	0.172	MESOLITHAL
13	AQUAT_VEG	5	0.36	0.185	MESOLITHAL
13	AQUAT_VEG	6	0.47	0.132	MESOLITHAL
13	AQUAT_VEG	7	0.36	0.160	MICROLITHAL
13	AQUAT_VEG	8	0.42	0.159	MICROLITHAL
13	AQUAT_VEG	9	0.44	0.170	ACAL
14	POOL	1	0.98	0.050	MESOLITHAL
14	POOL	2	0.79	0.093	MESOLITHAL
14	POOL	3	0.85	0.107	MESOLITHAL
14	POOL	4	0.78	0.092	MICROLITHAL
14	POOL	5	0.80	0.085	MICROLITHAL
14	POOL	6	0.81	0.102	ACAL
14	POOL	7	0.86	0.111	PSAMMAL
14	POOL	8	0.83	0.097	PSAMMAL
15	AQUAT_VEG	1	0.18	0.135	MESOLITHAL
15	AQUAT_VEG	2	0.23	0.161	MESOLITHAL
15	AQUAT_VEG	3	0.31	0.102	MESOLITHAL
15	AQUAT_VEG	4	0.21	0.144	MESOLITHAL
15	AQUAT_VEG	5	0.22	0.133	MESOLITHAL
15	AQUAT_VEG	6	0.27	0.139	MESOLITHAL
15	AQUAT_VEG	7	0.30	0.140	MICROLITHAL
15	AQUAT_VEG	8	0.21	0.128	MICROLITHAL
15	AQUAT_VEG	9	0.23	0.125	ACAL
16	AQUAT_VEG	1	0.47	0.050	MESOLITHAL
16	AQUAT_VEG	2	0.33	0.063	MESOLITHAL
16	AQUAT_VEG	3	0.44	0.041	MESOLITHAL
16	AQUAT_VEG	4	0.41	0.023	MESOLITHAL
16	AQUAT_VEG	5	0.42	0.011	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
16	AQUAT_VEG	6	0.35	0.005	MICROLITHAL
16	AQUAT_VEG	7	0.36	0.071	MICROLITHAL
16	AQUAT_VEG	8	0.37	0.065	ACAL
16	AQUAT_VEG	9	0.38	0.082	PSAMMAL
17	POOL	1	1.10	0.000	MESOLITHAL
17	POOL	2	1.09	0.000	PSAMMAL
17	POOL	3	1.05	0.000	PSAMMAL
17	POOL	4	1.06	0.000	PSAMMAL
17	POOL	5	1.16	0.000	PSAMMAL
17	POOL	6	1.11	0.000	PSAMMAL
17	POOL	7	1.07	0.000	PSAMMAL
17	POOL	8	1.14	0.000	PSAMMAL
18	RAPID	1	0.41	0.620	MESOLITHAL
18	RAPID	2	0.35	0.896	MESOLITHAL
18	RAPID	3	0.54	0.436	MESOLITHAL
18	RAPID	4	0.57	0.504	MESOLITHAL
18	RAPID	5	0.46	0.381	MICROLITHAL
19	AQUAT_VEG	1	0.31	0.294	MESOLITHAL
19	AQUAT_VEG	2	0.43	0.238	MESOLITHAL
19	AQUAT_VEG	3	0.27	0.219	MESOLITHAL
19	AQUAT_VEG	4	0.29	0.221	MESOLITHAL
19	AQUAT_VEG	5	0.20	0.241	MICROLITHAL
19	AQUAT_VEG	6	0.25	0.253	MICROLITHAL
19	AQUAT_VEG	7	0.33	0.222	MICROLITHAL
19	AQUAT_VEG	8	0.31	0.280	ACAL
19	AQUAT_VEG	9	0.29	0.276	PSAMMAL
20	RAPID	1	0.35	0.391	MESOLITHAL
20	RAPID	2	0.40	0.585	MESOLITHAL
20	RAPID	3	0.46	0.253	MESOLITHAL
20	RAPID	4	0.20	0.886	MESOLITHAL
20	RAPID	5	0.34	0.491	MESOLITHAL
20	RAPID	6	0.37	0.637	MESOLITHAL
20	RAPID	7	0.32	0.542	MESOLITHAL
20	RAPID	8	0.41	0.743	MICROLITHAL
20	RAPID	9	0.29	0.391	MICROLITHAL
20	RAPID	10	0.35	0.476	ACAL
21	GLIDE	1	0.53	0.388	MESOLITHAL
21	GLIDE	2	0.56	0.441	MESOLITHAL
21	GLIDE	3	0.72	0.288	MESOLITHAL
21	GLIDE	4	0.60	0.419	MESOLITHAL
21	GLIDE	5	0.56	0.191	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
21	GLIDE	6	0.91	0.276	MICROLITHAL
21	GLIDE	7	0.62	0.195	ACAL
21	GLIDE	8	0.43	0.212	PSAMMAL
21	GLIDE	9	0.70	0.223	PSAMMAL
21	GLIDE	10	0.83	0.207	PSAMMAL
Bartuva 1					
1	GLIDE	2	0.43	0.130	PSAMMAL
1	GLIDE	1	0.55	0.170	PELAL
1	GLIDE	3	0.46	0.160	PSAMMAL
1	GLIDE	4	0.52	0.140	PSAMMAL
2	POOL	1	0.72	0.230	PSAMMAL
2	POOL	2	0.91	0.200	PELAL
2	POOL	3	0.77	0.220	PSAMMAL
2	POOL	4	0.81	0.210	PSAMMAL
3	GLIDE	1	0.49	0.310	PSAMMAL
3	GLIDE	2	0.35	0.210	PELAL
3	GLIDE	3	0.47	0.290	PSAMMAL
3	GLIDE	4	0.37	0.300	PSAMMAL
3	GLIDE	5	0.41	0.240	PSAMMAL
4	POOL	1	0.78	0.200	PSAMMAL
4	POOL	2	0.75	0.100	PELAL
4	POOL	3	0.73	0.160	PSAMMAL
4	POOL	4	0.76	0.200	PSAMMAL
4	POOL	5	0.77	0.140	PSAMMAL
4	POOL	6	0.73	0.170	PSAMMAL
4	POOL	7	0.74	0.160	PSAMMAL
5	GLIDE	1	0.52	0.220	PSAMMAL
5	GLIDE	2	0.68	0.240	PSAMMAL
5	GLIDE	3	0.54	0.110	PELAL
5	GLIDE	4	0.45	0.230	PSAMMAL
5	GLIDE	5	0.56	0.190	PSAMMAL
5	GLIDE	6	0.62	0.170	PSAMMAL
5	GLIDE	7	0.57	0.210	PSAMMAL
6	POOL	1	0.86	0.060	PELAL
6	POOL	2	0.89	0.290	PSAMMAL
6	POOL	3	0.77	0.280	PSAMMAL
6	POOL	4	0.88	0.250	PSAMMAL
6	POOL	5	0.84	0.190	PSAMMAL
7	RAPID	1	0.29	0.450	MESOLITHAL
7	RAPID	2	0.24	0.570	MESOLITHAL
7	RAPID	3	0.22	0.510	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
7	RAPID	4	0.26	0.470	MESOLITHAL
7	RAPID	5	0.21	0.490	MESOLITHAL
7	RAPID	6	0.24	0.500	MESOLITHAL
7	RAPID	7	0.25	0.470	MICROLITHAL
7	RAPID	8	0.28	0.480	MICROLITHAL
7	RAPID	9	0.23	0.510	MICROLITHAL
7	RAPID	10	0.27	0.460	AKAL
8	GLIDE	1	0.63	0.120	PELAL
8	GLIDE	2	0.80	0.150	PSAMMAL
8	GLIDE	3	0.57	0.170	PSAMMAL
8	GLIDE	4	0.66	0.140	PSAMMAL
8	GLIDE	5	0.73	0.110	PSAMMAL
8	GLIDE	6	0.77	0.090	PSAMMAL
8	GLIDE	7	0.64	0.150	PSAMMAL
9	POOL	1	0.66	0.170	PSAMMAL
9	POOL	2	0.81	0.080	PELAL
9	POOL	3	0.59	0.070	PSAMMAL
9	POOL	4	0.73	0.100	PSAMMAL
9	POOL	5	0.68	0.090	PSAMMAL
9	POOL	6	0.71	0.140	PSAMMAL
9	POOL	7	0.69	0.120	PSAMMAL
10	RAPID	1	0.40	0.440	MESOLITHAL
10	RAPID	2	0.32	0.340	MESOLITHAL
10	RAPID	3	0.35	0.410	MESOLITHAL
10	RAPID	4	0.31	0.390	MESOLITHAL
10	RAPID	5	0.42	0.380	MESOLITHAL
10	RAPID	6	0.38	0.400	MESOLITHAL
10	RAPID	7	0.33	0.350	MICROLITHAL
10	RAPID	8	0.35	0.330	MICROLITHAL
10	RAPID	9	0.32	0.320	AKAL
11	POOL	1	0.74	0.090	AKAL
11	POOL	2	0.65	0.360	AKAL
11	POOL	3	0.66	0.280	AKAL
11	POOL	4	0.71	0.110	PSAMMAL
12	RAPID	1	0.46	0.490	MESOLITHAL
12	RAPID	2	0.34	0.410	MESOLITHAL
12	RAPID	3	0.45	0.370	MESOLITHAL
12	RAPID	4	0.37	0.330	PSAMMAL
12	RAPID	5	0.39	0.380	PSAMMAL
13	POOL	1	0.67	0.100	AKAL
13	POOL	2	0.70	0.120	AKAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
13	POOL	3	0.66	0.090	AKAL
13	POOL	4	0.63	0.100	PSAMMAL
14	RAPID	1	0.27	0.360	MESOLITHAL
14	RAPID	2	0.25	0.330	MESOLITHAL
14	RAPID	3	0.26	0.370	MESOLITHAL
14	RAPID	4	0.28	0.340	MICROLITHAL
15	GLIDE	1	0.47	0.180	MESOLITHAL
15	GLIDE	2	0.44	0.220	MESOLITHAL
15	GLIDE	3	0.41	0.190	MESOLITHAL
15	GLIDE	4	0.48	0.150	MICROLITHAL
15	GLIDE	5	0.46	0.200	PSAMMAL
16	POOL	1	0.75	0.160	MESOLITHAL
16	POOL	2	0.44	0.200	MESOLITHAL
16	POOL	3	0.47	0.170	MESOLITHAL
16	POOL	4	0.51	0.150	MESOLITHAL
16	POOL	5	0.56	0.160	MICROLITHAL
16	POOL	6	0.49	0.180	AKAL
16	POOL	7	0.55	0.130	PSAMMAL
16	POOL	8	0.48	0.140	PSAMMAL
16	POOL	9	0.54	0.140	PSAMMAL
16	POOL	10	0.51	0.150	PSAMMAL
16	POOL	11	0.55	0.110	PELAL
16	POOL	12	0.57	0.120	PSAMMAL
16	POOL	13	0.60	0.140	PSAMMAL
16	POOL	14	0.66	0.160	PSAMMAL
16	POOL	15	0.67	0.150	PSAMMAL
16	POOL	16	0.70	0.170	PSAMMAL
16	POOL	17	0.63	0.130	PSAMMAL
17	RAPID	1	0.53	0.290	MESOLITHAL
17	RAPID	2	0.42	0.230	MESOLITHAL
17	RAPID	3	0.50	0.310	MESOLITHAL
17	RAPID	4	0.38	0.330	MESOLITHAL
17	RAPID	5	0.41	0.370	MESOLITHAL
17	RAPID	6	0.43	0.320	MESOLITHAL
17	RAPID	7	0.38	0.310	MICROLITHAL
17	RAPID	8	0.37	0.290	MICROLITHAL
17	RAPID	9	0.41	0.250	MICROLITHAL
17	RAPID	10	0.43	0.200	AKAL
18	GLIDE	1	0.66	0.220	PSAMMAL
18	GLIDE	2	0.45	0.070	PELAL
18	GLIDE	3	0.60	0.300	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
18	GLIDE	4	0.53	0.320	PSAMMAL
18	GLIDE	5	0.59	0.260	PSAMMAL
18	GLIDE	6	0.48	0.290	PSAMMAL
18	GLIDE	7	0.61	0.150	PSAMMAL
19	RAPID	1	0.32	0.370	MESOLITHAL
19	RAPID	2	0.27	0.330	MESOLITHAL
19	RAPID	3	0.31	0.420	MESOLITHAL
19	RAPID	4	0.30	0.520	MESOLITHAL
19	RAPID	5	0.27	0.580	MESOLITHAL
19	RAPID	6	0.29	0.360	MICROLITHAL
19	RAPID	7	0.30	0.350	MICROLITHAL
19	RAPID	8	0.27	0.330	PSAMMAL
19	RAPID	9	0.28	0.320	PSAMMAL
19	RAPID	10	0.29	0.340	AKAL
20	GLIDE	1	0.56	0.140	PELAL
20	GLIDE	2	0.47	0.230	PSAMMAL
20	GLIDE	3	0.48	0.220	PSAMMAL
20	GLIDE	4	0.53	0.200	PSAMMAL
20	GLIDE	5	0.45	0.150	PSAMMAL
20	GLIDE	6	0.55	0.170	PSAMMAL
20	GLIDE	7	0.41	0.220	PSAMMAL
21	RAPID	1	0.40	0.470	MESOLITHAL
21	RAPID	2	0.33	0.380	MICROLITHAL
21	RAPID	3	0.41	0.420	AKAL
21	RAPID	4	0.48	0.450	AKAL
21	RAPID	5	0.50	0.390	AKAL
22	GLIDE	1	0.56	0.160	PELAL
22	GLIDE	2	0.48	0.220	PELAL
22	GLIDE	3	0.53	0.200	AKAL
22	GLIDE	4	0.51	0.180	AKAL
22	GLIDE	5	0.54	0.170	AKAL
23	RAPID	1	0.39	0.490	MESOLITHAL
23	RAPID	2	0.30	0.430	MESOLITHAL
23	RAPID	3	0.34	0.440	MICROLITHAL
24	GLIDE	1	0.45	0.150	PELAL
24	GLIDE	2	0.51	0.180	PSAMMAL
24	GLIDE	3	0.49	0.230	PSAMMAL
24	GLIDE	4	0.50	0.210	PSAMMAL
24	GLIDE	5	0.52	0.170	PSAMMAL
24	GLIDE	6	0.47	0.200	PSAMMAL
24	GLIDE	7	0.44	0.190	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
24	GLIDE	8	0.43	0.180	PSAMMAL
24	GLIDE	9	0.49	0.200	PSAMMAL
24	GLIDE	10	0.42	0.160	PSAMMAL
Bartuva 2					
1	POOL	1	0.44	0.000	PSAMMAL
1	POOL	2	0.41	0.000	PSAMMAL
1	POOL	3	0.37	0.000	PSAMMAL
1	POOL	4	0.36	0.000	PELAL
2	GLIDE	1	0.30	0.060	PSAMMAL
2	GLIDE	2	0.29	0.030	PSAMMAL
2	GLIDE	3	0.20	0.020	PSAMMAL
2	GLIDE	4	0.22	0.040	PSAMMAL
2	GLIDE	5	0.28	0.020	PELAL
3	POOL	1	0.61	0.000	PSAMMAL
3	POOL	2	0.53	0.000	PSAMMAL
3	POOL	3	0.51	0.000	PELAL
3	POOL	4	0.49	0.000	PSAMMAL
3	POOL	5	0.55	0.000	PSAMMAL
3	POOL	6	0.60	0.000	PSAMMAL
3	POOL	7	0.59	0.000	PSAMMAL
4	GLIDE	1	0.31	0.030	PSAMMAL
4	GLIDE	2	0.42	0.030	PELAL
4	GLIDE	3	0.33	0.040	PSAMMAL
4	GLIDE	4	0.35	0.030	PSAMMAL
4	GLIDE	5	0.34	0.030	PSAMMAL
4	GLIDE	6	0.40	0.040	PSAMMAL
4	GLIDE	7	0.38	0.030	PSAMMAL
5	POOL	1	0.61	0.010	PSAMMAL
5	POOL	2	0.62	0.010	PELAL
5	POOL	3	0.58	0.010	PSAMMAL
5	POOL	4	0.47	0.010	PSAMMAL
5	POOL	5	0.61	0.010	PSAMMAL
6	RIFFLE	1	0.19	0.110	MESOLITHAL
6	RIFFLE	2	0.18	0.120	MESOLITHAL
6	RIFFLE	3	0.12	0.110	MESOLITHAL
6	RIFFLE	4	0.14	0.110	MESOLITHAL
6	RIFFLE	5	0.13	0.110	MESOLITHAL
6	RIFFLE	6	0.15	0.110	MESOLITHAL
6	RIFFLE	7	0.12	0.110	MICROLITHAL
6	RIFFLE	8	0.11	0.120	MICROLITHAL
6	RIFFLE	9	0.18	0.120	MICROLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
6	RIFFLE	10	0.16	0.120	AKAL
7	POOL	1	0.44	0.020	PELAL
7	POOL	2	0.40	0.020	PSAMMAL
7	POOL	3	0.37	0.020	PSAMMAL
7	POOL	4	0.34	0.020	PSAMMAL
7	POOL	5	0.41	0.020	PSAMMAL
7	POOL	6	0.38	0.020	PSAMMAL
7	POOL	7	0.43	0.020	PSAMMAL
8	RIFFLE	1	0.12	0.190	MICROLITHAL
8	RIFFLE	2	0.15	0.210	MESOLITHAL
8	RIFFLE	3	0.18	0.170	AKAL
8	RIFFLE	4	0.13	0.180	MICROLITHAL
8	RIFFLE	5	0.14	0.200	MESOLITHAL
8	RIFFLE	6	0.16	0.190	MESOLITHAL
8	RIFFLE	7	0.15	0.210	MESOLITHAL
8	RIFFLE	8	0.17	0.230	MESOLITHAL
8	RIFFLE	9	0.18	0.200	MESOLITHAL
9	POOL	1	0.22	0.030	AKAL
9	POOL	2	0.25	0.060	AKAL
9	POOL	3	0.22	0.070	AKAL
9	POOL	4	0.23	0.050	PSAMMAL
10	RIFFLE	1	0.08	0.200	MESOLITHAL
10	RIFFLE	2	0.11	0.190	MESOLITHAL
10	RIFFLE	3	0.10	0.210	MESOLITHAL
10	RIFFLE	4	0.12	0.180	PSAMMAL
10	RIFFLE	5	0.09	0.190	PSAMMAL
11	POOL	1	0.42	0.050	AKAL
11	POOL	2	0.48	0.050	AKAL
11	POOL	3	0.35	0.060	AKAL
11	POOL	4	0.41	0.050	PSAMMAL
12	RIFFLE	1	0.08	0.200	MESOLITHAL
12	RIFFLE	2	0.08	0.200	MESOLITHAL
12	RIFFLE	3	0.10	0.180	MESOLITHAL
12	RIFFLE	4	0.09	0.210	MICROLITHAL
13	POOL	1	0.29	0.030	MESOLITHAL
13	POOL	2	0.30	0.030	MESOLITHAL
13	POOL	3	0.33	0.030	MESOLITHAL
13	POOL	4	0.35	0.030	MESOLITHAL
13	POOL	5	0.41	0.020	MICROLITHAL
13	POOL	6	0.36	0.020	AKAL
13	POOL	7	0.38	0.020	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
13	POOL	8	0.37	0.020	PSAMMAL
13	POOL	9	0.38	0.020	PSAMMAL
13	POOL	10	0.40	0.020	PSAMMAL
13	POOL	11	0.42	0.010	PELAL
13	POOL	12	0.45	0.020	PSAMMAL
13	POOL	13	0.50	0.020	PSAMMAL
13	POOL	14	0.55	0.020	PSAMMAL
13	POOL	15	0.57	0.010	PSAMMAL
13	POOL	16	0.59	0.010	PSAMMAL
13	POOL	17	0.61	0.010	PSAMMAL
14	GLIDE	1	0.42	0.010	PELAL
14	GLIDE	2	0.38	0.020	PSAMMAL
14	GLIDE	3	0.40	0.020	PSAMMAL
14	GLIDE	4	0.36	0.010	PSAMMAL
14	GLIDE	5	0.31	0.020	PSAMMAL
14	GLIDE	6	0.34	0.010	PSAMMAL
14	GLIDE	7	0.41	0.020	PSAMMAL
15	RIFFLE	1	0.12	0.290	MESOLITHAL
15	RIFFLE	2	0.20	0.190	MESOLITHAL
15	RIFFLE	3	0.15	0.220	MESOLITHAL
15	RIFFLE	4	0.17	0.260	MESOLITHAL
15	RIFFLE	5	0.11	0.210	MESOLITHAL
15	RIFFLE	6	0.22	0.230	MICROLITHAL
15	RIFFLE	7	0.19	0.190	MICROLITHAL
15	RIFFLE	8	0.16	0.250	PSAMMAL
15	RIFFLE	9	0.14	0.270	PSAMMAL
15	RIFFLE	10	0.17	0.190	AKAL
16	GLIDE	1	0.40	0.020	PELAL
16	GLIDE	2	0.39	0.020	PSAMMAL
16	GLIDE	3	0.33	0.020	PSAMMAL
16	GLIDE	4	0.37	0.020	PSAMMAL
16	GLIDE	5	0.34	0.020	PSAMMAL
16	GLIDE	6	0.31	0.020	PSAMMAL
16	GLIDE	7	0.41	0.020	PSAMMAL
16	GLIDE	8	0.33	0.020	MESOLITHAL
16	GLIDE	9	0.39	0.020	MICROLITHAL
16	GLIDE	10	0.40	0.020	AKAL
16	GLIDE	11	0.38	0.020	AKAL
16	GLIDE	12	0.35	0.020	AKAL
16	GLIDE	13	0.36	0.020	PELAL
16	GLIDE	14	0.39	0.020	PELAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
16	GLIDE	15	0.45	0.020	AKAL
16	GLIDE	16	0.41	0.020	AKAL
16	GLIDE	17	0.42	0.020	AKAL
17	RIFFLE	1	0.11	0.250	MESOLITHAL
17	RIFFLE	2	0.14	0.280	MESOLITHAL
17	RIFFLE	3	0.15	0.260	MICROLITHAL
18	GLIDE	1	0.35	0.070	PSAMMAL
18	GLIDE	2	0.30	0.060	PSAMMAL
18	GLIDE	3	0.32	0.030	PELAL
18	GLIDE	4	0.28	0.040	PSAMMAL
18	GLIDE	5	0.29	0.050	PSAMMAL
18	GLIDE	6	0.36	0.070	PSAMMAL
18	GLIDE	7	0.32	0.050	PSAMMAL
18	GLIDE	8	0.30	0.040	PSAMMAL
18	GLIDE	9	0.29	0.060	PSAMMAL
18	GLIDE	10	0.31	0.050	PSAMMAL
Bartuva 3					
1	GLIDE	1	0.76	0.330	PSAMMAL
1	GLIDE	2	0.70	0.260	PSAMMAL
1	GLIDE	3	0.77	0.190	PELAL
1	GLIDE	4	0.74	0.290	PSAMMAL
2	POOL	1	0.97	0.440	PSAMMAL
2	POOL	2	1.10	0.050	PELAL
2	POOL	3	1.02	0.170	PSAMMAL
2	POOL	4	0.99	0.330	PSAMMAL
3	GLIDE	1	0.59	0.480	PSAMMAL
3	GLIDE	2	0.26	0.470	PSAMMAL
3	GLIDE	3	0.72	0.430	PELAL
3	GLIDE	4	0.35	0.460	PSAMMAL
3	GLIDE	5	0.63	0.440	PSAMMAL
4	POOL	1	0.86	0.300	PELAL
4	POOL	2	0.90	0.350	PSAMMAL
4	POOL	3	0.81	0.330	PSAMMAL
4	POOL	4	0.89	0.370	PSAMMAL
4	POOL	5	0.87	0.320	PSAMMAL
4	POOL	6	0.90	0.340	PSAMMAL
4	POOL	7	0.88	0.350	PSAMMAL
5	GLIDE	1	0.77	0.260	PELAL
5	GLIDE	2	0.71	0.290	PSAMMAL
5	GLIDE	3	0.68	0.310	PSAMMAL
5	GLIDE	4	0.66	0.330	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
5	GLIDE	5	0.70	0.300	PSAMMAL
5	GLIDE	6	0.69	0.270	PSAMMAL
5	GLIDE	7	0.68	0.260	PSAMMAL
6	POOL	1	0.90	0.330	PSAMMAL
6	POOL	2	0.96	0.390	PSAMMAL
6	POOL	3	1.10	0.190	PELAL
6	POOL	4	0.85	0.260	PSAMMAL
6	POOL	5	1.06	0.290	PSAMMAL
7	RAPID	1	0.45	0.490	MESOLITHAL
7	RAPID	2	0.40	0.620	MESOLITHAL
7	RAPID	3	0.38	0.590	MESOLITHAL
7	RAPID	4	0.42	0.580	MESOLITHAL
7	RAPID	5	0.37	0.600	MESOLITHAL
7	RAPID	6	0.40	0.560	MESOLITHAL
7	RAPID	7	0.41	0.500	MICROLITHAL
7	RAPID	8	0.44	0.510	MICROLITHAL
7	RAPID	9	0.39	0.530	MICROLITHAL
7	RAPID	10	0.43	0.490	AKAL
8	GLIDE	1	0.86	0.250	PSAMMAL
8	GLIDE	2	0.91	0.110	PELAL
8	GLIDE	3	0.90	0.210	PSAMMAL
8	GLIDE	4	0.73	0.280	PSAMMAL
8	GLIDE	5	0.71	0.190	PSAMMAL
8	GLIDE	6	0.85	0.210	PSAMMAL
8	GLIDE	7	0.82	0.180	PSAMMAL
9	RAPID	1	0.55	0.420	MESOLITHAL
9	RAPID	2	0.61	0.600	MESOLITHAL
9	RAPID	3	0.59	0.570	MESOLITHAL
9	RAPID	4	0.58	0.480	MESOLITHAL
9	RAPID	5	0.59	0.510	MESOLITHAL
9	RAPID	6	0.60	0.590	MESOLITHAL
9	RAPID	7	0.57	0.440	MICROLITHAL
9	RAPID	8	0.48	0.460	MICROLITHAL
9	RAPID	9	0.56	0.430	AKAL
9	RAPID	11	0.54	0.610	AKAL
9	RAPID	12	0.61	0.590	AKAL
9	RAPID	13	0.58	0.600	AKAL
9	RAPID	14	0.60	0.570	PSAMMAL
9	RAPID	15	0.51	0.690	MESOLITHAL
9	RAPID	16	0.49	0.660	MESOLITHAL
9	RAPID	17	0.44	0.670	MESOLITHAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
9	RAPID	18	0.49	0.590	PSAMMAL
9	RAPID	19	0.45	0.560	PSAMMAL
9	RAPID	20	0.67	0.680	AKAL
9	RAPID	21	0.71	0.650	AKAL
9	RAPID	22	0.73	0.590	AKAL
9	RAPID	23	0.72	0.670	PSAMMAL
9	RAPID	24	0.84	0.790	MESOLITHAL
9	RAPID	25	0.82	0.650	MESOLITHAL
9	RAPID	26	0.71	0.660	MESOLITHAL
9	RAPID	27	0.72	0.590	MICROLITHAL
10	GLIDE	1	0.67	0.290	MESOLITHAL
10	GLIDE	2	0.53	0.480	MESOLITHAL
10	GLIDE	3	0.72	0.210	MESOLITHAL
10	GLIDE	4	0.72	0.430	MESOLITHAL
10	GLIDE	5	0.67	0.450	MICROLITHAL
10	GLIDE	6	0.64	0.350	AKAL
10	GLIDE	7	0.61	0.400	PSAMMAL
10	GLIDE	8	0.66	0.390	PSAMMAL
10	GLIDE	9	0.59	0.280	PSAMMAL
10	GLIDE	10	0.71	0.330	PSAMMAL
11	POOL	1	0.70	0.070	PELAL
11	POOL	2	0.74	0.250	PSAMMAL
11	POOL	3	0.73	0.400	PSAMMAL
11	POOL	4	0.78	0.310	PSAMMAL
11	POOL	5	0.76	0.240	PSAMMAL
11	POOL	6	0.64	0.390	PSAMMAL
11	POOL	7	0.69	0.170	PSAMMAL
12	RAPID	1	0.42	0.570	MESOLITHAL
12	RAPID	2	0.60	0.440	MESOLITHAL
12	RAPID	3	0.67	0.590	MESOLITHAL
12	RAPID	4	0.59	0.630	MESOLITHAL
12	RAPID	5	0.61	0.470	MESOLITHAL
12	RAPID	6	0.63	0.510	MESOLITHAL
12	RAPID	7	0.56	0.610	MICROLITHAL
12	RAPID	8	0.55	0.470	MICROLITHAL
12	RAPID	9	0.59	0.510	MICROLITHAL
12	RAPID	10	0.40	0.420	AKAL
13	GLIDE	1	0.56	0.330	PSAMMAL
13	GLIDE	2	0.68	0.400	PSAMMAL
13	GLIDE	3	0.64	0.460	PSAMMAL
13	GLIDE	4	0.75	0.190	PELAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
13	GLIDE	5	0.79	0.310	PSAMMAL
13	GLIDE	6	0.54	0.370	PSAMMAL
13	GLIDE	7	0.61	0.320	PSAMMAL
14	RAPID	1	0.36	0.560	MESOLITHAL
14	RAPID	2	0.35	0.510	MESOLITHAL
14	RAPID	3	0.41	0.530	MESOLITHAL
14	RAPID	4	0.40	0.550	MESOLITHAL
14	RAPID	5	0.39	0.480	MESOLITHAL
14	RAPID	6	0.36	0.520	MICROLITHAL
14	RAPID	7	0.38	0.490	MICROLITHAL
14	RAPID	8	0.35	0.500	PSAMMAL
14	RAPID	9	0.37	0.560	PSAMMAL
14	RAPID	10	0.40	0.530	AKAL
14	RAPID	11	0.48	0.550	PELAL
14	RAPID	12	0.55	0.480	PSAMMAL
14	RAPID	13	0.62	0.470	PSAMMAL
14	RAPID	14	0.61	0.510	PSAMMAL
14	RAPID	15	0.53	0.440	PSAMMAL
14	RAPID	16	0.59	0.530	PSAMMAL
14	RAPID	17	0.57	0.470	PSAMMAL
14	RAPID	18	0.39	0.650	MESOLITHAL
14	RAPID	19	0.55	0.600	MICROLITHAL
14	RAPID	20	0.57	0.580	AKAL
14	RAPID	21	0.61	0.590	AKAL
14	RAPID	22	0.58	0.570	AKAL
14	RAPID	23	0.45	0.660	PELAL
14	RAPID	24	0.43	0.590	PELAL
14	RAPID	25	0.55	0.610	AKAL
14	RAPID	26	0.58	0.450	AKAL
14	RAPID	27	0.45	0.550	AKAL
14	RAPID	28	0.51	0.570	MESOLITHAL
14	RAPID	29	0.51	0.570	MESOLITHAL
14	RAPID	30	0.50	0.490	MICROLITHAL
15	GLIDE	1	0.60	0.290	PELAL
15	GLIDE	2	0.56	0.260	PSAMMAL
15	GLIDE	3	0.57	0.280	PSAMMAL
15	GLIDE	4	0.59	0.270	PSAMMAL
15	GLIDE	5	0.58	0.250	PSAMMAL
15	GLIDE	6	0.51	0.190	PSAMMAL
15	GLIDE	7	0.55	0.200	PSAMMAL
15	GLIDE	8	0.61	0.260	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
15	GLIDE	9	0.52	0.230	PSAMMAL
15	GLIDE	10	0.60	0.280	PSAMMAL
Bartuva 4					
1	GLIDE	1	1.14	0.670	PSAMMAL
1	GLIDE	2	1.08	0.850	PSAMMAL
1	GLIDE	3	1.15	0.730	PSAMMAL
1	GLIDE	4	1.35	0.550	PSAMMAL
1	GLIDE	5	1.48	0.540	PELAL
2	GLIDE	1	0.97	0.790	PSAMMAL
2	GLIDE	2	0.64	0.320	PELAL
2	GLIDE	3	1.10	1.010	PSAMMAL
2	GLIDE	4	1.24	0.770	PSAMMAL
2	GLIDE	5	1.28	0.720	PSAMMAL
3	GLIDE	1	1.15	0.790	PSAMMAL
3	GLIDE	2	1.09	0.900	PSAMMAL
3	GLIDE	3	1.06	0.570	PSAMMAL
3	GLIDE	4	1.28	0.620	PSAMMAL
3	GLIDE	5	1.34	0.720	PSAMMAL
3	GLIDE	6	1.48	0.540	PELAL
3	GLIDE	7	1.22	0.530	PSAMMAL
3	GLIDE	8	0.83	0.560	MESOLITHAL
3	GLIDE	9	0.78	0.700	MESOLITHAL
3	GLIDE	10	0.75	0.610	MICROLITHAL
4	GLIDE	1	1.24	0.630	PELAL
4	GLIDE	2	1.29	0.740	PSAMMAL
4	GLIDE	3	1.28	0.600	PSAMMAL
4	GLIDE	4	1.11	0.730	PSAMMAL
4	GLIDE	5	1.10	0.620	PSAMMAL
4	GLIDE	6	1.21	0.690	PSAMMAL
4	GLIDE	7	1.17	0.610	PSAMMAL
5	GLIDE	1	0.93	0.740	MESOLITHAL
5	GLIDE	2	0.99	0.820	MESOLITHAL
5	GLIDE	3	0.96	0.840	MESOLITHAL
5	GLIDE	4	0.91	0.750	MESOLITHAL
5	GLIDE	5	0.95	0.760	MESOLITHAL
5	GLIDE	6	1.01	0.810	MESOLITHAL
5	GLIDE	7	0.88	0.670	MICROLITHAL
5	GLIDE	8	0.91	0.710	MICROLITHAL
5	GLIDE	9	0.96	0.650	AKAL
5	GLIDE	10	0.92	0.540	AKAL
5	GLIDE	11	0.99	0.600	AKAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
5	GLIDE	12	0.97	0.820	AKAL
5	GLIDE	13	0.96	0.760	PSAMMAL
5	GLIDE	14	0.80	0.650	MESOLITHAL
5	GLIDE	15	0.87	0.770	MESOLITHAL
5	GLIDE	16	0.83	0.640	MESOLITHAL
5	GLIDE	17	0.86	0.610	PSAMMAL
5	GLIDE	18	0.85	0.690	PSAMMAL
5	GLIDE	19	1.05	0.710	AKAL
5	GLIDE	20	1.08	0.690	AKAL
5	GLIDE	21	1.12	0.650	AKAL
5	GLIDE	22	1.10	0.720	PSAMMAL
5	GLIDE	23	1.22	0.820	MESOLITHAL
5	GLIDE	24	1.18	0.740	MESOLITHAL
5	GLIDE	25	1.09	0.780	MESOLITHAL
5	GLIDE	26	1.20	0.630	MICROLITHAL
6	GLIDE	1	1.05	0.820	MESOLITHAL
6	GLIDE	2	0.91	0.520	MESOLITHAL
6	GLIDE	3	1.10	0.780	MESOLITHAL
6	GLIDE	4	1.10	0.530	MESOLITHAL
6	GLIDE	5	1.08	0.450	MICROLITHAL
6	GLIDE	6	1.03	0.620	AKAL
6	GLIDE	7	0.99	0.590	PSAMMAL
6	GLIDE	8	1.05	0.570	PSAMMAL
6	GLIDE	9	0.98	0.600	PSAMMAL
6	GLIDE	10	1.06	0.540	PSAMMAL
7	GLIDE	1	1.12	0.830	PSAMMAL
7	GLIDE	2	1.11	0.540	PSAMMAL
7	GLIDE	3	1.16	0.590	PSAMMAL
7	GLIDE	4	1.02	0.530	PSAMMAL
7	GLIDE	5	1.08	0.510	PSAMMAL
7	GLIDE	6	1.11	0.580	PELAL
7	GLIDE	7	1.06	0.570	PSAMMAL
7	GLIDE	8	0.80	0.570	MESOLITHAL
7	GLIDE	9	0.78	0.550	MESOLITHAL
7	GLIDE	10	0.93	0.640	MICROLITHAL
8	GLIDE	1	0.94	0.780	PSAMMAL
8	GLIDE	2	0.91	0.760	PSAMMAL
8	GLIDE	3	1.02	0.840	PSAMMAL
8	GLIDE	4	1.13	0.780	PELAL
8	GLIDE	5	1.15	0.720	PSAMMAL
8	GLIDE	6	0.96	0.660	PSAMMAL

HMU NUM	HMU TYPE	PNTNUM	DEPTH, m	VELOCITY, m/s	SUBSTRATE
8	GLIDE	7	0.98	0.670	PSAMMAL
9	GLIDE	1	0.75	0.580	MESOLITHAL
9	GLIDE	2	0.74	0.530	MESOLITHAL
9	GLIDE	3	0.80	0.550	MESOLITHAL
9	GLIDE	4	0.77	0.620	MESOLITHAL
9	GLIDE	5	0.76	0.580	MESOLITHAL
9	GLIDE	6	0.75	0.530	MICROLITHAL
9	GLIDE	7	0.79	0.580	MICROLITHAL
9	GLIDE	8	0.71	0.520	PSAMMAL
9	GLIDE	9	0.76	0.570	PSAMMAL
9	GLIDE	10	0.81	0.550	AKAL
9	GLIDE	11	0.87	0.550	PELAL
9	GLIDE	12	0.94	0.570	PSAMMAL
9	GLIDE	13	1.01	0.560	PSAMMAL
9	GLIDE	14	0.99	0.520	PSAMMAL
9	GLIDE	15	0.92	0.530	PSAMMAL
9	GLIDE	16	0.98	0.520	PSAMMAL
9	GLIDE	17	0.95	0.530	PSAMMAL
9	GLIDE	18	0.77	0.710	MESOLITHAL
9	GLIDE	19	0.95	0.650	MICROLITHAL
9	GLIDE	20	0.94	0.630	AKAL
9	GLIDE	21	0.99	0.650	AKAL
9	GLIDE	22	0.95	0.620	AKAL
9	GLIDE	23	0.84	0.660	PELAL
9	GLIDE	24	0.82	0.590	PELAL
9	GLIDE	25	0.94	0.640	AKAL
9	GLIDE	26	0.97	0.560	AKAL
9	GLIDE	27	0.83	0.580	AKAL
10	GLIDE	1	0.89	0.580	MESOLITHAL
10	GLIDE	2	0.98	0.810	MESOLITHAL
10	GLIDE	3	0.87	0.700	MICROLITHAL
10	GLIDE	4	0.98	0.830	PSAMMAL
10	GLIDE	5	0.94	0.780	PSAMMAL
10	GLIDE	6	0.96	0.520	PSAMMAL
10	GLIDE	7	0.98	0.580	PSAMMAL
10	GLIDE	8	0.96	0.620	PSAMMAL
10	GLIDE	9	0.88	0.600	PSAMMAL
10	GLIDE	10	0.91	0.580	PSAMMAL
10	GLIDE	11	1.00	0.550	PSAMMAL
10	GLIDE	12	0.92	0.560	PSAMMAL
10	GLIDE	13	1.01	0.510	PELAL

ANNEX V

Table 1. Conditional models for prediction of presence and abundance of fish species in a river stretch (Lithuania and Latvia)

Alburnoides bipunctatus ADULTS Presence	Alburnoides bipunctatus ADULTS High abundance
IF [D30_45+D45_60+D60_75+D75_90+D90_105+D105_120+D120_135+D135_D150]>0.4 AND [CV15_30+CV30_45+CV45_60+CV60_75+CV75_90+CV90_105]>0.3 AND [MICROLITHAL +AKAL+ PSAMMAL]>0.3	IF [D60_75+D75_90+D90_105+D105_120+D120_135+D135_D150]>0.4 AND [CV30_45+CV45_60+CV60_75+CV75_90]>0.4 AND [MICROLITHAL +AKAL+ PSAMMAL]>0.4
Alburnoides bipunctatus JUVENILES Presence	Alburnoides bipunctatus JUVENILES High abundance
IF [D_15+D15_30+D30_45+D45_60+D60_75]>0.3 AND [CV15_30+CV30_45+CV45_60+CV60_75+CV75_90+CV90_105]>0.3 AND [MICROLITHAL +AKAL+ PSAMMAL]>0.3	IF [D15_30+D30_45+D45_60]>0.3 AND [CV30_45+CV45_60+CV60_75+CV75_90]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3
Alburnus alburnus ADULTS Presence	Alburnus alburnus ADULTS High abundance
IF [D60_75+D75_90+D90_105+D105_120+D120_135+D135_D150]>0.4 AND [CV_15+CV15_30+CV30_45+CV45_60]>0.3	IF [D75_90+D90_105+D105_120+D120_135+D135_D150]>0.5 AND [CV_15+CV15_30]>0.5
Barbatulus barbatulus ADULTS Presence	Barbatulus barbatulus ADULTS High abundance
IF [D_15+D15_30+D30_45+D45_60+D60_75+D75_90]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75+CV75_90]>0.3 AND	IF [D15_30+D30_45+D45_60]>0.5 AND [CV15_30+CV30_45+CV45_60+CV60_75]>0.4 AND

[MESOLITHAL+MICROLITHAL +AKAL]>0.3	[MESOLITHAL+MICROLITHAL +AKAL]>0.5
Cobitis taenia ADULTS Presence	Cobitis taenia ADULTS High abundance
IF [D_15+D15_30+D30_45+D45_60+D60_75]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60]>0.3 AND [PSAMMAL]>0.2	IF [D15_30+D30_45+D45_60]>0.3 AND [CV_15+CV15_30]>0.3 AND [PSAMMAL]>0.4
Cottus gobio ADULTS Presence	Cottus gobio ADULTS High abundance
IF [D15_30+D30_45+D45_60+D60_75+D75_90+D90_D105]>0.3 AND [CV15_30+CV30_45+CV45_60+CV60_75+CV75_90+CV90_105]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [BOULDERS=1 OR WOODY_DEBR=1 OR ROOTS=1]	IF [D30_45+D45_60+D60_75]>0.3 AND [CV30_45+CV45_60+CV60_75+CV75_90]>0.4 AND [MESOLITHAL+MICROLITHAL]>0.4 AND [BOULDERS=1]
Gobio gobio ADULTS Presence	Gobio gobio ADULTS High abundance
IF [D30_45+D45_60+D60_75+D75_90+D90_D105+D105_120+D120_135]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75]>0.3 AND [MICROLITHAL +AKAL+PSAMMAL]>0.3	IF [D45_60+D60_75]>0.3 AND [CV15_30+CV30_45+CV45_60]>0.3 AND [AKAL+PSAMMAL]>0.4
Gobio gobio JUVENILES Presence	Gobio gobio JUVENILES High abundance
IF [D_15+D15_30+D30_45+D45_60]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75]>0.3 AND [MICROLITHAL +AKAL+PSAMMAL]>0.3	IF [D_15+D15_30+D30_45]>0.4 AND [CV_15+CV15_30+CV30_45]>0.3 AND [AKAL+PSAMMAL]>0.3
Lampetra fluviatilis ADULTS Presence	Lampetra fluviatilis ADULTS High abundance

IF [D15_30+D30_45+D45_60]>0.3 AND [CV15_30+CV30_45+CV45_60+CV60_75+CV75_90]>0.3 AND [MICROLITHAL +AKAL]>0.2	IF [D15_30+D30_45+D45_60]>0.5 AND [CV30_45+CV45_60+CV60_75]>0.3 AND [MICROLITHAL +AKAL]>0.4
Lampetra fluviatilis JUVENILES Presence	Lampetra fluviatilis JUVENILES High abundance
IF [D_15+D15_30+D30_45+D45_60]>0.1 AND [CV_15]>0.1 AND [PSAMMAL+SAPROPEL]>0.4 AND [SUBMERG_VEG=1]	IF [D_15+D15_30+D30_45+D45_60]>0.2 AND [CV_15]>0.2 AND [PSAMMAL+SAPROPEL]>0.6 AND [SUBMERG_VEG=1]
Leuciscus leuciscus ADULTS Presence	Leuciscus leuciscus ADULTS High abundance
IF [D30_45+D45_60+D60_75+D75_90+D90_D105+D105_120]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75]>0.3 AND [MICROLITHAL +AKAL+PSAMMAL]>0.3 AND [SUBMERG_VEG=1 OR WOODY_DEBR=1 OR BOULDERS=1]	IF [D45_60+D60_75+D75_90]>0.3 AND [CV15_30+CV30_45+CV45_60]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [SUBMERG_VEG=1 OR WOODY_DEBR=1 OR BOULDERS=1]
Phoxinus phoxinus ADULTS Presence	Phoxinus phoxinus ADULTS High abundance
IF [D15_30+D30_45+D45_60+D60_75+D75_90]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75+CV75_90]>0.3 AND [MICROLITHAL +AKAL+PSAMMAL]>0.3 AND [SUBMERG_VEG=1 OR WOODY_DEBR=1 OR BOULDERS=1]	IF [D30_45+D45_60+D60_75]>0.5 AND [CV15_30+CV30_45+CV45_60+CV60_75]>0.4 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [SUBMERG_VEG=1 OR WOODY_DEBR=1 OR BOULDERS=1]
Phoxinus phoxinus JUVENILES	Phoxinus phoxinus JUVENILES

Presence	High abundance
IF [D_15+D15_30+D30_45+D45_60+D60_75]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75]>0.3 AND [MICROLITHAL +AKAL+PSAMMAL]>0.3 AND [SUBMERG_VEG=1 OR EMERG_VEG=1 OR WOODY_DEBR=1 OR BOULDERS=1]	IF [D15_30+D30_45+D45_60]>0.3 AND [CV_15+CV15_30+CV30_45]>0.3 AND [MICROLITHAL +AKAL+PSAMMAL]>0.4 AND [SUBMERG_VEG=1 OR EMERG_VEG=1 OR WOODY_DEBR=1 OR BOULDERS=1]
Rutilus rutilus ADULTS Presence	Rutilus rutilus ADULTS High abundance
IF [D30_45+D45_60+D60_75+D75_90+D90_105+D105_120+D120_135+D135_D150]>0.4 AND [CV_15+CV15_30+CV30_45+CV45_60]>0.3 AND [SUBMERG_VEG=1 OR EMERG_VEG=1]	IF [D60_75+D75_90+D90_105+D105_120+D120_135+D135_D150]>0.5 AND [CV_15+CV15_30]>0.3 AND [SUBMERG_VEG=1 OR EMERG_VEG=1]
Rutilus rutilus JUVENILES Presence	Rutilus rutilus JUVENILES High abundance
IF [D_15+D15_30+D30_45+D45_60+D60_75]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60]>0.3 AND [SUBMERG_VEG=1 OR EMERG_VEG=1]	IF [D_15+D15_30+D30_45+D45_60]>0.3 AND [CV_15+CV15_30]>0.3 AND [SUBMERG_VEG=1 OR EMERG_VEG=1]
Salmo salar JUVENILES Presence	Salmo salar JUVENILES High abundance
IF [D_15+D15_30+D30_45+D45_60+D60_75]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75+CV75_90+CV90_105]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [SUBMERG_VEG=1]	IF [D15_30+D30_45+D45_60]>0.3 AND [CV15_30+CV30_45+CV45_60+CV60_75+CV75_90]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.5 AND [SUBMERG_VEG=1]

Salmo trutta JUVENILES Presence	Salmo trutta JUVENILES High abundance
IF [D_15+D15_30+D30_45+D45_60+D60_75]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [WOODY_DEBR=1 OR BOULDERS=1]	IF [D_15+D15_30+D30_45+D45_60]>0.3 AND [CV_15+CV15_30+CV30_45]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [WOODY_DEBR=1 OR BOULDERS=1]
Squalius cephalus ADULTS Presence	Squalius cephalus ADULTS High abundance
IF [D60_75+D75_90+D90_105+D105_120+D120_135+D135_D150]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60+CV60_75]>0.3 AND [MICROLITHAL +AKAL+PSAMMAL]>0.3 AND [SUBMERG_VEG=1 OR EMERG_VEG=1 OR WOODY_DEBR=1]	IF [D60_75+D75_90+D90_105+D105_120]>0.4 AND [CV15_30+CV30_45]>0.3 AND [MICROLITHAL +AKAL+PSAMMAL]>0.4 AND [SUBMERG_VEG=1 OR EMERG_VEG=1 OR WOODY_DEBR=1]
Squalius cephalus JUVENILES Presence	Squalius cephalus JUVENILES High abundance
IF [D30_45+D45_60+D60_75+D75_90]>0.3 AND [CV_15+CV15_30+CV30_45+CV45_60]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [SUBMERG_VEG=1 OR WOODY_DEBR=1 OR BOULDERS=1]	IF [D30_45+D45_60+D60_75]>0.5 AND [CV15_30+CV30_45]>0.4 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [SUBMERG_VEG=1 OR WOODY_DEBR=1 OR BOULDERS=1]
Vimba vimba ADULTS Presence	
IF [D60_75+D75_90+D90_105+D105_120+D120_135]>0.3 AND [CV30_45+CV45_60+cv60_75]>0.3 AND	

[MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [SUBMERG_VEG=1]	
Vimba vimba JUVENILES Presence	
IF [D30_45+D45_60+D60_75]>0.3 AND [CV15_30+CV30_45+CV45_60]>0.3 AND [MESOLITHAL+MICROLITHAL +AKAL]>0.3 AND [SUBMERG_VEG=1]	

ANNEX VI

Table 1. **Presence (T) and absence (F) of different elements within GU-s in first sites below HPP (Latvia)**

River	Date	HMU TYPE	BOULD	SHAD	ROOTS	SUBMV	EMERGV	UNDB	WOOD
Vanka1_1	25.07.2017	GLIDE1	T	T	T	T	F	F	T
	25.07.2017	GLIDE2	T	T	T	T	F	F	T
	25.07.2017	GLIDE3	T	T	T	T	F	F	T
	25.07.2017	GLIDE4	F	F	T	T	F	F	T
	25.07.2017	RIFFLE1	T	F	F	F	F	F	F
	25.07.2017	GLIDE5	T	T	T	T	F	T	T
	25.07.2017	POOL1	T	T	T	T	T	F	T
	25.07.2017	SEC_CHAN1	F	T	F	F	F	F	T
Vanka1_2	30.08.2017	GLIDE1	F	T	T	T	F	F	T
	30.08.2017	GLIDE2	F	F	F	F	F	F	F
	30.08.2017	GLIDE3	T	T	T	T	F	T	T
	30.08.2017	RIFFLE1	T	T	F	F	F	F	T
	30.08.2017	RIFFLE2	T	T	T	T	T	T	T
	30.08.2017	RIFFLE3	T	T	T	F	T	T	T
	30.08.2017	GLIDE4	T	T	T	F	F	T	T
	30.08.2017	SEC_CHAN1	F	T	T	F	F	F	T
Vanka1_3	19.09.2017	GLIDE1	F	F	T	F	F	T	T
	19.09.2017	RIFFLE1	F	F	F	F	F	T	T
	19.09.2017	GLIDE2	F	F	T	F	F	T	T
	19.09.2017	RIFFLE2	F	F	T	F	F	F	T
	19.09.2017	SEC_CHAN1	F	T	F	F	F	F	T

River	Date	HMU TYPE	BOULD	SHAD	ROOTS	SUBMV	EMERGV	UNDB	WOOD
	19.09.2017	GLIDE3	T	T	T	F	F	T	T
Eda1_1	02.08.2017	AQUAT_VEG1	T	T	T	T	T	T	T
	02.08.2017	GLIDE1	T	T	T	T	F	T	T
	02.08.2017	GLIDE2	F	T	F	T	T	T	T
	02.08.2017	POOL1	F	T	T	T	F	T	T
	02.08.2017	GLIDE3	T	T	T	T	F	T	T
	02.08.2017	GLIDE4	F	F	T	T	T	T	T
	02.08.2017	GLIDE5	F	T	T	T	T	T	T
Eda1_2	04.09.2017	AQUAT_VEG1	T	T	F	T	F	T	T
	04.09.2017	GLIDE1	T	T	T	T	F	T	T
	04.09.2017	GLIDE2	T	T	T	T	T	T	T
	04.09.2017	POOL1	F	T	F	F	F	F	T
	04.09.2017	AQUAT_VEG2	F	F	F	T	F	F	T
	04.09.2017	POOL2	T	F	F	T	T	F	T
	04.09.2017	POOL3	F	F	F	F	F	F	T
Eda1_3	25.09.2017	GLIDE1	F	T	F	T	F	T	F
	25.09.2017	POOL1	F	T	T	F	F	T	T
	25.09.2017	GLIDE2	T	T	T	F	F	T	T
	25.09.2017	POOL2	T	T	F	F	F	T	T
	25.09.2017	GLIDE3	T	T	T	F	F	T	T
Ciecere1_1	09.08.2017	RIFFLE1	T	T	F	F	F	F	T
	09.08.2017	GLIDE1	T	T	T	T	F	T	T
	09.08.2017	RIFFLE2	T	T	T	T	F	F	T
	09.08.2017	GLIDE2	T	T	T	T	T	F	T
	09.08.2017	RIFFLE3	T	T	T	T	F	T	T
	09.08.2017	GLIDE3	T	T	T	T	F	T	T

River	Date	HMU TYPE	BOULD	SHAD	ROOTS	SUBMV	EMERGV	UNDB	WOOD
	09.08.2017	AQUAT_VEG1	T	F	F	T	T	F	T
	09.08.2017	GLIDE4	T	T	T	T	T	T	T
	09.08.2017	AQUAT_VEG2	T	F	T	T	T	F	T
	09.08.2017	POOL1	T	T	T	F	F	F	T
	09.08.2017	POOL2	T	T	F	T	F	F	T
	09.08.2017	BACKWATER1	T	T	T	T	F	T	T
	09.08.2017	POOL3	T	F	T	T	T	F	T
Ciecere1_2	28.09.2017	RIFFLE1	T	T	T	F	F	T	T
	28.09.2017	GLIDE1	T	F	T	T	F	T	T
	28.09.2017	RIFFLE2	T	T	T	T	F	F	T
	28.09.2017	GLIDE2	T	T	T	T	F	T	T
	28.09.2017	AQUAT_VEG1	T	F	T	T	T	F	T
	28.09.2017	BACKWATER1	T	T	F	F	F	F	T
	28.09.2017	POOL1	F	T	T	F	F	F	T

***Table 1.* Presence (T) and absence (F) of different elements within GU-s in first sites below HPP (Latvia), update 22.01.2019.**

River	Date	HMU_TYPE	BOULD	SHAD	ROOTS	SUBMV	EMERGV	UNDB	WOOD
Vanka1_4	23.10.2017	GLIDE	T	T	T	T	F	F	T
	23.10.2017	RIFFLE	T	T	T	T	F	T	T
	23.10.2017	GLIDE	T	T	T	T	F	T	T
	23.10.2017	RIFFLE	T	T	F	F	F	F	T
	23.10.2017	SEC_CHAN	F	T	T	F	F	F	T
	23.10.2017	GLIDE	T	T	T	T	F	T	T
Eda1_4	13.08.2018	POOL	T	T	T	T	T	T	T
	13.08.2018	AQUAT_VEG	T	T	T	T	F	T	T
	13.08.2018	POOL	T	T	T	T	F	T	T
Ciecere1_3	04.07.2018	RIFFLE	T	T	T	F	F	F	T
	04.07.2018	POOL	T	T	T	T	F	F	T
	04.07.2018	POOL	T	T	F	T	F	F	T
	04.07.2018	POOL	T	T	T	T	T	T	T
	04.07.2018	RIFFLE	T	T	T	T	F	F	T
	04.07.2018	AQUAT_VEG	T	T	T	T	T	T	T
	04.07.2018	GLIDE	T	T	T	T	T	T	T
	04.07.2018	AQUAT_VEG	T	T	T	T	T	T	T
	04.07.2018	GLIDE	T	T	T	T	T	T	T
	04.07.2018	AQUAT_VEG	T	T	T	T	T	F	T
Ciecere1_4	31.10.2018	RIFFLE	T	T	T	F	F	F	T
	31.10.2018	GLIDE	T	T	T	T	F	T	T
	31.10.2018	POOL	T	T	T	T	F	F	T
	31.10.2018	POOL	T	T	T	T	F	F	T
	31.10.2018	POOL	T	T	F	T	F	F	T
	31.10.2018	RAPID	T	T	T	T	F	F	T

	31.10.2018	RIFFLE	T	T	T	T	T	T	T
	31.10.2018	GLIDE	T	T	T	T	T	T	T
	31.10.2018	RIFFLE	T	T	T	T	T	T	T
	31.10.2018	GLIDE	T	T	T	T	T	T	T
	31.10.2018	RIFFLE	T	T	T	T	T	T	T
	31.10.2018	GLIDE	T	T	T	T	T	T	T

*BOULD-boulders, SHAD-canopy shading, ROOTS-exposed roots, SUBMV-submerged vegetation, EMERGV-emergent vegetation, UNDB-undercut banks, WOOD-woody debris

Fig. 1. Geomorphic unit map of Vanka River directly below HPP (25.07.2017)

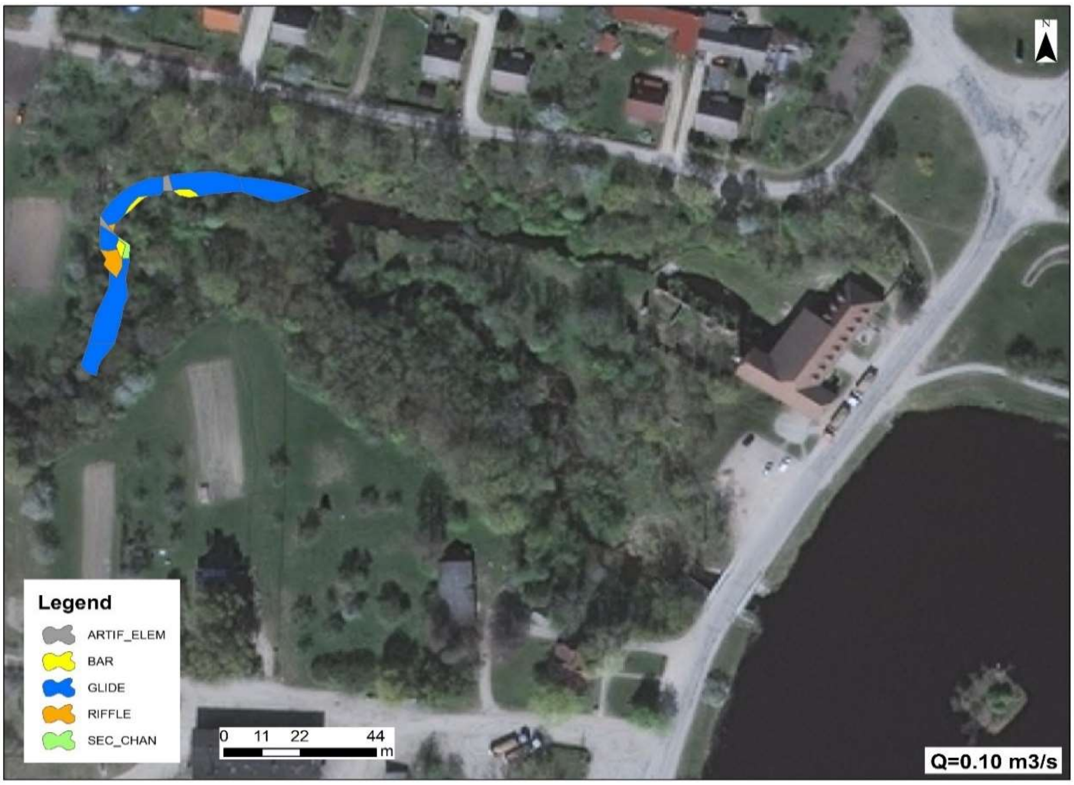


Fig. 2. Geomorphic unit map of Vanka River directly below HPP (30.08.2017)

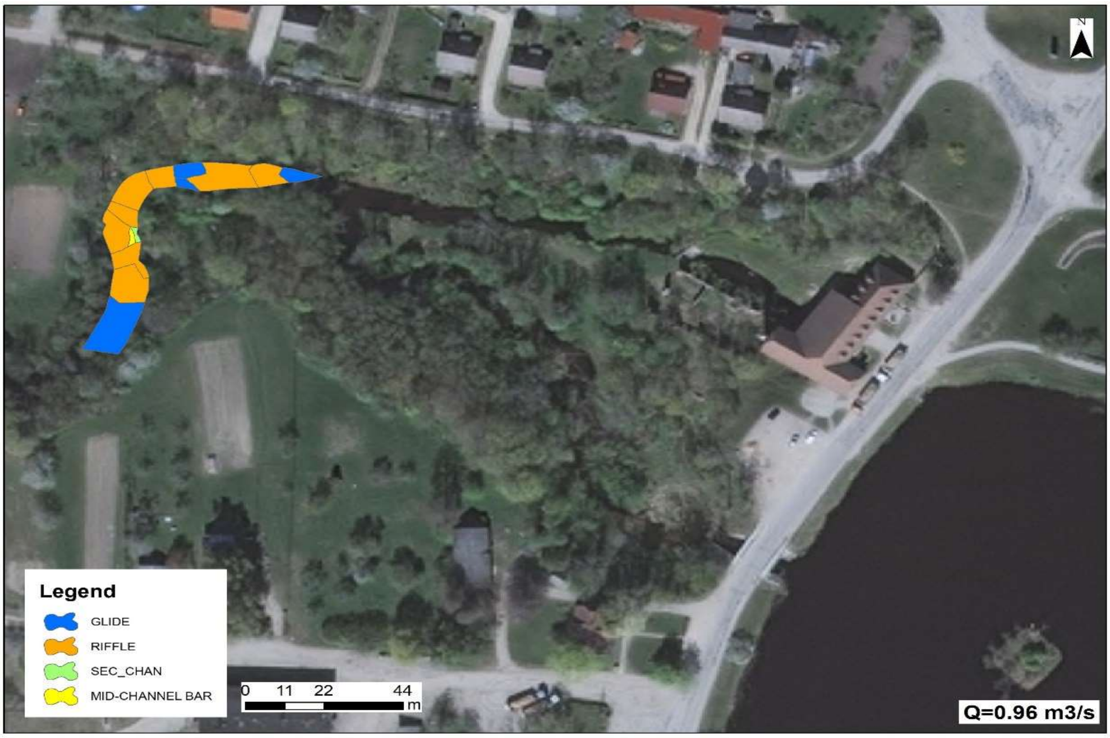


Fig. 3. Geomorphic unit map of Vanka River directly below HPP (19.09.2017)

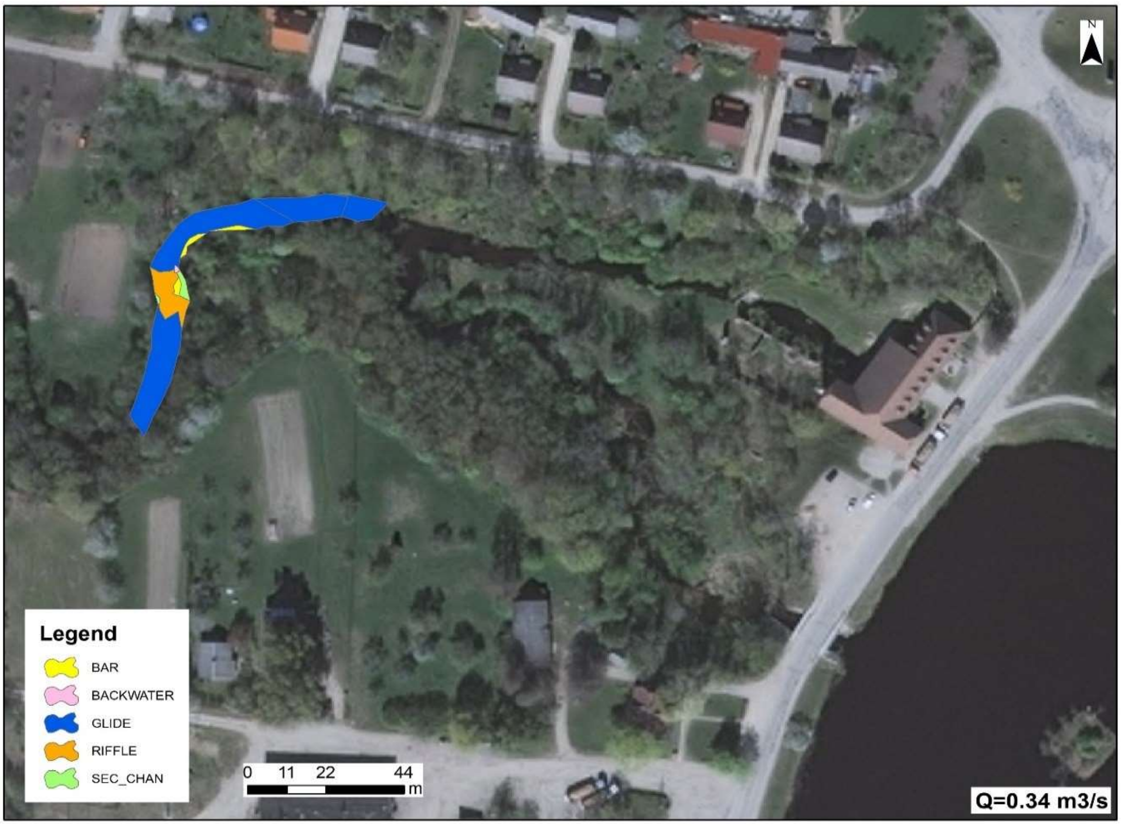


Fig. 4. Geomorphic unit map of Vanka River directly below HPP (23.10.2017)

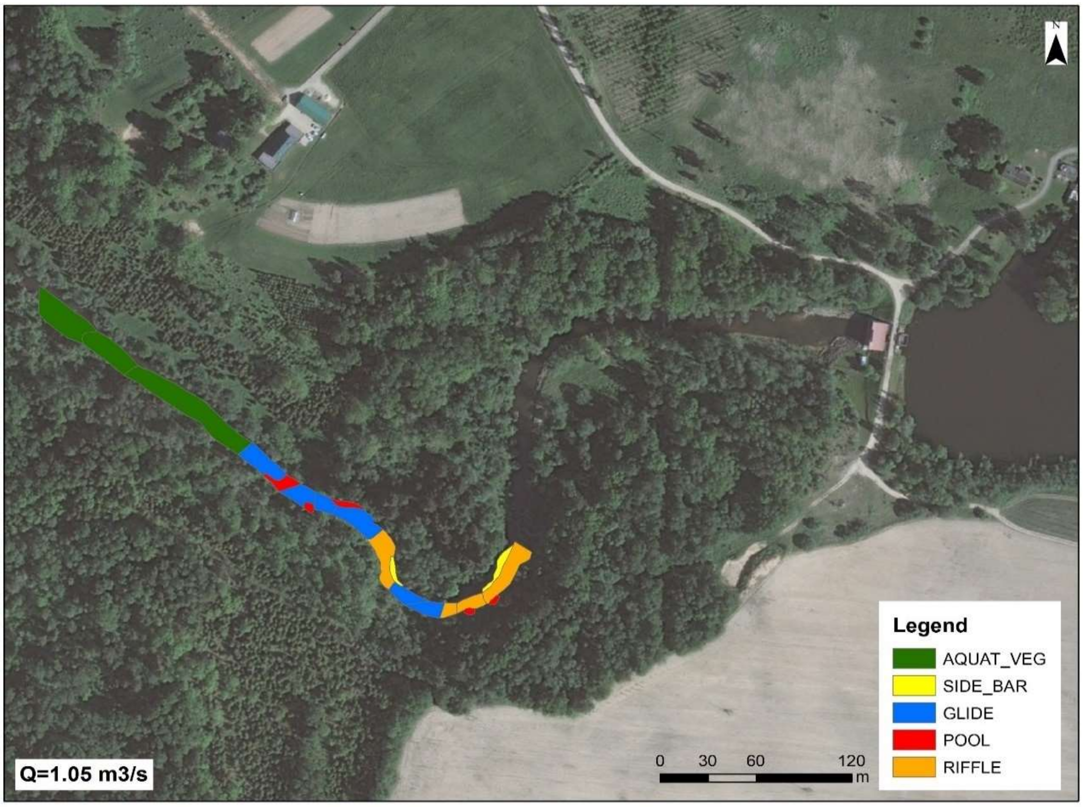


Fig. 5. Geomorphic unit map of Ciecere River directly below HPP (10.08.2017)

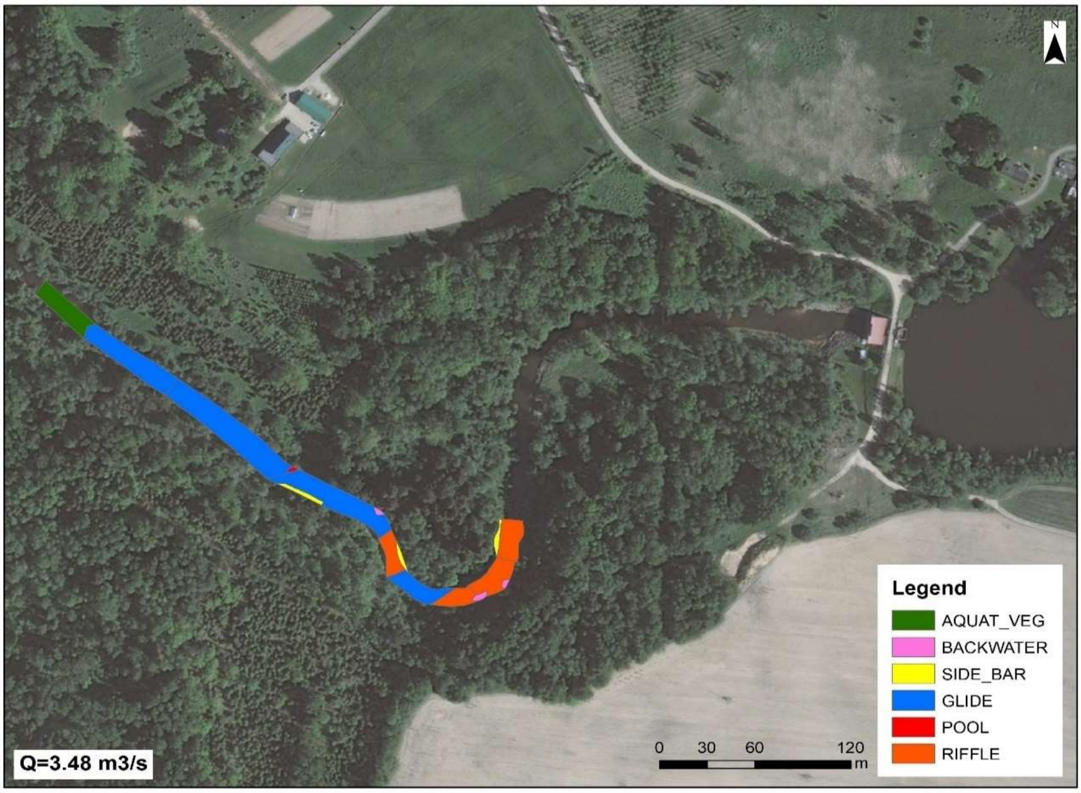


Fig. 6. Geomorphic unit map of Ciecere River directly below HPP (28.09.2017)

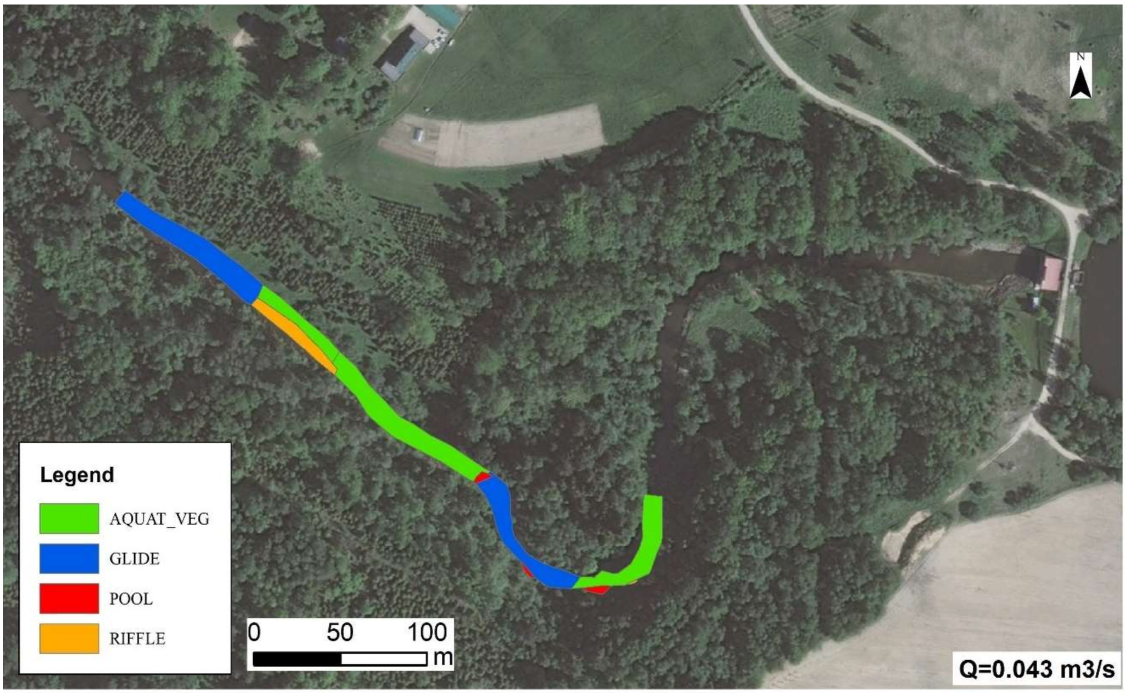


Fig. 7. Geomorphic unit map of Ciecere River directly below HPP (04.07.2018)

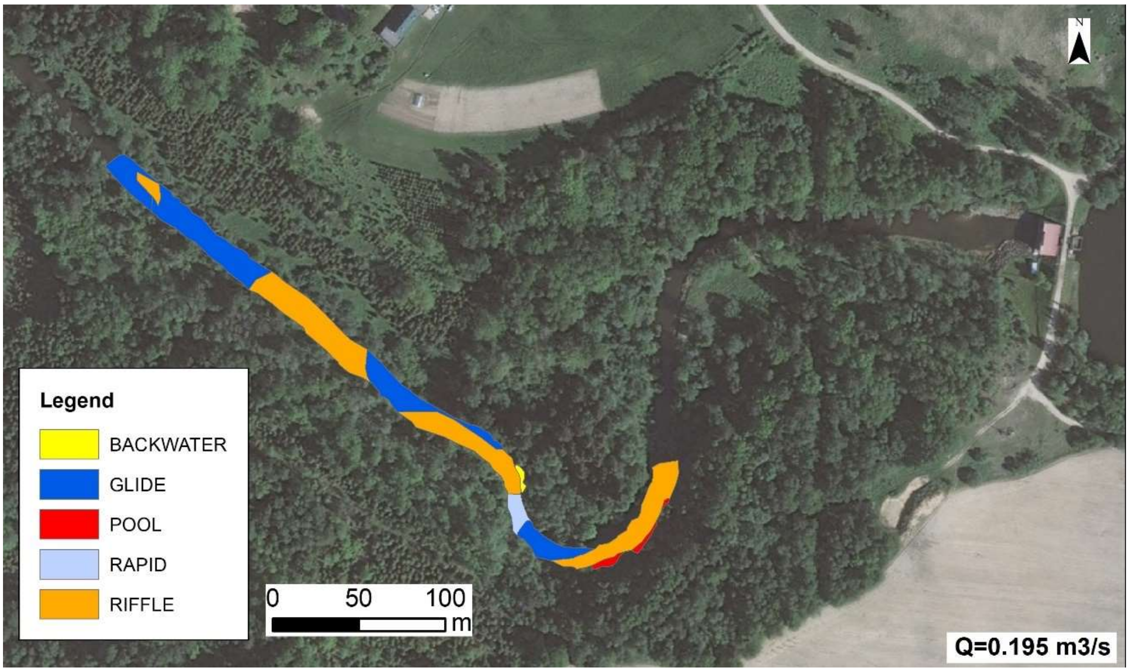


Fig. 8. Geomorphic unit map of Ciecere River directly below HPP (31.10.2018)

Fig. 9. Geomorphic unit map of Eda River directly below HPP (02.08.2017)

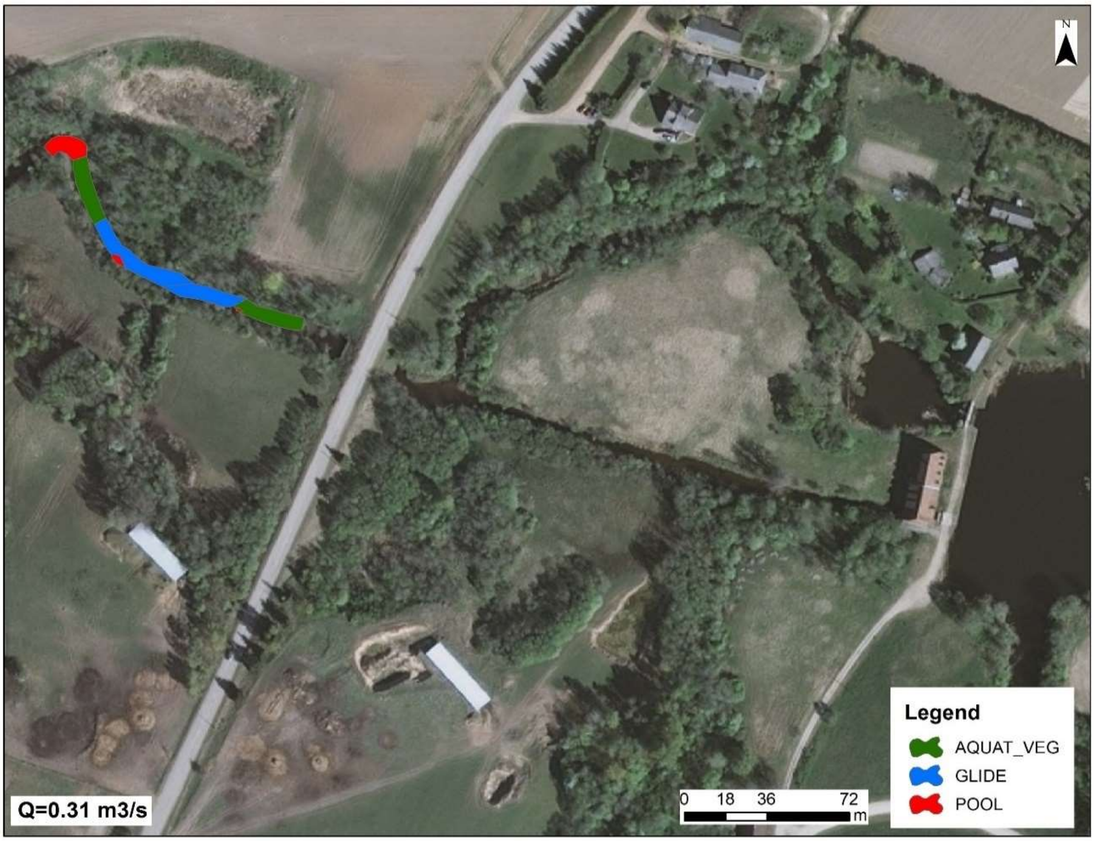


Fig. 10. Geomorphic unit map of Eda River directly below HPP (04.09.2017)

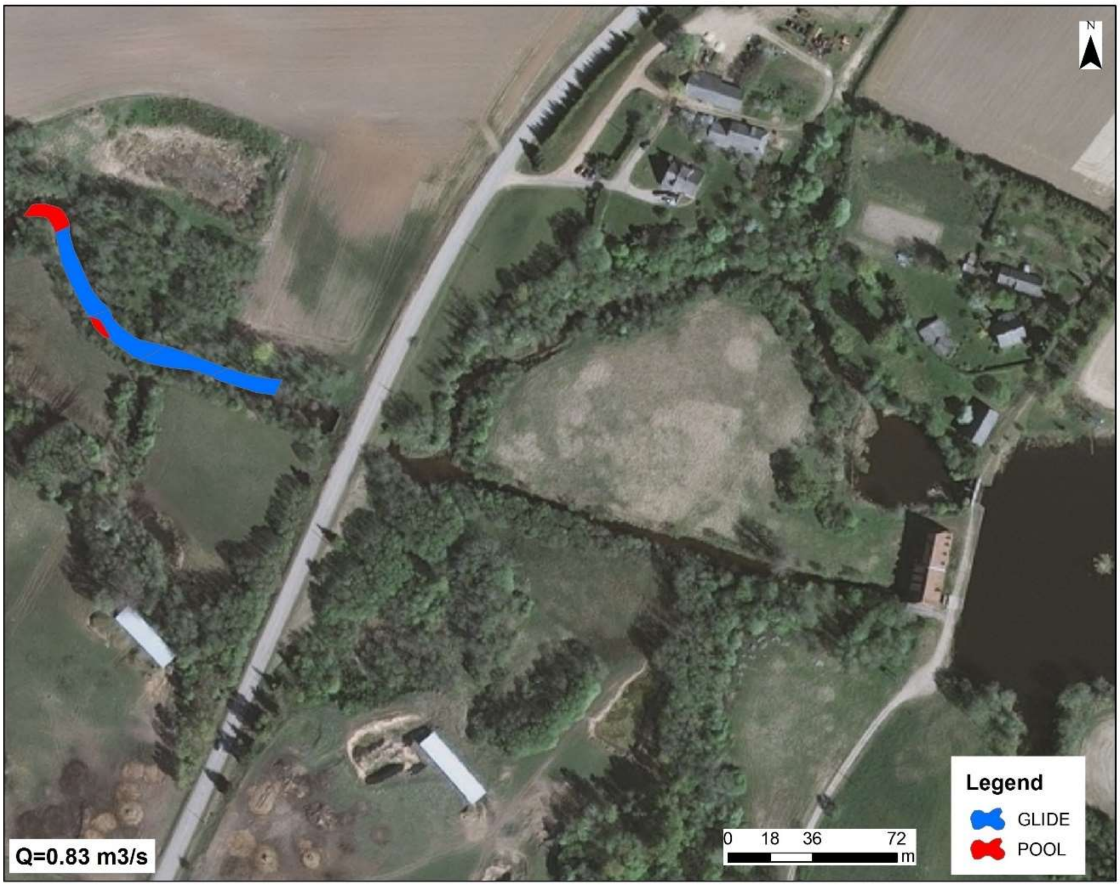


Fig. 11. Geomorphic unit map of Eda River directly below HPP (25.09.2017)

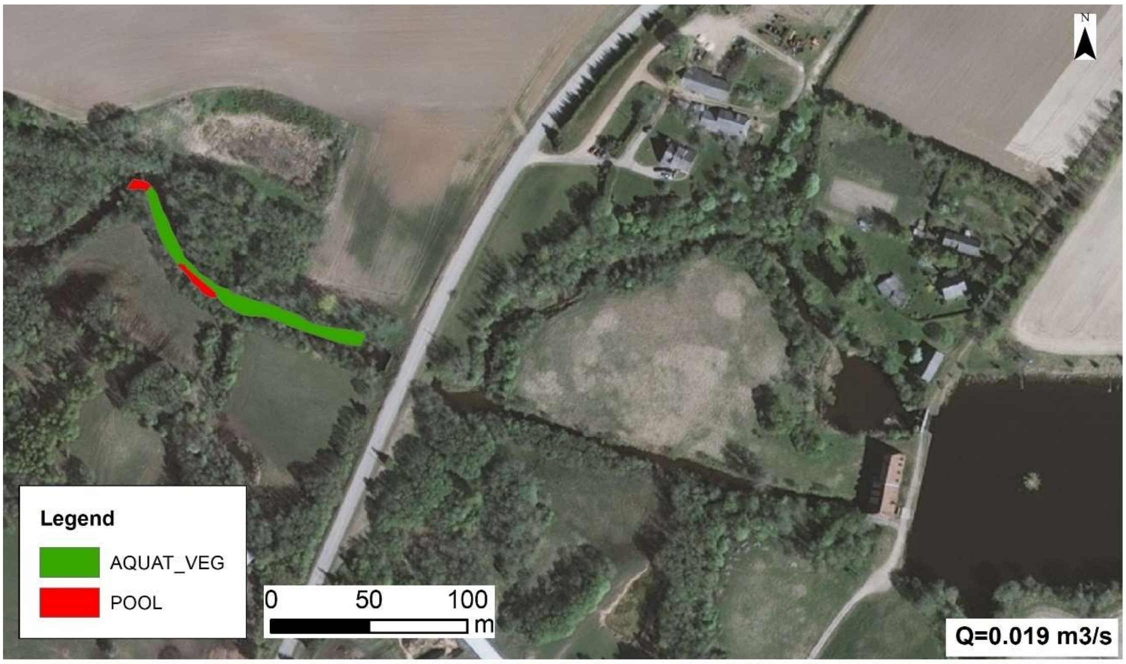


Fig. 12. Geomorphic unit map of Eda River directly below HPP (13.08.2018)

ANNEX VII

Depths and flow velocities at geomorphic unit representative points (Latvia)

Date	River	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
25.07.2017	Vanka1_1	1	GLIDE	18	0.224	Psammal	1
25.07.2017	Vanka1_1	1	GLIDE	17	0.075	Psammal	2
25.07.2017	Vanka1_1	1	GLIDE	16	0.081	Psammal	3
25.07.2017	Vanka1_1	1	GLIDE	15	0.098	Psammal	4
25.07.2017	Vanka1_1	1	GLIDE	2	0.122	Psammal	5
25.07.2017	Vanka1_1	1	GLIDE	22	0.128	Psammal	6
25.07.2017	Vanka1_1	1	GLIDE	21	0.092	Psammal	7
25.07.2017	Vanka1_1	2	GLIDE	23	0.013	Microlithal	1
25.07.2017	Vanka1_1	2	GLIDE	45	0.093	Microlithal	2
25.07.2017	Vanka1_1	2	GLIDE	22	0.042	Microlithal	3
25.07.2017	Vanka1_1	2	GLIDE	18	0.025	Akal	4
25.07.2017	Vanka1_1	2	GLIDE	18	0.237	Akal	5
25.07.2017	Vanka1_1	2	GLIDE	20	0.255	Akal	6
25.07.2017	Vanka1_1	2	GLIDE	18	0.295	Akal	7
25.07.2017	Vanka1_1	3	GLIDE	19	0.218	Psammal	1
25.07.2017	Vanka1_1	3	GLIDE	23	0.217	Psammal	2
25.07.2017	Vanka1_1	3	GLIDE	19	0.131	Psammal	3
25.07.2017	Vanka1_1	3	GLIDE	19	0.14	Akal	4
25.07.2017	Vanka1_1	3	GLIDE	28	0.085	Akal	5
25.07.2017	Vanka1_1	3	GLIDE	23	0.081	Psammal	6
25.07.2017	Vanka1_1	3	GLIDE	15	0.045	Microlithal	7
25.07.2017	Vanka1_1	3	GLIDE	20	0.116	Akal	8
25.07.2017	Vanka1_1	3	GLIDE	23	0.093	Akal	9
25.07.2017	Vanka1_1	3	GLIDE	12	0.155	Microlithal	10
25.07.2017	Vanka1_1	3	GLIDE	10	0.146	Akal	11
25.07.2017	Vanka1_1	3	GLIDE	19	0.04	Akal	12
25.07.2017	Vanka1_1	4	GLIDE	15	0.31	Psammal	1
25.07.2017	Vanka1_1	4	GLIDE	15	0.155	Psammal	2
25.07.2017	Vanka1_1	4	GLIDE	14	0.178	Psammal	3
25.07.2017	Vanka1_1	4	GLIDE	14	0.202	Psammal	4

25.07.2017	Vanka1_1	4	GLIDE	18	0.236	Psammal	5
25.07.2017	Vanka1_1	4	GLIDE	19	0.11	Psammal	6
25.07.2017	Vanka1_1	4	GLIDE	23	0.089	Psammal	7
25.07.2017	Vanka1_1	5	RIFFLE	18	0.111	Akal	1
25.07.2017	Vanka1_1	5	RIFFLE	17	0.026	Akal	2
25.07.2017	Vanka1_1	5	RIFFLE	19	0.207	Psammal	3
25.07.2017	Vanka1_1	5	RIFFLE	21	0.094	Psammal	4
25.07.2017	Vanka1_1	5	RIFFLE	18	0.203	Akal	5
25.07.2017	Vanka1_1	5	RIFFLE	14	0.076	Psammal	6
25.07.2017	Vanka1_1	5	RIFFLE	18	0.176	Microlithal	7
25.07.2017	Vanka1_1	6	GLIDE	19	0.153	Akal	1
25.07.2017	Vanka1_1	6	GLIDE	21	0.124	Psammal	2
25.07.2017	Vanka1_1	6	GLIDE	23	0.16	Akal	3
25.07.2017	Vanka1_1	6	GLIDE	20	0.013	Akal	4
25.07.2017	Vanka1_1	6	GLIDE	24	0.05	Pelal	5
25.07.2017	Vanka1_1	6	GLIDE	30	0.011	Akal	6
25.07.2017	Vanka1_1	6	GLIDE	26	0.026	Akal	7
25.07.2017	Vanka1_1	6	GLIDE	24	0.014	Psammal	8
25.07.2017	Vanka1_1	6	GLIDE	13	0.069	Microlithal	9
25.07.2017	Vanka1_1	6	GLIDE	19	0.186	Akal	10
25.07.2017	Vanka1_1	6	GLIDE	17	0.093	Psammal	11
25.07.2017	Vanka1_1	6	GLIDE	21	0.497	Microlithal	12
25.07.2017	Vanka1_1	6	GLIDE	23	0.227	Akal	13
25.07.2017	Vanka1_1	7	POOL	18	0.135	Psammal	1
25.07.2017	Vanka1_1	8	SEC_ CHAN	12	0.1	Psammal	1
25.07.2017	Vanka1_1	8	SEC_ CHAN	12	0.075	Psammal	2
26.07.2017	Vanka2_1	1	RIFFLE	42	0.266	Psammal	1
26.07.2017	Vanka2_1	1	RIFFLE	46	0.224	Psammal	2
26.07.2017	Vanka2_1	1	RIFFLE	34	0.289	Microlithal	3
26.07.2017	Vanka2_1	1	RIFFLE	22	0.223	Akal	4
26.07.2017	Vanka2_1	2	GLIDE	37	0.133	Psammal	1
26.07.2017	Vanka2_1	2	GLIDE	30	0.253	Microlithal	2
26.07.2017	Vanka2_1	2	GLIDE	27	0.114	Psammal	3
26.07.2017	Vanka2_1	3	SEC_ CHAN	22	0.171	Akal	1
26.07.2017	Vanka2_1	3	SEC_ CHAN	19	0.239	Akal	2
26.07.2017	Vanka2_1	3	SEC_ CHAN	15	0.16	Psammal	3
26.07.2017	Vanka2_1	4	RIFFLE	53	0.432	Microlithal	1

26.07.2017	Vanka2_1	4	RIFFLE	22	0.225	Psammal	2
26.07.2017	Vanka2_1	4	RIFFLE	36	0.339	Microlithal	3
26.07.2017	Vanka2_1	4	RIFFLE	41	0.426	Microlithal	4
26.07.2017	Vanka2_1	4	RIFFLE	52	0.274	Akal	5
26.07.2017	Vanka2_1	4	RIFFLE	66	0.195	Akal	6
26.07.2017	Vanka2_1	4	RIFFLE	69	0.233	Akal	7
26.07.2017	Vanka2_1	5	POOL	59	0.19	Akal	1
26.07.2017	Vanka2_1	5	POOL	58	0.015	Psammal	2
26.07.2017	Vanka2_1	5	POOL	43	0.001	Psammal	3
26.07.2017	Vanka2_1	6	POOL	54	0.198	Akal	1
26.07.2017	Vanka2_1	6	POOL	64	0.207	Psammal	2
26.07.2017	Vanka2_1	7	POOL	41	0.009	Psammal	2
26.07.2017	Vanka2_1	7	POOL	54	0.117	Psammal	3
26.07.2017	Vanka2_1	8	RIFFLE	37	0.395	Microlithal	1
26.07.2017	Vanka2_1	8	RIFFLE	23	0.529	Akal	2
26.07.2017	Vanka2_1	8	RIFFLE	27	0.19	Akal	3
26.07.2017	Vanka2_1	9	GLIDE	31	0.287	Psammal	1
26.07.2017	Vanka2_1	9	GLIDE	50	0.231	Psammal	2
26.07.2017	Vanka2_1	9	GLIDE	28	0.281	Psammal	3
26.07.2017	Vanka2_1	9	GLIDE	43	0.286	Psammal	4
26.07.2017	Vanka2_1	9	GLIDE	51	0.172	Psammal	5
26.07.2017	Vanka2_1	9	GLIDE	34	0.199	Psammal	6
26.07.2017	Vanka2_1	9	GLIDE	32	0.272	Psammal	7
26.07.2017	Vanka2_1	10	GLIDE	19	0.237	Akal	1
26.07.2017	Vanka2_1	10	GLIDE	25	0.286	Microlithal	2
26.07.2017	Vanka2_1	11	GLIDE	47	0.307	Akal	1
26.07.2017	Vanka2_1	11	GLIDE	30	0.231	Akal	2
26.07.2017	Vanka2_1	11	GLIDE	33	0.307	Akal	3
26.07.2017	Vanka2_1	11	GLIDE	24	0.271	Akal	4
26.07.2017	Vanka2_1	11	GLIDE	29	0.059	Psammal	5
26.07.2017	Vanka2_1	11	GLIDE	25	0.182	Psammal	6
26.07.2017	Vanka2_1	11	GLIDE	30	0.226	Psammal	7
26.07.2017	Vanka2_1	11	GLIDE	32	0.33	Psammal	8
27.07.2017	Vanka3_1	1	GLIDE	30	0.398	Microlithal	1
27.07.2017	Vanka3_1	1	GLIDE	29	0.287	Psammal	2
27.07.2017	Vanka3_1	1	GLIDE	35	0.129	Microlithal	3
27.07.2017	Vanka3_1	1	GLIDE	38	0.234	Akal	4

27.07.2017	Vanka3_1	1	GLIDE	11	0.168	Psammal	5
27.07.2017	Vanka3_1	1	GLIDE	22	0.283	Psammal	6
27.07.2017	Vanka3_1	1	GLIDE	27	0.304	Psammal	7
27.07.2017	Vanka3_1	2	GLIDE	8	0.172	Psammal	1
27.07.2017	Vanka3_1	2	GLIDE	11	0.136	Psammal	2
27.07.2017	Vanka3_1	2	GLIDE	7	0.156	Psammal	3
27.07.2017	Vanka3_1	2	GLIDE	15	0.213	Psammal	4
27.07.2017	Vanka3_1	2	GLIDE	8	0.211	Psammal	5
27.07.2017	Vanka3_1	3	POOL	39	0.242	Psammal	1
27.07.2017	Vanka3_1	3	POOL	54	0.149	Psammal	2
27.07.2017	Vanka3_1	3	POOL	44	0.048	Psammal	3
27.07.2017	Vanka3_1	4	GLIDE	21	0.225	Psammal	1
27.07.2017	Vanka3_1	4	GLIDE	36	0.281	Psammal	2
27.07.2017	Vanka3_1	4	GLIDE	37	0.28	Psammal	3
27.07.2017	Vanka3_1	4	GLIDE	18	0.199	Psammal	4
27.07.2017	Vanka3_1	4	GLIDE	24	0.12	Psammal	5
27.07.2017	Vanka3_1	4	GLIDE	45	0.25	Psammal	6
27.07.2017	Vanka3_1	4	GLIDE	35	0.15	Psammal	7
27.07.2017	Vanka3_1	5	SEC_ CHAN	28	0.373	Psammal	1
27.07.2017	Vanka3_1	5	SEC_ CHAN	27	0.274	Psammal	2
27.07.2017	Vanka3_1	5	SEC_ CHAN	26	0.361	Psammal	3
27.07.2017	Vanka3_1	5	SEC_ CHAN	24	0.246	Psammal	4
27.07.2017	Vanka3_1	5	SEC_ CHAN	12	0.13	Psammal	5
27.07.2017	Vanka3_1	5	SEC_ CHAN	23	0.114	Psammal	6
27.07.2017	Vanka3_1	5	SEC_ CHAN	32	0.222	Psammal	7
27.07.2017	Vanka3_1	6	GLIDE	24	0.363	Akal	1
27.07.2017	Vanka3_1	6	GLIDE	32	0.227	Akal	2
27.07.2017	Vanka3_1	6	GLIDE	4	0.233	Psammal	3
27.07.2017	Vanka3_1	6	GLIDE	28	0.225	Psammal	4
27.07.2017	Vanka3_1	6	GLIDE	25	0.223	Psammal	5
27.07.2017	Vanka3_1	6	GLIDE	14	0.215	Psammal	6
27.07.2017	Vanka3_1	6	GLIDE	28	0.225	Psammal	7
27.07.2017	Vanka3_1	7	POOL	63	0.248	Psammal	1
27.07.2017	Vanka3_1	7	POOL	61	0.247	Psammal	2
27.07.2017	Vanka3_1	7	POOL	63	0.248	Akal	3
27.07.2017	Vanka3_1	7	POOL	47	0.237	Psammal	4
27.07.2017	Vanka3_1	8	GLIDE	18	0.218	Psammal	1

27.07.2017	Vanka3_1	8	GLIDE	19	0.218	Psammal	2
27.07.2017	Vanka3_1	8	GLIDE	31	0.227	Psammal	3
27.07.2017	Vanka3_1	9	GLIDE	38	0.231	Psammal	1
27.07.2017	Vanka3_1	9	GLIDE	21	0.220	Psammal	2
27.07.2017	Vanka3_1	9	GLIDE	14	0.215	Akal	3
27.07.2017	Vanka3_1	9	GLIDE	54	0.242	Psammal	4
27.07.2017	Vanka3_1	9	GLIDE	43	0.235	Psammal	5
27.07.2017	Vanka3_1	9	GLIDE	40	0.233	Psammal	6
27.07.2017	Vanka3_1	9	GLIDE	21	0.220	Psammal	7
27.07.2017	Vanka3_1	9	GLIDE	15	0.216	Psammal	8
27.07.2017	Vanka3_1	10	SEC_ CHAN	7	0.210	Psammal	1
27.07.2017	Vanka3_1	10	SEC_ CHAN	9	0.212	Psammal	2
27.07.2017	Vanka3_1	10	SEC_ CHAN	13	0.214	Psammal	3
27.07.2017	Vanka3_1	10	SEC_ CHAN	24	0.222	Psammal	4
27.07.2017	Vanka3_1	10	SEC_ CHAN	11	0.213	Psammal	5
27.07.2017	Vanka3_1	10	SEC_ CHAN	21	0.220	Psammal	6
27.07.2017	Vanka3_1	11	GLIDE	34	0.255	Psammal	1
27.07.2017	Vanka3_1	11	GLIDE	63	0.130	Psammal	2
27.07.2017	Vanka3_1	11	GLIDE	28	0.355	Psammal	3
27.07.2017	Vanka3_1	11	GLIDE	75	0.280	Psammal	4
26.07.2017	Vanka4_1	1	POOL	59	0.354	Psammal	1
26.07.2017	Vanka4_1	1	POOL	75	0.329	Mesolithal	2
26.07.2017	Vanka4_1	1	POOL	63	0.313	Mesolithal	3
26.07.2017	Vanka4_1	2	GLIDE	42	0.313	Microlithal	1
26.07.2017	Vanka4_1	2	GLIDE	32	0.382	Microlithal	2
26.07.2017	Vanka4_1	2	GLIDE	31	0.277	Psammal	3
26.07.2017	Vanka4_1	2	GLIDE	25	0.258	Psammal	4
26.07.2017	Vanka4_1	2	GLIDE	15	0.112	Psammal	5
26.07.2017	Vanka4_1	2	GLIDE	24	0.223	Psammal	6
26.07.2017	Vanka4_1	2	GLIDE	26	0.171	Psammal	7
26.07.2017	Vanka4_1	3	POOL	54	0.147	Psammal	1
26.07.2017	Vanka4_1	3	POOL	77	0.204	Microlithal	2
26.07.2017	Vanka4_1	3	POOL	54	0.441	Mesolithal	3
26.07.2017	Vanka4_1	4	GLIDE	55	0.122	Psammal	1
26.07.2017	Vanka4_1	4	GLIDE	41	0.157	Psammal	2
26.07.2017	Vanka4_1	4	GLIDE	51	0.268	Psammal	3
26.07.2017	Vanka4_1	4	GLIDE	44	0.284	Psammal	4

26.07.2017	Vanka4_1	4	GLIDE	47	0.224	Psammal	5
26.07.2017	Vanka4_1	4	GLIDE	47	0.248	Psammal	6
26.07.2017	Vanka4_1	4	GLIDE	28	0.263	Psammal	7
26.07.2017	Vanka4_1	5	RIFFLE	54	0.386	Mesolithal	1
26.07.2017	Vanka4_1	5	RIFFLE	50	0.049	Psammal	2
26.07.2017	Vanka4_1	5	RIFFLE	28	0.175	Microlithal	3
26.07.2017	Vanka4_1	5	RIFFLE	19	0.396	Microlithal	4
26.07.2017	Vanka4_1	5	RIFFLE	32	0.224	Psammal	5
26.07.2017	Vanka4_1	6	GLIDE	28	0.271	Psammal	1
26.07.2017	Vanka4_1	6	GLIDE	40	0.375	Microlithal	2
26.07.2017	Vanka4_1	6	GLIDE	34	0.298	Psammal	3
26.07.2017	Vanka4_1	6	GLIDE	38	0.342	Psammal	4
26.07.2017	Vanka4_1	6	GLIDE	26	0.317	Psammal	5
26.07.2017	Vanka4_1	6	GLIDE	42	0.414	Microlithal	6
26.07.2017	Vanka4_1	6	GLIDE	26	0.289	Psammal	7
26.07.2017	Vanka4_1	7	POOL	74	0.191	Psammal	1
26.07.2017	Vanka4_1	7	POOL	54	0.049	Psammal	2
26.07.2017	Vanka4_1	7	POOL	41	0.123	Psammal	3
30.08.2017	Vanka1_2	1	GLIDE	15	0.1	Psammal	1
30.08.2017	Vanka1_2	1	GLIDE	13	0.1	Psammal	2
30.08.2017	Vanka1_2	1	GLIDE	17	0.1	Psammal	3
30.08.2017	Vanka1_2	1	GLIDE	14	0.2	Psammal	4
30.08.2017	Vanka1_2	1	GLIDE	22	0.001	Psammal	5
30.08.2017	Vanka1_2	1	GLIDE	15	0.1	Psammal	6
30.08.2017	Vanka1_2	1	GLIDE	17	0.2	Psammal	7
30.08.2017	Vanka1_2	1	GLIDE	25	0.15	Psammal	8
30.08.2017	Vanka1_2	1	GLIDE	20	0.25	Psammal	9
30.08.2017	Vanka1_2	2	GLIDE	21	0.2	Psammal	1
30.08.2017	Vanka1_2	2	GLIDE	15	0.1	Psammal	2
30.08.2017	Vanka1_2	2	GLIDE	18	0.15	Psammal	3
30.08.2017	Vanka1_2	2	GLIDE	21	0.2	Psammal	4
30.08.2017	Vanka1_2	2	GLIDE	15	0.2	Microlithal	5
30.08.2017	Vanka1_2	2	GLIDE	11	0.2	Psammal	6
30.08.2017	Vanka1_2	2	GLIDE	8	0.2	Psammal	7
30.08.2017	Vanka1_2	2	GLIDE	10	0.25	Psammal	8
30.08.2017	Vanka1_2	2	GLIDE	19	0.2	Psammal	9
30.08.2017	Vanka1_2	3	GLIDE	23	0.03	Psammal	1

30.08.2017	Vanka1_2	3	GLIDE	16	0.1	Psammal	2
30.08.2017	Vanka1_2	3	GLIDE	16	0.15	Psammal	3
30.08.2017	Vanka1_2	3	GLIDE	16	0.1	Psammal	4
30.08.2017	Vanka1_2	3	GLIDE	17	0.05	Psammal	5
30.08.2017	Vanka1_2	3	GLIDE	25	0.2	Psammal	6
30.08.2017	Vanka1_2	3	GLIDE	16	0.2	Psammal	7
30.08.2017	Vanka1_2	3	GLIDE	36	0.15	Akal	8
30.08.2017	Vanka1_2	3	GLIDE	9	0.001	Pelal	9
30.08.2017	Vanka1_2	3	GLIDE	24	0.15	Microlithal	10
30.08.2017	Vanka1_2	3	GLIDE	31	0.05	Psammal	11
30.08.2017	Vanka1_2	3	GLIDE	18	0.25	Psammal	12
30.08.2017	Vanka1_2	4	RIFFLE	19	0.1	Microlithal	1
30.08.2017	Vanka1_2	4	RIFFLE	17	0.4	Microlithal	2
30.08.2017	Vanka1_2	4	RIFFLE	17	0.4	Akal	3
30.08.2017	Vanka1_2	5	GLIDE	16	0.1	Akal	1
30.08.2017	Vanka1_2	5	GLIDE	15	0.2	Akal	2
30.08.2017	Vanka1_2	5	GLIDE	14	0.15	Akal	3
30.08.2017	Vanka1_2	5	GLIDE	7	0.1	Akal	4
30.08.2017	Vanka1_2	5	GLIDE	7	0.3	Akal	5
30.08.2017	Vanka1_2	6	RIFFLE	15	0.2	Pelal	1
30.08.2017	Vanka1_2	6	RIFFLE	25	0.45	Mesolithal	2
30.08.2017	Vanka1_2	6	RIFFLE	14	0.2	Akal	3
30.08.2017	Vanka1_2	6	RIFFLE	22	0.1	Microlithal	4
30.08.2017	Vanka1_2	6	RIFFLE	16	0.2	Akal	5
30.08.2017	Vanka1_2	6	RIFFLE	19	0.1	Microlithal	6
30.08.2017	Vanka1_2	6	RIFFLE	22	0.15	Microlithal	7
30.08.2017	Vanka1_2	7	GLIDE	17	0.2	Psammal	1
30.08.2017	Vanka1_2	7	GLIDE	18	0.2	Akal	2
30.08.2017	Vanka1_2	7	GLIDE	14	0.2	Akal	3
30.08.2017	Vanka1_2	7	GLIDE	17	0.1	Psammal	4
30.08.2017	Vanka1_2	7	GLIDE	13	0.1	Akal	5
30.08.2017	Vanka1_2	7	GLIDE	16	0.15	Akal	6
30.08.2017	Vanka1_2	7	GLIDE	16	0.03	Akal	7
30.08.2017	Vanka1_2	7	GLIDE	10	0.05	Microlithal	8
30.08.2017	Vanka1_2	7	GLIDE	10	0.2	Akal	9
30.08.2017	Vanka1_2	7	GLIDE	14	0.1	Microlithal	10
30.08.2017	Vanka1_2	7	GLIDE	9	0.03	Microlithal	11

30.08.2017	Vanka1_2	7	GLIDE	13	0.2	Microlithal	12
30.08.2017	Vanka1_2	7	GLIDE	13	0.25	Microlithal	13
30.08.2017	Vanka1_2	7	GLIDE	16	0.2	Microlithal	14
30.08.2017	Vanka1_2	8	SEC_ CHAN	17	0.15	Psammal	1
30.08.2017	Vanka1_2	8	SEC_ CHAN	20	0.1	Psammal	2
31.08.2017	Vanka2_2	1	GLIDE	48	0.15	Psammal	1
31.08.2017	Vanka2_2	1	GLIDE	30	0.075	Microlithal	2
31.08.2017	Vanka2_2	1	GLIDE	22	0.125	Psammal	3
31.08.2017	Vanka2_2	1	GLIDE	37	0.3	Akal	4
31.08.2017	Vanka2_2	1	GLIDE	13	0.1	Psammal	5
31.08.2017	Vanka2_2	2	RIFFLE	43	0.5	Microlithal	1
31.08.2017	Vanka2_2	2	RIFFLE	10	0.6	Microlithal	2
31.08.2017	Vanka2_2	2	RIFFLE	25	0.6	Akal	3
31.08.2017	Vanka2_2	2	RIFFLE	27	0.4	Microlithal	4
31.08.2017	Vanka2_2	2	RIFFLE	14	0.3	Psammal	5
31.08.2017	Vanka2_2	2	RIFFLE	19	0.45	Akal	6
31.08.2017	Vanka2_2	2	RIFFLE	29	0.5	Psammal	7
31.08.2017	Vanka2_2	2	RIFFLE	16	0.2	Microlithal	8
31.08.2017	Vanka2_2	2	RIFFLE	13	0.15	Psammal	9
31.08.2017	Vanka2_2	3	SEC_ CHAN	10	0.1	Psammal	1
31.08.2017	Vanka2_2	3	SEC_ CHAN	11	0.1	Psammal	2
31.08.2017	Vanka2_2	3	SEC_ CHAN	9	0.1	Psammal	3
31.08.2017	Vanka2_2	4	GLIDE	24	0.6	Microlithal	1
31.08.2017	Vanka2_2	4	GLIDE	7	0.1	Psammal	2
31.08.2017	Vanka2_2	4	GLIDE	26	0.3	Psammal	3
31.08.2017	Vanka2_2	4	GLIDE	33	0.35	Psammal	4
31.08.2017	Vanka2_2	4	GLIDE	40	0.25	Psammal	5
31.08.2017	Vanka2_2	4	GLIDE	27	0.2	Psammal	6
31.08.2017	Vanka2_2	4	GLIDE	20	0.25	Psammal	7
31.08.2017	Vanka2_2	4	GLIDE	12	0.2	Psammal	8
31.08.2017	Vanka2_2	4	GLIDE	24	0.45	Psammal	9
31.08.2017	Vanka2_2	5	POOL	51	0.2	Psammal	1
31.08.2017	Vanka2_2	5	POOL	20	0.01	Psammal	2
31.08.2017	Vanka2_2	5	POOL	47	0.2	Microlithal	3
31.08.2017	Vanka2_2	6	GLIDE	16	0.3	Psammal	1
31.08.2017	Vanka2_2	6	GLIDE	5	0.01	Psammal	2
31.08.2017	Vanka2_2	6	GLIDE	25	0.25	Psammal	3

31.08.2017	Vanka2_2	6	GLIDE	27	0.3	Psammal	4
31.08.2017	Vanka2_2	6	GLIDE	19	0.3	Psammal	5
31.08.2017	Vanka2_2	6	GLIDE	25	0.2	Psammal	6
31.08.2017	Vanka2_2	6	GLIDE	17	0.3	Microlithal	7
31.08.2017	Vanka2_2	6	GLIDE	28	0.2	Akal	8
31.08.2017	Vanka2_2	6	GLIDE	15	0.25	Microlithal	9
31.08.2017	Vanka2_2	7	RIFFLE	10	0.6	Akal	1
31.08.2017	Vanka2_2	7	RIFFLE	19	0.4	Akal	2
31.08.2017	Vanka2_2	7	RIFFLE	16	0.1	Psammal	3
31.08.2017	Vanka2_2	7	RIFFLE	37	0.625	Microlithal	4
31.08.2017	Vanka2_2	7	RIFFLE	20	0.3	Akal	5
31.08.2017	Vanka2_2	7	RIFFLE	31	0.65	Psammal	6
31.08.2017	Vanka2_2	8	GLIDE	48	0.003	Psammal	1
31.08.2017	Vanka2_2	8	GLIDE	11	0.2	Psammal	2
31.08.2017	Vanka2_2	8	GLIDE	21	0.325	Akal	3
31.08.2017	Vanka2_2	8	GLIDE	14	0.5	Microlithal	4
31.08.2017	Vanka2_2	9	POOL	53	0.075	Microlithal	1
31.08.2017	Vanka2_2	9	POOL	49	0.1	Psammal	2
31.08.2017	Vanka3_2	1	GLIDE	25	0.31	Psammal	1
31.08.2017	Vanka3_2	1	GLIDE	6	0.3	Psammal	2
31.08.2017	Vanka3_2	1	GLIDE	13	0.3	Psammal	3
31.08.2017	Vanka3_2	1	GLIDE	21	0.29	Psammal	4
31.08.2017	Vanka3_2	1	GLIDE	38	0.275	Psammal	5
31.08.2017	Vanka3_2	1	GLIDE	13	0.15	Psammal	6
31.08.2017	Vanka3_2	1	GLIDE	16	0.3	Psammal	7
31.08.2017	Vanka3_2	1	GLIDE	4	0.3	Psammal	8
31.08.2017	Vanka3_2	1	GLIDE	17	0.3	Psammal	9
31.08.2017	Vanka3_2	2	SEC_ CHAN	26	0.5	Psammal	1
31.08.2017	Vanka3_2	2	SEC_ CHAN	12	0.325	Psammal	2
31.08.2017	Vanka3_2	2	SEC_ CHAN	15	0.3	Psammal	3
31.08.2017	Vanka3_2	2	SEC_ CHAN	25	0.125	Psammal	4
31.08.2017	Vanka3_2	3	GLIDE	16	0.2	Psammal	1
31.08.2017	Vanka3_2	3	GLIDE	23	0.525	Psammal	2
31.08.2017	Vanka3_2	3	GLIDE	16	0.5	Psammal	3
31.08.2017	Vanka3_2	4	GLIDE	16	0.45	Psammal	1
31.08.2017	Vanka3_2	4	GLIDE	30	0.5	Psammal	2
31.08.2017	Vanka3_2	4	GLIDE	23	0.4	Psammal	3

31.08.2017	Vanka3_2	4	GLIDE	17	0.3	Psammal	4
31.08.2017	Vanka3_2	4	GLIDE	17	0.15	Psammal	5
31.08.2017	Vanka3_2	4	GLIDE	13	0.25	Psammal	6
31.08.2017	Vanka3_2	5	POOL	64	0.175	Psammal	1
31.08.2017	Vanka3_2	6	RIFFLE	30	0.6	Psammal	1
31.08.2017	Vanka3_2	6	RIFFLE	14	0.5	Psammal	2
31.08.2017	Vanka3_2	6	RIFFLE	36	0.3	Psammal	3
31.08.2017	Vanka3_2	7	SEC_ CHAN	12	0.2	Psammal	1
31.08.2017	Vanka3_2	7	SEC_ CHAN	12	0.275	Psammal	2
31.08.2017	Vanka3_2	8	GLIDE	25	0.275	Psammal	1
31.08.2017	Vanka3_2	8	GLIDE	54	0.15	Psammal	2
31.08.2017	Vanka3_2	8	GLIDE	19	0.375	Psammal	3
31.08.2017	Vanka3_2	8	GLIDE	66	0.3	Psammal	4
30.08.2017	Vanka4_2	1	GLIDE	47	0.2	Psammal	1
30.08.2017	Vanka4_2	1	GLIDE	19	0.2	Psammal	2
30.08.2017	Vanka4_2	1	GLIDE	35	0.3	Psammal	3
30.08.2017	Vanka4_2	1	GLIDE	61	0.1	Microlithal	4
30.08.2017	Vanka4_2	1	GLIDE	35	0.1	Microlithal	5
30.08.2017	Vanka4_2	1	GLIDE	41	0.25	Psammal	6
30.08.2017	Vanka4_2	1	GLIDE	48	0.2	Psammal	7
30.08.2017	Vanka4_2	1	GLIDE	21	0.3	Psammal	8
30.08.2017	Vanka4_2	2	POOL	71	0.05	Microlithal	1
30.08.2017	Vanka4_2	2	POOL	31	0.001	Psammal	2
30.08.2017	Vanka4_2	2	POOL	29	0.05	Psammal	3
30.08.2017	Vanka4_2	3	POOL	27	0.05	Microlithal	1
30.08.2017	Vanka4_2	3	POOL	46	0.03	Psammal	2
30.08.2017	Vanka4_2	3	POOL	47	0.001	Psammal	3
30.08.2017	Vanka4_2	4	RIFFLE	16	0.5	Microlithal	1
30.08.2017	Vanka4_2	4	RIFFLE	28	0.6	Microlithal	2
30.08.2017	Vanka4_2	4	RIFFLE	39	0.6	Psammal	3
30.08.2017	Vanka4_2	4	RIFFLE	63	0.1	Psammal	4
30.08.2017	Vanka4_2	4	RIFFLE	20	0.2	Microlithal	5
30.08.2017	Vanka4_2	4	RIFFLE	21	0.3	Akal	6
30.08.2017	Vanka4_2	4	RIFFLE	18	0.05	Psammal	7
30.08.2017	Vanka4_2	5	GLIDE	20	0.35	Psammal	1
30.08.2017	Vanka4_2	5	GLIDE	29	0.1	Psammal	2
30.08.2017	Vanka4_2	5	GLIDE	54	0.2	Psammal	3

30.08.2017	Vanka4_2	5	GLIDE	46	0.25	Microlithal	4
30.08.2017	Vanka4_2	5	GLIDE	21	0.3	Psammal	5
30.08.2017	Vanka4_2	5	GLIDE	26	0.3	Microlithal	6
30.08.2017	Vanka4_2	5	GLIDE	12	0.35	Microlithal	7
30.08.2017	Vanka4_2	5	GLIDE	36	0.2	Psammal	8
30.08.2017	Vanka4_2	5	GLIDE	20	0.3	Microlithal	9
30.08.2017	Vanka4_2	5	GLIDE	38	0.2	Psammal	10
30.08.2017	Vanka4_2	5	GLIDE	45	0.1	Psammal	11
30.08.2017	Vanka4_2	5	GLIDE	28	0.15	Psammal	12
30.08.2017	Vanka4_2	5	GLIDE	28	0.15	Psammal	13
30.08.2017	Vanka4_2	5	GLIDE	41	0.2	Psammal	14
30.08.2017	Vanka4_2	5	GLIDE	40	0.1	Psammal	15
30.08.2017	Vanka4_2	6	GLIDE	85	0.15	Psammal	1
30.08.2017	Vanka4_2	6	GLIDE	45	0.1	Psammal	2
30.08.2017	Vanka4_2	6	GLIDE	20	0.15	Psammal	3
30.08.2017	Vanka4_2	6	GLIDE	33	0.2	Psammal	4
30.08.2017	Vanka4_2	6	GLIDE	37	0.2	Microlithal	5
30.08.2017	Vanka4_2	6	GLIDE	28	0.25	Psammal	6
30.08.2017	Vanka4_2	6	GLIDE	22	0.25	Microlithal	7
30.08.2017	Vanka4_2	6	GLIDE	26	0.25	Microlithal	8
30.08.2017	Vanka4_2	6	GLIDE	42	0.1	Psammal	9
30.08.2017	Vanka4_2	6	GLIDE	37	0.1	Psammal	10
30.08.2017	Vanka4_2	6	GLIDE	35	0.2	Psammal	11
30.08.2017	Vanka4_2	7	RIFFLE	29	0.25	Mesolithal	1
30.08.2017	Vanka4_2	7	RIFFLE	34	0.5	Mesolithal	2
30.08.2017	Vanka4_2	7	RIFFLE	40	0.5	Mesolithal	3
30.08.2017	Vanka4_2	7	RIFFLE	13	0.4	Microlithal	4
30.08.2017	Vanka4_2	8	POOL	64	0.15	Psammal	1
30.08.2017	Vanka4_2	8	POOL	63	0.1	Psammal	2
30.08.2017	Vanka4_2	9	GLIDE	19	0.15	Psammal	1
30.08.2017	Vanka4_2	9	GLIDE	46	0.2	Psammal	2
30.08.2017	Vanka4_2	9	GLIDE	70	0.15	Psammal	3
30.08.2017	Vanka4_2	10	POOL	54	0.05	Psammal	1
30.08.2017	Vanka4_2	9	GLIDE	44	0.2	Mesolithal	1
30.08.2017	Vanka4_2	9	GLIDE	46	0.15	Psammal	2
30.08.2017	Vanka4_2	9	GLIDE	67	0.15	Mesolithal	3
30.08.2017	Vanka4_2	9	GLIDE	49	0.1	Microlithal	4

30.08.2017	Vanka4_2	9	GLIDE	33	0.15	Microlithal	5
30.08.2017	Vanka4_2	9	GLIDE	42	0.1	Microlithal	6
30.08.2017	Vanka4_2	9	GLIDE	19	0.03	Psammal	7
30.08.2017	Vanka4_2	11	POOL	52	0.15	Psammal	1
19.09.2017	Vanka1_3	1	GLIDE	53	0.1	Psammal	1
19.09.2017	Vanka1_3	1	GLIDE	61	0.3	Psammal	2
19.09.2017	Vanka1_3	1	GLIDE	62	0.63	Psammal	3
19.09.2017	Vanka1_3	1	GLIDE	59	0.25	Psammal	4
19.09.2017	Vanka1_3	1	GLIDE	60	0.4	Psammal	5
19.09.2017	Vanka1_3	2	RIFFLE	61	0.5	Psammal	1
19.09.2017	Vanka1_3	2	RIFFLE	66	0.5	Psammal	2
19.09.2017	Vanka1_3	2	RIFFLE	66	0.55	Psammal	3
19.09.2017	Vanka1_3	2	RIFFLE	56	0.25	Psammal	4
19.09.2017	Vanka1_3	2	RIFFLE	65	0.4	Psammal	5
19.09.2017	Vanka1_3	2	RIFFLE	54	0.45	Psammal	6
19.09.2017	Vanka1_3	2	RIFFLE	57	0.28	Psammal	7
19.09.2017	Vanka1_3	3	GLIDE	59	0.3	Microlithal	1
19.09.2017	Vanka1_3	3	GLIDE	62	0.3	Microlithal	2
19.09.2017	Vanka1_3	3	GLIDE	57	0.2	Microlithal	3
19.09.2017	Vanka1_3	3	GLIDE	46	0.3	Psammal	4
19.09.2017	Vanka1_3	4	RIFFLE	64	0.6	Psammal	1
19.09.2017	Vanka1_3	4	RIFFLE	59	0.5	Psammal	2
19.09.2017	Vanka1_3	4	RIFFLE	66	0.5	Akal	3
19.09.2017	Vanka1_3	4	RIFFLE	62	0.4	Psammal	4
19.09.2017	Vanka1_3	4	RIFFLE	39	0.15	Psammal	5
19.09.2017	Vanka1_3	4	RIFFLE	65	0.4	Psammal	6
19.09.2017	Vanka1_3	4	RIFFLE	65	0.5	Psammal	7
19.09.2017	Vanka1_3	4	RIFFLE	69	0.5	Akal	8
19.09.2017	Vanka1_3	4	RIFFLE	57	0.5	Microlithal	9
19.09.2017	Vanka1_3	4	RIFFLE	57	0.55	Psammal	10
19.09.2017	Vanka1_3	4	RIFFLE	53	0.65	Mesolithal	11
19.09.2017	Vanka1_3	4	RIFFLE	35	0.25	Mesolithal	12
19.09.2017	Vanka1_3	4	RIFFLE	59	0.6	Microlithal	13
19.09.2017	Vanka1_3	4	RIFFLE	61	0.7	Microlithal	14
19.09.2017	Vanka1_3	5	SEC_ CHAN	58	0.25	Microlithal	1
19.09.2017	Vanka1_3	5	SEC_ CHAN	45	0.25	Psammal	2
19.09.2017	Vanka1_3	6	GLIDE	60	0.5	Akal	1

19.09.2017	Vanka1_3	6	GLIDE	54	0.5	Psammal	2
19.09.2017	Vanka1_3	6	GLIDE	51	0.4	Psammal	3
19.09.2017	Vanka1_3	6	GLIDE	47	0.5	Microlithal	4
19.09.2017	Vanka1_3	6	GLIDE	57	0.5	Microlithal	5
19.09.2017	Vanka1_3	6	GLIDE	47	0.6	Microlithal	6
19.09.2017	Vanka1_3	6	GLIDE	54	0.5	Microlithal	7
20.09.2017	Vanka2_3	1	RIFFLE	86	0.55	Microlithal	1
20.09.2017	Vanka2_3	1	RIFFLE	91	0.33	Mesolithal	2
20.09.2017	Vanka2_3	2	SEC_ CHAN	56	0.4	Psammal	1
20.09.2017	Vanka2_3	2	SEC_ CHAN	48	0.55	Psammal	2
20.09.2017	Vanka2_3	3	RIFFLE	27	0.6	Microlithal	1
20.09.2017	Vanka2_3	3	RIFFLE	74	0.4	Psammal	2
20.09.2017	Vanka2_3	3	RIFFLE	86	0.4	Psammal	3
20.09.2017	Vanka2_3	3	RIFFLE	57	0.6	Psammal	4
20.09.2017	Vanka2_3	3	RIFFLE	96	0.6	Microlithal	5
20.09.2017	Vanka2_3	3	RIFFLE	86	0.6	Psammal	6
20.09.2017	Vanka2_3	3	RIFFLE	88	0.6	Akal	7
20.09.2017	Vanka2_3	3	RIFFLE	56	0.5	Psammal	8
20.09.2017	Vanka2_3	3	RIFFLE	84	0.7	Psammal	9
20.09.2017	Vanka2_3	3	RIFFLE	38	0.15	Psammal	10
20.09.2017	Vanka2_3	3	RIFFLE	83	0.35	Akal	11
20.09.2017	Vanka2_3	4	SEC_ CHAN	38	0.15	Psammal	1
20.09.2017	Vanka2_3	5	GLIDE	91	0.6	Akal	1
20.09.2017	Vanka2_3	5	GLIDE	87	0.4	Akal	2
20.09.2017	Vanka3_3	1	GLIDE	52	0.55	Psammal	1
20.09.2017	Vanka3_3	1	GLIDE	60	0.65	Psammal	2
20.09.2017	Vanka3_3	1	GLIDE	56	0.6	Psammal	3
20.09.2017	Vanka3_3	1	GLIDE	34	0.5	Psammal	4
20.09.2017	Vanka3_3	1	GLIDE	80	0.5	Psammal	5
20.09.2017	Vanka3_3	1	GLIDE	47	0.6	Psammal	6
20.09.2017	Vanka3_3	1	GLIDE	62	0.4	Psammal	7
20.09.2017	Vanka3_3	2	RIFFLE	20	0.25	Psammal	1
20.09.2017	Vanka3_3	2	RIFFLE	89	0.4	Psammal	2
20.09.2017	Vanka3_3	2	RIFFLE	64	0.6	Psammal	3
20.09.2017	Vanka3_3	2	RIFFLE	34	0.2	Psammal	4
20.09.2017	Vanka3_3	2	RIFFLE	49	0.55	Psammal	5

20.09.2017	Vanka3_3	2	RIFFLE	43	0.71	Microlithal	6
20.09.2017	Vanka3_3	2	RIFFLE	20	0.461	Psammal	7
20.09.2017	Vanka3_3	2	RIFFLE	25	0.426	Psammal	8
20.09.2017	Vanka3_3	2	RIFFLE	42	0.177	Psammal	9
20.09.2017	Vanka3_3	2	RIFFLE	26	0.284	Psammal	10
20.09.2017	Vanka3_3	2	RIFFLE	38	0.745	Psammal	11
20.09.2017	Vanka3_3	2	RIFFLE	26	0.71	Mesolithal	12
20.09.2017	Vanka3_3	2	RIFFLE	26	0.639	Psammal	13
20.09.2017	Vanka3_3	2	RIFFLE	50	0.71	Psammal	14
20.09.2017	Vanka3_3	2	RIFFLE	38	0.568	Mesolithal	15
20.09.2017	Vanka3_3	2	RIFFLE	28	0.426	Psammal	16
20.09.2017	Vanka3_3	2	RIFFLE	28	0.213	Psammal	17
20.09.2017	Vanka3_3	2	RIFFLE	21	0.355	Psammal	18
20.09.2017	Vanka3_3	3	RIFFLE	107	0.248	Psammal	1
20.09.2017	Vanka3_3	3	RIFFLE	50	0.852	Psammal	2
20.09.2017	Vanka3_3	3	RIFFLE	23	0.71	Microlithal	3
20.09.2017	Vanka3_3	3	RIFFLE	60	0.426	Psammal	4
20.09.2017	Vanka3_3	3	RIFFLE	20	0.284	Psammal	5
20.09.2017	Vanka3_3	3	RIFFLE	20	0.390	Psammal	6
20.09.2017	Vanka3_3	3	RIFFLE	42	0.390	Psammal	7
20.09.2017	Vanka3_3	3	RIFFLE	90	0.213	Psammal	8
20.09.2017	Vanka3_3	3	RIFFLE	32	0.532	Psammal	9
20.09.2017	Vanka3_3	3	RIFFLE	111	0.426	Psammal	10
19.09.2017	Vanka4_3	1	GLIDE	47	0.4	Psammal	1
19.09.2017	Vanka4_3	1	GLIDE	56	0.6	Psammal	2
19.09.2017	Vanka4_3	1	GLIDE	47	0.5	Psammal	3
19.09.2017	Vanka4_3	1	GLIDE	56	0.5	Psammal	4
19.09.2017	Vanka4_3	1	GLIDE	73	0.5	Psammal	5
19.09.2017	Vanka4_3	1	GLIDE	72	0.63	Microlithal	6
19.09.2017	Vanka4_3	1	GLIDE	49	0.25	Psammal	7
19.09.2017	Vanka4_3	2	RIFFLE	47	0.5	Psammal	1
19.09.2017	Vanka4_3	2	RIFFLE	78	0.6	Psammal	2
19.09.2017	Vanka4_3	2	RIFFLE	55	0.6	Psammal	3
19.09.2017	Vanka4_3	3	GLIDE	75	0.4	Psammal	1
19.09.2017	Vanka4_3	3	GLIDE	81	0.6	Microlithal	2
19.09.2017	Vanka4_3	3	GLIDE	72	0.2	Psammal	3
19.09.2017	Vanka4_3	3	GLIDE	87	0.13	Psammal	4

19.09.2017	Vanka4_3	3	GLIDE	87	0.5	Microlithal	5
19.09.2017	Vanka4_3	3	GLIDE	97	0.4	Psammal	6
19.09.2017	Vanka4_3	3	GLIDE	65	0.2	Psammal	7
23.10.2017.	Vanka1_4	1	GLIDE	28	0.179	Psammal	1
23.10.2017.	Vanka1_4	1	GLIDE	28	0.179	Psammal	2
23.10.2017.	Vanka1_4	1	GLIDE	31	0.268	Psammal	3
23.10.2017.	Vanka1_4	1	GLIDE	31	0.358	Psammal	4
23.10.2017.	Vanka1_4	1	GLIDE	27	0.268	Psammal	5
23.10.2017.	Vanka1_4	1	GLIDE	18	0.053	Psammal	6
23.10.2017.	Vanka1_4	1	GLIDE	38	0.179	Psammal	7
23.10.2017.	Vanka1_4	1	GLIDE	37	0.179	Psammal	8
23.10.2017.	Vanka1_4	2	GLIDE	38	0.537	Microlithal	1
23.10.2017.	Vanka1_4	2	GLIDE	33	0.179	Psammal	2
23.10.2017.	Vanka1_4	2	GLIDE	27	0.537	Akal	3
23.10.2017.	Vanka1_4	2	GLIDE	31	0.179	Akal	4
23.10.2017.	Vanka1_4	2	GLIDE	24	0.537	Microlithal	5
23.10.2017.	Vanka1_4	2	GLIDE	27	0.716	Psammal	6
23.10.2017.	Vanka1_4	2	GLIDE	18	0.001	Akal	7
23.10.2017.	Vanka1_4	3	GLIDE	27	0.537	Akal	1
23.10.2017.	Vanka1_4	3	GLIDE	31	0.179	Psammal	2
23.10.2017.	Vanka1_4	3	GLIDE	30	0.358	Psammal	3
23.10.2017.	Vanka1_4	3	GLIDE	36	0.179	Psammal	4
23.10.2017.	Vanka1_4	3	GLIDE	28	0.179	Microlithal	5
23.10.2017.	Vanka1_4	3	GLIDE	25	0.001	Psammal	8
23.10.2017.	Vanka1_4	3	GLIDE	8	0.001	Psammal	9
23.10.2017.	Vanka1_4	3	GLIDE	41	0.179	Mesolithal	10
23.10.2017.	Vanka1_4	3	GLIDE	46	0.053	Mesolithal	11
23.10.2017.	Vanka1_4	3	GLIDE	27	0.179	Microlithal	12
23.10.2017.	Vanka1_4	3	GLIDE	24	0.053	Microlithal	14
23.10.2017.	Vanka1_4	3	GLIDE	28	0.358	Microlithal	15
23.10.2017.	Vanka1_4	4	BACKWATER	28	0.001	Mesolithal	1
23.10.2017.	Vanka1_4	5	RIFFLE	28	0.716	Microlithal	13
23.10.2017.	Vanka1_4	5	RIFFLE	37	0.358	Microlithal	6
23.10.2017.	Vanka1_4	5	RIFFLE	28	0.358	Mesolithal	7
23.10.2017.	Vanka1_4	5	RIFFLE	30	0.179	Akal	1
23.10.2017.	Vanka1_4	5	RIFFLE	21	0.001	Psammal	2
23.10.2017.	Vanka1_4	5	RIFFLE	38	0.053	Psammal	3

23.10.2017.	Vanka1_4	5	RIFFLE	27	0.089	Psammal	4
23.10.2017.	Vanka1_4	5	RIFFLE	12	0.537	Mesolithal	1
23.10.2017.	Vanka1_4	5	RIFFLE	33	0.716	Mesolithal	2
23.10.2017.	Vanka1_4	5	RIFFLE	43	0.627	Mesolithal	3
23.10.2017.	Vanka1_4	5	RIFFLE	34	0.179	Mesolithal	4
23.10.2017.	Vanka1_4	5	RIFFLE	33	0.358	Mesolithal	5
23.10.2017.	Vanka1_4	6	SEC_ CHAN	28	0.001	Psammal	1
23.10.2017.	Vanka1_4	6	SEC_ CHAN	14	0.001	Psammal	2
23.10.2017.	Vanka1_4	7	GLIDE	28	0.001	Microlithal	1
23.10.2017.	Vanka1_4	7	GLIDE	21	0.268	Microlithal	2
23.10.2017.	Vanka1_4	7	GLIDE	30	0.179	Microlithal	3
23.10.2017.	Vanka1_4	7	GLIDE	25	0.179	Microlithal	4
23.10.2017.	Vanka1_4	7	GLIDE	27	0.358	Microlithal	5
23.10.2017.	Vanka1_4	7	GLIDE	20	0.537	Microlithal	6
23.10.2017.	Vanka1_4	7	GLIDE	27	0.358	Microlithal	7
23.10.2017.	Vanka1_4	7	GLIDE	25	0.358	Akal	8
23.10.2017.	Vanka2_4	1	GLIDE	38	0.2	Psammal	1
23.10.2017.	Vanka2_4	1	GLIDE	44	0.15	Organic	2
23.10.2017.	Vanka2_4	1	GLIDE	48	0.3	Microlithal	3
23.10.2017.	Vanka2_4	2	GLIDE	68	0.3	Psammal	1
23.10.2017.	Vanka2_4	2	GLIDE	50	0.03	Psammal	2
23.10.2017.	Vanka2_4	2	GLIDE	72	0.4	Microlithal	3
23.10.2017.	Vanka2_4	2	GLIDE	38	0.2	Psammal	4
23.10.2017.	Vanka2_4	2	GLIDE	50	0.4	Psammal	5
23.10.2017.	Vanka2_4	2	GLIDE	48	0.3	Microlithal	6
23.10.2017.	Vanka2_4	2	GLIDE	33	0.05	Psammal	7
23.10.2017.	Vanka2_4	2	GLIDE	10	0.001	Organic	8
23.10.2017.	Vanka2_4	2	GLIDE	25	0.001	Organic	9
23.10.2017.	Vanka2_4	3	SEC_ CHAN	35	0.25	Akal	1
23.10.2017.	Vanka2_4	3	SEC_ CHAN	29	0.15	Psammal	2
23.10.2017.	Vanka2_4	3	SEC_ CHAN	19	0.4	Akal	3
23.10.2017.	Vanka2_4	3	SEC_ CHAN	16	0.3	Psammal	4
23.10.2017.	Vanka2_4	3	SEC_ CHAN_	25	0.4	Psammal	5
23.10.2017.	Vanka2_4	3	SEC_ CHAN	26	0.3	Psammal	6
23.10.2017.	Vanka2_4	3	SEC_ CHAN	25	0.4	Psammal	7
23.10.2017.	Vanka2_4	3	SEC_ CHAN	28	0.3	Microlithal	8
23.10.2017.	Vanka2_4	4	RIFFLE	38	0.5	Akal	1

23.10.2017.	Vanka2_4	4	RIFFLE	45	0.2	Psammal	2
23.10.2017.	Vanka2_4	4	RIFFLE	30	0.3	Microlithal	3
23.10.2017.	Vanka2_4	4	RIFFLE	50	0.5	Akal	4
23.10.2017.	Vanka2_4	4	RIFFLE	39	0.4	Akal	5
23.10.2017.	Vanka2_4	4	RIFFLE	38	0.05	Psammal	6
23.10.2017.	Vanka2_4	5	BACKWATER	56	0.001	Psammal	1
23.10.2017.	Vanka2_4	6	RIFFLE	53	0.6	Akal	1
23.10.2017.	Vanka2_4	6	RIFFLE	49	0.4	Akal	2
23.10.2017.	Vanka2_4	7	POOL	75	0.1	Psammal	1
23.10.2017.	Vanka2_4	8	GLIDE	26	0.1	Psammal	1
23.10.2017.	Vanka2_4	8	GLIDE	49	0.2	Psammal	2
23.10.2017.	Vanka2_4	8	GLIDE	22	0.2	Psammal	3
23.10.2017.	Vanka2_4	8	GLIDE	51	0.4	Akal	4
23.10.2017.	Vanka2_4	8	GLIDE	38	0.4	Psammal	5
23.10.2017.	Vanka2_4	8	GLIDE	49	0.15	Psammal	6
23.10.2017.	Vanka2_4	8	GLIDE	67	0.5	Psammal	7
23.10.2017.	Vanka2_4	8	GLIDE	46	0.1	Psammal	8
23.10.2017.	Vanka2_4	8	GLIDE	67	0.2	Psammal	9
23.10.2017.	Vanka2_4	8	GLIDE	93	0.2	Psammal	10
23.10.2017.	Vanka2_4	8	GLIDE	31	0.35	Akal	11
23.10.2017.	Vanka2_4	8	GLIDE	53	0.3	Mesolithal	12
23.10.2017.	Vanka2_4	8	GLIDE	43	0.4	Akal	13
23.10.2017.	Vanka2_4	8	GLIDE	39	0.3	Psammal	14
23.10.2017.	Vanka2_4	8	GLIDE	46	0.3	Psammal	15
23.10.2017.	Vanka2_4	8	GLIDE	76	0.3	Psammal	16
23.10.2017.	Vanka2_4	8	GLIDE	53	0.1	Psammal	17
23.10.2017.	Vanka2_4	8	GLIDE	47	0.4	Akal	18
23.10.2017.	Vanka3_4	1	GLIDE	21	0.5	Psammal	1
23.10.2017.	Vanka3_4	1	GLIDE	28	0.5	Mesolithal	2
23.10.2017.	Vanka3_4	1	GLIDE	5	0.001	Psammal	3
23.10.2017.	Vanka3_4	1	GLIDE	6	0.001	Psammal	4
23.10.2017.	Vanka3_4	1	GLIDE	15	0.4	Psammal	5
23.10.2017.	Vanka3_4	1	GLIDE	46	0.2	Mesolithal	6
23.10.2017.	Vanka3_4	1	GLIDE	25	0.4	Psammal	7
23.10.2017.	Vanka3_4	1	GLIDE	14	0.3	Psammal	8
23.10.2017.	Vanka3_4	1	GLIDE	11	0.1	Psammal	9
23.10.2017.	Vanka3_4	2	POOL	39	0.1	Psammal	1

23.10.2017.	Vanka3_4	3	RIFFLE	36	0.1	Psammal	1
23.10.2017.	Vanka3_4	3	RIFFLE	35	0.4	Psammal	2
23.10.2017.	Vanka3_4	3	RIFFLE	35	0.2	Psammal	3
23.10.2017.	Vanka3_4	4	SEC_ CHAN	48	0.3	Psammal	1
23.10.2017.	Vanka3_4	4	SEC_ CHAN	12	0.1	Psammal	2
23.10.2017.	Vanka3_4	4	SEC CHAN	42	0.3	Psammal	3
23.10.2017.	Vanka3_4	5	GLIDE	35	0.3	Psammal	1
23.10.2017.	Vanka3_4	5	GLIDE	9	0.35	Psammal	2
23.10.2017.	Vanka3_4	5	GLIDE	27	0.15	Psammal	3
23.10.2017.	Vanka3_4	5	GLIDE	37	0.4	Akal	4
23.10.2017.	Vanka3_4	6	POOL	60	0	Psammal	1
23.10.2017.	Vanka3_4	7	RIFFLE	48	0.2	Psammal	1
23.10.2017.	Vanka3_4	7	RIFFLE	51	0.3	Psammal	2
23.10.2017.	Vanka3_4	7	RIFFLE	19	0.3	Psammal	3
23.10.2017.	Vanka3_4	8	GLIDE	32	0.3	Psammal	1
23.10.2017.	Vanka3_4	8	GLIDE	18	0.001	Psammal	2
23.10.2017.	Vanka3_4	8	GLIDE	41	0.001	Psammal	3
23.10.2017.	Vanka3_4	8	GLIDE	40	0.35	Akal	4
23.10.2017.	Vanka3_4	8	GLIDE	44	0.35	Akal	5
23.10.2017.	Vanka3_4	8	GLIDE	40	0.2	Psammal	6
23.10.2017.	Vanka3_4	8	GLIDE	69	0.3	Psammal	7
23.10.2017.	Vanka3_4	8	GLIDE	40	0.001	Psammal	8
23.10.2017.	Vanka3_4	8	GLIDE	28	0.001	Psammal	9
23.10.2017.	Vanka3_4	8	GLIDE	67	0.3	Psammal	10
23.10.2017.	Vanka3_4	8	GLIDE	10	0.2	Psammal	11
23.10.2017.	Vanka3_4	8	GLIDE	24	0.03	Psammal	12
23.10.2017.	Vanka3_4	8	GLIDE	13	0.2	Psammal	13
23.10.2017.	Vanka3_4	9	RIFFLE	50	0.15	Psammal	1
23.10.2017.	Vanka3_4	9	RIFFLE	38	0.9	Mesolithal	2
23.10.2017.	Vanka3_4	9	RIFFLE	26	0.4	Akal	3
23.10.2017.	Vanka3_4	10	POOL	70	0.001	Psammal	1
23.10.2017.	Vanka3_4	11	POOL	70	0.001	Psammal	1
23.10.2017.	Vanka3_4	12	GLIDE	33	0.15	Psammal	1
23.10.2017.	Vanka3_4	12	GLIDE	49	0.15	Akal	2
23.10.2017.	Vanka3_4	12	GLIDE	34	0.05	Psammal	3
23.10.2017.	Vanka3_4	12	GLIDE	16	0.1	Psammal	4
23.10.2017.	Vanka3_4	12	GLIDE	55	0.2	Psammal	5

23.10.2017.	Vanka3_4	12	GLIDE	54	0.4	Psammal	6
23.10.2017.	Vanka3_4	12	GLIDE	37	0.1	Psammal	7
23.10.2017.	Vanka3_4	12	GLIDE	86	0.2	Psammal	8
23.10.2017.	Vanka3_4	12	GLIDE	16	0.03	Psammal	9
23.10.2017.	Vanka3_4	12	GLIDE	43	0.3	Psammal	10
23.10.2017.	Vanka3_4	12	GLIDE	42	0.15	Psammal	11
23.10.2017.	Vanka3_4	12	GLIDE	77	0.1	Psammal	12
23.10.2017.	Vanka3_4	13	SEC_ CHAN	86	0.2	Psammal	1
23.10.2017.	Vanka3_4	13	SEC_ CHAN	43	0.3	Psammal	2
23.10.2017.	Vanka3_4	13	SEC_ CHAN	42	0.15	Psammal	3
22.10.2017.	Vanka4_4	1	POOL	93	0.1	Psammal	1
22.10.2017.	Vanka4_4	2	POOL	85	0.03	Psammal	1
22.10.2017.	Vanka4_4	3	GLIDE	37	0.5	Psammal	1
22.10.2017.	Vanka4_4	3	GLIDE	93	0.4	Psammal	2
22.10.2017.	Vanka4_4	3	GLIDE	45	0.2	Psammal	3
22.10.2017.	Vanka4_4	3	GLIDE	13	0.2	Psammal	4
22.10.2017.	Vanka4_4	3	GLIDE	21	0.4	Psammal	5
22.10.2017.	Vanka4_4	3	GLIDE	14	0.3	Psammal	6
22.10.2017.	Vanka4_4	3	GLIDE	78	0.4	Psammal	7
22.10.2017.	Vanka4_4	3	GLIDE	59	0.3	Psammal	8
22.10.2017.	Vanka4_4	3	GLIDE	64	0.3	Psammal	9
22.10.2017.	Vanka4_4	3	GLIDE	52	0.3	Psammal	10
22.10.2017.	Vanka4_4	3	GLIDE	87	0.2	Psammal	11
22.10.2017.	Vanka4_4	3	GLIDE	64	0.3	Psammal	12
22.10.2017.	Vanka4_4	3	GLIDE	38	0.15	Psammal	13
22.10.2017.	Vanka4_4	3	GLIDE	87	0.2	Psammal	14
22.10.2017.	Vanka4_4	3	GLIDE	67	0.2	Psammal	15
22.10.2017.	Vanka4_4	3	GLIDE	91	0.2	Psammal	16
22.10.2017.	Vanka4_4	4	RIFFLE	58	0.175	Microlithal	1
22.10.2017.	Vanka4_4	4	RIFFLE	67	0.4	Mesolithal	2
22.10.2017.	Vanka4_4	4	RIFFLE	44	0.35	Mesolithal	3
22.10.2017.	Vanka4_4	5	POOL	91	0.1	Psammal	1
22.10.2017.	Vanka4_4	6	POOL	43	0.03	Psammal	1
22.10.2017.	Vanka4_4	7	BACKWATER	25	0.001	Pelal	1
22.10.2017.	Vanka4_4	8	GLIDE	16	0.001	Psammal	1
22.10.2017.	Vanka4_4	8	GLIDE	53	0.15	Psammal	2
22.10.2017.	Vanka4_4	8	GLIDE	56	0.3	Psammal	3

22.10.2017.	Vanka4_4	8	GLIDE	54	0.2	Mesolithal	4
22.10.2017.	Vanka4_4	8	GLIDE	20	0.001	Pelal	5
22.10.2017.	Vanka4_4	8	GLIDE	47	0.2	Psammal	6
22.10.2017.	Vanka4_4	8	GLIDE	25	0.001	Pelal	7
22.10.2017.	Vanka4_4	8	GLIDE	72	0.3	Mesolithal	8
22.10.2017.	Vanka4_4	8	GLIDE	85	0.2	Pelal	9
22.10.2017.	Vanka4_4	8	GLIDE	83	0.2	Psammal	10
22.10.2017.	Vanka4_4	8	GLIDE	63	0.2	Mesolithal	11
02.08.2017.	Eda1_1	1	AQUAT_VEG	25	0.247	Microlithal	1
02.08.2017.	Eda1_1	1	AQUAT_ VEG	26	0.148	Akal	2
02.08.2017.	Eda1_1	1	AQUAT_ VEG	27	0.196	Akal	3
02.08.2017.	Eda1_1	1	AQUAT_ VEG	22	0.326	Akal	4
02.08.2017.	Eda1_1	1	AQUAT_VEG	25	0.25	Akal	5
02.08.2017.	Eda1_1	1	AQUAT_ VEG	29	0.21	Akal	6
02.08.2017.	Eda1_1	1	AQUAT_ VEG	26	0.251	Akal	7
02.08.2017.	Eda1_1	1	AQUAT_ VEG	27	0.153	Akal	8
02.08.2017.	Eda1_1	1	AQUAT_ VEG	27	0.075	Akal	9
02.08.2017.	Eda1_1	1	AQUAT_ VEG	23	0.276	Akal	10
02.08.2017.	Eda1_1	2	GLIDE	29	0.073	Akal	1
02.08.2017.	Eda1_1	2	GLIDE	28	0.175	Akal	2
02.08.2017.	Eda1_1	2	GLIDE	27	0.12	Akal	3
02.08.2017.	Eda1_1	2	GLIDE	28	0.153	Akal	4
02.08.2017.	Eda1_1	2	GLIDE	26	0.11	Akal	5
02.08.2017.	Eda1_1	2	GLIDE	25	0.13	Akal	6
02.08.2017.	Eda1_1	2	GLIDE	23	0.172	Akal	7
02.08.2017.	Eda1_1	3	GLIDE	22	0.219	Microlithal	1
02.08.2017.	Eda1_1	3	GLIDE	22	0.141	Psammal	2
02.08.2017.	Eda1_1	3	GLIDE	31	0.124	Psammal	3
02.08.2017.	Eda1_1	3	GLIDE	34	0.113	Psammal	4
02.08.2017.	Eda1_1	3	GLIDE	37	0.204	Microlithal	5
02.08.2017.	Eda1_1	4	POOL	51	0.227	Microlithal	1
02.08.2017.	Eda1_1	4	POOL	65	0.182	Psammal	2
02.08.2017.	Eda1_1	4	POOL	68	0.163	Psammal	3
02.08.2017.	Eda1_1	5	GLIDE	24	0.05	Psammal	1
02.08.2017.	Eda1_1	5	GLIDE	27	0.001	Psammal	2
02.08.2017.	Eda1_1	5	GLIDE	28	0.145	Psammal	3
02.08.2017.	Eda1_1	5	GLIDE	26	0.09	Psammal	4

02.08.2017.	Eda1_1	5	GLIDE	28	0.122	Psammal	5
02.08.2017.	Eda1_1	5	GLIDE	19	0.153	Psammal	6
02.08.2017.	Eda1_1	5	GLIDE	32	0.155	Psammal	7
02.08.2017.	Eda1_1	6	GLIDE	29	0.032	Microlithal	1
02.08.2017.	Eda1_1	6	GLIDE	29	0.093	Microlithal	2
02.08.2017.	Eda1_1	6	GLIDE	26	0.131	Psammal	3
02.08.2017.	Eda1_1	6	GLIDE	26	0.281	Microlithal	4
02.08.2017.	Eda1_1	6	GLIDE	26	0.107	Akal	5
02.08.2017.	Eda1_1	6	GLIDE	26	0.04	Psammal	6
02.08.2017.	Eda1_1	6	GLIDE	19	0.167	Psammal	7
02.08.2017.	Eda1_1	7	GLIDE	32	0.061	Akal	1
02.08.2017.	Eda1_1	7	GLIDE	40	0.072	Akal	2
02.08.2017.	Eda1_1	7	GLIDE	47	0.188	Akal	3
02.08.2017.	Eda1_1	7	GLIDE	50	0.053	Akal	4
02.08.2017.	Eda1_1	7	GLIDE	40	0.278	Akal	5
02.08.2017.	Eda1_1	7	GLIDE	41	0.08	Akal	6
02.08.2017.	Eda1_1	7	GLIDE	48	0.209	Microlithal	7
03.08.2017.	Eda2_1	1	GLIDE	77	0.118	Akal	1
03.08.2017.	Eda2_1	1	GLIDE	62	0.056	Akal	2
03.08.2017.	Eda2_1	1	GLIDE	58	0.124	Akal	3
03.08.2017.	Eda2_1	1	GLIDE	56	0.13	Akal	4
03.08.2017.	Eda2_1	1	GLIDE	45	0.115	Psammal	5
03.08.2017.	Eda2_1	1	GLIDE	46	0.135	Psammal	6
03.08.2017.	Eda2_1	1	GLIDE	53	0.178	Psammal	7
03.08.2017.	Eda2_1	2	POOL	77	0.062	Psammal	1
03.08.2017.	Eda2_1	2	POOL	90	0.023	Psammal	2
03.08.2017.	Eda2_1	2	POOL	101	0.059	ORGANIC	3
03.08.2017.	Eda2_1	2	POOL	95	0.04	ORGANIC	4
03.08.2017.	Eda2_1	2	POOL	86	0.076	ORGANIC	5
03.08.2017.	Eda2_1	2	POOL	90	0.108	ORGANIC	6
03.08.2017.	Eda2_1	2	POOL	90	0.077	ORGANIC	7
03.08.2017.	Eda2_1	3	GLIDE	35	0.007	ORGANIC	1
03.08.2017.	Eda2_1	3	GLIDE	35	0.059	ORGANIC	2
03.08.2017.	Eda2_1	3	GLIDE	29	0.117	Psammal	3
03.08.2017.	Eda2_1	3	GLIDE	31	0.061	Psammal	4
03.08.2017.	Eda2_1	3	GLIDE	33	0.045	Psammal	5
03.08.2017.	Eda2_1	4	POOL	101	0.081	Psammal	1

03.08.2017.	Eda2_1	4	POOL	92	0.067	Psammal	2
03.08.2017.	Eda2_1	4	POOL	111	0.069	Psammal	3
03.08.2017.	Eda2_1	4	POOL	127	0.073	Pelal	4
03.08.2017.	Eda2_1	5	GLIDE	68	0.001	Psammal	1
03.08.2017.	Eda2_1	5	GLIDE	52	0.003	Psammal	2
03.08.2017.	Eda2_1	5	GLIDE	72	0.01	Psammal	3
03.08.2017.	Eda2_1	5	GLIDE	63	0.048	Psammal	4
03.08.2017.	Eda2_1	5	GLIDE	64	0.034	Psammal	5
03.08.2017.	Eda2_1	6	GLIDE	56	0.062	Pelal	1
03.08.2017.	Eda2_1	6	GLIDE	54	0.06	Pelal	2
03.08.2017.	Eda2_1	6	GLIDE	62	0.128	Psammal	3
03.08.2017.	Eda2_1	6	GLIDE	61	0.197	Psammal	4
03.08.2017.	Eda2_1	6	GLIDE	61	0.078	Psammal	5
03.08.2017.	Eda2_1	6	GLIDE	68	0.177	Psammal	6
03.08.2017.	Eda2_1	6	GLIDE	67	0.046	Pelal	7
03.08.2017.	Eda2_1	7	GLIDE	65	0.129	Psammal	1
03.08.2017.	Eda2_1	7	GLIDE	54	0.1	Psammal	2
03.08.2017.	Eda2_1	7	GLIDE	49	0.177	Psammal	3
03.08.2017.	Eda2_1	7	GLIDE	47	0.178	Psammal	4
03.08.2017.	Eda2_1	7	GLIDE	56	0.146	Psammal	5
03.08.2017.	Eda2_1	7	GLIDE	54	0.132	Psammal	6
03.08.2017.	Eda2_1	7	GLIDE	53	0.016	Psammal	7
03.08.2017.	Eda2_1	8	POOL	95	0.059	Psammal	1
03.08.2017.	Eda2_1	8	POOL	99	0.065	Psammal	2
03.08.2017.	Eda2_1	8	POOL	87	0.119	Psammal	3
03.08.2017.	Eda2_1	8	POOL	104	0.037	Pelal	4
03.08.2017.	Eda2_1	8	POOL	58	0.163	Akal	5
03.08.2017.	Eda2_1	8	POOL	59	0.052	Pelal	6
03.08.2017.	Eda2_1	8	POOL	56	0.122	Psammal	7
03.08.2017.	Eda2_1	8	POOL	62	0.115	Psammal	8
03.08.2017.	Eda2_1	8	POOL	79	0.153	Pelal	9
03.08.2017.	Eda3_1	1	GLIDE	36	0.245	Akal	1
03.08.2017.	Eda3_1	1	GLIDE	34	0.284	Akal	2
03.08.2017.	Eda3_1	1	GLIDE	37	0.05	Akal	3
03.08.2017.	Eda3_1	1	GLIDE	44	0.133	Akal	4
03.08.2017.	Eda3_1	1	GLIDE	43	0.06	Psammal	5
03.08.2017.	Eda3_1	1	GLIDE	48	0.141	Microlithal	6

03.08.2017.	Eda3_1	1	GLIDE	40	0.127	Microlithal	7
03.08.2017.	Eda3_1	1	GLIDE	28	0.054	Psammal	8
03.08.2017.	Eda3_1	1	GLIDE	30	0.101	Psammal	9
03.08.2017.	Eda3_1	1	GLIDE	30	0.117	Psammal	10
03.08.2017.	Eda3_1	1	GLIDE	20	0.075	Psammal	11
03.08.2017.	Eda3_1	1	GLIDE	23	0.113	Psammal	12
03.08.2017.	Eda3_1	2	POOL	43	0.052	Microlithal	1
03.08.2017.	Eda3_1	2	POOL	39	0.033	Microlithal	2
03.08.2017.	Eda3_1	2	POOL	55	0.02	Microlithal	3
03.08.2017.	Eda3_1	2	POOL	36	0.025	Microlithal	4
03.08.2017.	Eda3_1	2	POOL	49	0.088	Microlithal	5
03.08.2017.	Eda3_1	3	GLIDE	48	0.107	Microlithal	1
03.08.2017.	Eda3_1	3	GLIDE	45	0.146	Microlithal	2
03.08.2017.	Eda3_1	3	GLIDE	52	0.227	Microlithal	3
03.08.2017.	Eda3_1	3	GLIDE	52	0.072	Microlithal	4
03.08.2017.	Eda3_1	3	GLIDE	50	0.163	Microlithal	5
03.08.2017.	Eda3_1	3	GLIDE	54	0.084	Microlithal	6
03.08.2017.	Eda3_1	3	GLIDE	29	0.122	Akal	7
03.08.2017.	Eda3_1	3	GLIDE	46	0.083	Pelal	8
03.08.2017.	Eda3_1	3	GLIDE	42	0.12	Psammal	9
03.08.2017.	Eda3_1	3	GLIDE	42	0.094	Psammal	10
03.08.2017.	Eda3_1	3	GLIDE	45	0.031	Psammal	11
03.08.2017.	Eda3_1	3	GLIDE	52	0.091	Psammal	12
03.08.2017.	Eda3_1	3	GLIDE	40	0.123	Psammal	13
03.08.2017.	Eda3_1	3	GLIDE	43	0.121	Psammal	14
03.08.2017.	Eda3_1	4	GLIDE	44	0.041	Psammal	1
03.08.2017.	Eda3_1	4	GLIDE	48	0.053	Psammal	2
03.08.2017.	Eda3_1	4	GLIDE	52	0.04	Psammal	3
03.08.2017.	Eda3_1	4	GLIDE	46	0.106	Psammal	4
03.08.2017.	Eda3_1	4	GLIDE	46	0.117	Psammal	5
03.08.2017.	Eda3_1	4	GLIDE	37	0.153	Psammal	6
03.08.2017.	Eda3_1	4	GLIDE	43	0.286	Psammal	7
03.08.2017.	Eda3_1	5	GLIDE	23	0.105	Psammal	1
03.08.2017.	Eda3_1	5	GLIDE	25	0.069	Psammal	2
03.08.2017.	Eda3_1	5	GLIDE	23	0.093	Psammal	3
03.08.2017.	Eda3_1	5	GLIDE	26	0.03	Pelal	4
03.08.2017.	Eda3_1	5	GLIDE	36	0.085	Psammal	5

03.08.2017.	Eda3_1	5	GLIDE	42	0.042	Pelal	6
03.08.2017.	Eda3_1	5	GLIDE	24	0.069	Psammal	7
04.08.2017.	Eda4_1	1	AQUAT_ VEG	14	0.135	Psammal	1
04.08.2017.	Eda4_1	1	AQUAT_ VEG	12	0.138	Psammal	2
04.08.2017.	Eda4_1	1	AQUAT_ VEG	26	0.163	Psammal	3
04.08.2017.	Eda4_1	1	AQUAT_ VEG	35	0.214	Psammal	4
04.08.2017.	Eda4_1	1	AQUAT_ VEG	22	0.081	Psammal	5
04.08.2017.	Eda4_1	1	AQUAT_ VEG	21	0.072	Psammal	6
04.08.2017.	Eda4_1	1	AQUAT_ VEG	22	0.134	Psammal	7
04.08.2017.	Eda4_1	1	AQUAT_ VEG	22	0.159	Psammal	8
04.08.2017.	Eda4_1	1	AQUAT_ VEG	24	0.131	Psammal	9
04.08.2017.	Eda4_1	1	AQUAT_ VEG	31	0.022	Psammal	10
04.08.2017.	Eda4_1	1	AQUAT_VEG	32	0.129	Psammal	11
04.08.2017.	Eda4_1	1	AQUAT_ VEG	36	0.153	Psammal	12
04.08.2017.	Eda4_1	2	GLIDE	10	0.01	Pelal	1
04.08.2017.	Eda4_1	2	GLIDE	8	0.01	Pelal	2
04.08.2017.	Eda4_1	2	GLIDE	7	0.01	Pelal	3
04.08.2017.	Eda4_1	3	POOL	43	0.069	Psammal	1
04.08.2017.	Eda4_1	3	POOL	45	0.116	Psammal	2
04.08.2017.	Eda4_1	3	POOL	56	0.119	Psammal	3
04.08.2017.	Eda4_1	4	POOL	61	0.075	Psammal	1
04.08.2017.	Eda4_1	4	POOL	50	0.053	Psammal	2
04.08.2017.	Eda4_1	4	POOL	47	0.046	Psammal	3
04.08.2017.	Eda4_1	5	GLIDE	26	0.016	Psammal	1
04.08.2017.	Eda4_1	5	GLIDE	22	0.077	Psammal	2
04.08.2017.	Eda4_1	5	GLIDE	29	0.061	Psammal	3
04.08.2017.	Eda4_1	5	GLIDE	28	0.07	Psammal	4
04.08.2017.	Eda4_1	5	GLIDE	30	0.014	Psammal	5
04.08.2017.	Eda4_1	5	GLIDE	28	0.024	Psammal	6
04.08.2017.	Eda4_1	5	GLIDE	40	0.085	Psammal	7
04.08.2017.	Eda4_1	5	GLIDE	16	0.105	Psammal	8
04.08.2017.	Eda4_1	5	GLIDE	13	0.068	Psammal	9
04.08.2017.	Eda4_1	5	GLIDE	20	0.01	Pelal	10
04.08.2017.	Eda4_1	5	GLIDE	20	0.027	Psammal	11
04.08.2017.	Eda4_1	5	GLIDE	21	0.02	Psammal	12
04.08.2017.	Eda4_1	5	GLIDE	11	0.095	Psammal	13
04.08.2017.	Eda4_1	5	GLIDE	10	0.01	Pelal	14

04.08.2017.	Eda4_1	6	GLIDE	23	0.184	Psammal	1
04.08.2017.	Eda4_1	6	GLIDE	27	0.154	Psammal	2
04.08.2017.	Eda4_1	6	GLIDE	35	0.164	Microlithal	3
04.08.2017.	Eda4_1	6	GLIDE	30	0.037	Psammal	4
04.08.2017.	Eda4_1	6	GLIDE	51	0.014	Psammal	5
04.08.2017.	Eda4_1	6	GLIDE	41	0.072	Psammal	6
04.08.2017.	Eda4_1	6	GLIDE	39	0.119	Psammal	7
04.08.2017.	Eda4_1	6	GLIDE	28	0.081	Psammal	8
04.08.2017.	Eda4_1	6	GLIDE	29	0.033	Psammal	9
04.08.2017.	Eda4_1	6	GLIDE	42	0.033	Psammal	10
04.09.2017	Eda1_2	1	AQUAT_ VEG	2	0.2	Akal	1
04.09.2017	Eda1_2	1	AQUAT_ VEG	19	0.3	Akal	2
04.09.2017	Eda1_2	1	AQUAT_ VEG	25	0.3	Akal	3
04.09.2017	Eda1_2	1	AQUAT_VEG	24	0.2	Akal	4
04.09.2017	Eda1_2	1	AQUAT_ VEG	22	0.3	Akal	5
04.09.2017	Eda1_2	1	AQUAT_ VEG	27	0.1	Akal	6
04.09.2017	Eda1_2	1	AQUAT_ VEG	22	0.1	Akal	7
04.09.2017	Eda1_2	1	AQUAT_ VEG	25	0.2	Akal	8
04.09.2017	Eda1_2	1	AQUAT_ VEG	20	0.2	Akal	9
04.09.2017	Eda1_2	1	AQUAT_ VEG	24	0.1	Akal	10
04.09.2017	Eda1_2	2	GLIDE	23	0.1	Akal	1
04.09.2017	Eda1_2	2	GLIDE	21	0.1	Akal	2
04.09.2017	Eda1_2	2	GLIDE	19	0.2	Microlithal	3
04.09.2017	Eda1_2	2	GLIDE	20	0.2	Microlithal	4
04.09.2017	Eda1_2	2	GLIDE	22	0.1	Microlithal	5
04.09.2017	Eda1_2	2	GLIDE	22	0.1	Microlithal	6
04.09.2017	Eda1_2	2	GLIDE	20	0.2	Microlithal	7
04.09.2017	Eda1_2	2	GLIDE	20	0.2	Microlithal	8
04.09.2017	Eda1_2	2	GLIDE	20	0.2	Akal	9
04.09.2017	Eda1_2	3	GLIDE	28	0.1	Akal	1
04.09.2017	Eda1_2	3	GLIDE	27	0.1	Akal	2
04.09.2017	Eda1_2	3	GLIDE	27	0.1	Microlithal	3
04.09.2017	Eda1_2	3	GLIDE	43	0.1	Microlithal	4
04.09.2017	Eda1_2	3	GLIDE	36	0.1	ORGANIC	5
04.09.2017	Eda1_2	3	GLIDE	55	0.1	Microlithal	6
04.09.2017	Eda1_2	3	GLIDE	32	0.1	Microlithal	7
04.09.2017	Eda1_2	3	GLIDE	40	0.009	ORGANIC	8

04.09.2017	Eda1_2	3	GLIDE	54	0.1	Microlithal	9
04.09.2017	Eda1_2	3	GLIDE	27	0.1	Microlithal	10
04.09.2017	Eda1_2	4	POOL	64	0.1	Microlithal	1
04.09.2017	Eda1_2	5	AQUAT_ VEG	34	0.1	Microlithal	1
04.09.2017	Eda1_2	5	AQUAT_ VEG	22	0.1	Microlithal	2
04.09.2017	Eda1_2	5	AQUAT_ VEG	29	0.009	Pelal	3
04.09.2017	Eda1_2	5	AQUAT_ VEG	28	0.1	Pelal	4
04.09.2017	Eda1_2	5	AQUAT_ VEG	27	0.2	Microlithal	5
04.09.2017	Eda1_2	5	AQUAT_VEG	24	0.1	Pelal	6
04.09.2017	Eda1_2	5	AQUAT_ VEG	34	0.1	Pelal	7
04.09.2017	Eda1_2	5	AQUAT_ VEG	32	0.1	Pelal	8
04.09.2017	Eda1_2	5	AQUAT_ VEG	36	0.1	Microlithal	9
04.09.2017	Eda1_2	6	POOL	50	0.1	Microlithal	1
04.09.2017	Eda1_2	6	POOL	43	0.1	Mesolithal	2
04.09.2017	Eda1_2	6	POOL	74	0.009	Mesolithal	3
04.09.2017	Eda1_2	6	POOL	82	0.009	Mesolithal	4
04.09.2017	Eda1_2	6	POOL	73	0.009	Mesolithal	5
04.09.2017	Eda1_2	6	POOL	51	0.009	Mesolithal	6
04.09.2017	Eda1_2	7	POOL	64	0.1	Microlithal	1
05.09.2017	Eda2_2	1	GLIDE	71	0.2	Psammal	1
05.09.2017	Eda2_2	1	GLIDE	44	0.1	Psammal	2
05.09.2017	Eda2_2	1	GLIDE	61	0.2	Psammal	3
05.09.2017	Eda2_2	1	GLIDE	84	0.1	Psammal	4
05.09.2017	Eda2_2	1	GLIDE	38	0.1	Psammal	5
05.09.2017	Eda2_2	1	GLIDE	92	0.1	Psammal	6
05.09.2017	Eda2_2	1	GLIDE	80	0.009	Pelal	7
05.09.2017	Eda2_2	1	GLIDE	63	0.2	Psammal	8
05.09.2017	Eda2_2	1	GLIDE	64	0.2	Psammal	9
05.09.2017	Eda2_2	2	POOL	58	0.1	Psammal	1
05.09.2017	Eda2_2	2	POOL	89	0.001	Psammal	2
05.09.2017	Eda2_2	2	POOL	89	0.1	Psammal	3
05.09.2017	Eda2_2	3	GLIDE	69	0.3	Psammal	1
05.09.2017	Eda2_2	4	POOL	100	0.1	Psammal	1
05.09.2017	Eda3_2	1	GLIDE	45	0.3	Psammal	1
05.09.2017	Eda3_2	1	GLIDE	37	0.1	Psammal	2
05.09.2017	Eda3_2	1	GLIDE	49	0.2	Microlithal	3
05.09.2017	Eda3_2	1	GLIDE	40	0.1	Mesolithal	4

05.09.2017	Eda3_2	1	GLIDE	51	0.1	Psammal	5
05.09.2017	Eda3_2	1	GLIDE	44	0.1	Mesolithal	6
05.09.2017	Eda3_2	1	GLIDE	59	0.3	Mesolithal	7
05.09.2017	Eda3_2	1	GLIDE	54	0.2	Microlithal	8
05.09.2017	Eda3_2	1	GLIDE	53	0.2	Microlithal	9
05.09.2017	Eda3_2	1	GLIDE	46	0.1	Microlithal	10
05.09.2017	Eda3_2	1	GLIDE	42	0.1	Microlithal	11
05.09.2017	Eda3_2	1	GLIDE	34	0.2	Microlithal	12
05.09.2017	Eda3_2	1	GLIDE	32	0.3	Microlithal	13
05.09.2017	Eda3_2	2	RIFFLE	25	0.3	Mesolithal	1
05.09.2017	Eda3_2	2	RIFFLE	20	0.2	Mesolithal	2
05.09.2017	Eda3_2	2	RIFFLE	31	0.4	Mesolithal	3
05.09.2017	Eda3_2	2	RIFFLE	21	0.01	Pelal	4
05.09.2017	Eda3_2	2	RIFFLE	29	0.4	Mesolithal	5
05.09.2017	Eda3_2	2	RIFFLE	28	0.4	Mesolithal	6
05.09.2017	Eda3_2	2	RIFFLE	18	0.4	Mesolithal	7
05.09.2017	Eda3_2	2	RIFFLE	45	0.3	Mesolithal	8
05.09.2017	Eda3_2	2	RIFFLE	24	0.1	Mesolithal	9
05.09.2017	Eda3_2	2	RIFFLE	20	0.2	Pelal	10
05.09.2017	Eda3_2	2	RIFFLE	45	0.3	Psammal	11
05.09.2017	Eda3_2	2	RIFFLE	35	0.2	Mesolithal	12
05.09.2017	Eda3_2	2	RIFFLE	35	0.3	Mesolithal	13
05.09.2017	Eda3_2	2	RIFFLE	40	0.2	Mesolithal	14
05.09.2017	Eda3_2	2	RIFFLE	34	0.3	Mesolithal	15
05.09.2017	Eda3_2	2	RIFFLE	36	0.2	Akal	16
05.09.2017	Eda4_2	1	AQUAT_ VEG	26	0.1	Psammal	1
05.09.2017	Eda4_2	1	AQUAT_ VEG	27	0.3	Pelal	3
05.09.2017	Eda4_2	1	AQUAT_ VEG	22	0.2	Psammal	4
05.09.2017	Eda4_2	1	AQUAT_ VEG	42	0.1	Psammal	5
05.09.2017	Eda4_2	1	AQUAT_ VEG	39	0.2	Psammal	6
05.09.2017	Eda4_2	2	POOL	46	0.03	Psammal	1
05.09.2017	Eda4_2	3	GLIDE	38	0.2	Psammal	1
05.09.2017	Eda4_2	3	GLIDE	46	0.1	Psammal	2
05.09.2017	Eda4_2	3	GLIDE	36	0.2	Psammal	3
05.09.2017	Eda4_2	3	GLIDE	34	0.2	Psammal	4
05.09.2017	Eda4_2	3	GLIDE	39	0.01	Pelal	5
05.09.2017	Eda4_2	3	GLIDE	36	0.1	Psammal	6

05.09.2017	Eda4_2	3	GLIDE	27	0	Psammal	7
05.09.2017	Eda4_2	3	GLIDE	35	0.1	Psammal	8
05.09.2017	Eda4_2	4	GLIDE	3	0.01	Psammal	1
05.09.2017	Eda4_2	5	POOL	68	0.009	Psammal	1
05.09.2017	Eda4_2	5	POOL	85	0.009	Pelal	2
05.09.2017	Eda4_2	6	POOL	46	0.03	Psammal	1
05.09.2017	Eda4_2	7	GLIDE	8	0.1	Psammal	1
25.09.2017	Eda1	1	GLIDE	29	0.5	Akal	1
25.09.2017	Eda1	1	GLIDE	32	0.4	Akal	2
25.09.2017	Eda1	1	GLIDE	37	0.4	Microlithal	3
25.09.2017	Eda1	1	GLIDE	33	0.4	Microlithal	4
25.09.2017	Eda1	1	GLIDE	35	0.5	Akal	5
25.09.2017	Eda1	1	GLIDE	33	0.5	Akal	6
25.09.2017	Eda1	1	GLIDE	36	0.5	Akal	7
25.09.2017	Eda1	1	GLIDE	32	0.6	Akal	8
25.09.2017	Eda1	1	GLIDE	30	0.4	Akal	9
25.09.2017	Eda1	1	GLIDE	29	0.5	Akal	10
25.09.2017	Eda1	1	GLIDE	35	0.5	Akal	11
25.09.2017	Eda1	1	GLIDE	36	0.3	Akal	12
25.09.2017	Eda1	2	POOL	51	0.5	Akal	1
25.09.2017	Eda1	2	POOL	74	0.2	Akal	2
25.09.2017	Eda1	2	POOL	70	0.2	Akal	3
25.09.2017	Eda1	2	POOL	55	0.4	Akal	4
25.09.2017	Eda1	3	GLIDE	41	0.2	Akal	1
25.09.2017	Eda1	3	GLIDE	45	0.4	Akal	2
25.09.2017	Eda1	3	GLIDE	54	0.4	Akal	3
25.09.2017	Eda1	3	GLIDE	29	0.5	Akal	4
25.09.2017	Eda1	3	GLIDE	38	0.65	Akal	5
25.09.2017	Eda1	3	GLIDE	39	0.4	Akal	6
25.09.2017	Eda1	3	GLIDE	37	0.5	Akal	7
25.09.2017	Eda1	3	GLIDE	46	0.5	Akal	8
25.09.2017	Eda1	4	POOL	57	0.1	Akal	1
25.09.2017	Eda1	4	POOL	66	0.4	Microlithal	2
25.09.2017	Eda1	4	POOL	71	0.3	Microlithal	3
25.09.2017	Eda1	4	POOL	64	0.03	Microlithal	4
25.09.2017	Eda1	5	GLIDE	34	0.1	Microlithal	1
25.09.2017	Eda1	5	GLIDE	63	0.2	Microlithal	2

25.09.2017	Eda2	1	GLIDE	58	0.6	Microlithal	1
25.09.2017	Eda2	1	GLIDE	100	0.6	Microlithal	2
25.09.2017	Eda2	1	GLIDE	92	0.4	Psammal	3
25.09.2017	Eda2	1	GLIDE	73	0.2	Psammal	4
25.09.2017	Eda2	1	GLIDE	91	0.3	Psammal	5
25.09.2017	Eda2	1	GLIDE	37	0.2	Psammal	6
25.09.2017	Eda2	1	GLIDE	67	0.2	Psammal	7
25.09.2017	Eda2	2	POOL	54	0.3	Psammal	1
25.09.2017	Eda2	2	POOL	69	0.35	Psammal	2
25.09.2017	Eda2	2	POOL	92	0.03	Psammal	3
25.09.2017	Eda2	3	POOL	110	0.25	Psammal	1
25.09.2017	Eda2	4	GLIDE	100	0.1	Psammal	1
26.09.2017	Eda3	1	GLIDE	69	0.4	Microlithal	1
26.09.2017	Eda3	1	GLIDE	55	0.2	Microlithal	2
26.09.2017	Eda3	1	GLIDE	55	0.3	Microlithal	3
26.09.2017	Eda3	1	GLIDE	67	0.2	Microlithal	4
26.09.2017	Eda3	1	GLIDE	57	0.3	Microlithal	5
26.09.2017	Eda3	1	GLIDE	65	0.4	Microlithal	6
26.09.2017	Eda3	2	BACKWATER	25	0	Pelal	1
26.09.2017	Eda3	3	GLIDE	58	0.3	Microlithal	1
26.09.2017	Eda3	3	GLIDE	48	0.3	Microlithal	2
26.09.2017	Eda3	3	GLIDE	42	0.6	Microlithal	3
26.09.2017	Eda3	4	RIFFLE	38	0.792	Microlithal	1
26.09.2017	Eda3	4	RIFFLE	42	0.629	Microlithal	2
26.09.2017	Eda3	4	RIFFLE	30	0.899	Microlithal	3
26.09.2017	Eda3	4	RIFFLE	48	0.684	Microlithal	4
26.09.2017	Eda3	4	RIFFLE	50	0.401	Microlithal	5
26.09.2017	Eda3	4	RIFFLE	34	0.487	Microlithal	6
26.09.2017	Eda3	4	RIFFLE	55	0.573	Microlithal	7
26.09.2017	Eda3	4	RIFFLE	25	0.001	Psammal	8
26.09.2017	Eda3	4	RIFFLE	50	0.590	Microlithal	9
26.09.2017	Eda4	1	GLIDE	20	0.340	Psammal	1
26.09.2017	Eda4	1	GLIDE	50	0.375	Psammal	2
26.09.2017	Eda4	1	GLIDE	49	0.444	Psammal	3
26.09.2017	Eda4	1	GLIDE	65	0.414	Psammal	4
26.09.2017	Eda4	1	GLIDE	75	0.306	Psammal	5
26.09.2017	Eda4	1	GLIDE	30	0.332	Psammal	6

26.09.2017	Eda4	2	POOL	72	0.289	Psammal	1
26.09.2017	Eda4	3	GLIDE	61	0.396	Psammal	1
26.09.2017	Eda4	3	GLIDE	68	0.474	Psammal	2
26.09.2017	Eda4	3	GLIDE	28	0.181	Psammal	3
26.09.2017	Eda4	3	GLIDE	31	0.159	Psammal	4
26.09.2017	Eda4	3	GLIDE	58	0.641	Psammal	5
26.09.2017	Eda4	3	GLIDE	65	0.211	Psammal	6
26.09.2017	Eda4	3	GLIDE	68	0.310	Psammal	7
26.09.2017	Eda4	4	BACKWATER	10	0.001	Psammal	1
26.09.2017	Eda4	4	BACKWATER	27	0.001	Psammal	2
26.09.2017	Eda4	4	BACKWATER	11	0.001	Psammal	3
26.09.2017	Eda4	5	GLIDE	52	0.254	Psammal	1
26.09.2017	Eda4	5	GLIDE	32	0.366	Pelal	2
26.09.2017	Eda4	5	GLIDE	73	0.409	Pelal	3
26.09.2017	Eda4	5	GLIDE	55	0.088	Pelal	4
26.09.2017	Eda4	6	POOL	75	0.27	Psammal	1
10.08.2017	Ciecere1	1	RIFFLE	29	0.58	Microlithal	1
10.08.2017	Ciecere1	1	RIFFLE	20	0.33	Microlithal	2
10.08.2017	Ciecere1	1	RIFFLE	27	0.4	Microlithal	3
10.08.2017	Ciecere1	1	RIFFLE	30	0.387	Microlithal	4
10.08.2017	Ciecere1	1	RIFFLE	38	0.084	Microlithal	5
10.08.2017	Ciecere1	1	RIFFLE	22	0.364	Microlithal	6
10.08.2017	Ciecere1	1	RIFFLE	28	0.444	Psammal	7
10.08.2017	Ciecere1	2	GLIDE	48	0.16	Akal	1
10.08.2017	Ciecere1	2	GLIDE	56	0.315	Akal	2
10.08.2017	Ciecere1	2	GLIDE	80	0.197	Psammal	3
10.08.2017	Ciecere1	2	GLIDE	68	0.203	Psammal	4
10.08.2017	Ciecere1	2	GLIDE	60	0.089	Psammal	5
10.08.2017	Ciecere1	3	RIFFLE	31	0.634	Akal	1
10.08.2017	Ciecere1	3	RIFFLE	34	0.39	Psammal	2
10.08.2017	Ciecere1	3	RIFFLE	26	0.491	Psammal	3
10.08.2017	Ciecere1	3	RIFFLE	46	0.099	Akal	4
10.08.2017	Ciecere1	3	RIFFLE	29	0.053	Akal	5
10.08.2017	Ciecere1	3	RIFFLE	51	0.274	Akal	6
10.08.2017	Ciecere1	4	GLIDE	30	0.139	Psammal	1
10.08.2017	Ciecere1	4	GLIDE	45	0.245	Psammal	2
10.08.2017	Ciecere1	4	GLIDE	45	0.226	Akal	3

10.08.2017	Ciecere1	4	GLIDE	48	0.221	Psammal	4
10.08.2017	Ciecere1	4	GLIDE	47	0.188	Microlithal	5
10.08.2017	Ciecere1	4	GLIDE	45	0.082	Psammal	6
10.08.2017	Ciecere1	4	GLIDE	36	0.262	Psammal	7
10.08.2017	Ciecere1	5	RIFFLE	48	0.14	Akal	1
10.08.2017	Ciecere1	5	RIFFLE	40	0.6	Akal	2
10.08.2017	Ciecere1	5	RIFFLE	41	0.59	Akal	3
10.08.2017	Ciecere1	5	RIFFLE	27	0.44	Akal	4
10.08.2017	Ciecere1	5	RIFFLE	70	0.27	Akal	5
10.08.2017	Ciecere1	5	RIFFLE	60	0.3	Akal	6
10.08.2017	Ciecere1	5	RIFFLE	32	0.15	Psammal	7
10.08.2017	Ciecere1	6	GLIDE	48	0.148	Psammal	1
10.08.2017	Ciecere1	6	GLIDE	60	0.071	Akal	2
10.08.2017	Ciecere1	6	GLIDE	57	0.077	Akal	3
10.08.2017	Ciecere1	6	GLIDE	46	0.116	Psammal	4
10.08.2017	Ciecere1	6	GLIDE	49	0.062	Psammal	5
10.08.2017	Ciecere1	6	GLIDE	40	0.1	Psammal	6
10.08.2017	Ciecere1	6	GLIDE	48	0.128	Psammal	7
10.08.2017	Ciecere1	7	AQUAT_ VEG	42	0.144	Psammal	1
10.08.2017	Ciecere1	7	AQUAT_ VEG	46	0.053	Psammal	2
10.08.2017	Ciecere1	7	AQUAT_ VEG	40	0.119	Psammal	3
10.08.2017	Ciecere1	7	AQUAT_ VEG	42	0.167	Psammal	4
10.08.2017	Ciecere1	7	AQUAT_ VEG	38	0.18	Psammal	5
10.08.2017	Ciecere1	7	AQUAT_ VEG	37	0.015	Psammal	6
10.08.2017	Ciecere1	7	AQUAT_ VEG	41	0.151	Psammal	7
10.08.2017	Ciecere1	7	AQUAT_ VEG	48	0.018	Psammal	8
10.08.2017	Ciecere1	7	AQUAT_ VEG	48	0.05	Psammal	9
10.08.2017	Ciecere1	7	AQUAT_ VEG	53	0.001	Psammal	10
10.08.2017	Ciecere1	8	GLIDE	60	0.077	Psammal	1
10.08.2017	Ciecere1	8	GLIDE	58	0.042	Psammal	2
10.08.2017	Ciecere1	8	GLIDE	56	0.048	Psammal	3
10.08.2017	Ciecere1	8	GLIDE	56	0.063	Psammal	4
10.08.2017	Ciecere1	8	GLIDE	47	0.109	Psammal	5
10.08.2017	Ciecere1	8	GLIDE	63	0.138	Psammal	6
10.08.2017	Ciecere1	8	GLIDE	56	0.1	Psammal	7
10.08.2017	Ciecere1	9	AQUAT_ VEG	23	0.111	Psammal	1
10.08.2017	Ciecere1	9	AQUAT_ VEG	72	0.247	Psammal	2

10.08.2017	Ciecere1	9	AQUAT_ VEG	64	0.055	Psammal	3
10.08.2017	Ciecere1	9	AQUAT_ VEG	59	0.07	Akal	4
10.08.2017	Ciecere1	9	AQUAT_ VEG	65	0.105	Akal	5
10.08.2017	Ciecere1	9	AQUAT_ VEG	65	0.096	Akal	6
10.08.2017	Ciecere1	9	AQUAT_ VEG	64	0.108	Akal	7
10.08.2017	Ciecere1	1	POOL	51	0.23	Microlithal	1
10.08.2017	Ciecere1	11	POOL	101	0.661	Psammal	1
10.08.2017	Ciecere1	12	BACKWATER	40	0.03	Psammal	1
10.08.2017	Ciecere1	13	POOL	89	0.023	Psammal	1
09.08.2017	Ciecere2	1	RIFFLE	30	0.406	Microlithal	1
09.08.2017	Ciecere2	1	RIFFLE	44	0.32	Microlithal	2
09.08.2017	Ciecere2	1	RIFFLE	24	0.16	Psammal	3
09.08.2017	Ciecere2	1	RIFFLE	38	0.24	Microlithal	4
09.08.2017	Ciecere2	1	RIFFLE	30	0.93	Mesolithal	5
09.08.2017	Ciecere2	1	RIFFLE	47	0.4	Mesolithal	6
09.08.2017	Ciecere2	1	RIFFLE	19	0.64	Mesolithal	7
09.08.2017	Ciecere2	1	RIFFLE	16	0.68	Mesolithal	8
09.08.2017	Ciecere2	2	GLIDE	44	0.365	Akal	1
09.08.2017	Ciecere2	2	GLIDE	40	0.425	Akal	2
09.08.2017	Ciecere2	2	GLIDE	35	0.35	Akal	3
09.08.2017	Ciecere2	2	GLIDE	45	0.3	Akal	4
09.08.2017	Ciecere2	2	GLIDE	62	0.28	Akal	5
09.08.2017	Ciecere2	2	GLIDE	60	0.22	Akal	6
09.08.2017	Ciecere2	2	GLIDE	58	0.08	Psammal	7
09.08.2017	Ciecere2	2	GLIDE	53	0.23	Psammal	8
09.08.2017	Ciecere2	2	GLIDE	57	0.26	Mesolithal	9
09.08.2017	Ciecere2	2	GLIDE	65	0.106	Mesolithal	10
09.08.2017	Ciecere2	2	GLIDE	24	0.001	Psammal	11
09.08.2017	Ciecere2	2	GLIDE	20	0.001	Psammal	12
09.08.2017	Ciecere2	2	GLIDE	15	0.001	Psammal	13
09.08.2017	Ciecere2	3	RIFFLE	55	0.53	Akal	1
09.08.2017	Ciecere2	3	RIFFLE	42	0.16	Psammal	2
09.08.2017	Ciecere2	3	RIFFLE	31	0.31	Akal	3
09.08.2017	Ciecere2	3	RIFFLE	25	0.24	Psammal	4
09.08.2017	Ciecere2	3	RIFFLE	17	0.33	Psammal	5
09.08.2017	Ciecere2	3	RIFFLE	42	0.63	Psammal	6
09.08.2017	Ciecere2	3	RIFFLE	46	0.52	Psammal	7

09.08.2017	Ciecere2	3	RIFFLE	25	0.41	Psammal	8
09.08.2017	Ciecere2	3	RIFFLE	17	0.63	Psammal	9
09.08.2017	Ciecere2	4	GLIDE	41	0.22	Psammal	1
09.08.2017	Ciecere2	4	GLIDE	46	0.34	Psammal	2
09.08.2017	Ciecere2	4	GLIDE	39	0.11	Psammal	3
09.08.2017	Ciecere2	4	GLIDE	40	0.038	Psammal	4
09.08.2017	Ciecere2	4	GLIDE	26	0.075	Psammal	5
09.08.2017	Ciecere2	4	GLIDE	16	0.11	Psammal	6
09.08.2017	Ciecere2	4	GLIDE	40	0.16	Psammal	7
09.08.2017	Ciecere2	4	GLIDE	57	0.12	Psammal	8
09.08.2017	Ciecere2	4	GLIDE	47	0.17	Psammal	9
09.08.2017	Ciecere2	4	GLIDE	44	0.33	Psammal	10
09.08.2017	Ciecere2	4	GLIDE	50	0.185	Psammal	11
09.08.2017	Ciecere2	4	GLIDE	40	0.24	Psammal	12
09.08.2017	Ciecere2	4	GLIDE	29	0.28	Psammal	13
09.08.2017	Ciecere2	4	GLIDE	43	0.14	Psammal	14
09.08.2017	Ciecere2	4	GLIDE	36	0.3	Psammal	15
09.08.2017	Ciecere2	4	GLIDE	60	0.18	Psammal	16
09.08.2017	Ciecere2	4	GLIDE	30	0.32	Psammal	17
09.08.2017	Ciecere2	4	GLIDE	74	0.2	Psammal	18
09.08.2017	Ciecere2	4	GLIDE	82	0.15	Psammal	19
09.08.2017	Ciecere2	4	GLIDE	96	0.05	Psammal	20
09.08.2017	Ciecere2	4	GLIDE	65	0.28	Psammal	21
09.08.2017	Ciecere2	4	GLIDE	66	0.26	Psammal	22
09.08.2017	Ciecere2	5	GLIDE	118	0.14	Akal	1
09.08.2017	Ciecere2	5	GLIDE	60	0.001	Psammal	2
09.08.2017	Ciecere2	5	GLIDE	81	0.001	Psammal	3
09.08.2017	Ciecere2	5	GLIDE	91	0.001	Psammal	4
09.08.2017	Ciecere2	6	RIFFLE	48	0.14	Akal	1
09.08.2017	Ciecere2	6	RIFFLE	40	0.6	Microlithal	2
09.08.2017	Ciecere2	6	RIFFLE	41	0.59	Microlithal	3
09.08.2017	Ciecere2	6	RIFFLE	27	0.44	Microlithal	4
09.08.2017	Ciecere2	6	RIFFLE	70	0.27	Microlithal	5
09.08.2017	Ciecere2	6	RIFFLE	60	0.3	Akal	6
09.08.2017	Ciecere2	6	RIFFLE	32	0.15	Akal	7
09.08.2017	Ciecere2	7	GLIDE	83	0.18	Psammal	1
09.08.2017	Ciecere2	7	GLIDE	77	0.18	Psammal	2

09.08.2017	Ciecere2	7	GLIDE	86	0.16	Psammal	3
09.08.2017	Ciecere2	7	GLIDE	136	0.037	Psammal	4
09.08.2017	Ciecere2	7	GLIDE	20	0.058	Psammal	5
09.08.2017	Ciecere2	7	GLIDE	31	0.002	Psammal	6
09.08.2017	Ciecere2	7	GLIDE	112	0.001	Psammal	7
09.08.2017	Ciecere2	7	GLIDE	104	0.06	Psammal	8
09.08.2017	Ciecere2	8	POOL	52	0.009	Psammal	1
09.08.2017	Ciecere2	8	POOL	80	0.245	Psammal	2
09.08.2017	Ciecere2	8	POOL	86	0.175	Psammal	3
09.08.2017	Ciecere2	8	POOL	67	0.281	Akal	4
09.08.2017	Ciecere2	8	POOL	40	0.293	Akal	5
09.08.2017	Ciecere2	8	POOL	72	0.3	Akal	6
09.08.2017	Ciecere2	8	POOL	60	0.34	Akal	7
09.08.2017	Ciecere2	8	POOL	44	0.125	Akal	8
09.08.2017	Ciecere2	9	BACKWATER	60	0.001	Psammal	1
09.08.2017	Ciecere2	9	BACKWATER	81	0.001	Psammal	2
09.08.2017	Ciecere2	9	BACKWATER	91	0.001	Psammal	3
09.08.2017	Ciecere2	10	BACKWATER	26	0.075	Psammal	1
09.08.2017	Ciecere2	10	BACKWATER	5	0.001	Psammal	2
09.08.2017	Ciecere2	10	BACKWATER	16	0.11	Psammal	3
09.08.2017	Ciecere2	11	POOL	120	0.02	Pelal	1
09.08.2017	Ciecere2	12	POOL	80	0.02	Pelal	1
28.09.2017	Ciecere1	1	RIFFLE	50	0.925	Microlithal	1
28.09.2017	Ciecere1	1	RIFFLE	42	0.508	Microlithal	2
28.09.2017	Ciecere1	1	RIFFLE	41	0.543	Microlithal	3
28.09.2017	Ciecere1	1	RIFFLE	52	0.977	Microlithal	4
28.09.2017	Ciecere1	1	RIFFLE	50	0.861	Microlithal	5
28.09.2017	Ciecere1	1	RIFFLE	45	0.818	Microlithal	6
28.09.2017	Ciecere1	1	RIFFLE	56	0.990	Microlithal	7
28.09.2017	Ciecere1	1	RIFFLE	50	0.981	Microlithal	8
28.09.2017	Ciecere1	1	RIFFLE	58	0.887	Microlithal	9
28.09.2017	Ciecere1	1	RIFFLE	80	0.869	Microlithal	10
28.09.2017	Ciecere1	2	GLIDE	96	0.252	Microlithal	1
28.09.2017	Ciecere1	2	GLIDE	61	0.431	Microlithal	2
28.09.2017	Ciecere1	2	GLIDE	102	0.484	Microlithal	3
28.09.2017	Ciecere1	2	GLIDE	54	0.461	Microlithal	4
28.09.2017	Ciecere1	2	GLIDE	51	0.676	Microlithal	5

28.09.2017	Ciecere1	2	GLIDE	68	0.560	Microlithal	6
28.09.2017	Ciecere1	3	RIFFLE	50	0.882	Mesolithal	1
28.09.2017	Ciecere1	3	RIFFLE	50	1.140	Mesolithal	2
28.09.2017	Ciecere1	3	RIFFLE	52	0.968	Microlithal	3
28.09.2017	Ciecere1	3	RIFFLE	56	0.366	Microlithal	4
28.09.2017	Ciecere1	3	RIFFLE	70	0.650	Microlithal	5
28.09.2017	Ciecere1	3	RIFFLE	58	0.603	Microlithal	6
28.09.2017	Ciecere1	3	RIFFLE	58	0.598	Mesolithal	7
28.09.2017	Ciecere1	3	RIFFLE	67	0.706	Microlithal	8
28.09.2017	Ciecere1	3	RIFFLE	74	0.487	Microlithal	9
28.09.2017	Ciecere1	3	RIFFLE	60	0.366	Akal	10
28.09.2017	Ciecere1	4	GLIDE	65	0.577	Akal	1
28.09.2017	Ciecere1	4	GLIDE	75	0.607	Akal	2
28.09.2017	Ciecere1	4	GLIDE	72	0.422	Akal	3
28.09.2017	Ciecere1	4	GLIDE	65	0.414	Akal	4
28.09.2017	Ciecere1	4	GLIDE	62	0.590	Microlithal	5
28.09.2017	Ciecere1	4	GLIDE	68	0.469	Microlithal	6
28.09.2017	Ciecere1	4	GLIDE	78	0.852	Akal	7
28.09.2017	Ciecere1	4	GLIDE	72	0.418	Akal	8
28.09.2017	Ciecere1	4	GLIDE	69	0.250	Akal	9
28.09.2017	Ciecere1	4	GLIDE	72	0.680	Akal	10
28.09.2017	Ciecere1	4	GLIDE	75	0.435	Microlithal	11
28.09.2017	Ciecere1	4	GLIDE	65	0.315	Akal	12
28.09.2017	Ciecere1	4	GLIDE	90	0.239	Akal	13
28.09.2017	Ciecere1	4	GLIDE	78	0.487	Microlithal	14
28.09.2017	Ciecere1	4	GLIDE	81	0.3323	Microlithal	15
28.09.2017	Ciecere1	4	GLIDE	78	0.133	Akal	16
28.09.2017	Ciecere1	5	AQUAT_ VEG	76	0.534	Microlithal	1
28.09.2017	Ciecere1	5	AQUAT_ VEG	64	0.276	Microlithal	2
28.09.2017	Ciecere1	5	AQUAT_ VEG	80	0.672	Pelal	3
28.09.2017	Ciecere1	5	AQUAT_ VEG	80	0.077	Pelal	4
28.09.2017	Ciecere1	5	AQUAT_ VEG	90	0.479	Pelal	5
28.09.2017	Ciecere1	5	AQUAT_ VEG	64	0.508	Pelal	6
28.09.2017	Ciecere1	5	AQUAT_ VEG	80	0.491	Pelal	7
28.09.2017	Ciecere1	5	AQUAT_ VEG	70	0.107	Pelal	8
28.09.2017	Ciecere1	5	AQUAT_ VEG	96	0.351	Pelal	9
28.09.2017	Ciecere1	6	BACKWATER	58	0.1	Psammal	1

28.09.2017	Ciecere1	7	BACKWATER	52	0.1	Psammal	1
28.09.2017	Ciecere1	8	BACKWATER	45	0.001	Psammal	1
28.09.2017	Ciecere1	9	POOL	85	0.15	Akal	1
27.09.2017	Ciecere2	1	GLIDE	173	0.358	Psammal	1
27.09.2017	Ciecere2	1	GLIDE	110	0.131	Psammal	2
27.09.2017	Ciecere2	1	GLIDE	90	0.086	Psammal	3
27.09.2017	Ciecere2	1	GLIDE	88	0.098	Psammal	4
27.09.2017	Ciecere2	1	GLIDE	100	0.358	Psammal	5
27.09.2017	Ciecere2	1	GLIDE	108	0.291	Psammal	6
28.09.2017	Ciecere2	2	RAPID	88	0.465	Mesolithal	1
28.09.2017	Ciecere2	2	RAPID	81	0.796	Mesolithal	2
28.09.2017	Ciecere2	2	RAPID	55	0.723	Mesolithal	3
28.09.2017	Ciecere2	2	RAPID	50	0.637	Mesolithal	4
28.09.2017	Ciecere2	2	RAPID	70	1.170	Mesolithal	5
28.09.2017	Ciecere2	2	RAPID	68	1.200	Mesolithal	6
28.09.2017	Ciecere2	2	RAPID	85	0.861	Mesolithal	7
28.09.2017	Ciecere2	3	GLIDE	95	0.484	Akal	1
28.09.2017	Ciecere2	3	GLIDE	72	0.276	Microlithal	2
28.09.2017	Ciecere2	3	GLIDE	67	0.315	Microlithal	3
28.09.2017	Ciecere2	3	GLIDE	80	0.723	Microlithal	4
28.09.2017	Ciecere2	4	POOL	80	0.272	Akal	1
28.09.2017	Ciecere2	5	GLIDE	50	0.061	Psammal	1
28.09.2017	Ciecere2	5	GLIDE	95	0.362	Psammal	2
28.09.2017	Ciecere2	5	GLIDE	115	0.740	Akal	3
28.09.2017	Ciecere2	5	GLIDE	90	0.353	Akal	4
28.09.2017	Ciecere2	5	GLIDE	85	0.359	Akal	5
28.09.2017	Ciecere2	5	GLIDE	54	0.461	Microlithal	6
28.09.2017	Ciecere2	6	RIFFLE	63	0.667	Akal	1
28.09.2017	Ciecere2	6	RIFFLE	56	0.293	Akal	2
28.09.2017	Ciecere2	6	RIFFLE	68	0.491	Akal	3
28.09.2017	Ciecere2	6	RIFFLE	72	0.555	Akal	4
28.09.2017	Ciecere2	6	RIFFLE	63	0.461	Akal	5
28.09.2017	Ciecere2	6	RIFFLE	61	0.607	Akal	6
28.09.2017	Ciecere2	6	RIFFLE	61	0.508	Akal	7
28.09.2017	Ciecere2	6	RIFFLE	83	0.426	Microlithal	8
28.09.2017	Ciecere2	6	RIFFLE	81	0.448	Microlithal	9
28.09.2017	Ciecere2	6	RIFFLE	65	0.452	Microlithal	10

28.09.2017	Ciecere2	6	RIFFLE	63	0.457	Microlithal	11

Depths and flow velocities at geomorphic unit representative points (Latvia), update 22.01.2019

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
13.08.2018	Eda1_4	1	AQUAT_VEG	23	0.162	AKAL	1
13.08.2018	Eda1_4	1	AQUAT_VEG	19	0.29	MICROLITHAL	2
13.08.2018	Eda1_4	1	AQUAT_VEG	15	0.2	AKAL	3
13.08.2018	Eda1_4	1	AQUAT_VEG	10	0.188	MICROLITHAL	4
13.08.2018	Eda1_4	1	AQUAT_VEG	25	0.237	MICROLITHAL	5
13.08.2018	Eda1_4	1	AQUAT_VEG	14	0.201	PSAMMAL	6
13.08.2018	Eda1_4	1	AQUAT_VEG	17	0.189	AKAL	7
13.08.2018	Eda1_4	1	AQUAT_VEG	18	0.251	AKAL	8
13.08.2018	Eda1_4	1	AQUAT_VEG	21	0.035	PSAMMAL	9
13.08.2018	Eda1_4	1	AQUAT_VEG	45	0.077	MICROLITHAL	10
13.08.2018	Eda1_4	1	AQUAT_VEG	15	0.126	AKAL	11
13.08.2018	Eda1_4	1	AQUAT_VEG	22	0.212	MESOLITHAL	12
13.08.2018	Eda1_4	1	AQUAT_VEG	32	0.172	MICROLITHAL	13
13.08.2018	Eda1_4	1	AQUAT_VEG	27	0.147	PSAMMAL	14
13.08.2018	Eda1_4	2	POOL	31	0.145	MICROLITHAL	1
13.08.2018	Eda1_4	2	POOL	57	0.203	MESOLITHAL	2
13.08.2018	Eda1_4	2	POOL	44	0.174	AKAL	3
13.08.2018	Eda1_4	2	POOL	56	0.029	AKAL	4
13.08.2018	Eda1_4	2	POOL	58	0.122	AKAL	5
13.08.2018	Eda1_4	2	POOL	40	0.146	MESOLITHAL	6
13.08.2018	Eda1_4	2	POOL	52	0.129	AKAL	7
13.08.2018	Eda1_4	3	POOL	52	0.044	PSAMMAL	1
13.08.2018	Eda1_4	3	POOL	43	0.071	AKAL	2
13.08.2018	Eda1_4	3	POOL	60	0.113	AKAL	3
13.08.2018	Eda1_4	3	POOL	28	0.088	MICROLITHAL	4
13.08.2018	Eda1_4	3	POOL	18	0.051	MICROLITHAL	5
13.08.2018	Eda1_4	3	POOL	32	0.049	MICROLITHAL	6
13.08.2018	Eda1_4	3	POOL	48	0.114	AKAL	7
13.08.2018	Eda1_4	3	POOL	40	0.17	PSAMMAL	8
13.08.2018	Eda2_4	1	POOL	72	0.299	AKAL	1
13.08.2018	Eda2_4	1	POOL	60	0.001	PSAMMAL	2
13.08.2018	Eda2_4	1	POOL	68	0.304	AKAL	3
13.08.2018	Eda2_4	1	POOL	64	0.182	PSAMMAL	4
13.08.2018	Eda2_4	1	POOL	56	0.083	PSAMMAL	5
13.08.2018	Eda2_4	1	POOL	55	0.138	PSAMMAL	6

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
13.08.2018	Eda2_4	1	POOL	61	0.106	PSAMMAL	7
13.08.2018	Eda2_4	1	POOL	44	0.211	MICROLITHAL	8
13.08.2018	Eda2_4	1	POOL	45	0.117	PELAL	9
13.08.2018	Eda2_4	1	POOL	75	0.096	PSAMMAL	10
13.08.2018	Eda2_4	1	POOL	78	0.105	PELAL	11
13.08.2018	Eda2_4	1	POOL	27	0.119	AKAL	12
13.08.2018	Eda2_4	2	GLIDE	72	0.1	PSAMMAL	1
13.08.2018	Eda2_4	2	GLIDE	70	0.123	MICROLITHAL	2
13.08.2018	Eda2_4	2	GLIDE	100	0.102	PELAL	3
13.08.2018	Eda2_4	2	GLIDE	130	0.104	PSAMMAL	4
13.08.2018	Eda2_4	2	GLIDE	110	0.101	PSAMMAL	5
13.08.2018	Eda2_4	2	GLIDE	74	0.111	PSAMMAL	6
13.08.2018	Eda2_4	2	GLIDE	85	0.11	PSAMMAL	7
13.08.2018	Eda2_4	3	AQUAT_VEG	36	0.132	AKAL	1
13.08.2018	Eda2_4	3	AQUAT_VEG	59	0.123	PSAMMAL	2
13.08.2018	Eda2_4	3	AQUAT_VEG	71	0.082	PSAMMAL	3
13.08.2018	Eda2_4	3	AQUAT_VEG	60	0.122	PELAL	4
13.08.2018	Eda2_4	3	AQUAT_VEG	58	0.096	PSAMMAL	5
13.08.2018	Eda2_4	3	AQUAT_VEG	70	0.131	PELAL	6
13.08.2018	Eda2_4	3	AQUAT_VEG	62	0.123	PSAMMAL	7
13.08.2018	Eda2_4	4	POOL	120	0.039	PSAMMAL	1
13.08.2018	Eda2_4	4	POOL	158	0.02	PELAL	2
13.08.2018	Eda2_4	4	POOL	80	0.03	PELAL	3
13.08.2018	Eda2_4	4	POOL	130	0.042	PSAMMAL	4
13.08.2018	Eda2_4	4	POOL	165	0.019	PSAMMAL	5
13.08.2018	Eda2_4	4	POOL	75	0.029	PSAMMAL	6
13.08.2018	Eda2_4	4	POOL	10	0.035	PSAMMAL	7
13.08.2018	Eda2_4	5	AQUAT_VEG	50	0.106	PSAMMAL	1
13.08.2018	Eda2_4	5	AQUAT_VEG	57	0.14	PSAMMAL	2
13.08.2018	Eda2_4	5	AQUAT_VEG	58	0.039	PSAMMAL	3
13.08.2018	Eda2_4	5	AQUAT_VEG	44	0.14	PSAMMAL	4
13.08.2018	Eda2_4	5	AQUAT_VEG	60	0.198	PSAMMAL	5
13.08.2018	Eda2_4	5	AQUAT_VEG	66	0.14	PSAMMAL	6
13.08.2018	Eda2_4	5	AQUAT_VEG	55	0.045	PSAMMAL	7
13.08.2018	Eda3_4	1	GLIDE	47	0.3105	MESOLITHAL	1
13.08.2018	Eda3_4	1	GLIDE	33	0.043	MESOLITHAL	2
13.08.2018	Eda3_4	1	GLIDE	34	0.098	MESOLITHAL	3
13.08.2018	Eda3_4	1	GLIDE	47	0.109	AKAL	4
13.08.2018	Eda3_4	1	GLIDE	37	0.016	MICROLITHAL	5
13.08.2018	Eda3_4	1	GLIDE	46	0.157	PSAMMAL	6
13.08.2018	Eda3_4	1	GLIDE	41	0.107	MICROLITHAL	7

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
13.08.2018	Eda3_4	1	GLIDE	32	0.081	MICROLITHAL	8
13.08.2018	Eda3_4	1	GLIDE	22	0.146	MESOLITHAL	9
13.08.2018	Eda3_4	1	GLIDE	32	0.145	MICROLITHAL	10
13.08.2018	Eda3_4	2	POOL	45	0.045	MICROLITHAL	1
13.08.2018	Eda3_4	2	POOL	41	0.081	MICROLITHAL	2
13.08.2018	Eda3_4	2	POOL	39	0.047	PSAMMAL	3
13.08.2018	Eda3_4	2	POOL	50	0.064	MICROLITHAL	4
13.08.2018	Eda3_4	2	POOL	53	0.084	AKAL	5
13.08.2018	Eda3_4	2	POOL	60	0.053	PELAL	6
13.08.2018	Eda3_4	2	POOL	58	0.049	PELAL	7
13.08.2018	Eda3_4	3	BACKWATER	30	0.001	MICROLITHAL	1
13.08.2018	Eda3_4	3	BACKWATER	36	0.001	AKAL	2
13.08.2018	Eda3_4	3	BACKWATER	33	0.001	PSAMMAL	3
13.08.2018	Eda3_4	3	BACKWATER	31	0.001	MESOLITHAL	4
13.08.2018	Eda3_4	3	BACKWATER	26	0.03	MICROLITHAL	5
13.08.2018	Eda3_4	3	BACKWATER	28	0.001	PELAL	6
13.08.2018	Eda3_4	3	BACKWATER	30	0.001	PELAL	7
13.08.2018	Eda3_4	4	RIFFLE	22	0.522	MESOLITHAL	1
13.08.2018	Eda3_4	4	RIFFLE	25	0.44	MESOLITHAL	2
13.08.2018	Eda3_4	4	RIFFLE	22	0.329	MESOLITHAL	3
13.08.2018	Eda3_4	4	RIFFLE	14	0.156	MESOLITHAL	4
13.08.2018	Eda3_4	4	RIFFLE	20	0.447	MESOLITHAL	5
13.08.2018	Eda3_4	4	RIFFLE	19	0.304	MESOLITHAL	6
13.08.2018	Eda3_4	4	RIFFLE	36	0.201	MESOLITHAL	7
13.08.2018	Eda3_4	4	RIFFLE	13	0.395	AKAL	8
13.08.2018	Eda3_4	4	RIFFLE	18	0.409	MESOLITHAL	9
13.08.2018	Eda3_4	5	GLIDE	20	0.331	AKAL	1
13.08.2018	Eda3_4	5	GLIDE	30	0.279	MESOLITHAL	2
13.08.2018	Eda3_4	5	GLIDE	32	0.113	MESOLITHAL	3
13.08.2018	Eda3_4	5	GLIDE	22	0.18	PSAMMAL	4
13.08.2018	Eda3_4	5	GLIDE	22	0.237	MESOLITHAL	5
13.08.2018	Eda3_4	5	GLIDE	16	0.301	MESOLITHAL	6
13.08.2018	Eda3_4	5	GLIDE	15	0.04	PELAL	7
04.07.2018	Ciecere1_3	1	RIFFLE	9	0.093	MEGALITHAL	1
04.07.2018	Ciecere1_3	1	RIFFLE	23	0.123	AKAL	2
04.07.2018	Ciecere1_3	1	RIFFLE	15	0.518	MESOLITHAL	3
04.07.2018	Ciecere1_3	1	RIFFLE	20	0.305	MICROLITHAL	4
04.07.2018	Ciecere1_3	1	RIFFLE	24	0.227	MICROLITHAL	5
04.07.2018	Ciecere1_3	1	RIFFLE	11	0.289	MESOLITHAL	6
04.07.2018	Ciecere1_3	1	RIFFLE	24	0.761	MESOLITHAL	7
04.07.2018	Ciecere1_3	2	POOL	47	0.001	MESOLITHAL	1

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
04.07.2018	Ciecere1_3	2	POOL	26	0.001	AKAL	2
04.07.2018	Ciecere1_3	2	POOL	32	0.001	MESOLITHAL	3
04.07.2018	Ciecere1_3	2	POOL	33	0.001	MESOLITHAL	4
04.07.2018	Ciecere1_3	2	POOL	30	0.001	MESOLITHAL	5
04.07.2018	Ciecere1_3	2	POOL	34	0.001	AKAL	6
04.07.2018	Ciecere1_3	2	POOL	29	0.001	MESOLITHAL	7
04.07.2018	Ciecere1_3	3	POOL	59	0.001	MESOLITHAL	1
04.07.2018	Ciecere1_3	3	POOL	56	0.001	MESOLITHAL	2
04.07.2018	Ciecere1_3	3	POOL	56	0.001	PSAMMAL	3
04.07.2018	Ciecere1_3	3	POOL	64	0.001	AKAL	4
04.07.2018	Ciecere1_3	3	POOL	50	0.001	MESOLITHAL	5
04.07.2018	Ciecere1_3	3	POOL	58	0.001	MESOLITHAL	6
04.07.2018	Ciecere1_3	3	POOL	62	0.001	PSAMMAL	7
04.07.2018	Ciecere1_3	4	POOL	22	0.081	PSAMMAL	1
04.07.2018	Ciecere1_3	4	POOL	37	0.382	MESOLITHAL	2
04.07.2018	Ciecere1_3	4	POOL	60	0.265	MESOLITHAL	3
04.07.2018	Ciecere1_3	4	POOL	90	0.05	AKAL	4
04.07.2018	Ciecere1_3	4	POOL	78	0.137	AKAL	5
04.07.2018	Ciecere1_3	4	POOL	66	0.158	PSAMMAL	6
04.07.2018	Ciecere1_3	4	POOL	62	0.212	MESOLITHAL	7
04.07.2018	Ciecere1_3	4	POOL	40	0.166	AKAL	8
04.07.2018	Ciecere1_3	5	RIFFLE	25	0.363	MICROLITHAL	1
04.07.2018	Ciecere1_3	5	RIFFLE	24	0.493	MESOLITHAL	2
04.07.2018	Ciecere1_3	5	RIFFLE	15	0.21	PSAMMAL	3
04.07.2018	Ciecere1_3	5	RIFFLE	15	0.418	MICROLITHAL	4
04.07.2018	Ciecere1_3	5	RIFFLE	30	0.386	MESOLITHAL	5
04.07.2018	Ciecere1_3	5	RIFFLE	25	0.485	MEGALITHAL	6
04.07.2018	Ciecere1_3	5	RIFFLE	20	0.389	MESOLITHAL	7
04.07.2018	Ciecere1_3	5	RIFFLE	15	0.4	AKAL	8
04.07.2018	Ciecere1_3	6	AQUAT_VEG	30	0.273	MESOLITHAL	1
04.07.2018	Ciecere1_3	6	AQUAT_VEG	34	0.109	MACROLITHAL	2
04.07.2018	Ciecere1_3	6	AQUAT_VEG	40	0.138	AKAL	3
04.07.2018	Ciecere1_3	6	AQUAT_VEG	26	0.176	MICROLITHAL	4
04.07.2018	Ciecere1_3	6	AQUAT_VEG	39	0.037	MICROLITHAL	5
04.07.2018	Ciecere1_3	6	AQUAT_VEG	30	0.12	PSAMMAL	6
04.07.2018	Ciecere1_3	6	AQUAT_VEG	25	0.135	PSAMMAL	7
04.07.2018	Ciecere1_3	6	AQUAT_VEG	32	0.109	PSAMMAL	8
04.07.2018	Ciecere1_3	7	GLIDE	28	0.245	MESOLITHAL	1
04.07.2018	Ciecere1_3	7	GLIDE	25	0.168	MICROLITHAL	2
04.07.2018	Ciecere1_3	7	GLIDE	34	0.337	AKAL	3
04.07.2018	Ciecere1_3	7	GLIDE	25	0.335	MICROLITHAL	4

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
04.07.2018	Ciecere1_3	7	GLIDE	38	0.178	AKAL	5
04.07.2018	Ciecere1_3	7	GLIDE	40	0.088	PSAMMAL	6
04.07.2018	Ciecere1_3	7	GLIDE	47	0.172	PSAMMAL	7
04.07.2018	Ciecere1_3	7	GLIDE	59	0.129	PSAMMAL	8
04.07.2018	Ciecere1_3	7	GLIDE	45	0.201	AKAL	9
04.07.2018	Ciecere1_3	7	GLIDE	46	0.271	MESOLITHAL	10
04.07.2018	Ciecere1_3	8	AQUAT_VEG	40	0.16	MESOLITHAL	1
04.07.2018	Ciecere1_3	8	AQUAT_VEG	30	0.151	MICROLITHAL	2
04.07.2018	Ciecere1_3	8	AQUAT_VEG	39	0.046	AKAL	3
04.07.2018	Ciecere1_3	8	AQUAT_VEG	29	0.028	PSAMMAL	4
04.07.2018	Ciecere1_3	8	AQUAT_VEG	40	0.074	PSAMMAL	5
04.07.2018	Ciecere1_3	8	AQUAT_VEG	37	0.035	PSAMMAL	6
04.07.2018	Ciecere1_3	8	AQUAT_VEG	34	0.032	AKAL	7
04.07.2018	Ciecere1_3	9	GLIDE	46	0.109	MESOLITHAL	1
04.07.2018	Ciecere1_3	9	GLIDE	62	0.041	AKAL	2
04.07.2018	Ciecere1_3	9	GLIDE	58	0.06	PELAL	3
04.07.2018	Ciecere1_3	9	GLIDE	47	0.098	AKAL	4
04.07.2018	Ciecere1_3	9	GLIDE	27	0.161	MEGALITHAL	5
04.07.2018	Ciecere1_3	9	GLIDE	65	0.049	MICROLITHAL	6
04.07.2018	Ciecere1_3	9	GLIDE	60	0.069	AKAL	7
04.07.2018	Ciecere1_3	10	AQUAT_VEG	46	0.144	MACROLITHAL	1
04.07.2018	Ciecere1_3	10	AQUAT_VEG	47	0.086	AKAL	2
04.07.2018	Ciecere1_3	10	AQUAT_VEG	12	0.001	PSAMMAL	3
04.07.2018	Ciecere1_3	10	AQUAT_VEG	38	0.001	PSAMMAL	4
04.07.2018	Ciecere1_3	10	AQUAT_VEG	12	0.001	PELAL	5
04.07.2018	Ciecere1_3	10	AQUAT_VEG	78	0.229	PSAMMAL	6
04.07.2018	Ciecere1_3	10	AQUAT_VEG	58	0.067	PSAMMAL	7
31.10.2018	Ciecere1_4	1	RIFFLE	40	0.671	MICROLITHAL	1
31.10.2018	Ciecere1_4	1	RIFFLE	20	0.362	MESOLITHAL	2
31.10.2018	Ciecere1_4	1	RIFFLE	42	0.765	MICROLITHAL	3
31.10.2018	Ciecere1_4	1	RIFFLE	32	0.161	AKAL	4
31.10.2018	Ciecere1_4	1	RIFFLE	20	0.293	MEGALITHAL	5
31.10.2018	Ciecere1_4	1	RIFFLE	48	0.71	MESOLITHAL	6
31.10.2018	Ciecere1_4	1	RIFFLE	33	0.21	MESOLITHAL	7
31.10.2018	Ciecere1_4	1	RIFFLE	46	0.549	MESOLITHAL	8
31.10.2018	Ciecere1_4	1	RIFFLE	66	0.318	MICROLITHAL	9
31.10.2018	Ciecere1_4	1	RIFFLE	35	0.628	AKAL	10
31.10.2018	Ciecere1_4	1	RIFFLE	35	0.628	MESOLITHAL	11
31.10.2018	Ciecere1_4	1	RIFFLE	35	0.785	MICROLITHAL	12
31.10.2018	Ciecere1_4	1	RIFFLE	76	0.574	MESOLITHAL	13
31.10.2018	Ciecere1_4	2	GLIDE	70	0.251	MESOLITHAL	1

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
31.10.2018	Ciecere1_4	2	GLIDE	57	0.001	MICROLITHAL	2
31.10.2018	Ciecere1_4	2	GLIDE	120	0.187	AKAL	3
31.10.2018	Ciecere1_4	2	GLIDE	60	0.094	AKAL	4
31.10.2018	Ciecere1_4	2	GLIDE	90	0.3175	MICROLITHAL	5
31.10.2018	Ciecere1_4	2	GLIDE	60	0.238	MICROLITHAL	6
31.10.2018	Ciecere1_4	2	GLIDE	76	0.429	PSAMMAL	7
31.10.2018	Ciecere1_4	3	POOL	20	0.001	PELAL	1
31.10.2018	Ciecere1_4	3	POOL	12	0.001	PELAL	2
31.10.2018	Ciecere1_4	3	POOL	20	0.001	AKAL	3
31.10.2018	Ciecere1_4	4	POOL	52	0.001	MESOLITHAL	1
31.10.2018	Ciecere1_4	4	POOL	35	0.001	MESOLITHAL	2
31.10.2018	Ciecere1_4	4	POOL	33	0.001	AKAL	3
31.10.2018	Ciecere1_4	4	POOL	21	0.001	MESOLITHAL	4
31.10.2018	Ciecere1_4	5	POOL	86	0.001	MESOLITHAL	1
31.10.2018	Ciecere1_4	5	POOL	52	0.001	MESOLITHAL	2
31.10.2018	Ciecere1_4	5	POOL	58	0.001	PSAMMAL	3
31.10.2018	Ciecere1_4	5	POOL	37	0.001	MESOLITHAL	4
31.10.2018	Ciecere1_4	6	RAPID	40	1.066	MICROLITHAL	1
31.10.2018	Ciecere1_4	6	RAPID	30	0.871	MESOLITHAL	2
31.10.2018	Ciecere1_4	6	RAPID	37	1.113	MICROLITHAL	3
31.10.2018	Ciecere1_4	6	RAPID	38	0.332	MEGALITHAL	4
31.10.2018	Ciecere1_4	6	RAPID	29	0.869	MESOLITHAL	5
31.10.2018	Ciecere1_4	6	RAPID	42	1.05	MESOLITHAL	6
31.10.2018	Ciecere1_4	6	RAPID	39	1.066	AKAL	7
31.10.2018	Ciecere1_4	6	RAPID	48	0.001	PSAMMAL	8
31.10.2018	Ciecere1_4	7	RIFFLE	40	0.273	MICROLITHAL	1
31.10.2018	Ciecere1_4	7	RIFFLE	26	0.001	PSAMMAL	2
31.10.2018	Ciecere1_4	7	RIFFLE	45	1.183	MESOLITHAL	3
31.10.2018	Ciecere1_4	7	RIFFLE	38	0.726	AKAL	4
31.10.2018	Ciecere1_4	7	RIFFLE	33	0.585	MICROLITHAL	5
31.10.2018	Ciecere1_4	7	RIFFLE	65	0.51	MICROLITHAL	6
31.10.2018	Ciecere1_4	7	RIFFLE	34	0.218	PSAMMAL	7
31.10.2018	Ciecere1_4	8	GLIDE	12	0.103	AKAL	1
31.10.2018	Ciecere1_4	8	GLIDE	50	0.005	AKAL	2
31.10.2018	Ciecere1_4	8	GLIDE	48	0.127	MACROLITHAL	3
31.10.2018	Ciecere1_4	8	GLIDE	47	0.149	AKAL	4
31.10.2018	Ciecere1_4	8	GLIDE	52	0.099	PSAMMAL	5
31.10.2018	Ciecere1_4	8	GLIDE	38	0.122	MACROLITHAL	6
31.10.2018	Ciecere1_4	8	GLIDE	38	0.122	MESOLITHAL	7
31.10.2018	Ciecere1_4	9	RIFFLE	42	0.601	MACROLITHAL	1
31.10.2018	Ciecere1_4	9	RIFFLE	67	0.461	PSAMMAL	2

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
31.10.2018	Ciecere1_4	9	RIFFLE	28	0.253	MEGALITHAL	3
31.10.2018	Ciecere1_4	9	RIFFLE	47	0.37	MESOLITHAL	4
31.10.2018	Ciecere1_4	9	RIFFLE	60	0.583	AKAL	5
31.10.2018	Ciecere1_4	9	RIFFLE	36	0.154	MACROLITHAL	6
31.10.2018	Ciecere1_4	9	RIFFLE	68	0.379	AKAL	7
31.10.2018	Ciecere1_4	9	RIFFLE	62	0.077	PSAMMAL	8
31.10.2018	Ciecere1_4	9	RIFFLE	48	0.107	PSAMMAL	9
31.10.2018	Ciecere1_4	9	RIFFLE	56	0.653	MICROLITHAL	10
31.10.2018	Ciecere1_4	9	RIFFLE	22	0.438	MEGALITHAL	11
31.10.2018	Ciecere1_4	9	RIFFLE	37	0.301	PSAMMAL	12
31.10.2018	Ciecere1_4	9	RIFFLE	76	0.407	PSAMMAL	13
31.10.2018	Ciecere1_4	9	RIFFLE	60	0.383	MESOLITHAL	14
31.10.2018	Ciecere1_4	9	RIFFLE	54	0.612	MICROLITHAL	15
31.10.2018	Ciecere1_4	9	RIFFLE	56	0.19	PSAMMAL	16
31.10.2018	Ciecere1_4	9	RIFFLE	50	0.374	PSAMMAL	17
31.10.2018	Ciecere1_4	9	RIFFLE	57	0.226	MICROLITHAL	18
31.10.2018	Ciecere1_4	9	RIFFLE	56	0.299	PSAMMAL	19
31.10.2018	Ciecere1_4	9	RIFFLE	60	0.461	AKAL	20
31.10.2018	Ciecere1_4	10	GLIDE	42	0.405	AKAL	1
31.10.2018	Ciecere1_4	10	GLIDE	60	0.335	MESOLITHAL	2
31.10.2018	Ciecere1_4	10	GLIDE	56	0.028	PELAL	3
31.10.2018	Ciecere1_4	10	GLIDE	65	0.331	PELAL	4
31.10.2018	Ciecere1_4	10	GLIDE	70	0.347	MICROLITHAL	5
31.10.2018	Ciecere1_4	10	GLIDE	58	0.324	MACROLITHAL	6
31.10.2018	Ciecere1_4	10	GLIDE	31	0.317	MEGALITHAL	7
31.10.2018	Ciecere1_4	10	GLIDE	29	0.317	MEGALITHAL	8
31.10.2018	Ciecere1_4	10	GLIDE	66	0.173	AKAL	9
31.10.2018	Ciecere1_4	10	GLIDE	72	0.395	MESOLITHAL	10
31.10.2018	Ciecere1_4	11	RIFFLE	56	0.434	PSAMMAL	1
31.10.2018	Ciecere1_4	11	RIFFLE	52	0.424	MESOLITHAL	2
31.10.2018	Ciecere1_4	11	RIFFLE	50	0.2	PSAMMAL	3
31.10.2018	Ciecere1_4	11	RIFFLE	52	0.623	AKAL	4
31.10.2018	Ciecere1_4	11	RIFFLE	65	0.324	AKAL	5
31.10.2018	Ciecere1_4	11	RIFFLE	63	0.324	AKAL	6
31.10.2018	Ciecere1_4	11	RIFFLE	50	0.2	MICROLITHAL	7
31.10.2018	Ciecere1_4	12	GLIDE	38	0.243	MESOLITHAL	1
31.10.2018	Ciecere1_4	12	GLIDE	34	0.302	PSAMMAL	2
31.10.2018	Ciecere1_4	12	GLIDE	70	0.196	PELAL	3
31.10.2018	Ciecere1_4	12	GLIDE	48	0.189	MACROLITHAL	4
31.10.2018	Ciecere1_4	12	GLIDE	76	0.233	MESOLITHAL	5
31.10.2018	Ciecere1_4	12	GLIDE	77	0.371	AKAL	6

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
31.10.2018	Ciecere1_4	12	GLIDE	62	0.103	PELAL	7
04.07.2018.	Ciecere2_3	1	POOL	96	0.3	MESOLITHAL	1
04.07.2018.	Ciecere2_3	1	POOL	132	0.001	PSAMMAL	2
04.07.2018.	Ciecere2_3	1	POOL	122	0.001	AKAL	3
04.07.2018.	Ciecere2_3	1	POOL	114	0.036	PSAMMAL	4
04.07.2018.	Ciecere2_3	1	POOL	86	0.068	AKAL	5
04.07.2018.	Ciecere2_3	1	POOL	58	0.001	AKAL	6
04.07.2018.	Ciecere2_3	1	POOL	71	0.001	PELAL	7
04.07.2018.	Ciecere2_3	2	RIFFLE	65	0.235	MESOLITHAL	1
04.07.2018.	Ciecere2_3	2	RIFFLE	34	0.42	MEGALITHAL	2
04.07.2018.	Ciecere2_3	2	RIFFLE	54	0.528	MEGALITHAL	3
04.07.2018.	Ciecere2_3	2	RIFFLE	35	0.41	AKAL	4
04.07.2018.	Ciecere2_3	2	RIFFLE	41	0.025	MEGALITHAL	5
04.07.2018.	Ciecere2_3	2	RIFFLE	50	0.52	MEGALITHAL	6
04.07.2018.	Ciecere2_3	2	RIFFLE	35	0.4	MEGALITHAL	7
04.07.2018.	Ciecere2_3	3	GLIDE	82	0.148	AKAL	1
04.07.2018.	Ciecere2_3	3	GLIDE	48	0.507	MEGALITHAL	2
04.07.2018.	Ciecere2_3	3	GLIDE	88	0.001	PSAMMAL	3
04.07.2018.	Ciecere2_3	3	GLIDE	92	0.001	PSAMMAL	4
04.07.2018.	Ciecere2_3	3	GLIDE	94	0.067	MESOLITHAL	5
04.07.2018.	Ciecere2_3	3	GLIDE	88	0.054	MESOLITHAL	6
04.07.2018.	Ciecere2_3	3	GLIDE	90	0.001	MESOLITHAL	7
04.07.2018.	Ciecere2_3	4	AQUAT_VEG	76	0.001	PSAMMAL	1
04.07.2018.	Ciecere2_3	4	AQUAT_VEG	55	0.001	MEGALITHAL	2
04.07.2018.	Ciecere2_3	4	AQUAT_VEG	100	0.001	MEGALITHAL	3
04.07.2018.	Ciecere2_3	4	AQUAT_VEG	71	0.001	AKAL	4
04.07.2018.	Ciecere2_3	4	AQUAT_VEG	75	0.001	PSAMMAL	5
04.07.2018.	Ciecere2_3	4	AQUAT_VEG	60	0.001	MICROLITHAL	6
04.07.2018.	Ciecere2_3	4	AQUAT_VEG	58	0.001	MICROLITHAL	7
04.07.2018.	Ciecere2_3	5	GLIDE	100	0.001	MICROLITHAL	1
04.07.2018.	Ciecere2_3	5	GLIDE	98	0.001	PSAMMAL	2
04.07.2018.	Ciecere2_3	5	GLIDE	66	0.001	PSAMMAL	3
04.07.2018.	Ciecere2_3	5	GLIDE	130	0.001	PSAMMAL	4
04.07.2018.	Ciecere2_3	5	GLIDE	36	0.001	PELAL	5
04.07.2018.	Ciecere2_3	5	GLIDE	47	0.001	PSAMMAL	6
04.07.2018.	Ciecere2_3	5	GLIDE	73	0.001	PSAMMAL	7
04.07.2018.	Ciecere2_3	6	AQUAT_VEG	69	0.097	AKAL	1
04.07.2018.	Ciecere2_3	6	AQUAT_VEG	78	0.081	AKAL	2
04.07.2018.	Ciecere2_3	6	AQUAT_VEG	56	0.09	AKAL	3
04.07.2018.	Ciecere2_3	6	AQUAT_VEG	48	0.155	MICROLITHAL	4
04.07.2018.	Ciecere2_3	6	AQUAT_VEG	52	0.057	AKAL	5

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
04.07.2018.	Ciecere2_3	6	AQUAT_VEG	34	0.056	AKAL	6
04.07.2018.	Ciecere2_3	6	AQUAT_VEG	48	0.058	AKAL	7
04.07.2018.	Ciecere2_3	7	GLIDE	63	0.094	AKAL	1
04.07.2018.	Ciecere2_3	7	GLIDE	86	0.029	PSAMMAL	2
04.07.2018.	Ciecere2_3	7	GLIDE	96	0.067	AKAL	3
04.07.2018.	Ciecere2_3	7	GLIDE	82	0.23	AKAL	4
04.07.2018.	Ciecere2_3	7	GLIDE	80	0.123	AKAL	5
04.07.2018.	Ciecere2_3	7	GLIDE	61	0.081	PSAMMAL	6
04.07.2018.	Ciecere2_3	7	GLIDE	58	0.08	AKAL	7
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	67	0.009	AKAL	1
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	43	0.069	AKAL	2
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	65	0.01	AKAL	3
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	42	0.084	AKAL	4
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	34	0.053	AKAL	5
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	40	0.08	AKAL	6
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	20	0.295	MICROLITHAL	7
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	36	0.103	MESOLITHAL	8
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	38	0.104	AKAL	9
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	58	0.001	AKAL	10
04.07.2018.	Ciecere2_3	8	AQUAT_VEG	15	0.166	MEGALITHAL	11
04.07.2018.	Ciecere2_3	9	BACKWATER	28	0.027	PSAMMAL	1
04.07.2018.	Ciecere2_3	9	BACKWATER	41	0.123	PSAMMAL	2
04.07.2018.	Ciecere2_3	9	BACKWATER	25	0.026	PSAMMAL	3
04.07.2018.	Ciecere2_3	9	BACKWATER	42	0.12	PSAMMAL	4
04.07.2018.	Ciecere2_3	9	BACKWATER	41	0.104	PSAMMAL	5
04.07.2018.	Ciecere2_3	9	BACKWATER	38	0.121	PSAMMAL	6
04.07.2018.	Ciecere2_3	9	BACKWATER	43	0.205	PSAMMAL	7
04.07.2018.	Ciecere2_3	10	GLIDE	34	0.249	MESOLITHAL	1
04.07.2018.	Ciecere2_3	10	GLIDE	15	0.504	MEGALITHAL	2
04.07.2018.	Ciecere2_3	10	GLIDE	42	0.392	MEGALITHAL	3
04.07.2018.	Ciecere2_3	10	GLIDE	60	0.098	MICROLITHAL	4
04.07.2018.	Ciecere2_3	10	GLIDE	47	0.025	MICROLITHAL	5
04.07.2018.	Ciecere2_3	10	GLIDE	58	0.1	MICROLITHAL	6
04.07.2018.	Ciecere2_3	10	GLIDE	58	0.025	MESOLITHAL	7
04.07.2018.	Ciecere2_3	11	RAPID	29	0.989	MEGALITHAL	1
04.07.2018.	Ciecere2_3	11	RAPID	25	0.06	MESOLITHAL	2
04.07.2018.	Ciecere2_3	11	RAPID	30	0.346	MESOLITHAL	3
04.07.2018.	Ciecere2_3	11	RAPID	15	0.793	MEGALITHAL	4
04.07.2018.	Ciecere2_3	11	RAPID	30	0.189	MACROLITHAL	5
04.07.2018.	Ciecere2_3	11	RAPID	45	0.306	MICROLITHAL	6
04.07.2018.	Ciecere2_3	11	RAPID	22	0.317	MESOLITHAL	7

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
31.10.2018	Ciecere2_4	1	BACKWATER	41	0.001	PELAL	1
31.10.2018	Ciecere2_4	1	BACKWATER	22	0.001	PELAL	2
31.10.2018	Ciecere2_4	1	BACKWATER	27	0.001	AKAL	3
31.10.2018	Ciecere2_4	1	BACKWATER	37	0.001	PSAMMAL	4
31.10.2018	Ciecere2_4	1	BACKWATER	22	0.001	PSAMMAL	5
31.10.2018	Ciecere2_4	2	GLIDE	65	0.079	PSAMMAL	1
31.10.2018	Ciecere2_4	2	GLIDE	110	0.082	PELAL	2
31.10.2018	Ciecere2_4	2	GLIDE	109	0.185	AKAL	3
31.10.2018	Ciecere2_4	2	GLIDE	166	0.085	MESOLITHAL	4
31.10.2018	Ciecere2_4	2	GLIDE	97	0.125	AKAL	5
31.10.2018	Ciecere2_4	2	GLIDE	98	0.19	PSAMMAL	6
31.10.2018	Ciecere2_4	2	GLIDE	109	0.185	AKAL	7
31.10.2018	Ciecere2_4	3	POOL	87	0.029	MICROLITHAL	1
31.10.2018	Ciecere2_4	3	POOL	107	0.059	PSAMMAL	2
31.10.2018	Ciecere2_4	3	POOL	74	0.001	AKAL	3
31.10.2018	Ciecere2_4	3	POOL	87	0.029	PSAMMAL	4
31.10.2018	Ciecere2_4	3	POOL	107	0.059	PSAMMAL	5
31.10.2018	Ciecere2_4	3	POOL	74	0.001	AKAL	6
31.10.2018	Ciecere2_4	3	POOL	71	0.021	MICROLITHAL	7
31.10.2018	Ciecere2_4	4	RIFFLE	44	0.353	MACROLITHAL	1
31.10.2018	Ciecere2_4	4	RIFFLE	19	0.853	MEGALITHAL	2
31.10.2018	Ciecere2_4	4	RIFFLE	38	0.25	MEGALITHAL	3
31.10.2018	Ciecere2_4	4	RIFFLE	28	0.459	MEGALITHAL	4
31.10.2018	Ciecere2_4	4	RIFFLE	27	0.847	MEGALITHAL	5
31.10.2018	Ciecere2_4	4	RIFFLE	49	1.059	MACROLITHAL	6
31.10.2018	Ciecere2_4	4	RIFFLE	49	0.99	MACROLITHAL	7
31.10.2018	Ciecere2_4	4	RIFFLE	46	0.353	PSAMMAL	8
31.10.2018	Ciecere2_4	5	BACKWATER	96	0.001	PELAL	1
31.10.2018	Ciecere2_4	5	BACKWATER	98	0.001	PELAL	2
31.10.2018	Ciecere2_4	5	BACKWATER	60	0.001	PELAL	3
31.10.2018	Ciecere2_4	5	BACKWATER	27	0.001	PSAMMAL	4
31.10.2018	Ciecere2_4	5	BACKWATER	98	0.001	PSAMMAL	5
31.10.2018	Ciecere2_4	5	BACKWATER	60	0.001	PSAMMAL	6
31.10.2018	Ciecere2_4	5	BACKWATER	27	0.001	PELAL	7
31.10.2018	Ciecere2_4	6	BACKWATER	75	0.001	PELAL	1
31.10.2018	Ciecere2_4	6	BACKWATER	57	0.001	PSAMMAL	2
31.10.2018	Ciecere2_4	6	BACKWATER	60	0.001	PELAL	3
31.10.2018	Ciecere2_4	6	BACKWATER	25	0.001	PELAL	4
31.10.2018	Ciecere2_4	6	BACKWATER	75	0.001	PSAMMAL	5
31.10.2018	Ciecere2_4	6	BACKWATER	60	0.001	PELAL	6
31.10.2018	Ciecere2_4	6	BACKWATER	25	0.001	PELAL	7

DATE	RIVER	HMU NUM	HMU TYPE	DEPTH	VELOCITY	SUBSTRATE	MEAS NUM
31.10.2018	Ciecere2_4	7	GLIDE	50	0.069	MESOLITHAL	1
31.10.2018	Ciecere2_4	7	GLIDE	60	0.242	MESOLITHAL	2
31.10.2018	Ciecere2_4	7	GLIDE	10	0.254	MEGALITHAL	3
31.10.2018	Ciecere2_4	7	GLIDE	60	0.001	AKAL	4
31.10.2018	Ciecere2_4	7	GLIDE	56	0.284	AKAL	5
31.10.2018	Ciecere2_4	7	GLIDE	36	0.138	AKAL	6
31.10.2018	Ciecere2_4	7	GLIDE	65	0.428	MICROLITHAL	7
31.10.2018	Ciecere2_4	7	GLIDE	95	0.3675	AKAL	8
31.10.2018	Ciecere2_4	7	GLIDE	68	0.115	MICROLITHAL	9
31.10.2018	Ciecere2_4	7	GLIDE	18	0.259	MEGALITHAL	10
31.10.2018	Ciecere2_4	8	RIFFLE	43	0.501	MICROLITHAL	1
31.10.2018	Ciecere2_4	8	RIFFLE	40	0.251	PSAMMAL	2
31.10.2018	Ciecere2_4	8	RIFFLE	43	0.435	AKAL	3
31.10.2018	Ciecere2_4	8	RIFFLE	25	0.439	AKAL	4
31.10.2018	Ciecere2_4	8	RIFFLE	39	0.397	MICROLITHAL	5
31.10.2018	Ciecere2_4	8	RIFFLE	41	0.435	AKAL	6
31.10.2018	Ciecere2_4	8	RIFFLE	35	0.397	MESOLITHAL	7
31.10.2018	Ciecere2_4	9	GLIDE	45	0.234	PSAMMAL	1
31.10.2018	Ciecere2_4	9	GLIDE	45	0.138	PSAMMAL	2
31.10.2018	Ciecere2_4	9	GLIDE	21	0.356	MEGALITHAL	3
31.10.2018	Ciecere2_4	9	GLIDE	47	0.257	MICROLITHAL	4
31.10.2018	Ciecere2_4	9	GLIDE	53	0.153	MESOLITHAL	5
31.10.2018	Ciecere2_4	9	GLIDE	45	0.295	MESOLITHAL	6
31.10.2018	Ciecere2_4	9	GLIDE	49	0.32	MICROLITHAL	7
31.10.2018	Ciecere2_4	9	GLIDE	45	0.592	MICROLITHAL	8
31.10.2018	Ciecere2_4	9	GLIDE	22	0.564	MEGALITHAL	9
31.10.2018	Ciecere2_4	9	GLIDE	20	0.515	MICROLITHAL	10
31.10.2018	Ciecere2_4	9	GLIDE	18	0.185	AKAL	11
31.10.2018	Ciecere2_4	9	GLIDE	66	0.263	MICROLITHAL	12
31.10.2018	Ciecere2_4	9	GLIDE	39	0.15	MESOLITHAL	13
31.10.2018	Ciecere2_4	9	GLIDE	27	0.001	PSAMMAL	14
31.10.2018	Ciecere2_4	9	GLIDE	71	0.296	MESOLITHAL	15
31.10.2018	Ciecere2_4	9	GLIDE	40	0.056	PSAMMAL	16
31.10.2018	Ciecere2_4	10	RIFFLE	35	0.453	MACROLITHAL	1
31.10.2018	Ciecere2_4	10	RIFFLE	19	0.136	MESOLITHAL	2
31.10.2018	Ciecere2_4	10	RIFFLE	53	0.358	MESOLITHAL	3
31.10.2018	Ciecere2_4	10	RIFFLE	17	0.265	MEGALITHAL	4
31.10.2018	Ciecere2_4	10	RIFFLE	24	0.374	MEGALITHAL	5
31.10.2018	Ciecere2_4	10	RIFFLE	18	0.391	MESOLITHAL	6
31.10.2018	Ciecere2_4	10	RIFFLE	27	0.374	MICROLITHAL	7

ANNEX VIII

Field Work Protocol for Latvian Fish data collecting

Parameters:
Card square: by scale map prepared by the Latvian geospatial agency 1 : 50000 (http://map.lgia.gov.lv/index.php?lang=0&cPath=4_15_29);
Date: dd/mm/year;
River basin district: Venta;
River basin;
River;
Site code;
Site: closest populated site or another reference point – bridge with road code number, Farmstead with name.
Project name: ECOFLOW;
Habitat: by expert opinion: rhithral or patomal conditions;
Long X: WGS84_latsystem;
Lat Y: WGS84_latsystem;
Fishing effort: time in minutes;
Fishing area length: m- measured;
Fishing area width: m- measured;
River width: m- measured or maps data;
Fished area: m^2- calculated form length and width;
Average depth: m- measured;
Maximal depth: m- measured;
Morphological modifications: yes/no- expert opinion;
Shading: 4 ranges from no, occasional, predominant, total-expert opinion;
Habitat: riffle, rapid, pool (in %from fished area)-expert opinion;
Flow speed: m/s- measured;
Vegetation by intensity: no, low, average, intensive-expert opinion;
By type: flowering plants; algae; water moss- expert opinion;
Surroundings: wood, meadows, arable land, populated place, industrial area (in %from the area)
Signs of pollution: expert opinion;
Composition of river bead: bedrock, boulders, pebble/cobble; gravel, sand, silt, clay (in % from the fished area)- expert opinion;
Organic components on the river bead: wooden debris; mud; marlstone (in % from the total area)-expert opinion;
Water temperature:°C-measured;
Oxygen: mg/l- measured;
pH: measured;
Water conductivity: µS/cm.

Table 1. Fish number and species composition in ECOFLOW rivers (Latvia)

Species	Ciecere(areasampled 971 m^2		Ēda (areasampled611 m^2)		Vanka (areasampled 621 m^2)	
	Num of fish L>50 mm	Num of fish L<50 mm	Num of fish L>50 mm	Num of fish L<50 mm	Num of fish L>50 mm	Num of fish L<50 mm
Abramis brama	2 (0.3)					
Alburnoides bipunctatus	75 (10.8)	60 (38.7)				
Alburnus alburnus	39 (5.6)	7 (4.5)	1 (0.1)			
Anguilla anguilla	1 (0.1)					
Barbatula barbatula	3(0.4)		48 (4.0)	15 (5.4)	29 (11.0)	46 (71.9)
Blicca bjoerkna	2 (0.3)					
Cobitis taenia	28 (4.0)		9 (0.7)		2 (0.8)	
Cottus gobio			2 (0.2)			
Gobio gobio	85 (12.3)	10 (6.5)	50 (4.1)	8 (2.9)		
Lampetra planeri			1 (0.1)			
Leucaspius delineatus			2 (0.2)	39 (14.0)		
Leuciscus leuciscus	57 (8.2)	6 (3.9)			11 (4.2)	
Perca fluviatilis	1 (0.1)		1 (0.1)			
Phoxinus phoxinus	46 (6.6)		1025 (84.5)	142 (50.9)	61 (23.1)	17 (25.6)
Rhodeus sericeus	11 (1.6)	17 (11.0)	4 (0.3)	6 (2.2)		
Rutilus rutilus	315 (45.5)	46 (29.7)	64 (5.3)	68 (24.4)		
Salmo trutta			3 (0.2)		161 (61.0)	1 (1.5)
Scardinius erythrophthalmus				1 (0.4)		
Squalius cephalus	28 (4.0)	9 (5.8)	3 (0.2)			
Vimba vimba	1 (0.1)					
Total number	694	155	1213	279	264	64
Averag number of fish per 100 m2		87.4		244.1		52.8

In brackets - %;
Species composing more than 10% fish community in the river

Table 2. Average densities of fish per 100 m² in different geomorphic unit types (Latvia)

Species	Vanka		Ciecere					Eda					
	1glide	2glide	2glide	2pool	1glide	1backwater	1riffle	1glide	1flood lake	1 pool	2pool	2glide	3glide
ABRB					0.9								
ALBB			1.2		23.8		93.8						
ALBA			3.6	12.5	0.4	15.6	6.3					1.7	
ANGA			0.2										
BARB	4.0	11.0	0.2				2.5	15.2	93.3	100.0		15.0	6.6
BLIB			0.2	0.8									
COBT	0.4		0.2	4.2	7.8	4.4	2.5	0.7				13.3	
COTG									13.3			1.7	
GOBG			4.4	0.8	18.6		36.3	3.4	13.3			23.3	10.9
LAMP								0.7					
LEUD													10.0
LEUL	1.6	0.6	4.6	10.8	10.0		5.0						
PERF					0.4			0.7					
PHOP	14.4	1.2			7.4		36.6	18.6	146.7			43.3	315.1
RHOS					3.0	35.6	6.3	1.4	66.7			3.3	0.3
RUTR			14.9	50.0	80.1	20.0	41.3	6.2	26.7	350.0	17.9	35.0	25.7
SALT	3.2	29.2											
SCAE													0.3
SQUC			0.6	0.8	7.8	15.6	10.0						0.9
VIMV					0.4								
SUM	23.6	42.0	30.3	80.0	160.6	91.1	240.0	46.9	360.0	450.0	17.9	145.7	370.6

Species composing more than >10% fish community in sampling location (geomorphic unit)