MINISTRY OF AGRICULTURE, RURAL DEVELOPMENT AND ENVIRONMENT
WATER DEVELOPMENT DEPARTMENT

"Preparatory studies that will form the basis for the elaboration of the 3rd River Basin Management Plan (RBMP) of Cyprus – Implementation of the Water Framework Directive 2000/60/EC"

Contract Number: YY 07/2019

2nd Interim Report
Activity 8
"Classification of the SWB status/potential"

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1 Introduction

According to the Terms of Reference in the context of Activity 8, the classification of the status/potential of surface Water Bodies is required. Activity 8 includes three sub-activities:

Sub-activity 8.1 This includes:

- Data collection, data evaluation and quality controls. The data used (chemical, biological, physicochemical) cover the hydrological years between 2013-2014 and 2018-2019.

- General evaluation of the monitoring program results for rivers, natural lakes and reservoirs, including the relevant HMWBs and AWBs, taking into account the requirements of Annex V of the WFD, Directive 2008/105/EC and Directive 2009/90/EC.

- Checking and documenting the findings in relation to the general data coherence, exceedances, any errors, etc. For some values, verification was required through the laboratory that performed the analyzes. In cases of exceeding the Environmental Quality Standards (EQS) and resulting in the chemical status becoming "unsatisfactory" or ecological moderate or worse, the respective monitoring results were reviewed by checking back the initial laboratory reports and the respective time series.

Sub-activity 8.2 This includes:

- The method of estimating the chemical and physicochemical conditions in rivers and reservoirs was reviewed and, where necessary, adapted. This was not possible for the lakes as there are no definitive reference conditions. The 2009 CIS guidelines for the assessment of eutrophication (**GD** 23) were used, in particular the new "best practice for setting nutrient concentration limits to support good ecological status" (toolkit). For the physicochemical quality elements (QE) covered by the above "best practice guide", a review and, partial correction of the system developed under the contract WDD54/2009 and YY02/2013.
- Analysis of the monitoring results for the physicochemical parameters in relation to the corresponding results of the biological quality data, and determination of whether the threshold values of the physicochemical parameters correspond to the state of the biological quality data.

Sub-activity 8.3 This includes:

Classification of the status (ecological and chemical) of all WBs (rivers, lakes, reservoirs, HMWBs and AWBs) taking into account the Directives 2000/60/EC, 2008/105/EC, 2013/39/EU, 2009/90/EC, the 3rd Intercalibration Commission Decision (EU) 2018/229, and the relevant **GDs** 4, 7, 10, 13 and 23 as in force.

To assess the chemical status, the concentration of priority substances and other substances (e.g. metals) in **river, reservoir and lake sediments** was also taken into account. A correlation was made with concentrations and trends in the water column and then relevant conclusions were drawn, taking into account Canada's threshold values.

The bioavailable concentrations for all heavy metals have been determined, where the corresponding methods and models (**the bio-met model for Ni and Pb**) exist, as required by the Directive 2008/105/EC.

The results of the substances monitoring included in the "watch list of substances for monitoring at a Union level in the field of water policy in accordance with Directive 2008/105/EC" (COMMISSION IMPLEMENTING DECISION (EU) 2018/840) were also evaluated.

To assess the ecological potential of the river HMWBs, the following were implemented:

a) Application of the **estimation method of the 2nd RBMP** for the determination of the ecological potential of the river HMWBs (excluding reservoirs).

b) Classification of reservoir capacity using the **national method of Cyprus** (NMASRP index - Commission Decision (EU) 2018/229).

Regarding the BQEs in river fish and in view of the absence of a national assessment method, all data collected during the respective monitoring programs (e.g. WDD 49/2010, information on the historical presence of fish on waterbody level, recoreded non-native populations). The result of the evaluation was not used to assess the ecological status in a narrow sense, because no evaluation method is currently available. However, the results from the monitoring of fish would be presented in parallel with the results of other BQEs and were taken into account in the classification of the ecological potential of HMWBs.

For the case of BQE **phytoplankton and zooplankton in natural lakes and in view of the absence of a national assessment method**, all data collected were used, taking into account the preliminary reference conditions set for natural lakes in Cyprus under Contracts YY02/2013 and YY02/2016D. Also, the results of the research project "Assessment of ecological water quality of natural lakes of Cyprus", 2020 (Research project 71498), compiled by Prof. Maria Moustaka, of the Aristotle University of Thessaloniki, were utilized.

For the evaluation of the **hydromorphological elements** as there is not yet an official evaluation method, the conclusions of the 2nd RBMP were evaluated.

The results per monitoring station were recorded in the form of tables and GIS files (shapefiles).

The results per water body for each parameter separately and for each quality element are presented, as well as the final status results. Tables are provided showing the confidence in the evaluation results. The classification of trust was done according to the instructions of the Guidance Document for the submission of data 2016 (final draft V6.0.2).

The results are also presented at a country level in tables and maps that give a broad picture of the ecological and chemical status of the waters of Cyprus.

For each water body the following are **clearly** presented:

- The data and quality data used to assess it (or that no data were available).
- The methods and procedures applied.
- The evaluation systems applied and the corresponding threshold values.
- Which parameters were decisive for the final status.

2 Sub-activity 8.1. Data control

For the implementation of sub-activity 8.1, the results of the Monitoring Program were collected on all types of surface bodies, in both the water column and the sediment. The evaluation of the completeness and quality of the data covered the hydrological years between 2013-2014 and 2018-2019. Additionally, the data and the results of the following reports were utilized:

1. Water Development Department. Evaluation of Results of **Priority Substances** as defined in the integrated Directive 2008/105/EC and other substances of national interest in **surface water** (for the period 2015-2017) and **sediments** (for the period 2013-2017) of rivers, reservoirs and lakes. November 2017 Division of Hydrometry.
2. Water Development Department. **Evaluation of Results of Priority Substances** and other substances in **surface waters and sediments** of rivers, reservoirs and lakes. April 2019 Division of Hydrometry.
3. Water Development Department. Provision of Services for the Determination of the **Reference Conditions in Lake Bodies** within the framework of the Program of Measures (Measure 142) and updating of the characterization of the body types in accordance with the provisions of the Water Framework Directive. **YY 06/2013**. Third & Fourth Deliverable (D3 & D4). December 18, 2015.
4. Water Development Department. Purchase of Services for updating the definition of the **Reference Conditions for Lake Water Bodies** and updating the designation of the types of bodies in accordance with the provisions of the Water Framework Directive, based on the results of the contract YY 06/2013. **YY 02/2016D**. FINAL DELIVERABLE (D1 & D2). December 12, 2016.
5. Water Development Department. Specialized consultancy services for: (i) sampling in Cyprus natural lakes, zooplankton analysis and determination of biological indices from samples collected from the natural lakes, and (ii) zooplankton analysis (abundance, biodiversity, biomass) in samples collected from coastal areas. Contract Number: **YY 01/2018**. Deliverable 4 Final report from the **analysis of zooplankton samples** collected from natural lakes in the period 2017-2019.
6. Water Development Department. Provision of specialized consultancy services for phytoplankton analysis and determination of biological metrics in samples collected from Cyprus natural lakes. Implementation of Directive 2000/60/EC. Contract YY 06/2019. Deliverable 2 - Results report (2017-1019).
7. Aristotle University of Thessaloniki. Ecological assessment of water quality of natural lakes of Cyprus. Research project 71498. M. Moustaka, August 2020.
8. Water Development Department. Provision Of Specialized Consultancy Services For **Phytoplankton** Analysis And Determination Of Biological Indices In Samples Collected From Cyprus Impounded River Water Bodies (Reservoirs). Implementation Of Directive 2000/60/EC. Contract YY **03/2018**. 3rd Deliverable. Results Report.
9. Water Development Department. Sampling, Sample Analysis And Evaluation Of Biological Quality Data. Implementation Of Article 8 Of Directive 2000/60/Ec. Contract WDD 21/2015. Final essay.

10. Water Development Department. Sampling, Sample Analysis And Evaluation Of Biological Quality Data. Implementation Of Article 8 Of Directive 2000/60/EC. Contract WDD 15/2017. Final essay.

3 Sub-activity 8.2. Review of physicochemical conditions in rivers, reservoirs and natural lakes

According to Annex II of the WFD, for each type of surface water body, typical hydromorphological and **physicochemical conditions** are defined, which represent the values of the hydromorphological and physicochemical quality elements (defined in point 1.1 of Annex V of the WFD) for the specific surface water body, when its ecological status is characterized as **high** in the relevant table in point 1.2 of Annex V of the WFD.

According to the definitions of high, good and moderate ecological status of rivers and lakes, when the physicochemical quality elements are in:

- High status: The values of the physicochemical elements correspond completely or almost completely to the undisturbed conditions. Nutrient concentrations remain within the limits normally characteristic of undisturbed conditions. The levels of salinity, pH, oxygen balance, acid neutrality, transparency and temperature show no signs of anthropogenic disturbance and remain within the limits, normally characteristic of undisturbed conditions.
- Good status: Temperature, oxygen balance, pH, acid neutrality, transparency and salinity do not reach the limits set to ensure the functioning of the ecosystem and to achieve the values set for biological quality elements. The concentrations of nutrients do not exceed the limits set to ensure the functioning of the typical ecosystem and the achievement of the values set for the biological quality elements.
- Moderate status: The conditions correspond to the achievement of the set values for the biological quality elements.

According to GD 23 in the assessment of eutrophication, nutrients strongly support the biological quality assessment of phytoplankton, macroalgae, and phytobenthos. The threshold between good and moderate nutrition, nutrients will provide important information on the state of eutrophication, which is one of the key information needed to establish a program of measures.

Different water types have different nutrient sensitivity. Therefore, when setting nutrient standards, it is important to consider the category of water and, **where necessary, the type of surface water.**

When setting standards for nutrients you should always keep in mind the goals and the fact that the nutrient parameters are part of a quality support element and therefore standards for this parameter are goals that we should strive for. In general, the primary goal of WFD is good ecological status and thus can not be done without evaluation of biological quality data. The process of developing appropriate nutrient standards should include:

a) a clear picture of the good state of biology/ecology;

b) the understanding of the relationship between nutrients and biology/ecology;

c) the decide on the best available techniques for exporting the standards and the appropriate level of prevention and summary statistics to be used in defining those standards;

d) sufficient and reliable monitoring data for exporting and determining compliance with the standards.

According to GD 23, the establishment of standards must be linked to biological thresholds that are taken into account in the assessment of the ecological status.

Toolbox for exporting nutrient standards

Use of empirical data: Nutritional standards can be set using available biological quality monitoring data and nutrient parameters. The simplest way is to use a certain percentage of the nutrient concentration distribution of the stations that are classified in **Good Status** for one or more biological quality elements or parameters. This method is very simple and worthwhile if a sufficiently low percentage is chosen to ensure that biological values are achieved. It is recommended to exclude sites where other environmental factors besides nutrients act and which may impair biological quality. The disadvantage of the method is that the relationship between biology and nutrient concentrations is not controlled.

A more complex method is to apply **regression analysis**. In its simplest form, it is considered a linear and single-factor relationship between biology and nutrients. An appropriate statistical value derived from the regression analysis can be used to design the standard. When the predicted nutrient concentration at the G/M threshold value comes from the best application, the G/M nutrient concentration will lead to a biological value of about 50%. Using the percentage distribution of linear regression errors, the confidence level of achieving biological value can be enhanced to another desired level (reference).

The most advanced method is to **use statistical techniques** that correlate nutrient concentrations with **more than one** environmental **factors**, or that may allow different types of relationships, e.g. **non-linear**. This method can be recommended in cases where it is clear that nutrients are not the only factor determining biological quality or where the relationships are clearly non-linear.

The level of incorrect classification between biological quality elements and nutrients can also be used by setting the G/M threshold for nutrients. This method is more or less repetitive and provides a direct picture of the effects of the defined nutrient pattern for the site classification. The process begins with drawing up a set of potential nutrient standards in small discrete steps, which can be used to create a classification set for each potential nutrient standard for both biological quality and nutrients. In each position the ranking results have four possible combinations:

1) the biological quality elements are good and the nutrients are not that good,

2) the biological quality elements are good and the nutrients are also good,

3) the biological quality elements are not good and on the other side the nutrients are good, and

4) the biological quality elements are not good and the nutrients are also not good.

If the nutrients are related to the biological quality elements, then the fraction of these four classification combinations is shifted to the possible typical nutrient gradient. If the discrete steps are small enough, the potential model can be designed together with the distribution of the four types of classification. The template can now be defined as the contribution of one of these four classification combinations. For example, the concentration of nutrients where e.g. 10% of BQE classification results are not good and nutrients are not good either, it can be set as standard. By this definition, the tested value of biological status is about 90% of the cases achieved by achieving the nutrient standard.

The Hindcasting method is a way to estimate background levels. Natural baseline values for rivers can be estimated from models, assuming undisturbed conditions (e.g. forest basins) rather than a specific time period, as the latter reflects a different state of eutrophication processes in different regions. The model data should be validated by comparison with remote area values and historical (paleo-ecological) findings. Hindcast values are not standard but they can be used at the **discretion of experts** to determine nutritional standards.

In the framework of the Common Implementation Strategy of the WFD, a document of best practices for the establishment of nutrient concentrations in support of good ecological status was drafted ***(Phillips G, et al., 2018b, a)***. This document was designed to help Member States determine the phosphorus and nitrogen concentrations that are likely to support Good Ecological Status. It can be used to control existing threshold values or to develop new ones. The document is supported by a set of tools that provide statistical models, in the form of a Microsoft (MS) Excel workbook and a series of scripts that can be executed using R, an open-source language widely used in statistical analysis and graphical presentation **(Varbiro G, et al., 2018)**. The toolkit has been extensively tested by Member State experts in all water categories (lakes, rivers, transitional and coastal waters).

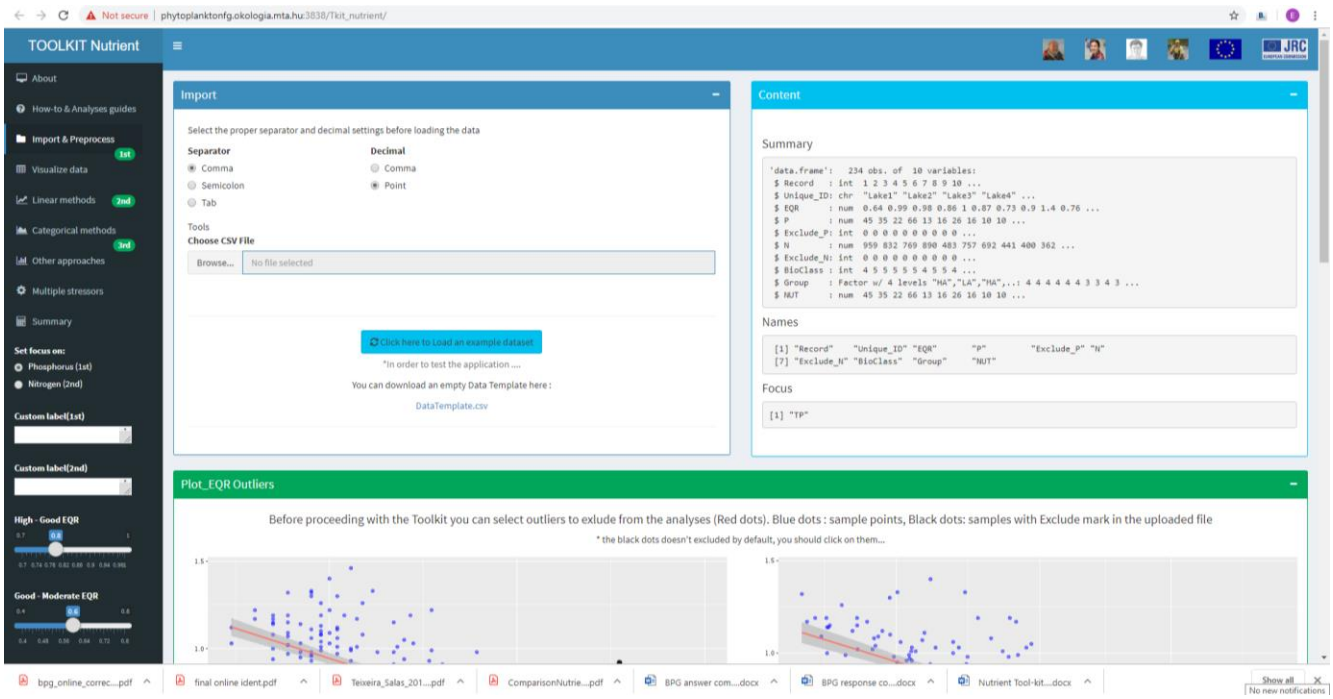


Figure 3-1 Screenshot from the Nutrients Toolkit software

3.1 Rivers

According to the 2nd RBMP, the following limit conditions apply with regards to rivers, in terms of nutrients and specific pollutants:

Table 3-1 Classification system for chemical - physicochemical elements in river monitoring stations (excluding reservoirs) according to the 2nd RBMP

Parameter	Unit	High	Good	Moderate	Poor	Bad
DO	mg/l	>9,0	9,0-6,4	6,4-4,0	4,0-2,0	<2,0
$N\text{-}NO_3^-$	mg/l	<0,22	0,22-0,60	0,61-1,30	1,30-1,80	>1,80
$N\text{-}NH_4^+$	mg/l	<0,024	0,024-0,060	0,061-0,200	0,210-0,500	>0,500
$N\text{-}NO_2^-$	µg/l	<3,0	3,0-8,0	8,1-30,0	30,1-70,0	>70,0
TP	µg/l	<85	86-165	166-220	221-405	>405
$P\text{-}PO_4^{-3}$	µg/l	<30	30-105	106-165	166-340	>340
EC	µS/cm	<250	250-750	750-2000	2001-3000	>3000
SAR		<3	3-5	5,1-10	10-15	>15
BOD_5	mg/l	<0,5	0,5-2,0	2,1-3,5	3,5-5,0	>5,0

In river WB stations where there were biological quality data and nutrient measurements, the **EQR of macroinvertebrates, diatoms and macrophytes was checked (average value where 2 values in each year are present),** TN, TP and NO_3 for the period of the 1st half of the year (i.e. with the average values of the 1st half of the year), taking into account the river type of each station.

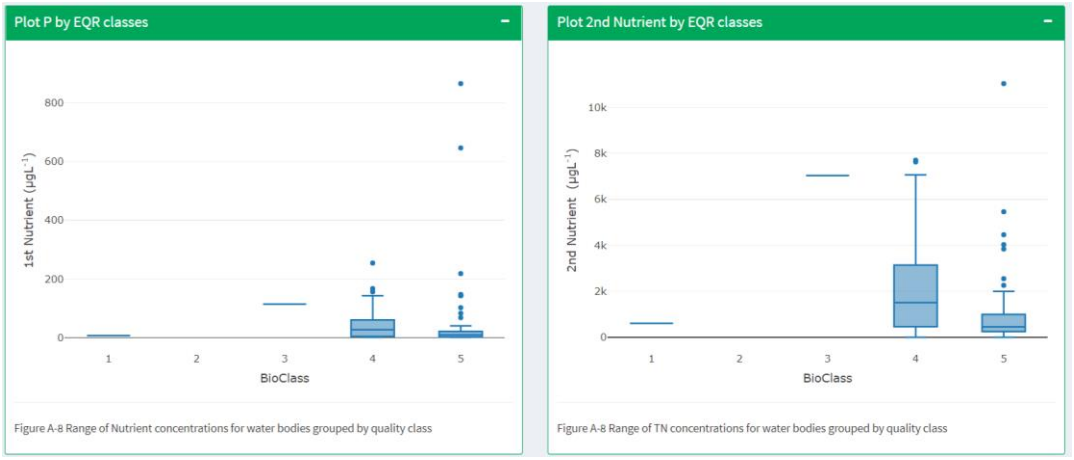


Figure 3-2 **Diatoms, IPS-RM4. Plots TP (1st Nutrient) & TN (2nd nutrient) by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)**

Figure 3-3 **Diatoms, IPS-RM5. Plots TP (1st Nutrient) & TN (2nd nutrient) by EQR (High=5, Good=4, Moderate=3)**

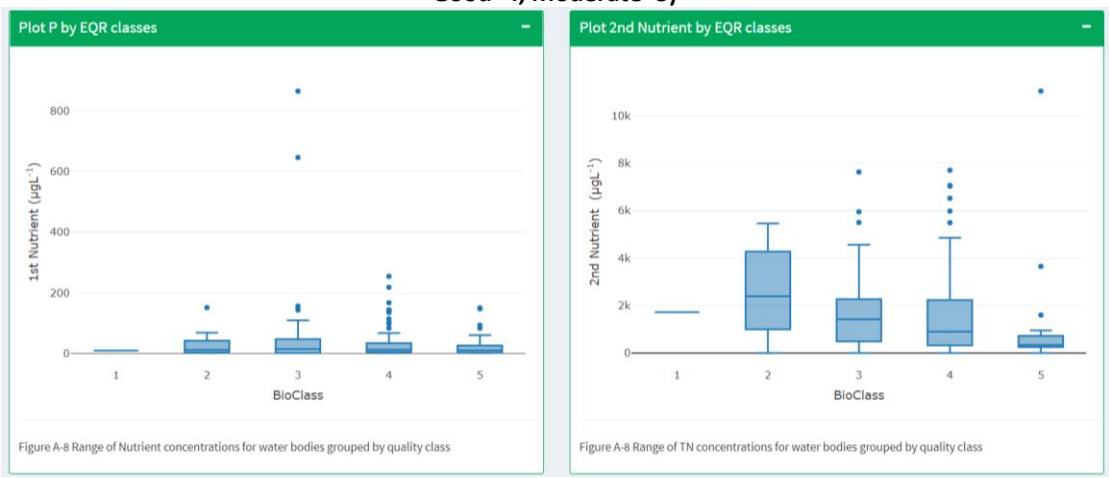


Figure 3-4 **Macroinvertebrates, STAR-RM4. Plots TP (1st Nutrient) & TN (2nd nutrient) by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)**

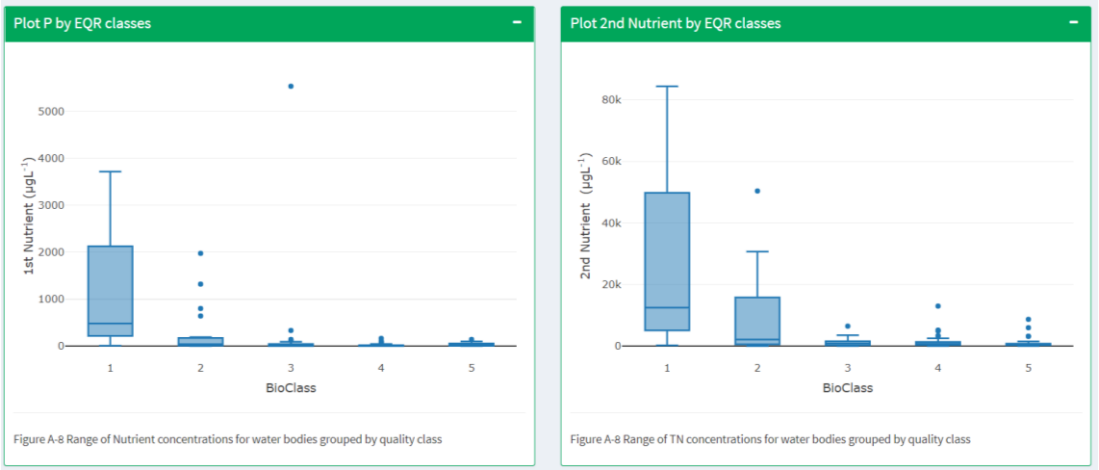


Figure 3-5 **Macroinvertebrates, STAR-RM5. Plots TP (1st Nutrient) & TN (2nd nutrient) by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)**

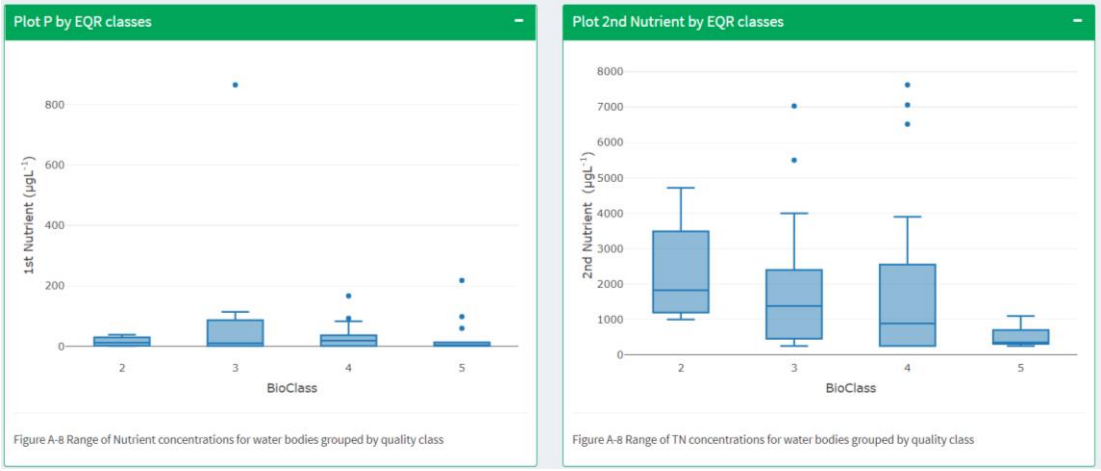


Figure 3-6 **Macrophytes, IBMR-RM4. Plots TP (1st Nutrient) & TN (2nd nutrient) by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)**

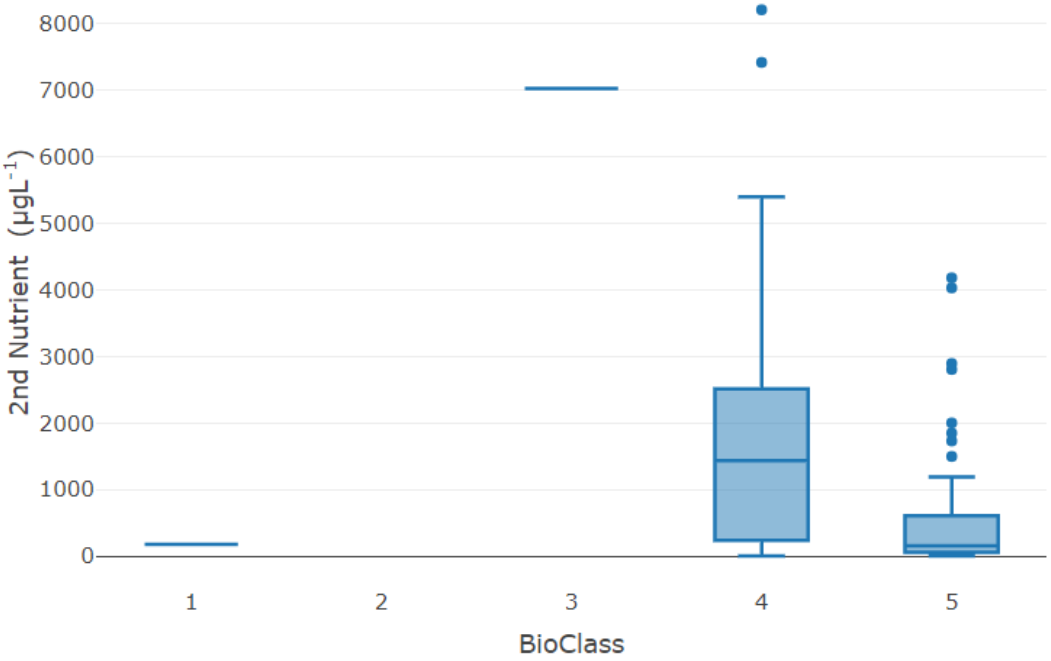


Figure 3-7 **Diatoms, IPS-RM4. Plot N-NO_3 by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)**

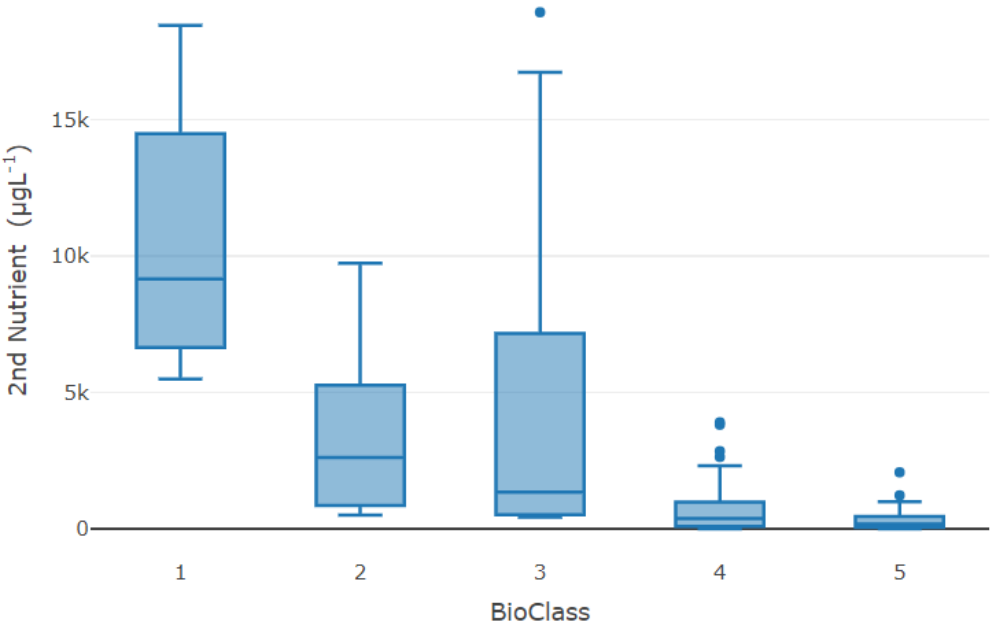


Figure 3-8 **Diatoms, IPS-RM5. Plot N-NO3 by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)**

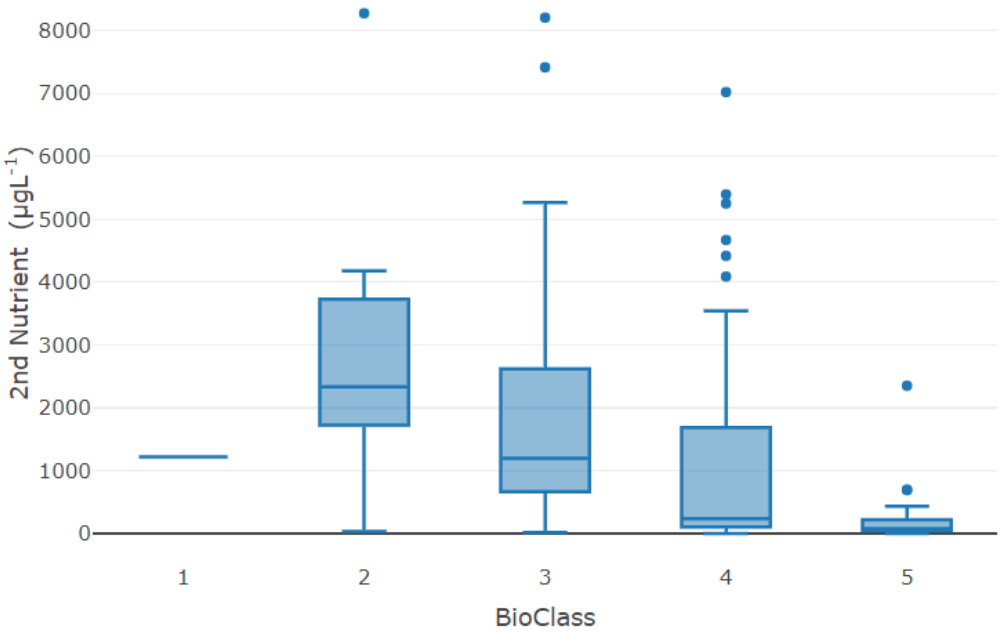


Figure 3-9 Macroinvertebrates, STAR-RM4. Plot N-NO3 by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)

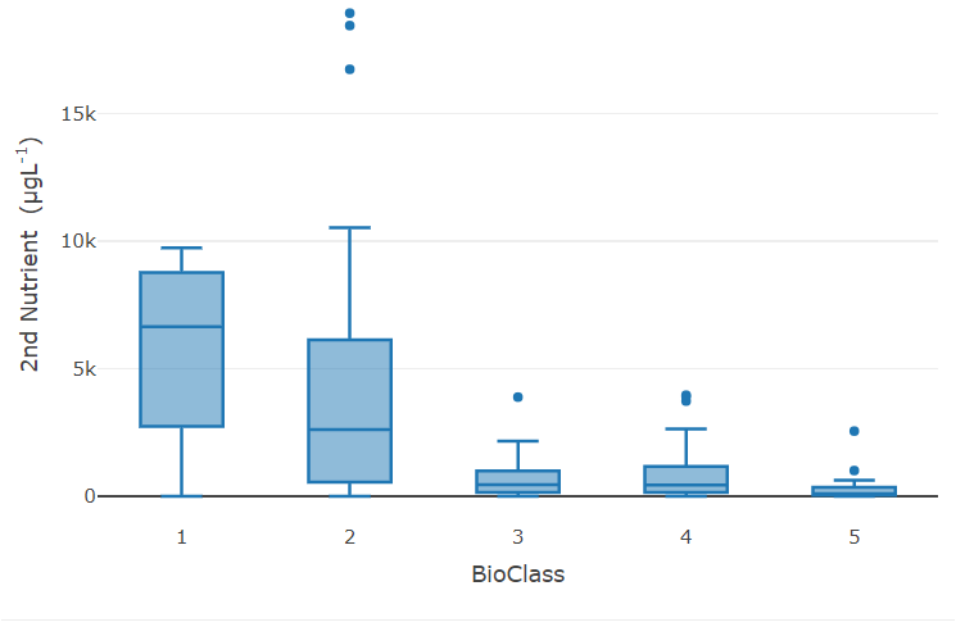


Figure 3-10 Macroinvertebrates, STAR-RM5. Plot N-NO3 by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)

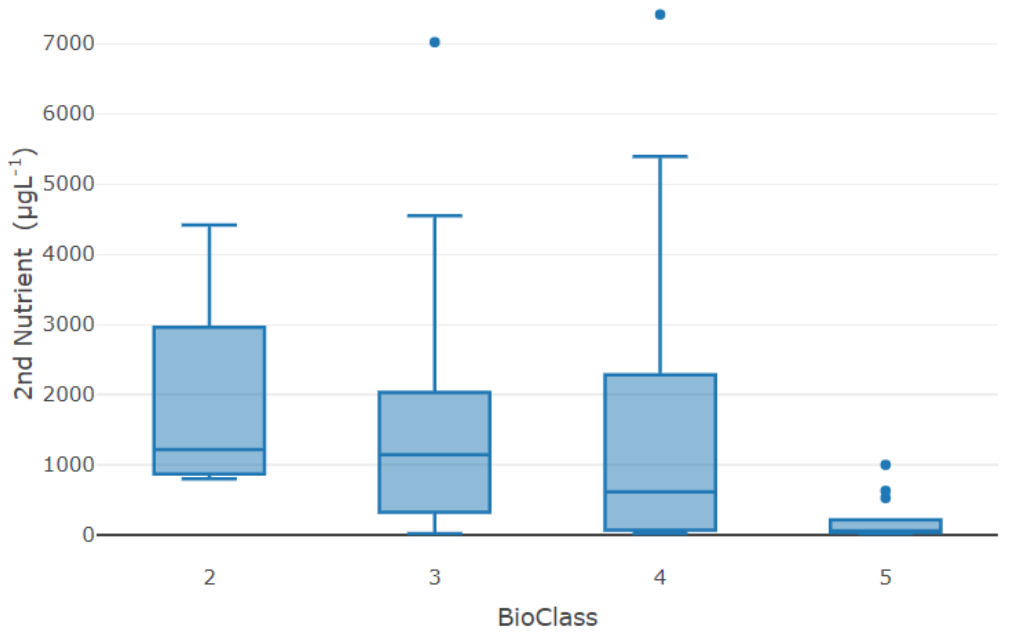


Figure 3-11 **Macrophytes, IBMR-RM4. Plot N-NO3 by EQR (High=5, Good=4, Moderate=3, Poor=2, Bad=1)**

Checking continued further regardless of river typology.

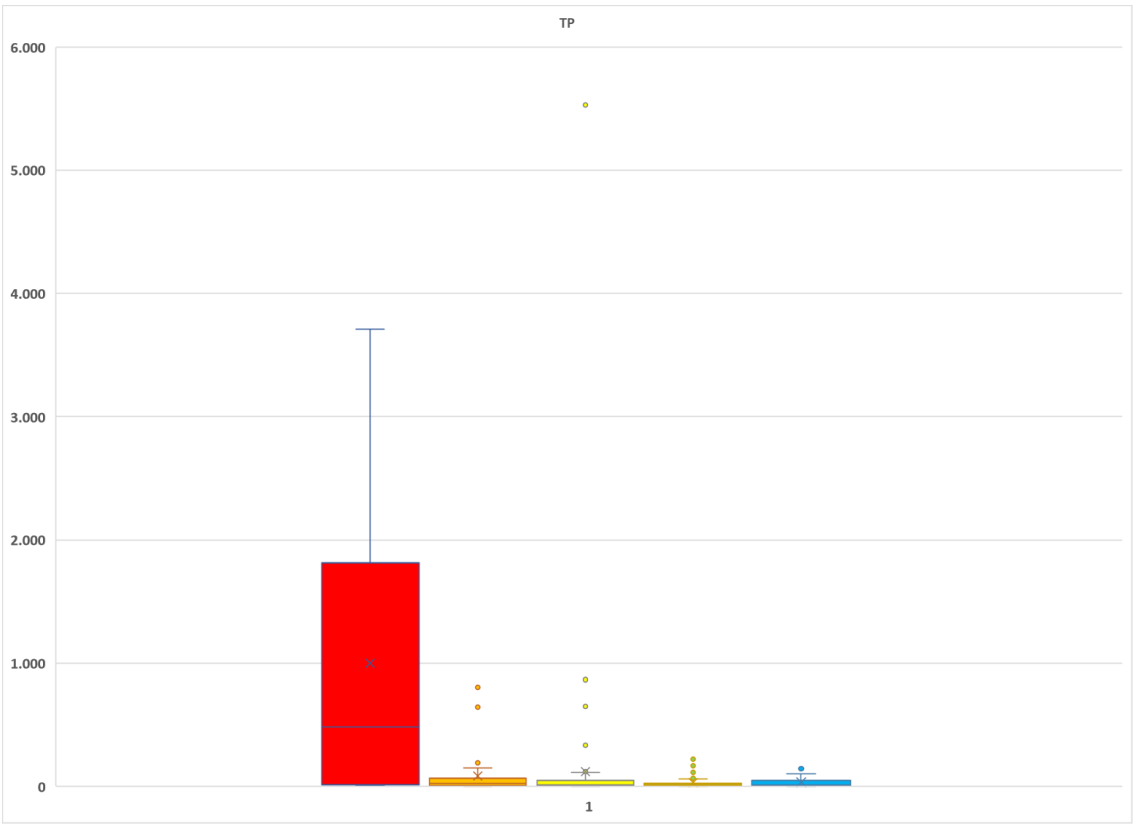


Figure 3-12 Total phosphorus concentration range in river groups of the same biological status (red = poor status, blue = high status)

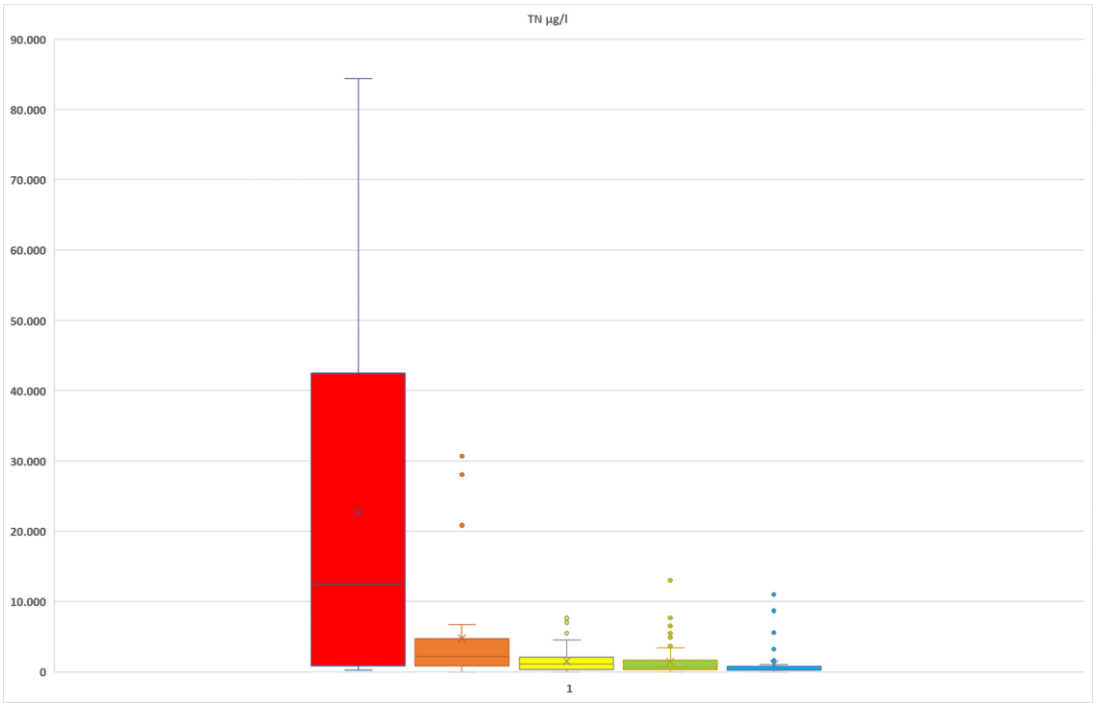


Figure 3-13 Range of total nitrogen concentration in river groups of the same biological status (red = poor condition, blue = high status)

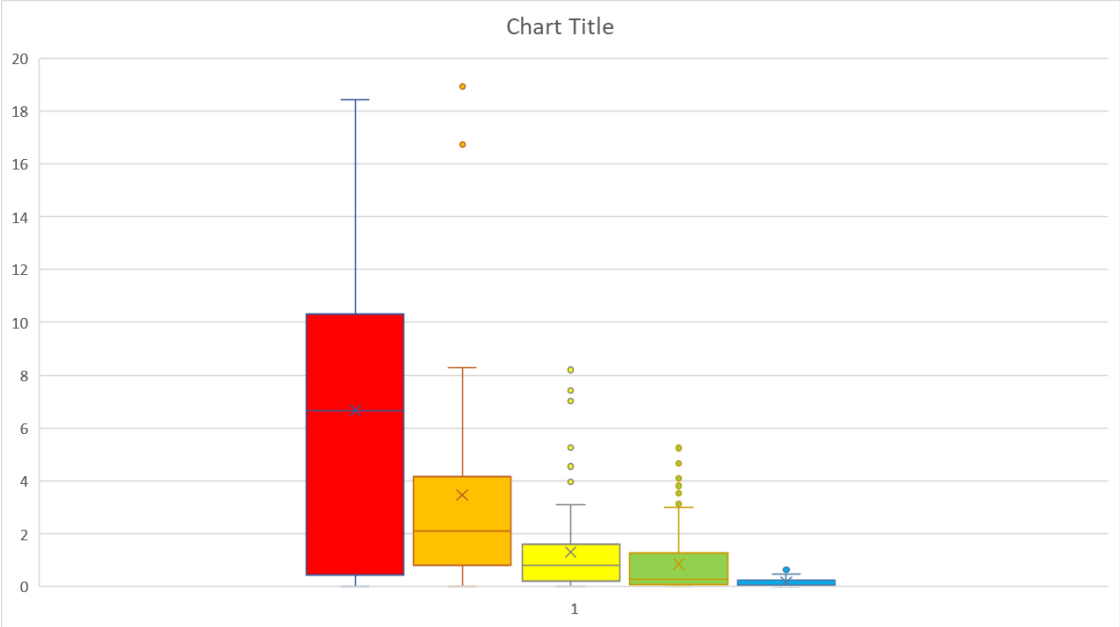


Figure 3-14 **Concentration range of N-NO_3 in groups of rivers of the same biological status (red = poor status, blue = high status)**

From the above task, clear data emerged only for N-NO_3, the new threshold values of which are given in the following table. Specifically, the threshold values were obtained from the whiskers of the boxplots of Figure 3-14.

Table 3-2 **New classification system for chemical - physicochemical elements in all types of river monitoring stations**

	Unit	High	Good	Moderate	Poor	Bad
DO	mg/l	>9,0	9,0-6,4	6,4-4,0	4,0-2,0	<2,0
$N\text{-}NO_3^-$	mg/l	<0,46	0,46-2,9	2,9-3,10	3,10-8,3	>8,3
$N\text{-}NH_4^+$	mg/l	<0,024	0,024-0,060	0,061-0,200	0,210-0,500	>0,500
$N\text{-}NO_2^-$	µg/l	<3,0	3,0-8,0	8,1-30,0	30,1-70,0	>70,0
TP	µg/l	<85	86-165	166-220	221-405	>405
$P\text{-}PO_4^{-3}$	µg/l	<30	30-105	106-165	166-340	>340
EC	µS/cm	<250	250-750	750-2000	2001-3000	>3000
SAR		<3	3-5	5,1-10	10-15	>15
BOD_5	mg/l	<0,5	0,5-2,0	2,1-3,5	3,5-5,0	>5,0

3.2 Reservoirs (Impounded Rivers)

The following thresholds in terms of nutrients and specific pollutants apply to reservoirs based on the 2nd RBMP:

	Unit	Good	Moderate
pH		(6-9)	
DO	mg/l	6,4	
EC	µS/cm	1250	
Total P	mg/l	0,05	
NH_4^+	mg/l	0,3	
Total Coliforms	/100ml	1200	
Cr	µg/l	50	
As	µg/l	10	
Cu	µg/l	40 µg/l (water hardness between 100 - 300 mg/l $CaCO_3$)	
		112 µg/l (water hardness > 300 mg/l $CaCO_3$)	
B	µg/l	1000	
Fe	µg/l	1000	
Zn	µg/l	1000 µg/l (water hardness between - 500 mg/l $CaCO_3$)	
		2000 µg/l water hardness > 300 mg/l $CaCO_3$)	

Wih regards to reservoirs, the biological potential was evaluated as it is characterized by the NMASRP index in relation to the total amount of nitrogen and phosphorus during the summer period (May - October) from all the years from which data were available. Achna and Lympia reservoirs were not taken into account in the evaluation. The following figures show the nutrient boxplots of the reservoirs in relation to the assessment of biological potential.

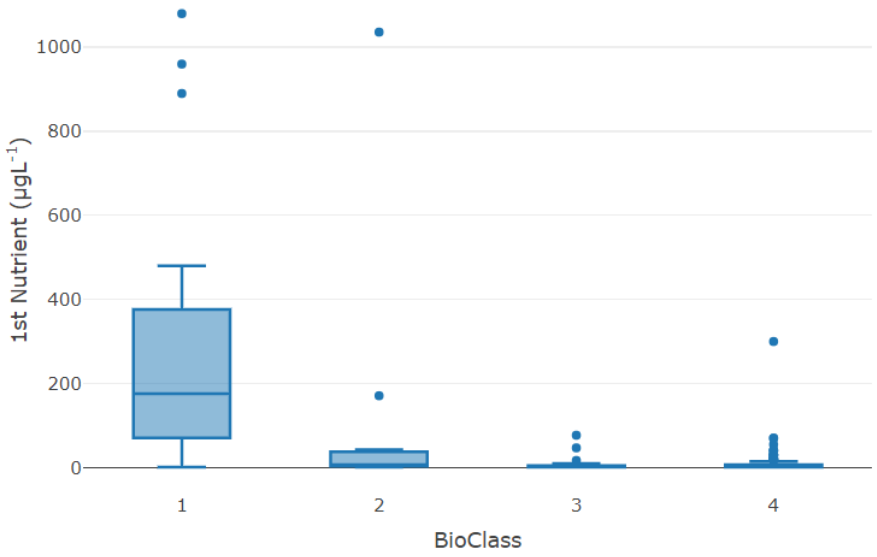


Figure 3-15 **Total phosphorus concentration range in reservoir groups of the same biological potential (4 = Good, 3 = Moderate, 2 Incomplete, 1 = Poor) (summer season)**

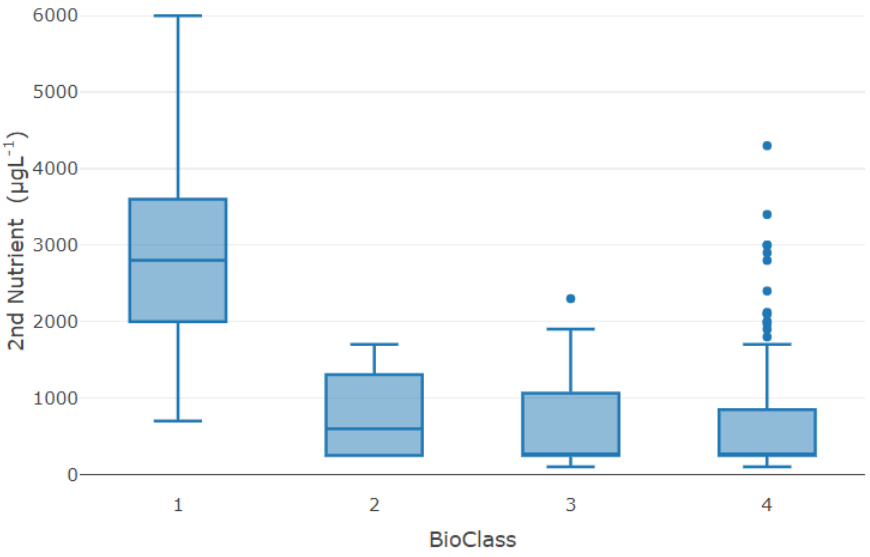


Figure 3-16 **Total nitrogen concentration range in reservoirs of the same biological potential (4 = Good, 3 = Moderate, 2 Incomplete, 1 = Poor) (summer season)**

The above task did not lead to clear conclusions capable of leading to new threshold values for either phosphorus or nitrogen.

3.3 Lakes

The above task was not implemented for lakes as there are no definite threshold values for the physicochemical conditions.

4 Sub-activity 8.3. Classification of stations' ecological status

4.1 River Water Bodies

4.1.1 Introduction

The rivers of Cyprus belong to the following types:

- P, Perennial flow (mountain streams), corresponding to type R-M4 of the intercalibration exercise/R-M4 IC Type),
- I, Intermittent flow, corresponding to type R-M5 of the intercalibration exercise/R-M5 IC Type),
- Ih, Harsh Intermittent flow, corresponding to type R-M5 of the intercalibration exercise/R-M5 IC Type),
- E, Ephemeral/episodic stream (does not correspond to a type of intercalibration exercise),

and for the classification of their ecological status, the classification methodology of the 2nd RBMP was followed. The Commission Decision (EU) 2018/229 and the new thresholds for nitrates that have emerged in this project, have also been taken into account (see Chapter 3).

Biological Quality Elements (BQEs)

Table 4-1 Ecological class thresholds for BQEs monitored in the rivers of Cyprus under Decision (EU) 2018/229[1]

			HIGH	GOOD	MODERATE	POOR	BAD
Benthic invertebrates	P (R-M4)	STAR ICMi	0,972	0,729	0,486	0,243	
	I and Ih (R-M5)	STAR ICMi	0,982	0,737	0,491	0,249	
Diatoms	P (R-M4)	IPS	0,91	0,68	0,46	0,23	
	I and Ih (R-M5)	IPS	0,96	0,72	0,48	0,24	
Aquatic macrophytes	P (R-M4)	IBMR	0,795	0,596	0,397	0,198	

With regards to fish (see also Table 4-14):

- a digital catchment area file has been created, where historical data on the presence of eels are indexed
- a digital file of fish fauna sampling locations has been created
- the necessary data have been indexed in the digital file with the rivers WBs (historical presence/absence, current presence/absence, species, etc.)
- the following indicators were calculated for each year and in each sampling:
  - presence of *Anguila anguila* (0,1/absence, presence)
  - abundance of *Anguila anguila (*0,1/for values ≥ 2)

[1] There is no method for Aquatic macrophytes in the Intercalibration Type R-M5. BQEs do not apply to E-type rivers.

- size of *Anguila anguila (*0,1/for values ≥ 3)
- presence of *Salmo trutta* (0,1/absence, presence)
- abundance of *Salmo trutta (*0,1/for values ≥ 2)
- size of *Salmo trutta (*0,1/for values ≥ 3)
- presence of *Oncorhynchus mykiss* (0,1/absence, presence)
- abundance of *Oncorhynchus mykiss (*0,1/for values ≥ 2)
- size of *Oncorhynchus mykiss (*0,1/for values ≥ 3)

Physicochemical status

To assess the chemical-physicochemical status of surface waters, the chemical-physicochemical elements that support the biological elements are used (i.e., thermal conditions, oxygenation conditions, salinity, acidification status, nutrient conditions and specific pollutants). The physicochemical parameters - which support the biological quality elements - that were finally used for the estimation of the river WBs (excluding (excluding the impounded rivers [reservoirs]) in Cyprus, based on local conditions, are grouped in the table below.

Table 4-2 Physicochemical parameters for the evaluation of river WBs in Cyprus

Chemical - Physicochemical category	Parameters
Organic load	BOD_5,DO, NH_4^+, NO_2^-,TP
Chemical load	NO_3^-, PO_4^{-3}
Salinity	EC, SAR

The categorization system for the various chemical-physicochemical parameters used to categorize the chemical-physicochemical status of the monitoring stations of the rivers of Cyprus, are presented in the following Table.

Table 4-3 New classification system for chemical - physicochemical elements in river monitoring stations (excluding reservoirs)

Parameter	Unit	High	Good	Moderate	Poor	Bad
DO	mg/l	>9,0	9,0-6,4	6,4-4,0	4,0-2,0	<2,0
$N\text{-}NO_3^-$	mg/l	<0,46	0,46-2,9	2,9-3,10	3,10-8,3	>8,3
$N\text{-}NH_4^+$	mg/l	<0,024	0,024-0,060	0,061-0,200	0,210-0,500	>0,500
$N\text{-}NO_2^-$	µg/l	<3,0	3,0-8,0	8,1-30,0	30,1-70,0	>70,0
TP	µg/l	<85	86-165	166-220	221-405	>405
$P\text{-}PO_4^{-3}$	µg/l	<30	30-105	106-165	166-340	>340
EC	µS/cm	<250	250-750	750-2000	2001-3000	>3000
SAR		<3	3-5	5,1-10	10-15	>15
BOD_5	mg/l	<0,5	0,5-2,0	2,1-3,5	3,5-5,0	>5,0

To classify stations into chemical-physicochemical categories, the chemical-physicochemical characteristics of a WB are are grouped as shown in Table 4-2 above, according to the type of pressures to which they respond to, and they are then classified according to the worst-case principle.

The types of pressures and the corresponding groups of indicators are:

A) Organic load. Dissolved oxygen, ammonium, nitrites, total phosphorus and BOD_5 were used as indicators of organic load.

B) Chemical load. Nitrates and phosphates were included as indicators.

C) Salinity. Conductivity and SAR are taken into account as salinity indicators.

The classification of each monitoring station for each of the three groups of indicators of chemical-physicochemical conditions (organic and chemical loads and salinity), is based on the average of the indicators of each group, while the value of each indicator (parameter) is determined as the average of the available time series of measurements. Finally, for the classification of the chemical-physicochemical conditions, the "worst-case principle" is applied, i.e. it is classified based on the group of indicators with the worst quality.

By applying all the above thresholds for all parameters, the overall evaluation system presented in the following Table was applied, so that all groups of water quality parameters are comparable. The quality of each group was then calculated according to the **total average value of the average values for each parameter**. Then, the total chemical-physicochemical quality of each monitoring station is classified, based on the principle "one out-all out".

Table 4-4 Water parameter evaluation system and parameter groups for water quality

Class	Value range	Average value for value range	
H (High)	>4-5	(4,1+5)/2=	4,55
G (Good)	>3-4	(3,1+4)/2=	3,55
M (Moderate)	>2-3	(2,1+3)/2=	2,55
P (Poor)	>1-2	(1,1+2)/2=	1,55
B (Bad)	<1	1/2=	0,5

River Basin Specific Pollutants (RBSPs)

The value of each parameter is determined as the average of the available measurement time series. In case of failures the value is considered moderate, while in case of non-exceedance it is considered as high or good.

Table 4-5 Concentration thresholds of River Basin Specific Pollutants (RBSPs)

Specific Pollutant	Zn		Cu		Boron
Hardness of water (mg/l $CaCO_3$)	>100	>500	>100	>300	-
Specific pollutant concentration threshold (mg/l)	1,0	2,0	0,04	0,112	1,0

4.1.2 Biological quality elements

All available monitoring data for the period 2013-2019 were taken into account, except for the cases of monitoring of macrophytes in perennial flow rivers (RM4), in which only one species was recorded and therefore, the result of the biological assessment was considered

unreliable. For intermittent rivers (RM5), no evaluation was performed using the Macrophytes BQEs.

As shown in the table below, there is a total number of 136 BQEs monitoring stations. Out of these stations, the assessment of the biological status was possible in 113 of those, as 5 of them out of 136 are located in unspecified WBs, 14 are in ephemeral WBs and therefore the BQEs are not taken into account in the classification of the ecological status. Additionally, 4 stations included only macrophyte sampling, which was not taken into account either due to typology (RM5) or due to the number of macrophyte species (1).

Out of the 113 stations, 65 are located on RM4-type rivers and 48 on RM5-type rivers. Also, 12 stations are in high, 53 in good, 33 in moderate and 15 in poor status.

Table 4-6 Biological quality elements in river WB monitoring stations

Station	WB	(Current) Intercalibration type	Diatoms	Benthic Invertebrates	Aquatic macrophytes	Biological Status
			IPS	STAR ICMi	IBMR	
r1-1-1-75	CY1-1-AB	RM5	0,89	0,729		Moderate
r1-1-3-95	CY1-1-AB	RM5	0,94	0,788		Good
r1-1-6-65	CY1-1-C	RM5	0,61	0,474		Poor
r1-2-1-60	CY1-2-B	RM4	1,05	1,050	0,94	High
r1-2-1-96	CY1-2-B	RM4	1,11	1,051	0,76	Good
r1-2-2-70	CY1-2-A	RM4	0,94	1,003	0,67	Good
r1-2-2-99	CY1-2-A	RM4	1,01	Not considered	0,71	Good
r1-2-3-44	CY1-2-A	RM4	0,79	0,701	0,75	Moderate
r1-2-3-94	CY1-2-A	RM4	1,00	0,851	0,59	Moderate
r1-2-4-27	CY1-2-E	RM5	0,81	0,854		Good
r1-2-5-70	CY1-2-F2	RM4	0,95	0,977	0,70	Good
r1-2-6-17	CY1-2-D2	RM4	0,91	0,831	0,60	Good
r1-2-6-64	CY1-2-D1	RM5	0,95	0,779		Good
r1-3-1-79	CY1-3-A1	RM4	0,98	1,137	0,77	Good
r1-3-2-96	CY1-3-A2	RM5			0,806	-
r1-3-3-98	CY1-3-A1	RM4	0,93	1,146		High
r1-3-5-05	CY1-3-A1	RM4	0,98	1,105	0,82	High
r1-3-5-91	CY1-3-A3	RM4	1,11	0,940	0,76	Good
r1-3-6-53	CY1-3-B	RM5	0,89	1,189		Good
r1-3-8-40	CY1-3-C	RM5	1,02	0,916		Good
r1-3-8-60	CY1-3-C	RM5	0,84	0,613		Moderate
r1-4-1-98	CY1-4-A	RM4	0,89	0,954	0,87	Good
r1-4-3-35	CY1-4-B	RM5	0,91	1,141		Good
r1-4-6-75	CY1-4-K	(Ephemeral WB)	0,69	0,65		-
r1-4-7-10	CY1-4-F	RM4	0,97	0,686	0,53	Moderate
r1-4-8-88	CY1-4-M	(Ephemeral WB)		0,60		-
r1-5-5-89	CY1-5-D1	RM5	0,48	0,413		Poor
r1-6-2-09	CY1-6-A2	RM4	0,98	0,718	0,43	Moderate
r1-6-2-13	CY1-6-A2	RM4			0,67	Good
r1-6-2-17	CY1-6-A2	RM4	1,01	0,625	0,55	Moderate
R1-8-2-71	CY1-8-A1	RM5	1,12	0,85		Good
r1-8-5-89	CY1-8-B	(Ephemeral WB)	0,63	0,53		-

Station	WB	(Current) Intercalibration type	Diatoms	Benthic Invertebrates	Aquatic macrophytes	Biological Status
			IPS	STAR ICMi	IBMR	
r2-1-2-92	CY2-1-C	RM4	0,88	0,47		Poor
r2-1-2-99	CY2-1-C	The station is affected by the sea, it is not considered for classification	0,66	0,51	0,58	-
r2-2-3-80	CY2-2-J	RM4	1,00	0,635	1,00	Moderate
r2-2-3-96	CY2-2-L	RM4	0,90	0,83	0,60	Moderate
r2-2-3-98	CY2-2-B	RM5	0,96	0,658		Moderate
r2-2-6-35	CY2-2-D	RM5	0,75	0,790		Good
r2-3-1-64	CY2-3-A	(Ephemeral WB)	0,22	0,40		-
r2-3-2-96	CY2-3-B	(Ephemeral WB)	0,49	0,37		-
r2-3-4-80	CY2-3-C2	RM5	0,98	1,077		High
r2-3-8-48	CY2-3-F1	RM4	0,92	0,963	0,92	Good
r2-4-6-70	CY2-4-D	RM5	0,96	0,963		Good
r2-6-1-92	CY2-6-A	(Ephemeral WB)	0,95	0,87		-
r2-7-2-75	CY2-7-A	RM5	0,99	0,995		High
r2-8-3-10	CY2-8-A	RM4	1,06	0,906	0,80	Good
r2-9-2-17	CY2-9-B	RM5	0,85	0,924		Good
r2-9-2-50	CY2-9-B	RM5	0,85	0,915		Good
r3-1-1-48	CY3-1-A	RM4			0,77	Good
r3-1-2-30	CY3-1-BC	RM5	1,00	1,063		High
r3-2-1-38	No WB	No WB	0,99	0,74	0,73	-
r3-2-1-39	No WB	No WB			0,66	-
r3-2-1-53	CY3-2-A	RM4	0,96	0,788	0,75	Good
r3-2-1-60	CY3-2-A	RM4	0,89	0,812	0,67	Good
r3-2-1-65	CY3-2-A	RM4	0,90	0,661	0,80	Moderate
r3-2-1-67	No WB	No WB			0,50	-
r3-2-1-69	No WB	No WB	0,86	0,54	0,61	-
r3-2-1-85	CY3-2-A	RM4	0,83	0,646	0,53	Moderate
r3-2-2-17	CY3-2-B	RM4	0,90		0,93	Good
r3-2-2-90	CY3-2-B	RM4	0,92		0,56	Moderate
r3-3-1-60	CY3-3-A	RM4	1,10	0,601	0,94	Moderate
r3-3-1-68	CY3-3-A	RM4	0,96	1,006		High
r3-3-2-60	CY3-3-D	RM4	0,74	0,928	0,87	Good
r3-3-2-62	CY3-3-D	RM4	0,72	0,668	0,53	Moderate
r3-3-2-85	CY3-3-D	RM4	0,82	0,746	0,72	Good
r3-3-3-02	CY3-3-B	RM4	0,94	0,493	0,54	Moderate
r3-3-3-15	CY3-3-B	RM4	0,78	0,45	0,46	Poor
r3-3-3-58	CY3-3-B	RM4	0,83	0,501	0,62	Moderate
r3-3-3-82	CY3-3-B	RM4			0,36	Poor
r3-3-3-95	CY3-3-B	RM4	0,84	0,683	0,33	Poor
r3-3-4-41	CY3-3-B	RM4			0,526	Moderate
r3-4-1-69	No WB	No WB	0,88	1,04		-
r3-4-2-05	CY3-4-AB	RM5	0,72	1,079		Good
r3-4-2-80	CY3-4-AB	RM5	0,66	0,714		Moderate
r3-5-1-50	CY3-5-A	RM5	0,89	1,229		Good
r3-5-4-40	CY3-5-D	RM5	0,74	0,520		Moderate
r3-7-1-55	CY3-7-B	RM5	0,85	0,969		Good

Station	WB	(Current) Intercalibration type	Diatoms	Benthic Invertebrates	Aquatic macrophytes	Biological Status
			IPS	STAR ICMi	IBMR	
r3-7-3-25	CY3-7-DEF	RM5	0,90	1,004		Good
r3-7-3-71	CY3-7-DEF	RM5	0,83	1,033		Good
r3-7-5-35	CY3-7-N	(Ephemeral WB)	0,45	0,55		-
r6-1-1-48	CY6-1-A	RM5	0,99	0,825		Good
r6-1-1-72	CY6-1-A	RM5	1,01	0,983		High
r6-5-1-34	CY6-5-A	RM5	0,94	0,934		Good
r6-5-1-85	CY6-5-B	RM5	0,71	0,528		Moderate
r8-5-1-60	CY8-5-AB	(Ephemeral WB)	0,70	0,57		-
r8-7-1-65	CY8-7-A	RM5	0,96	0,954		Good
r8-7-2-60	CY8-7-C	RM5	0,64	0,590		Moderate
r8-7-3-95	CY8-7-D	RM5	0,98	0,637		Moderate
r8-8-2-95	CY8-8-C	RM5	0,96	0,645		Moderate
r8-9-3-83	CY8-9-ABCG	RM5	0,79	0,745		Good
r8-9-5-40	CY8-9-ABCG	RM5	0,81	0,722		Moderate
r8-9-6-98	CY8-9-H	(Ephemeral WB)	0,65	0,57		-
r9-1-4-51	CY9-1-E	(Ephemeral WB)	0,62	0,64		-
r9-2-1-43	CY9-2-BC	RM5	0,74	1,274		Good
r9-2-1-47	CY9-2-BC	RM5			0,71	-
r9-2-3-05	CY9-2-E	RM5	0,63	0,942		Moderate
r9-2-3-85	CY9-2-F	RM5	0,97	0,995		High
r9-2-4-27	CY9-2-J	(Ephemeral WB)	0,98	1,07		-
r9-2-4-95	CY9-2-KL	RM5	0,74	0,661		Moderate
r9-4-3-39	CY9-4-G	(Ephemeral WB)	0,35	0,85		-
r9-4-3-41	CY9-4-B	(Ephemeral WB)	0,54	0,85		-
r9-4-3-80	CY9-4-C	RM5	0,33	0,464		Poor
r9-6-1-17	CY9-6-P	RM4	1,10	0,976	0,94	High
r9-6-1-33	CY9-6-P	RM4	0,99	0,975	0,81	High
r9-6-1-44	CY9-6-P	RM4	1,01	0,801	0,80	Good
r9-6-1-67	CY9-6-Q	RM4			(0,42) Not considered	-
r9-6-1-68	CY9-6-Q	RM4	0,79	0,809	0,67	Good
r9-6-1-82	CY9-6-Q	RM4	0,85	0,901	0,67	Good
r9-6-1-87	CY9-6-R	RM5	0,88	1,267		Good
r9-6-2-60	CY9-6-R	RM5	0,98	0,737		Good
r9-6-3-12	CY9-6-I	RM4	1,121	0,917	1,19	Good
r9-6-3-15	CY9-6-I	RM4	1,11	1,080		High
r9-6-3-31	CY9-6-KL	RM4	1,07	0,609		Moderate
r9-6-3-32	CY9-6-KL	RM4	1,16	0,38	0,36	Poor
r9-6-3-36	CY9-6-KL	RM4	0,92	0,674	0,38	Poor
r9-6-3-46	CY9-6-KL	RM4			0,61	Good
r9-6-3-47	CY9-6-KL	RM4	0,80	0,498	0,31	Poor
r9-6-3-61	CY9-6-KL	RM4		0,33	0,42	Poor
r9-6-3-77	CY9-6-N	RM4	1,12	0,995	0,66	High
r9-6-3-80	CY9-6-O	RM4			Not considered. Only one species	-

Station	WB	(Current) Intercalibration type	Diatoms	Benthic Invertebrates	Aquatic macrophytes	Biological Status
			IPS	STAR ICMi	IBMR	
r9-6-3-83	CY9-6-KL	RM4		0,36	0,41	Poor
r9-6-3-87	CY9-6-O	RM4	0,89	0,912	0,93	Good
r9-6-4-24	CY9-6-M	RM4	0,85	0,861	0,45	Moderate
r9-6-4-34	CY9-6-M	RM4	0,92	0,758	0,60	Good
r9-6-4-37	CY9-6-M	RM4			0,29	Poor
r9-6-4-90	CY9-6-M	RM4	0,75	0,673	0,42	Moderate
r9-6-4-92	CY9-6-M	RM4	0,94	0,757	0,44	Moderate
r9-6-5-62	CY9-6-BCD	RM5	0,73	0,793		Good
r9-6-5-63	CY9-6-BCD	RM5	0,86	0,641		Moderate
r9-6-5-67	CY9-6-A	RM4	0,75	0,674	0,38	Poor
r9-6-5-74	CY9-6-BCD	RM5	0,84	0,901		Good
r9-6-5-75	CY9-6-BCD	RM5	0,79	0,733		Moderate
r9-6-5-77	CY9-6-E	RM4	0,83	0,815	0,60	Good
r9-6-6-32	CY9-6-E	RM4	0,73	0,843	0,39	Poor
r9-6-6-40	CY9-6-E	RM4			0,61	Good
r9-6-7-70	CY9-6-F	RM5	0,76	0,914		Good

In the cases of WBs that had more than one station, the evaluation of those WBs resulted from the average of all the results of each BQE, from all the stations in the WB.

Table 4-7 Biological quality elements in river WBs with more than 1 monitoring stations

WB Code	Station	(Current) Intercallibration type	Diatoms	Benthic Invertebrates	Aquatic macrophytes	WB Biological Status
			IPS	STAR ICM	IBMR	
CY1-1-AB	r1-1-1-75 r1-1-3-95	**RM5**	0,9237	0,7680		Good
CY1-2-A	r1-2-2-70 r1-2-2-99 r1-2-3-32 r1-2-3-39 r1-2-3-44 r1-2-3-53 r1-2-3-94 r1-2-4-25	**RM4**	0,9576	0,8727	0,6495	Good
CY1-2-B	r1-2-1-60 r1-2-1-96	**RM4**	1,0883	1,0504	0,8153	High
CY1-2-D2	r1-2-6-17 r1-2-6-29	**RM4**	0,9076	0,8308	0,6040	Good
CY1-3-A1	r1-3-1-79 r1-3-3-98 r1-3-5-05	**RM4**	0,9714	1,1156	0,8100	High
CY1-3-C	r1-3-8-40 r1-3-8-60	**RM5**	0,8625	0,6994		Moderate
CY1-6-A2	r1-6-2-09 r1-6-2-13 r1-6-2-17	**RM4**	0,9958	0,6711	0,5065	Moderate
CY2-2-B	r2-2-3-95 r2-2-3-98	**RM5**	0,9572	0,6583		Moderate
CY2-9-B	r2-9-1-80 r2-9-2-17 r2-9-2-50	**RM5**	0,8511	0,9176		Good

WB Code	Station	(Current) Intercallibration type	Diatoms	Benthic Invertebrates	Aquatic macrophytes	WB Biological Status
			IPS	STAR ICM	IBMR	
CY3-2-A	r3-2-1-53 r3-2-1-60 r3-2-1-65 r3-2-1-85	**RM4**	0,8727	0,7067	0,6468	Good
CY3-2-B	r3-2-2-17 r3-2-2-90	**RM4**	0,9061		0,7440	Good
CY3-3-A	r3-3-1-60 r3-3-1-68	**RM4**	1,0571	0,7359	0,9420	Good
CY3-3-B	r3-3-3-02 r3-3-3-15 r3-3-3-58 r3-3-3-82 r3-3-3-95 r3-3-4-41	**RM4**	0,8408	0,5379	0,4859	Moderate
CY3-3-D	r3-3-2-60 r3-3-2-62 r3-3-2-85	**RM4**	0,7523	0,7673	0,7241	Good
CY3-4-AB	r3-4-2-05 r3-4-2-80 r3-4-2-90	**RM5**	0,6825	0,8507		Moderate
CY6-1-A	r6-1-1-48 r6-1-1-72 r6-1-1-80	**RM5**	1,0016	0,9124		Good
CY8-9-C2G	r8-9-3-83 r8-9-5-40	**RM5**	0,8002	0,7324		Moderate
CY9-6-BCD	r9-6-5-62 r9-6-5-63 r9-6-5-74 r9-6-5-75	**RM5**	0,8088	0,7304		Moderate
CY9-6-E	r9-6-5-77 r9-6-6-32 r9-6-6-40	**RM4**	0,7491	0,8372	0,4703	Moderate
CY9-6-I	r9-6-3-13 r9-6-3-15	**RM4**	1,1187	0,9710	1,1930	Good
CY9-6-KL	r9-6-3-31 r9-6-3-32 r9-6-3-36 r9-6-3-46 r9-6-3-47 r9-6-3-61 r9-6-3-82 r9-6-3-83	**RM4**	0,9931	0,4911	0,4010	Moderate
CY9-6-M	r9-6-4-24 r9-6-4-34 r9-6-4-37 r9-6-4-90 r9-6-4-92	**RM4**	0,9008	0,7608	0,4420	Moderate
CY9-6-P	r9-6-1-17 r9-6-1-33 9-6-1-44	**RM4**	1,0202	0,8588	0,8230	Good
CY9-6-Q	r9-6-1-68 r9-6-1-82	**RM4**	0,8227	0,8549		Good
CY9-6-R	r9-6-1-87 r9-6-2-60 r9-6-2-90	**RM5**	0,9259	1,0020		Good

4.1.3 Physicochemical quality elements

The total available monitoring data for the period 2013-2019 in 174 monitoring stations was taken into account, except for the cases of station r3-3-1-68[2], which has limited measurements, and some stations that are not regular monitoring stations for the purposes of the application of the WFD, and include only Dissolved Oxygen and Electrical Conductivity data. However, since these measurements exist, they are presented in the table below.

Out of the 147 stations considered, 47 are in high, 82 in good, 15 in moderate, 2 in poor and 1 in bad status.

Table 4-8 Physicochemical quality elements in river monitoring stations

	Organic Load					Chemical Load		Salinity					
Station	BOD_5	DO	NH_4-N	NO2-N	TP	NO_3-N	P-PO_4	SAR	EC	Organic Load	Chemical Load	Salinity	Physicochemical Status
r1-1-1-75	0,85	9,4	0,023	0,003	0,011	0,538	0,015	0,7	648	4,35	4,05	4,05	4,05
r1-1-3-95	0,60	9,4	0,027	0,003	0,006	0,690	0,015	0,4	703	4,15	4,05	4,05	4,05
r1-1-6-65	0,87	10,9	0,040	0,008	0,010	0,781	0,015	0,5	781	3,75	4,05	3,55	3,55
r1-2-1-60	10,00		0,010	0,003	0,001	0,020	0,015			3,54	4,55		3,54
r1-2-1-96	0,64	9,2	0,010	0,003	0,003	0,037	0,015	0,6	459	4,35	4,55	4,05	4,05
r1-2-2-70	1,50		0,010	0,003	0,011	0,250	0,015			4,30	4,55		4,30
r1-2-2-99			0,010	0,003	0,001	0,020	0,015			4,55	4,55		4,55
r1-2-3-32		9,8							498	4,55		3,55	3,55
r1-2-3-39		8,8							580	3,55		3,55	3,55
r1-2-3-53		9,5							654	4,55		3,55	3,55
r1-2-3-94	0,64	10,3	0,019	0,003	0,039	0,235	0,015	0,5	547	4,35	4,55	4,05	4,05
r1-2-4-25	1,36	20,0	0,030	0,003	0,056	0,145	0,061	0,5	531	4,15	4,05	4,05	4,05
r1-2-4-27	10,00		0,056	0,003	0,002	0,020	0,015			3,29	4,55		3,29
r1-2-4-95		9,1							552	4,55		3,55	3,55
r1-2-5-71			0,010	0,003	5,355	1,140	0,015			3,20	4,05		3,20
r1-2-6-17	1,50		0,010	0,003	0,001	0,020	0,015			4,30	4,55		4,30
r1-2-6-29		9,9							685	4,55		3,55	3,55
r1-2-6-64	1,58	10,2	0,024	0,003	0,015	0,182	0,015	0,7	693	4,15	4,55	4,05	4,05
r1-2-7-90		9,8							816	4,55		2,55	2,55
r1-3-1-79			0,010	0,003	0,001	0,020	0,015			4,55	4,55		4,55
r1-3-3-98			0,010	0,003	0,001	0,020	0,015			4,55	4,55		4,55
r1-3-5-05	0,75	9,5	0,016	0,003	0,003	0,034	0,015	0,4	472	4,35	4,55	4,05	4,05
r1-3-5-91	1,00	9,2	0,010	0,003	0,001	0,020	0,015	0,4	550	4,35	4,55	4,05	4,05
r1-3-6-53	0,77	9,8	0,021	0,003	0,005	0,060	0,015	0,6	674	4,35	4,55	4,05	4,05
r1-3-8-40	20,00		0,010	0,003	0,001	0,450	0,015			3,54	4,55		3,54
r1-3-8-60	1,50	9,9	0,038	0,003	0,005	0,497	0,016	0,7	745	3,95	4,05	4,05	3,95
r1-4-1-98	1,00	9,1	0,018	0,003	0,003	0,020	0,015	0,5	496	4,35	4,55	4,05	4,05
r1-4-2-15		23,3							554	4,55		3,55	3,55
r1-4-3-35	0,98	9,1	0,021	0,003	0,007	0,041	0,015	0,5	584	4,35	4,55	4,05	4,05
r1-4-4-50		10,6							1.029	4,55		2,55	2,55
r1-4-6-75	0,91	10,9	0,057	0,005	0,031	1,265	0,015	0,7	1.332	3,95	4,05	3,55	3,55
r1-4-7-10	1,55	8,6	0,050	0,004	0,151	0,310	0,025	0,5	1.815	3,55	4,05	3,55	3,55
r1-4-8-88	1,57	10,5	0,075	0,021	0,019	3,462	0,015	2,7	1.480	3,55	3,05	3,55	3,05
r1-4-9-80	1,04	11,0	0,061	0,012	0,274	1,494	0,015	0,9	1.464	2,95	4,05	3,55	2,95

[2] *(1 sampling)*

Station	Organic Load					Chemical Load		Salinity		Organic Load	Chemical Load	Salinity	Physicochemical Status
	BOD_5	DO	NH_4-N	NO2-N	TP	NO_3-N	P-PO_4	SAR	EC				
r1-4-9-99[3]	1,25		0,008	0,005	0,030	0,452				4,30	4,55		4,30
r1-5-5-89	0,74	9,3	0,047	0,010	0,032	7,249	0,015	1,2	1.190	3,75	3,05	3,55	3,05
r1-6-2-09			0,026	0,003	0,001	0,020	0,015			4,22	4,55		4,22
r1-6-2-17	0,81	9,7	0,016	0,003	0,010	0,194	0,015	0,7	906	4,15	4,55	3,55	3,55
r1-8-5-89	2,00	11,0	0,022	0,009	0,026	0,530	0,015	2,1	1.158	3,95	4,05	3,55	3,55
r2-1-2-99[4]			0,032	0,024	0,003	0,875	0,015			3,55	4,05		3,55
r2-1-8-74	1,50	10,0	0,016	0,009	0,013	1,980	0,015	0,9	854	3,95	4,05	3,55	3,55
r2-2-3-80	8,00									0,50			0,50
r2-2-3-95	1,46	8,8	0,128	0,009	0,033	0,462	0,015	0,7	2.608	3,35	4,05	3,05	3,05
r2-2-3-96	15,00	8,6	0,010	0,003	0,001	0,020	0,015		766	3,54	4,55	2,55	2,55
r2-2-3-98			0,010	0,003	0,001	0,020	0,015			4,55	4,55		4,55
r2-2-5-75[5]	0,50	9,3	0,051	0,004	0,004	0,166	0,015	0,4	732	4,15	4,55	4,05	4,05
r2-2-6-35	1,03	8,6	0,010	0,003	0,004	0,139	0,015	1,1	930	4,15	4,55	3,55	3,55
r2-2-6-60		8,5							1.097	3,55		2,55	2,55
r2-2-7-34		9,7							1.727	4,55		2,55	2,55
r2-2-8-95		7,7							2.204	3,55		1,55	1,55
r2-3-1-64	1,50	6,3	0,011	0,003	0,006	0,190	0,015	3,7	2.727	3,75	4,55	2,55	2,55
r2-3-2-96	1,14	9,6	0,088	0,005	0,003	0,475	0,015	0,9	3.013	3,75	4,05	2,53	2,53
r2-3-4-80	1,18	9,1	0,022	0,003	0,025	0,097	0,015	0,8	843	4,15	4,55	3,55	3,55
r2-3-7-74	0,76	9,1	0,047	0,003	0,012	0,138	0,015	0,9	1.040	4,15	4,55	3,55	3,55
r2-3-8-48	0,47	8,1	0,018	0,003	0,022	0,063	0,015	0,8	657	4,35	4,55	4,05	4,05
r2-3-8-60		7,9							743	3,55		3,55	3,55
r2-4-6-70	1,45	9,2	0,010	0,003	0,005	0,020	0,015	0,7	789	4,35	4,55	3,55	3,55
r2-4-6-80		8,8							844	3,55		2,55	2,55
r2-6-1-92	1,17	10,1	0,019	0,003	0,080	0,030	0,015	0,5	579	4,35	4,55	4,05	4,05
r2-7-2-75	0,84	9,1	0,025	0,003	0,022	0,040	0,015	0,6	570	4,15	4,55	4,05	4,05
r2-8-3-10	1,36	8,8	0,027	0,003	0,014	0,057	0,015	0,4	542	3,75	4,55	4,05	3,75
r2-9-2-17	1,50		0,010	0,003	0,001	3,360	0,015			4,30	3,05		3,05
r2-9-2-50	1,21	9,1	0,049	0,003	0,010	2,210	0,015	0,4	578	3,95	4,05	4,05	3,95
r3-1-2-30	0,78	9,8	0,022	0,003	0,051	0,038	0,015	0,4	454	4,35	4,55	4,05	4,05
r3-2-1-38			0,010	0,003	0,027	0,270	0,015			4,55	4,55		4,55
r3-2-1-53			0,010	0,003	0,001	1,450	0,015			4,55	4,05		4,05
r3-2-1-60			0,010	0,003	0,021	0,840	0,015			4,55	4,05		4,05
r3-2-1-65			0,024	0,003	0,008	1,245	0,015			4,55	4,05		4,05
r3-2-1-69			0,010	0,009	0,046	3,850	0,015			3,88	3,05		3,05
r3-2-1-85	0,75	9,3	0,013	0,003	0,016	1,253	0,016	0,6	528	4,35	4,05	4,05	4,05
r3-2-2-17			0,064	0,003	0,001	1,080	0,015			3,88	4,05		3,88
r3-2-2-90			0,022	0,003	0,015	0,770	0,015			4,55	4,05		4,05
r3-2-3-48	0,50	9,4	0,057	0,004	0,009	0,020	0,015	1,6	936	4,15	4,55	3,55	3,55
r3-3-1-60	0,70	9,5	0,020	0,003	0,010	0,157	0,015	0,5	552	4,35	4,55	4,05	4,05
r3-3-1-70		9,4							499	4,55		3,55	3,55
r3-3-2-60	1,48	9,3	0,039	0,005	0,010	0,365	0,015	1,8	1.163	3,95	4,55	3,55	3,55
r3-3-2-62			0,010	0,003	0,013	0,310	0,015			4,55	4,55		4,55
r3-3-2-85	1,50		0,049	0,003	0,001	0,540	0,015			4,05	4,05		4,05

[3] *Not considered during classification since it borders with the sea*

[4] *Not considered during classification since it borders with the sea*

[5] *Only physicochemical data available. Not considered during classification (It only includes DO,EC)*

Station	Organic Load					Chemical Load		Salinity		Organic Load	Chemical Load	Salinity	Physicochemical Status
	BOD_5	DO	NH_4-N	NO2-N	TP	NO_3-N	P-PO_4	SAR	EC				
r3-3-3-02			0,028	0,006	0,006	0,910	0,015			3,88	4,05		3,88
r3-3-3-15	2,06	9,5	0,010	0,004	0,013	1,023	0,015	0,7	613	3,95	4,05	4,05	3,95
r3-3-3-58			0,010	0,034	0,025	2,380	0,015			3,55	4,05		3,55
r3-3-3-95	1,14	9,2	0,032	0,010	0,026	1,852	0,015	0,7	765	3,75	4,05	3,55	3,55
r3-4-1-69	21,00		0,052	0,003	0,092	0,133	0,015			3,04	4,55		3,04
r3-4-2-05	8,00		0,036	0,003	0,676	0,020	0,015			2,28	4,55		2,28
r3-4-2-90	1,10	9,9	0,030	0,004	0,018	0,662	0,015	0,8	935	3,95	4,05	3,55	3,55
r3-5-1-50	1,60	9,1	0,029	0,003	0,028	0,274	0,015	0,4	480	3,95	4,55	4,05	3,95
r3-5-3-90		9,2							772	4,55		2,55	2,55
r3-5-4-28		10,4							547	4,55		3,55	3,55
r3-5-4-40	1,03	9,2	0,025	0,004	0,010	0,411	0,017	0,7	1.220	3,95	4,55	3,55	3,55
r3-7-1-50		10,2							539	4,55		3,55	3,55
r3-7-1-55	1,09	10,5	0,020	0,003	0,014	0,255	0,016	0,4	457	4,35	4,55	4,05	4,05
r3-7-1-84	0,75	11,1	0,027	0,003	0,066	0,663	0,015	0,4	415	3,95	4,05	4,05	3,95
r3-7-3-25	1,50		0,036	0,003	0,002	0,315	0,015			4,05	4,55		4,05
r3-7-3-71	1,72	10,0	0,035	0,003	0,033	0,719	0,015	0,4	565	3,95	4,05	4,05	3,95
r3-7-3-90		10,2							491	4,55		3,55	3,55
r3-7-5-34		10,3							610	4,55		3,55	3,55
r3-7-5-35	0,50	10,2	0,029	0,008	0,007	2,730	0,015	1,6	972	3,95	4,05	3,55	3,55
r3-7-5-50	0,80	12,8	0,032	0,029	0,041	1,394	0,024	2,4	1.756	3,75	3,55	3,55	3,55
r6-1-1-72	0,83	10,3	0,021	0,003	0,014	0,426	0,015	0,4	446	4,35	4,55	4,05	4,05
r6-1-1-80	1,00	9,9	0,026	0,004	0,005	0,146	0,015	0,5	438	3,95	4,55	4,05	3,95
r6-1-2-38	1,00	11,4	0,021	0,008	0,007	0,582	0,015	0,6	517	4,15	4,05	4,05	4,05
r6-1-2-90	0,63	10,5	0,032	0,011	0,031	1,350	0,015	0,6	842	3,75	4,05	3,55	3,55
r6-1-4-34	0,92	10,6	0,189	0,059	0,045	6,262	0,018	4,5	2.540	3,35	3,05	2,55	2,55
r6-1-5-52	1,80	9,6	0,219	0,068	0,131	1,928	0,092	4,7	3.237	2,95	3,55	2,03	2,03
r6-5-1-34	0,72	10,3	0,039	0,003	0,008	0,250	0,015	0,3	544	3,95	4,55	4,05	3,95
r6-5-1-85	0,65	9,8	0,120	0,015	0,026	2,854	0,027	0,9	1.180	3,55	3,55	3,55	3,55
r6-5-2-45		12,7							2.531	4,55		1,55	1,55
r6-5-2-85	1,00	8,6	1,238	2,655	0,208	2,653	0,049	8,3	5.435	2,13	3,55	1,53	1,53
r6-5-3-15	1,00	10,4	0,084	0,030	0,010	2,011	0,015	0,9	966	3,55	4,05	3,55	3,55
r6-5-3-50	0,79	10,3	0,051	0,020	0,020	1,899	0,015	0,8	1.513	3,75	4,05	3,55	3,55
r8-2-4-10		10,6							1.949	4,55		2,55	2,55
r8-3-2-60	3,30	15,1	0,189	0,044	0,011	2,425	0,015	3,7	7.741	3,15	4,05	2,03	2,03
r8-4-1-57	0,60	9,8	0,031	0,005	0,007	3,198	0,015	0,9	1.243	3,95	3,05	3,55	3,05
r8-4-1-58	0,55	9,8	0,042	0,019	0,006	3,335	0,015	0,6	1.914	3,75	3,05	3,55	3,05
r8-4-3-40	1,54	11,5	0,069	0,046	0,052	5,400	0,019	0,9	1.530	3,35	3,05	3,55	3,05
r8-4-4-72	0,63	9,9	0,019	0,008	0,014	3,681	0,015	1,2	1.552	3,95	3,05	3,55	3,05
r8-4-5-30	1,10	11,9	0,050	0,028	0,026	6,930	0,015	1,1	1.381	3,75	3,05	3,55	3,05
r8-5-1-60	0,81	10,6	0,072	0,017	0,034	1,008	0,015	1,2	1.062	3,55	4,05	3,55	3,55
r8-6-2-57	1,10	9,6	0,013	0,004	0,003	0,373	0,015	1,0	1.132	4,15	4,55	3,55	3,55
r8-6-3-50	2,00	12,0	0,010	0,066	0,014	0,190	0,015	0,0	1.973	3,75	4,55	3,55	3,55
r8-7-1-65	1,50	10,4	0,010	0,005	0,002	0,153	0,015	0,3	668	4,15	4,55	4,05	4,05
r8-7-2-60	1,00	10,6	0,033	0,004	0,005	0,421	0,015	0,7	1.374	3,95	4,55	3,55	3,55
r8-7-3-95	0,97	10,1	0,017	0,003	0,017	0,752	0,015	1,2	1.013	4,15	4,05	3,55	3,55
r8-8-2-95	1,30	10,6	0,030	0,004	0,005	0,574	0,015	0,6	751	3,95	4,05	3,55	3,55
r8-9-3-83	1,28	7,8	0,038	0,003	0,015	0,226	0,015	0,7	1.557	3,95	4,55	3,55	3,55
r8-9-5-40	1,75	10,4	0,023	0,003	0,040	0,806	0,047	0,7	1.431	4,35	3,55	3,55	3,55
r8-9-6-98	1,04	10,5	0,016	0,003	0,037	1,873	0,015	1,6	1.361	4,15	4,05	3,55	3,55
r8-9-7-50		11,2							1.640	4,55		2,55	2,55
r9-1-3-80	1,94	10,5	0,033	0,023	0,032	11,925	0,015	1,1	1.532	3,75	2,53	3,55	2,53
r9-1-4-51	1,58	10,6	1,019	0,033	0,021	2,678	0,015	0,6	1.267	2,94	4,05	3,55	2,94
r9-1-4-64		9,8							1.267	4,55		2,55	2,55
r9-2-1-43	0,88	8,7	0,023	0,003	0,021	0,417	0,017	0,4	527	4,15	4,55	4,05	4,05

Station	Organic Load					Chemical Load		Salinity		Organic Load	Chemical Load	Salinity	Physicochemical Status
	BOD_5	DO	NH_4-N	NO2-N	TP	NO_3-N	P-PO_4	SAR	EC				
r9-2-3-05	1,13	9,1	0,030	0,006	0,019	1,019	0,016	0,4	818	3,95	4,05	3,55	3,55
r9-2-3-85	1,14	9,4	0,048	0,004	0,019	0,705	0,015	0,5	978	3,95	4,05	3,55	3,55
r9-2-4-27	1,70	10,2	0,039	0,003	0,019	0,118	0,015	0,3	988	3,95	4,55	3,55	3,55
r9-2-4-95	1,73	10,7	0,084	0,007	0,005	1,376	0,015	0,8	1.120	3,75	4,05	3,55	3,55
r9-4-3-39	1,08	9,6	0,389	0,067	0,273	10,188	0,043	1,1	1.557	2,55	2,03	3,55	2,03
r9-4-3-41	1,55	11,0	0,034	0,008	0,010	3,094	0,015	0,6	954	3,95	3,55	3,55	3,55
r9-4-3-80	13,15	8,3	2,073	0,540	0,585	5,948	0,221	3,1	2.816	1,11	1,55	2,55	1,11
r9-5-1-99	2,00	10,3	0,010	0,022	0,042	0,600	0,015	0,3	265	3,95	4,05	4,05	3,95
r9-6-1-17			0,010	0,003	0,001	0,101	0,015	0,1		4,55	4,55	4,55	4,55
r9-6-1-33			0,010	0,003	0,001	0,050	0,015			4,55	4,55		4,55
r9-6-1-44	0,78	9,8	0,015	0,003	0,003	0,178	0,015	0,2	551	4,35	4,55	4,05	4,05
r9-6-1-68			0,039	0,003	0,008	0,060	0,015			4,22	4,55		4,22
r9-6-1-82		9,2	0,050	0,003	0,001	0,105	0,015		602	4,30	4,55	3,55	3,55
r9-6-1-87	1,11	10,0	0,046	0,003	0,060	0,298	0,048	0,4	658	3,95	4,05	4,05	3,95
r9-6-2-60	0,69	9,7	0,021	0,004	0,014	0,314	0,015	0,4	683	4,15	4,55	4,05	4,05
r9-6-2-90		9,8							605	4,55		3,55	3,55
r9-6-3-13	7,00		0,041	0,003	0,005	0,085	0,015			3,29	4,55		3,29
r9-6-3-15			0,010	0,004	0,003	0,120	0,015	0,5		4,22	4,55	4,55	4,22
r9-6-3-31	1,50		0,010	0,003	0,006	0,190	0,015			4,30	4,55		4,30
r9-6-3-32	4,00		0,010	0,006	0,001	0,940	0,015			3,55	4,05		3,55
r9-6-3-36	1,29	9,3	0,022	0,003	0,066	2,635	0,015	2,2	1.504	4,15	4,05	3,55	3,55
r9-6-3-47			0,188	0,005	0,007	1,840	0,015			3,55	4,05		3,55
r9-6-3-61			0,010	0,003	0,001	2,570	0,015			4,55	4,05		4,05
r9-6-3-77	0,63	9,5	0,023	0,003	0,007	0,035	0,015	0,3	603	4,35	4,55	4,05	4,05
r9-6-3-82		10,0							1.124	4,55		2,55	2,55
r9-6-3-83			0,037	0,005	0,002	1,590	0,015			3,88	4,05		3,88
r9-6-3-87	0,66	9,3	0,067	0,004	0,030	0,492	0,016	0,5	660	3,75	4,05	4,05	3,75
r9-6-4-24	3,00		0,035	0,049	0,011	2,310	0,015			3,05	4,05		3,05
r9-6-4-34			0,063	0,025	0,011	1,585	0,015			3,22	4,05		3,22
r9-6-4-90			0,057	0,010	0,001	1,345	0,015			3,55	4,05		3,55
r9-6-4-92	1,34	9,8	0,043	0,005	0,005	1,560	0,015	1,4	1.096	3,95	4,05	3,55	3,55
r9-6-5-62	1,40	9,3	0,093	0,015	0,147	6,460	0,086	0,5	553	3,35	2,55	4,05	2,55
r9-6-5-63	1,08	9,7	0,021	0,019	0,032	5,995	0,015	0,4	622	3,95	3,05	4,05	3,05
r9-6-5-67	4,00		0,054	0,900	0,109	4,550	0,090			2,29	2,55		2,29
r9-6-5-74			0,010	0,006	0,026	2,280	0,015			4,22	4,05		4,05
r9-6-5-75			0,010	0,009	0,083	3,010	0,030			3,88	3,05		3,05
r9-6-5-77			0,010	0,003	0,048	3,540	0,015			4,55	3,05		3,05
r9-6-6-32	1,03	9,6	0,049	0,006	0,062	3,642	0,035	0,5	592	3,95	2,55	4,05	2,55
r9-6-7-70	1,27	10,4	0,034	0,005	0,035	2,300	0,031	0,7	658	3,95	3,55	4,05	3,55
r9-8-4-95	0,50	10,2	0,010	0,004	0,003	3,940	0,015	0,7	873	4,35	3,05	3,55	3,05
r9-8-6-99	0,50	10,3	0,010	0,011	0,059	2,150	0,015	1,1	1.208	4,15	4,05	3,55	3,55

In the cases of WBs that had more than one station, the evaluation of the WBs resulted from the average of all the results of each quality element, from all the stations in the WB.

Table 4-9 Physicochemical quality elements in river WBs with more than 1 monitoring stations

WB	Stations	Organic Load	Chemical Load	Salinity	Physicochemical Status	Physicochemical Status
CY1-1-AB	r1-1-1-75 r1-1-3-95	4,150	4,05	4,1	4,1	High
CY1-2-A	r1-2-2-70 r1-2-2-99 r1-2-3-32 r1-2-3-39 r1-2-3-44 r1-2-3-53 r1-2-3-94 r1-2-4-25	4,150	4,05	4,1	4,1	High
CY1-2-B	r1-2-1-60 r1-2-1-96	4,350	4,55	4,1	4,1	High
CY1-2-D2	r1-2-6-17 r1-2-6-29	4,300	4,55		4,3	High
CY1-3-A1	r1-3-1-79 r1-3-3-98 r1-3-5-05	4,550	4,55		4,6	High
CY1-3-C	r1-3-8-40 r1-3-8-60	3,750	4,05	4,1	3,8	Good
CY1-6-A2	r1-6-2-09 r1-6-2-13 r1-6-2-17	4,150	4,55	3,6	3,55	Good
CY2-2-B	r2-2-3-95 r2-2-3-98	3,350	4,55	3,1	3,1	Good
CY2-9-B	r2-9-1-80 r2-9-2-17 r2-9-2-50	3,950	4,05	4,1	3,95	Good
CY3-2-A	r3-2-1-53 r3-2-1-60 r3-2-1-65 r3-2-1-85	4,350	4,05	4,1	4,1	High
CY3-3-B	r3-3-3-02 r3-3-3-15 r3-3-3-58 r3-3-3-82 r3-3-3-95 r3-3-4-41	3,750	4,05	4,1	3,8	Good
CY3-3-D	r3-3-2-60 r3-3-2-62 r3-3-2-85	3,950	4,55	3,6	3,6	Good
CY3-4-AB	r3-4-2-05 r3-4-2-80 r3-4-2-90	3,950	4,05	3,6	3,6	Good
CY6-1-A	r6-1-1-48 r6-1-1-72 r6-1-1-80	4,150	4,55	4,1	4,1	High

WB	Stations	Organic Load	Chemical Load	Salinity	Physicochemical Status	Physicochemical Status
CY6-5-C	r6-5-3-15 r6-5-3-50	3,55	4,05	3,55	3,6	Good
CY8-4-C	r8-4-3-40 r8-4-5-30	3,350	3,05	3,6	3,1	Good
CY8-6-A	r8-6-2-57 r8-6-3-50	3,950	4,55	3,6	3,6	Good
CY8-9-C2G	r8-9-3-83 r8-9-5-40	4,150	3,55	3,6	3,6	Good
CY9-1-B	r9-1-4-51 r9-1-3-80	3,140	3,05	3,6	3,05	Good
CY9-6-BCD	r9-6-5-62 r9-6-5-63 r9-6-5-74 r9-6-5-75	3,550	2,55	4,1	2,6	Moderate
CY9-6-E	r9-6-5-77 r9-6-6-32 r9-6-6-40	3,950	2,55	4,1	2,6	Moderate
CY9-6-I	r9-6-3-13 r9-6-3-15	3,300	4,55	4,6	3,3	Good
CY9-6-KL	r9-6-3-31 r9-6-3-32 r9-6-3-36 r9-6-3-46 r9-6-3-47 r9-6-3-61 r9-6-3-82 r9-6-3-83	3,950	4,05	3,6	3,6	Good
CY9-6-M	r9-6-4-24 r9-6-4-34 r9-6-4-37 r9-6-4-90 r9-6-4-92	3,950	4,05	3,6	3,6	Good
CY9-6-P	r9-6-1-17 r9-6-1-33 9-6-1-44	4,350	4,55	4,1	4,1	High
CY9-6-Q	r9-6-1-68 r9-6-1-82	4,300	4,55	3,6	3,6	Good
CY9-6-R	r9-6-1-87 r9-6-2-60 r9-6-2-90	3,950	4,05	4,1	3,95	Good

4.1.4 Specific Pollutants

The total of available monitoring data for the period 2013-2019 was taken into account.

Table 4-10 Specific pollutants in river WB monitoring stations

Station	WB	B	Cu	Zn	Hardness	Specific Pollutants
		µg/l			mg/l $CaCO_3$	
r1-1-1-75	CY1-1-AB	105			247	Pass
r1-1-3-95	CY1-1-AB	75	3	8	274	Pass
r1-1-6-65	CY1-1-C	59			271	Pass
r1-2-1-96	CY1-2-B	50			154	Pass
r1-2-3-94	CY1-2-A	24	3	6	236	Pass
r1-2-4-25	CY1-2-A	50	3	13	214	Pass
r1-2-6-64	CY1-2-D1	70	3	9	224	Pass
r1-3-5-05	CY1-3-A3	57			167	Pass
r1-3-5-91	CY1-3-A3	5	29	480	244	Pass
r1-3-6-53	CY1-3-B	78	9	74	226	Pass
r1-3-8-60	CY1-3-C	121	4	19	254	Pass
r1-4-1-98	CY1-4-A	140			213	Pass
r1-4-3-35	CY1-4-B	91			220	Pass
r1-4-6-75	CY1-4-K	498	3	6	634	Pass
r1-4-7-10	CY1-4-F	219	3	9	916	Pass
r1-4-8-88	CY1-4-M	402	9	5	395	Pass
r1-4-9-80	CY1-4-H	224	3	7	476	Pass
r1-4-9-99	CY1-4-H	3.921	7	10		Not considered since it is affected by the sea
r1-5-5-89	CY1-5-D1	229	3	7	380	Pass
r1-6-2-17	CY1-6-A2	194			338	Pass
r1-8-5-89	CY1-8-B	369			308	Pass
r2-1-8-74	CY2-1-A	181			245	Pass
r2-2-3-95	CY2-2-B	333	3	11	1411	Pass
r2-2-6-35	CY2-2-D	419	3	5	256	Pass
r2-3-1-64	CY2-3-A	1.334	3	5	618	Fail
r2-3-2-96	CY2-3-B	903	54	118	1655	Pass
r2-3-4-80	CY2-3-C2	38	4	9	308	Pass
r2-3-7-74	CY2-3-E	246	3	5	363	Pass
r2-3-8-48	CY2-3-F1	56			225	Pass
r2-4-6-70	CY2-4-D	60			346	Pass
r2-6-1-92	CY2-6-A	64			261	Pass
r2-7-2-75	CY2-7-A	55			211	Pass
r2-8-3-10	CY2-8-A	50			195	Pass
r2-9-2-50	CY2-9-B	32	3	9	251	Pass
r3-1-2-30	CY3-1-BC	50			174	Pass
r3-2-1-85	CY3-2-A	45	3	7	212	Pass
r3-2-3-48	No WB	380			396	Pass
r3-3-1-60	CY3-3-A	94	3	8	256	Pass
r3-3-2-60	CY3-3-D	520	3	7	379	Pass
r3-3-3-15	CY3-3-B	86	3	13	294	Pass

Station	WB	B	Cu	Zn	Hardness	Specific Pollutants
		µg/l			mg/l $CaCO_3$	
r3-3-3-95	CY3-3-B	128	3	9	341	Pass
r3-4-2-90	CY3-4-AB	81	3	9	328	Pass
r3-5-1-50	CY3-5-A	38	3	5	154	Pass
r3-5-4-40	CY3-5-D	64	15	82	537	Pass
r3-7-1-55	CY3-7-B	59	3	6	172	Pass
r3-7-1-84	No WB	50		13	151	Pass
r3-7-3-71	CY3-7-DEF	29	3	10	218	Pass
r3-7-5-35	CY3-7-N	167	3	5	319	Pass
r3-7-5-50	No WB	159	3	7	367	Pass
r6-1-1-72	CY6-1-A	50	3	5	200	Pass
r6-1-1-80	CY6-1-A	50	3	13	209	Pass
r6-1-2-38	No WB	221	5	8	236	Pass
r6-1-2-90	No WB	288			209	Pass
r6-1-4-34	No WB	579	5	16	483	Pass
r6-1-5-52	No WB	556	4	13	779	Pass
r6-5-1-34	CY6-5-A	48	3	5	194	Pass
r6-5-1-85	CY6-5-B	141	3	5	349	Pass
r6-5-2-85	CY6-5-H	2.503	6	13	612	Fail
r6-5-3-15	No WB	109	4	7	294	Pass
r6-5-3-50	No WB	93	14	5	339	Pass
r8-3-2-60	CY8-3-A	1.521	7	8	2020	Fail
r8-4-1-57	No WB	164	3	5	294	Pass
r8-4-1-58	No WB	131	133	655	1086	Fail
r8-4-3-40	CY8-4-C	195	4	12	503	Pass
r8-4-4-72	CY8-4-G	266			430	Pass
r8-4-5-30	CY8-4-C	196	4	8	413	Pass
r8-5-1-60	CY8-5-AB	208			342	Pass
r8-6-2-57	CY8-6-A	86	3	8	352	Pass
r8-6-3-50	CY8-6-A	2.000	3	5	1012	Fail
r8-7-2-60	CY8-7-C	64	4	16	436	Pass
r8-7-3-95	CY8-7-D	287			290	Pass
r8-8-2-95	CY8-8-C	90	3	9	378	Pass
r8-9-3-83	CY8-9-C2G	221			553	Pass
r8-9-5-40	CY8-9-C2G	65	3	9	543	Pass
r8-9-6-98	CY8-9-H	142	9	7	358	Pass
r9-1-3-80	No WB	194	5	6	593	Pass
r9-1-4-51	CY9-1-BC	62	3	5	566	Pass
r9-2-1-43	CY9-2-BC	23	3	5	226	Pass
r9-2-3-05	CY9-2-E	84	3	15	368	Pass
r9-2-3-85	CY9-2-F	52	3	9		Pass
r9-2-4-27	CY9-2-J	39	3	5		Pass
r9-2-4-95	CY9-2-KL	107	14	8		Pass
r9-4-3-39	CY9-4-G	197	3	5		Pass
r9-4-3-41	CY9-4-B	90	3	10		Pass
r9-4-3-80	CY9-4-C	446	5	8		Pass
r9-5-1-99	No WB	50	3	48		Pass
r9-6-1-44	CY9-6-P	272				Pass
r9-6-1-87	CY9-6-R	56	3	5		Pass
r9-6-2-60	CY9-6-R	50				Pass
r9-6-3-36	CY9-6-KL	488	3	8		Pass

Station	WB	B	Cu	Zn	Hardness	Specific Pollutants
		µg/l			mg/l $CaCO_3$	
r9-6-3-77	CY9-6-N	125				Pass
r9-6-3-87	CY9-6-O	29	3	7		Pass
r9-6-4-92	CY9-6-M	323	3	10		Pass
r9-6-5-62	CY9-6-BCD	12	3	9		Pass
r9-6-5-63	CY9-6-BCD	45	3	5		Pass
r9-6-6-32	CY9-6-E	50	3	12		Pass
r9-6-7-70	CY9-6-F	56				Pass
r9-8-4-95	CY9-8-B3	50				Pass
r9-8-6-99	CY9-8-C	130				Pass

In the case of WBs that had more than one station, the evaluation of WBs was obtained from the average of all station data.

Table 4-11 Specific pollutants in river WBs with more than 1 monitoring stations

WB	B	Cu	Zn	Hardness	Specific Pollutants
	µg/l			mg/l $CaCO_3$	
CY1-1-AB	87	3	8	261	Pass
CY1-1-C	59			271	Pass
CY1-2-A	33	3	8	224	Pass
CY1-2-B	50			154	Pass
CY1-2-D1	70	3	9	224	Pass
CY1-3-A3	46	29	480	179	Pass
CY1-3-B	78	9	74	226	Pass
CY1-3-C	121	4	19	254	Pass
CY1-4-A	140			213	Pass
CY1-4-B	91			220	Pass
CY1-4-F	219	3	9	916	Pass
CY1-4-H	224	3	7	476	Pass
CY1-4-K	498	3	6	634	Pass
CY1-4-M	402	9	5	395	Pass
CY1-5-D1	229	3	7	380	Pass
CY1-6-A2	194			338	Pass
CY1-8-B	369			308	Pass
CY2-1-A	181			245	Pass
CY2-2-B	333	3	11	1.411	Pass
CY2-2-D	419	3	5	256	Pass
CY2-3-A	**1.334**	3	5	618	Fail
CY2-3-B	903	54	118	1.655	Pass
CY2-3-C2	38	4	9	308	Pass
CY2-3-E	246	3	5	363	Pass
CY2-3-F1	56			225	Pass
CY2-4-D	60			346	Pass
CY2-6-A	64			261	Pass
CY2-7-A	55			211	Pass
CY2-8-A	50			195	Pass
CY2-9-B	32	3	9	251	Pass
CY3-1-BC	50			174	Pass
CY3-2-A	45	3	7	212	Pass
CY3-3-A	94	3	8	256	Pass

WB	B	Cu	Zn	Hardness	Specific Pollutants
	µg/l			mg/l $CaCO_3$	
CY3-3-B	120	3	9	330	Pass
CY3-3-D	520	3	7	379	Pass
CY3-4-AB	81	3	9	328	Pass
CY3-5-A	38	3	5	154	Pass
CY3-5-D	64	15	82	537	Pass
CY3-7-B	59	3	6	172	Pass
CY3-7-DEF	29	3	10	218	Pass
CY3-7-N	167	3	5	319	Pass
CY6-1-A	50	3	10	202	Pass
CY6-5-A	48	3	5	194	Pass
CY6-5-B	141	3	5	349	Pass
CY6-5-H	**2.503**	6	13	612	Fail
CY8-3-A	**1.521**	7	8	2.020	Fail
CY8-4-C	195	4	11	480	Pass
CY8-4-G	266			430	Pass
CY8-5-AB	208			342	Pass
CY8-6-A	405	3	8	462	Pass
CY8-7-C	64	4	16	436	Pass
CY8-7-D	287			290	Pass
CY8-8-C	90	3	9	378	Pass
CY8-9-C2G	127	3	9	548	Pass
CY8-9-H	142	9	7	358	Pass
CY9-2-BC	23	3	5	226	Pass
CY9-2-E	84	3	15	368	Pass
CY9-2-F	52	3	9		Pass
CY9-2-J	39	3	5		Pass
CY9-2-KL	107	14	8		Pass
CY9-4-B	90	3	10		Pass
CY9-4-C	446	5	8		Pass
CY9-4-G	197	3	5		Pass
CY9-6-BCD	28	3	7		Pass
CY9-6-E	50	3	12		Pass
CY9-6-F	56				Pass
CY9-6-KL	488	3	8		Pass
CY9-6-M	323	3	10		Pass
CY9-6-N	125				Pass
CY9-6-O	29	3	7		Pass
CY9-6-P	272				Pass
CY9-6-R	54	3	5		Pass
CY9-8-B3	50				Pass
CY9-8-C	130				Pass

4.1.5 Hydromorphological data

According to the WFD, the values of the hydromorphological quality elements must be taken into account when classifying WBs in the high ecological status and at the maximum ecological potential (i.e., during the degradation from high ecological status or maximum ecological potential to good ecological status/potential). For the other status/potential categories, the hydromorphological elements must have "conditions consistent with the achievement of the values set for the biological quality elements".

In the absence of most recent data, the evaluation of the 2nd RBMP was used. The evaluation of the hydromorphological characteristics and the calculation of the Integrated Pressure Index (IPI) in stations of the 2nd RBMP that were evaluated in the context of the present study, are presented in the following table.

Table 4-12 Hydromorphological Status of stations

Station Code	WB Code	Hydromorphological Status
r1-1-3-95	CY1-1-AB	Good & below
r1-2-4-25	CY1-2-A	High
r1-3-5-05	CY1-3-A1	High
r1-3-8-60	CY1-3-C	Good & below
r1-4-3-35	CY1-4-B	High
r1-4-7-10	CY1-4-F	Good & below
r2-2-3-95	CY2-2-B	Good & below
r2-7-2-75	CY2-7-A	High
r2-8-3-10	CY2-8-A	High
r2-9-2-50	CY2-9-B	Good & below
r3-1-1-48	CY3-1-A	High
r3-1-2-30	CY3-1-BC	High
r3-2-1-85	CY3-2-A	Good & below
r3-3-1-60	CY3-3-A	High
r3-5-1-50	CY3-5-A	High
r3-5-4-40	CY3-5-D	Good & below
r3-7-1-55	CY3-7-B	Good & below
r3-7-3-71	CY3-7-DEF	Good & below
r6-1-1-72	CY6-1-A	High
r6-1-2-90	CY6-1-E	Good & below
r6-5-1-85	CY6-5-B	Good & below
r8-4-3-40	CY8-4-C	Good & below
r8-7-1-65	CY8-7-A	High
r8-7-2-60	CY8-7-C	Good & below
r8-9-5-40	CY8-9-C2G	High
r9-2-3-05	CY9-2-E	Good & below
r9-2-3-85	CY9-2-F	High
r9-6-1-44	CY9-6-P	Good & below
r9-6-1-87	CY9-6-R	Good & below
r9-6-2-60	CY9-6-R	Good & below
r9-6-4-92	CY9-6-M	Good & below
r9-6-6-32	CY9-6-E	High
r9-6-7-70	CY9-6-F	Good & below

4.1.6 Ecological Status

The following tables summarize the results of the ecological evaluation of the Monitoring Network.

A total of 190 stations were evaluated where there was data for the classification of the ecological status. Of these, the ecological status was classified in 159 stations, of which in 13 of them their status was found high, in 84 good, in 46 moderate and in 16 poor.

Table 4-13 Evaluation of ecological status of monitoring stations

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r1-1-1-75	CY1-1-AB	Cha potami d/s Mandria (Yofirin bridge)	Moderate	High	pass	-	Moderate	
r1-1-3-95	CY1-1-AB	Kissousa weir	Good	High	pass	Good & below	Good	
r1-1-6-65	CY1-1-C	Kato Archimandrita	Poor	Good	pass	-	Poor	
r1-2-1-60	CY1-2-B	d/s Ayios Avakoum	High	Good	-	-	Good	
r1-2-1-96	CY1-2-B	u/s Diplopotamos locality	Good	High	pass	-	Good	
r1-2-2-70	CY1-2-A	Kefalokremmin bridge	Good	High	-	-	Good	
r1-2-2-99	CY1-2-A	u/s Kaminaria Phini confluence	Good	High	-	-	Good	
r1-2-3-32	-	Phini R. d/s Chantara waterfall	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r1-2-3-39	-	Phini R. @ Phini (New Koinotiko Symvoulio)	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r1-2-3-44	CY1-2-A	near Phini	Moderate	-	-	-	Moderate	
r1-2-3-53	-	Phini R. u/s Vines Reservoir	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r1-2-3-94	CY1-2-A	near Pachnoutis ford	Moderate	High	pass	-	Moderate	
r1-2-4-25	CY1-2-A	Diarizos U/S Arminou Dam	-	High	pass	High	High	
r1-2-4-27	CY1-2-E	@ Yiophyrin tou Tholou	Good	Good	-	-	Good	
r1-2-4-95	-	Diarizos near Filousa	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r1-2-5-70	CY1-2-F2	Yerovasinos d/s Yerovasa	Good	Good	-	-	Good	ή r1-2-5-71
r1-2-6-17	CY1-2-D2	kourtellorotsos	Good	High	-	-	Good	
r1-2-6-29	-	Diarizos @ Kidasi - Kentro Extreme View	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r1-2-6-64	CY1-2-D1	Ayios Georgios	Good	High	pass	-	Good	

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r1-2-7-90	-	Diarizos near Kouklia Pafou	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r1-3-1-79	CY1-3-A1	near forest station	Good	High	-	-	Good	
r1-3-2-96	CY1-3-A2	Stenous R. near Kastroullin locality	-	-	-	-	-	
r1-3-3-98	CY1-3-A1	near Kastroullin locality	High	High	-	-	High	
r1-3-5-05	CY1-3-A1	Lazaridhes	High	High	pass	High	High	
r1-3-5-91	CY1-3-A3	Roudias bridge	Good	High	pass	-	Good	
r1-3-6-53	CY1-3-B	Rotsos twn Laoudiwn	Good	High	pass	-	Good	
r1-3-8-40	CY1-3-C	u/s Choletria	Good	Good	-	-	Good	
r1-3-8-60	CY1-3-C	Phinikas	Moderate	Good	pass	Good & below	Moderate	
r1-4-1-98	CY1-4-A	u/s Ayia forest	Good	High	pass	-	Good	
r1-4-2-15	-	Agia near Agia Forest Station	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r1-4-3-35	CY1-4-B	u/s Kannaviou Dam	Good	High	pass	High	Good	
r1-4-4-50	-	Ezousas near Kannaviou	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r1-4-6-75	CY1-4-K	Varkas River Near Amargeti	-	Good	pass	-	Good	
r1-4-7-10	CY1-4-F	Moro nero	Moderate	Good	pass	Good & below	Moderate	
r1-4-8-88	CY1-4-M	Kochatis River Near Koloni	-	Good	pass	-	Good	
r1-4-9-80	CY1-4-H	Ezousas near Acheleia	-	Moderate	pass	-	Moderate	
r1-4-9-99	-	Ezousas at Coast EZ2	-	-	-	-	-	Not considered during classification
r1-5-5-89	CY1-5-D1	Near Kaliadhes Locality	Poor	Good	pass	-	Poor	
r1-6-2-09	CY1-6-A2	u/s adonis baths	Moderate	High	-	-	Moderate	
r1-6-2-13	CY1-6-A2	Adonis baths	Good	-	-	-	Good	
r1-6-2-17	CY1-6-A2	krya vrysi	Moderate	Good	pass	-	Moderate	
r1-8-2-71	CY1-8-A1	Avgas R. d/s Avakas Gorge mouth	Good	-	-	-	Good	

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r1-8-5-89	CY1-8-B	Pevkos R. @ Lara Road	-	Good	pass	-	Good	
r2-1-2-92	CY2-1-C	d/s Loutra Aphroditis	Poor	-	-	-	Poor	
r2-1-2-99	-	Argaki tou Pyrgou @ Coast	-	-	-	-	-	Not considered during classification
r2-1-8-74	CY2-1-A	Argaki tou Ayiou Ioanni near shooting range	-	Good	pass	-	Good	
r2-2-3-80	CY2-2-J	Klavaris stream U/S Paphos-Polis road	Moderate	Bad	-	-	Moderate	
r2-2-3-95	CY2-2-B	near Skoulli	-	Good	pass	Good & below	Good	
r2-2-3-96	CY2-2-L	Skoulli (d/s Kritou Terra)	Moderate	Moderate	-	-	Moderate	
r2-2-3-98	CY2-2-B	Skoulli koinotiko parko (Phinidjes locality)	Moderate	High	-	-	Moderate	
r2-2-5-75	-	Stavros Tis Psokas R. @ Rizokremmos	-	-	-	-	-	Not considered during classification
r2-2-6-35	CY2-2-D	Sarama quarry	Good	Good	pass	-	Good	
r2-2-6-60	-	Stavros Tis Psokas near Skarfos	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r2-2-7-34	-	Chrysochou River @ Goudi bridge	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r2-2-8-95	-	Chrysochou near Coast	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r2-3-1-64	CY2-3-A	Mirmikoph River D/S Steni	-	Moderate	fail	-	Moderate	
r2-3-2-96	CY2-3-B	Pelathousa R. (Argaki tis Limnis) @ Polis-Argaka Rd.	-	Moderate	pass	-	Moderate	
r2-3-4-80	CY2-3-C2	u/s Argaka Dam	High	Good	pass	-	Good	
r2-3-7-74	CY2-3-E	Xeropotamos D/S Poros tou Sykarkou	-	Good	pass	-	Good	
r2-3-8-48	CY2-3-F1	Pochalandra	Good	High	pass	-	Good	

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r2-3-8-60	-	Gialia near Pano Gialia	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r2-4-6-70	CY2-4-D	u/s Pomos reservoir	Good	Good	pass	-	Good	
r2-4-6-80	No WB	Mavros Kremmos U/S Pomos Dam	-	-	-	-	-	No WB. PHYS-CHEM elements are not considered. Only DO_EC
r2-6-1-92	CY2-6-A	Katouris U/S Pyrgos Reservoir	-	High	pass	-	High	
r2-7-2-75	CY2-7-A	Phleva	High	High	pass	High	High	
r2-8-3-10	CY2-8-A	Saw Mill	Good	Good	pass	High	Good	
r2-9-1-80	CY2-9-B	Kolympos tis Ouranias diversion	-	-	-	-	Good	-
r2-9-2-17	CY2-9-B	near Kalonomatti spring	Good	Good	-	-	Good	
r2-9-2-50	CY2-9-B	Ag. Varvara	Good	Good	pass	Good & below	Good	
r3-1-1-48	CY3-1-A	Ayia Triada Dam	Good	-	-	High	Good	
r3-1-2-30	CY3-1-BC	u/s Kafizes Dam	High	High	pass	High	High	
r3-2-1-38	No WB	Potamos tous Nekrous near Pedoulas (u/s Dimma tou Markoulia)	-	High	-	-	High	No WB
r3-2-1-39	No WB	Potamos tous Nekrous near Pedoulas (d/s Dimma tou Markoulia)	-	-	-	-	-	No WB
r3-2-1-53	CY3-2-A	near Pano fraktis	Good	High	-	-	Good	
r3-2-1-60	CY3-2-A	sulphur springs u/s Moutoulas	Good	High	-	-	Good	
r3-2-1-65	CY3-2-A	near Moutoulas bridge	Moderate	High	-	-	Moderate	
r3-2-1-69	No WB	Katouris @ Moutoullas (Village center bridge)	-	Good	-	-	Good	No WB
r3-2-1-85	CY3-2-A	u/s Kalopanagiotis Dam	Moderate	High	pass	Good & below	Moderate	
r3-2-2-17	CY3-2-B	d/s Xyloyephyron Bridge (Markos)	Good	Good	-	-	Good	

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r3-2-2-90	CY3-2-B	u/s Lefka Dam	Moderate	High	-	-	Moderate	
r3-2-3-48	CY3-2-E	Vrountokremni Argakin near Yeronta locality	-	Good	pass	-	Good	Epehmeral off RBMP
r3-3-1-60	CY3-3-A	u/s Fish Farm	Moderate	High	pass	High	Moderate	
r3-3-1-68	CY3-3-A	Ayios Nikolaos bottling plant	High	-	-	-	High	PHYS-CHEM elements are not considered
r3-3-1-70	-	Agios Nikolaos near Kakopetria	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r3-3-2-60	CY3-3-D	near Kakopetria	Good	Good	pass	-	Good	
r3-3-2-62	CY3-3-D	near Kampos locality	Moderate	High	-	-	Moderate	
r3-3-2-85	CY3-3-D	@ Kouphoelies locality (Kakopetria)	Good	High	-	-	Good	
r3-3-3-02	CY3-3-B	Kakopetria u/s STP	Moderate	Good	-	-	Moderate	
r3-3-3-15	CY3-3-B	Galata hydrometric station	Poor	Good	pass	-	Poor	
r3-3-3-58	CY3-3-B	Kaliana inn (Chani)	Moderate	Good	-	-	Moderate	
r3-3-3-82	CY3-3-B	Temvria	Poor	-	-	-	Poor	
r3-3-3-95	CY3-3-B	Evrychou	Poor	Good	pass	-	Poor	
r3-3-4-41	CY3-3-B	Kato Flasou	Moderate	-	-	-	Moderate	
r3-4-1-69	No WB	Arg. tou Phterikiou @ Forest Dept. Water Tank	-	Good	-	-	Good	No WB
r3-4-2-05	CY3-4-AB	@ Ag. Theodoros	Good	Moderate	-	-	Moderate	
r3-4-2-80	CY3-4-AB	near Atsas locality (old road bridge)	Moderate	-	-	-	Moderate	
r3-4-2-90	CY3-4-AB	Atsas near Evrychou	-	Good	pass	-	Good	
r3-5-1-50	CY3-5-A	Lagoudera bridge	Good	Good	pass	High	Good	
r3-5-3-90	-	Asinou near Nikitari	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r3-5-4-28	-	Kannavia R. D/S Ag. Georgiou Kafkallou	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r3-5-4-40	CY3-5-D	Vizakia	Moderate	Good	pass	Good & below	Moderate	
r3-7-1-50	-	Peristerona near Panagia Bridge	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r3-7-1-55	CY3-7-B	Sifilos	Good	High	pass	Good & below	Good	
r3-7-1-84	CY_3-7-C	Peristerona @ Peristerona	-	Good	pass	-	Good	
r3-7-3-25	CY3-7-DEF	u/s Palekhori/Kambi Reservoir	Good	High	-	-	Good	
r3-7-3-71	CY3-7-DEF	u/s Akaki-Malounta Dam	Good	Good	pass	Good & below	Good	
r3-7-3-90	-	Akaki near Malounta	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r3-7-5-34	-	Koutis R. @ Arediou	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r3-7-5-35	CY3-7-N	Aloupos R. near Arediou	-	Good	pass	-	Good	
r3-7-5-50	CY3-7-O	Koutis R. @ Asprokremnos locality	-	Good	pass	-	Good	Ephemeral off RBMP
r6-1-1-48	CY6-1-A	Agios Onoufrios	Good	-	-	-	Good	
r6-1-1-72	CY6-1-A	Filani	High	High	pass	High	High	
r6-1-1-80	CY6-1-A	Agios Onoufrios near Kampia	-	Good	pass	-	Good	
r6-1-2-38	CY6-1-D	Pediaios near Kato Deftera	-	High	pass	-	High	
r6-1-2-90	CY6-1-E	Pediaios near Lefkosia	-	Good	pass	Good & below	Good	
r6-1-4-34	CY6-1-K	Katevas near SOPAZ roundabout	-	Moderate	pass	-	Moderate	Ephemeral off RBMP
r6-1-5-52	CY6-1-L	Vathys @ Athalassa Park	-	Moderate	pass	-	Moderate	Ephemeral off RBMP
r6-5-1-34	CY6-5-A	Azizis locality	Good	Good	pass	-	Good	
r6-5-1-85	CY6-5-B	Kotsiatis	Moderate	Good	pass	Good & below	Moderate	
r6-5-2-45	-	Alykos R. near Margi	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r6-5-2-85	CY6-5-H	Alykos d/s Dhali Industrial Area	-	Poor	fail	-	Poor	
r6-5-3-15	CY6-5-C	Gialias near Nisou	-	Good	pass	-	Good	
r6-5-3-50	CY6-5-C	Gialias near Potamia	-	Good	pass	-	Good	
r8-2-4-10	-	Aradippou near Aradippou	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r8-3-2-60	CY8-3-A	Kalo Chorio R. @ Kamares	-	Moderate	fail	-	Moderate	
r8-4-1-57	CY8-4-A	Kalamoulia R. u/s Lympia Reservoir	-	Good	pass	-	Good	Ephemeral off RBMP
r8-4-1-58	CY8-4-B	Xylias R. u/s Lympia Reservoir	-	Good	Fail	-	Moderate	Ephemeral off RBMP
r8-4-3-40	CY8-4-C	Treminthos near Agia Anna	-	Good	pass	Good & below	Good	
r8-4-4-72	CY8-4-G	Ayios Ioannis R. near Stazousa	-	Good	pass	-	Good	
r8-4-5-30	CY8-4-C	Treminthos near Klavdia	-	Good	pass	-	Good	
r8-5-1-60	CY8-5-AB	Pouzis near Alethriko	-	Good	pass	-	Good	
r8-6-2-57	CY8-6-A	Xeros near Ghlyki Neron (Stavrovouni Forest)	-	Good	pass	-	Good	
r8-6-3-50	CY8-6-A	Xeropotamos near Alaminos	-	Good	fail	-	Moderate	
r8-7-1-65	CY8-7-A	Kyprovasa	Good	High	-	High	Good	
r8-7-2-60	CY8-7-C	Pano Lefkara	Moderate	Good	pass	Good & below	Moderate	
r8-7-3-95	CY8-7-D	u/s Dhipotamos reservoir	Moderate	Good	pass	-	Moderate	
r8-8-2-95	CY8-8-C	Choirokoitia	Moderate	Good	pass	-	Moderate	
r8-9-3-83	CY8-9-C2G	near Layia	Good	Good	pass	-	Good	
r8-9-5-40	CY8-9-C2G	Layia	Moderate	Good	pass	High	Moderate	
r8-9-6-98	CY8-9-H	Argaki Asgatas near Kalavasos	-	Good	pass	-	Good	
r8-9-7-50	-	Vasilikos near Kalavasos	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r9-1-3-80	CY9-1-E	Argaki tis Monis near Moni	-	Moderate	pass	-	Moderate	
r9-1-4-51	CY9-1-BC	Argaki tou Pyrgou u/s Recharge Dam	-	Moderate	pass	-	Moderate	
r9-1-4-64	-	Argaki tou Pyrgou near Hilidhonia (d/s Rech. Dam)	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r9-2-1-43	CY9-2-BC	Kalimera diversion	Good	High	pass	-	Good	
r9-2-1-47	CY9-2-BC	Ayios Pavlos river near Athrakos	-	-	-	-	-	
r9-2-3-05	CY9-2-E	Dierona	Moderate	Good	pass	Good & below	Moderate	
r9-2-3-85	CY9-2-F	Phinikaria	High	Good	pass	High	Good	
r9-2-4-27	CY9-2-J	Argaki tou Monastiriou near Amyrou Monastery	-	Good	pass	-	Good	
r9-2-4-95	CY9-2-KL	u/s Germasogia dam	Moderate	Good	pass	-	Moderate	
r9-4-3-39	CY9-4-G	Phasoula d/s Paramytha	-	Moderate	pass	-	Moderate	
r9-4-3-41	CY9-4-B	Garyllis R. @ Paramytha	-	Good	pass	-	Good	
r9-4-3-80	CY9-4-C	u/s Polemidia Dam weir (Ayia Eirini)	Poor	Poor	pass	-	Poor	
r9-5-1-99	CY9-5-A	Ypsonas near Ypsonas	-	Good	pass	-	Good	Ephemeral off RBMP
r9-6-1-17	CY9-6-P	d/s Troodos square (Pumping station)	High	High	-	-	High	
r9-6-1-33	CY9-6-P	u/s Psilo dentro	High	High	-	-	High	
r9-6-1-44	CY9-6-P	u/s Myllomeris Waterfall	Good	High	pass	Good & below	Good	
r9-6-1-68	CY9-6-Q	Pera pedi (d/s bridge)	Good	High	-	-	Good	
r9-6-1-82	CY9-6-Q	Agia Mavri	Good	Good	-	-	Good	
r9-6-1-87	CY9-6-R	Koilani	Good	Good	pass	Good & below	Good	
r9-6-2-60	CY9-6-R	u/s Tunnel Outlet	Good	High	pass	Good & below	Good	
r9-6-2-90	-	Kryos near Alasa	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r9-6-3-13	CY9-6-I	Loumata d/s Armirolivado (boy scout camp)	Good	Good	-	-	Good	ή r9-6-3-12

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r9-6-3-15	CY9-6-I	Amiantos loumata	High	High	-	-	High	
r9-6-3-31	CY9-6-KL	Loumata u/s Kato Amiantos	Moderate	High	-	-	Moderate	
r9-6-3-32	CY9-6-KL	Troodos u/s Kato Amiantos	Poor	Good	-	-	Poor	
r9-6-3-36	CY9-6-KL	Kato Amiantos	Poor	Good	pass	-	Poor	
r9-6-3-46	CY9-6-KL	near Kardhaki locality u/s bridge	Good	-	-	-	Good	
r9-6-3-47	CY9-6-KL	near Kardhaki locality	Poor	Good	-	-	Poor	
r9-6-3-61	CY9-6-KL	near kalogiros forest	Poor	High	-	-	Poor	
r9-6-3-77	CY9-6-N	u/s Saittas diversion	Good	High	pass	-	Good	
r9-6-3-82	-	Kouris R. @ Saittas (u/s trash rack)	-	-	-	-	-	PHYS-CHEM elements are not considered. Only DO_EC
r9-6-3-83	CY9-6-KL	u/s Trimiklini dam	Poor	Good	-	-	Poor	Former r9-6-3-74
r9-6-3-87	CY9-6-O	@ Lourka (Footbridge)	Good	Good	pass	-	Good	
r9-6-4-24	CY9-6-M	Silikou Laneia road (Point A)	Moderate	Good	-	-	Moderate	
r9-6-4-34	CY9-6-M	Ayios Georgios (Livadia locality)	Good	Good	-	-	Good	
r9-6-4-37	CY9-6-M	@ Ay. Yeoryios-Monagri Road	Poor	-	-	-	Poor	
r9-6-4-90	CY9-6-M	u/s Kouris Dam	Moderate	Good	-	-	Moderate	
r9-6-4-92	CY9-6-M	Alassa new weir	Moderate	Good	pass	Good & below	Moderate	
r9-6-5-62	CY9-6-BCD	Near Ag. Ioannis	Good	Moderate	pass	-	Moderate	
r9-6-5-63	CY9-6-BCD	d/s Potamitissa	Moderate	Good	pass	-	Moderate	
r9-6-5-67	CY9-6-A	near Ayios Ioannis	Poor	Moderate	-	-	Poor	
r9-6-5-74	CY9-6-BCD	near Kato Mylos	Good	High	-	-	Good	
r9-6-5-75	CY9-6-BCD	near Kato Mylos	Moderate	Good	-	-	Moderate	
r9-6-5-77	CY9-6-E	d/s Agros-Ampelikos confluence	Good	Good	-	-	Good	
r9-6-6-32	CY9-6-E	Ag. Mamas	Poor	Moderate	pass	High	Poor	
r9-6-6-40	CY9-6-E	near quarry bridge	Good	-	-	-	Good	

Station	WB	Station Name	BQEs	Physico-chemical QEs	RBSPs	Hydromorphological Status	Ecological Status	Remarks
r9-6-7-70	CY9-6-F	u/s Kouris Dam	Good	Good	pass	Good & below	Good	
r9-8-4-95	CY9-8-B3	Evdhimou (Mandalas) R. @ Mandalas diversion	-	Good	pass	-	Good	
r9-8-6-99	CY9-8-C	Evdhimou river at coast	-	Good	pass	-	Good	

Table 4-14 Assessment of ecological status of WBs with monitoring stations

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY1-1-AB	Khapotami	I	r1-1-1-75 r1-1-3-95	Good	High	Pass	Good & below	Good		No data
CY1-1-C	Khapotami	IH	r1-1-6-65	Poor	Good	Pass		Poor		No data
CY1-1-D	Khapotami	E							• Ha_ek • Ha_usek • Khapotami R. @ Coast (River mouth)	Fish habitat (*Anguilla anguilla*, River mouth, Other)
CY1-2-A	Dhiarizos	P	r1-2-2-70 r1-2-2-99 r1-2-3-32 r1-2-3-39 r1-2-3-44 r1-2-3-53 r1-2-3-94 r1-2-4-25	Good	High	Pass	High	Good	• Agiasma • Diarizos U/S Arminou Dam • Ds Gef Tzelefou • Finifisheries • Gefelias • Kaminaria R. @ Kephalokremmin bridge • Phini R. @ Chantara waterfall • Phini R. d/s trout farm • Phini River @ Pakhnoutis ford • Trieselies • Troodospicnik • Two bridges • Us Gef Tzelefou • Vrachos • Diarizos R. @ Tholos R. confluence	Fish habitat (*Salmo trutta*, Other)
CY1-2-B	Dhiarizos	P	r1-2-1-60 r1-2-1-96	High	High	Pass		High	• Agios Avvakoum • DiarMid • Milikouri Spring • Pareklissoudi • Platys River u/s Dhiplopotamos locality	Fish habitat (*Anguilla anguilla, Salmo trutta*, Other)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY1-2-D1	Dhiarizos	Ih	r1-2-6-64	Good	High	Pass		Good	• D/s Life pond • Dhiarizos near Arminou (Kapnismenos locality) • Dhiarizos u/s Ay. Georgios (Arkolies locality) • Diarizos at Coast (river mouth) • Diarizos near Filousa • Diarizos near Kouklia Pafou • Ekvoles Diarizos • Fragma Arminou • Gefira Yerovassa • Souskiou	Fish habitat (*Anguilla anguilla, Salmo trutta*, River mouth, Other)
CY1-2-D2	Dhiarizos	P	r1-2-6-17 r1-2-6-29	Good	High			Good	• Dhiarizos @ Kourtellorotsos • Kisdasi • u/skidasi	Fish habitat (*Anguilla anguilla,* Other)
CY1-2-E	Tholos	IH	r1-2-4-27	Good	Good			Good		No data
CY1-2-F1	Yerovasinos	I							• Yerovasinos R. d/s Kithasi	Fish habitat (*Anguilla anguilla*)
CY1-2-F2	Yerovasinos	P	r1-2-5-70	Good	Good			Good	• Yerovasinos R. d/s culvert (Makrina locality) • Yerovasinos R. d/s Yerovasa	Fish habitat (*Anguilla anguilla*)
CY1-3-A1	Roudhias	P	r1-3-1-79 r1-3-3-98 r1-3-5-05	High	High			High	• Alonoudhkiou R. near Kastroullin localilty • Alonoui • d/sCedrus • Gerfyrka • Xeros near Lazarides • Xeros_up • Yephyrkon R. near Forest Station	Fish habitat (*Salmo trutta*)
CY1-3-A2	Stenous	IH							Stenoi	Fish habitat (Salmo trutta)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY1-3-A3	Stenous	P	r1-3-5-91	Good	High	Pass	High	Good	• Gef Roudias • u/s_vretsia • Xeros River @ Rhoudias Bridge	Fish habitat (Salmo trutta)
CY1-3-B	Xeros Potamos	IH	r1-3-6-53	Good	High	Pass		Good	• Gef Salamiou Xeros • Perasma Xeros	Potential fish migration ('transit') in the reach (Salmo trutta)
CY1-3-C	Xeros Potamos	IH	r1-3-8-40 r1-3-8-60	Moderate	Good	Pass	Good & below	Moderate	• Finikas d/s prodam • Gef Choletria • Xeros near Foinikas	Fish habitat (Other)
CY1-3-E	Xeros Potamos	E							• Asprokremma Ponds • Ekvoles Xeros • Xeros R. @ Coast (River mouth) • Xeros R. d/s Asprokremmos Dam	Fish habitat (River mouth, Other)
CY1-3-F	Lazaridhaes	I							• Lazarides 1	Fish habitat and fish migration ('transit')
CY1-4-A	Ayia & Klimadhiou	P	r1-4-1-98	Good	High	Pass		Good	• Spring Dixaloi	No data
CY1-4-B	Ayia	I	r1-4-3-35	Good	High	Pass	High	Good	• Panagia Diakou Agia	Fish habitat (Other)
CY1-4-DE	Ezousa	IH							• Ezousas d/s Kannaviou village • Fragma Kannaviou • Kat_kannaviou	Fish habitat and fish migration ('transit') (Anguilla anguilla, Other)
CY1-4-F	Ezousa	P	r1-4-7-10	Moderate	Good	Pass	Good & below	Moderate	• Amati • Ezousa River near Ammati spring • Ezousas near Moro Nero	Fish habitat (*Anguilla anguilla*)
CY1-4-G	Ezousa	I							• Ezousas near Marathounta (Kiladhin tou Shailou)	Fish habitat (*Anguilla anguilla*)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY1-4-H	Ezousa	E	r1-4-9-80		Moderate	Pass		Moderate	• Ekvoles Ezousas • Ezousa @ coast	Fish habitat (*Anguilla anguilla*, River mouth, Other)
CY1-4-K	Varkas	E	r1-4-6-75		Good	Pass		Good		Outside fish zone
CY1-4-L2	Rinou & Kyparishon	P							• Argaki Mylarkou	Fish habitat (*Anguilla anguilla*)
CY1-4-M	Kochatis	E	r1-4-8-88		Good	Pass		Good		No data
CY1-5-D1	Kochatis	I	r1-5-5-89	Poor	Good	Pass		Poor		No data
CY1-5-D2	Kochinas	P							• Koshinas River @ Coast (Vreksa beach)	Fish habitat (*Anguilla anguilla*, River mouth)
CY1-5-E2	Agriokalami & Taisi	P							• Agriokalami @ Coast • Agriokalami @ Coast (river mouth)	Fish habitat (*Anguilla anguilla*, River mouth)
CY1-6-A2	Mavrokolymbos	P	r1-6-2-09 r1-6-2-13 r1-6-2-17	Moderate	Good	Pass		Moderate		No data
CY1-6-C	Mavrokolymbos	E								Fish habitat (*Anguilla anguilla*)
CY1-8-A1	Kalamoulli (Avgas)	IH	r1-8-2-71	Good				Good	• Avakas • Avakas Mouth • Avgas R. d/s Avakas Gorge mouth • Toxeftra near coast (road culvert)	Fish habitat (*Anguilla anguilla*, River mouth)
CY1-8-B	Pevkos	E	r1-8-5-89		Good	Pass		Good		No data
CY2-1-A	Ayiou Ioanni	E	r2-1-8-74		Good	Pass		Good		No data

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY2-1-C	Argaki tou Pyrgou (Loutra Aphroditis)	P	r2-1-2-92	Poor				Poor	• Aphrodites baths • Arg. Pyrgou @ Coast • Arg. Pyrgou @ Loutra Aphroditis Pond	Fish habitat (*Anguilla anguilla*)
CY2-2-B	Garyllis	I	r2-2-3-95 r2-2-3-98	Moderate	Good	Pass	Good & below	Moderate		Fish habitat (*Anguilla anguilla*)
CY2-2-C	Stavros tis Psokas	I							• Stavros kat camping • Stavros Psokas 1	No data
CY2-2-D	Stavros tis Psokas	I	r2-2-6-35	Good	Good	Pass		Good	• D/s gef watermills Arama • Stavros Psokas u/s dam E • U/s evretou dam 2 • U/s gef watermills Arama	Fish habitat (Other)
CY2-2-F	Stavros tis Psokas	E							• D/s dam Evretou	Potential fish migration ('transit') in the reach
CY2-2-G	Khrysokhou	I							• Chrysochou River @ Goudi bridge • Gef Skouli • Goudi bridge	Fish habitat (*Anguilla anguilla*,Other)
CY2-2-H	Khrysokhou	IH							• Chrysochou River near Polis - Mavrolaona locality • Khrysokhou R. near Chrysochou (Daoudies locality) • Polis Crys 1 • Polis Eucalyptus forest drainage canal at coast (Newek_polis) • Polis Mouth 1 • Polis Mouth 2	Fish habitat (*Anguilla anguilla*, River mouth, Other)
CY2-2-I	Klavaris	IH							• AgParaskevi	Fish habitat (Other)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY2-2-J	Klavaris	P	r2-2-3-80	Moderate	Bad			Moderate	• Klavaris stream U/S Paphos-Polis road	Fish habitat (*Anguilla anguilla*)
CY2-2-L	Kryos (Kritou Terra)	P	r2-2-3-96	Moderate	Moderate			Moderate	• Kryos Riv. @ Skoulli (d/s Kritou Tera)	Fish habitat (*Anguilla anguilla*)
CY2-3-A	Mirmikoph	E	r2-3-1-64		Moderate	Fail		Moderate		No data
CY2-3-B	Argaki tis Limnis	E	r2-3-2-96		Moderate	Pass		Moderate		No data
CY2-3-C2	Magounda	I	r2-3-4-80	High	Good	Pass		Good	• Fragma Argaka	No data
CY2-3-D	Magounda	E							• Argaka_ek • Makounta @ Coast (River mouth)	Fish habitat (*Anguilla anguilla*, River mouth)
CY2-3-E	Xeropotamos	E	r2-3-7-74		Good	Pass		Good		Outside fish zone
CY2-3-F1	Yialia	P	r2-3-8-48	Good	High	Pass		Good		Fish habitat and fish migration ('transit') (Other)
CY2-3-F2	Yialia	I							• Gialia Ds spring • Gialia Seep Pond • Gialia Spring • Gialia Us Spring • Gialian1 • Yialia @ spring • Yialia River near Pano Mylos locality	Fish habitat (*Anguilla anguilla*, Other)
CY2-3-G	Yialia	IH							• Gialan2	Fish migration ('transit') in the reach
CY2-4-B	Xeros	E							• Fragma Ag Marina	Potential fish migration ('transit') in the reach

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY2-4-D	Livadhi	IH	r2-4-6-70	Good	Good	Pass		Good	• Fragma Pomou • Livadi u/s dam • Livadi u/s dam 2	Fish habitat and fish migration ('transit') (Other)
CY2-6-A	Katouris	E	r2-6-1-92		High	Pass	High	High		No data
CY2-6-B	Katouris	E							• Fragma Katouri • Kato Pirgos	No data
CY2-7-A	Pyrgos	I	r2-7-2-75	High	High	Pass	High	High	• Ekv PlatisPyrgoy • Fleva • Pirgos 1 • Pyrgos near Fleva • Pyrgos near Fleva (Pyrgos hydrometer) • Pyrgos R. at Vrodisia • Pyrgos R. near Epta Polemidhies locality • Pyrgos River @coast (EKv PlatisPyrgou) • Pyrgos River near coast (EKv PlatisPyrgou) • Vrondisia	Fish habitat (*Anguilla anguilla*, River mouth)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY2-8-A	Limnitis	P	r2-8-3-10	Good	Good	Pass	High	Good	• Fragma Tsakistras • Gef Limniti • Gef Mavres Sykies • Kat Fragma Tsakistras • Kat Gef Limniti • Limnitis near Old Limnitis Saw Mill (Old Weir) • Limnitis Old weir • Limnitis R. d/s Tsakistra Dam • Limnitis R. near Mylos tou Marasiouna • Limnitis R. near Mylos tou Mustafalli • Yperchilistis Tsakistra	Fish habitat (*Anguilla anguilla*, Other)
CY2-9-B	Kambos	I	r2-9-1-80 r2-9-2-17 r2-9-2-50	Good	Good	Pass	Good & below	Good	• Kampos 1	No data
CY2-9-C	Kambos	I							• Fragma Galinis	No data
CY3-1-A	Xeros	P	r3-1-1-48	Good			High	Good	• Fragma Kamenou Paidiou Katgerakies	Fish habitat and fish migration ('transit') (Other)
CY3-1-BC	Xeros	I	r3-1-2-30	High	High	Pass	High	High	• D/s Kafizides dam • D/s Kamenopaidi • Gef Xerou Lefkas • Kafizides dam • U/s Kafizides dam • Xeros d/s Kameno pedi	Fish migration ('transit') in the reach (Other)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY3-2-A	Kambos	P	r3-2-1-53 r3-2-1-60 r3-2-1-65 r3-2-1-85	Good	High	Pass	Good & below	Good	• Fragma Kalopanagioti • Kalopanagiotis Dam Inflow (Kalopanagiotis u/s) • Marathasa u/s dam • Marathasa U/S Kalopanagiotis Dam (Kalopanagiotis u/s_2) • Moutoulas	Fish habitat (Other)
CY3-2-B	Marathasa	P	r3-2-2-17 r3-2-2-90	Good	High			Good	• Marathasa d/s fisheries • Marathasa d/s Xyloyephyron Bridge (Markos) • Marathasa R. d/s Lefka Dam • Marathasa R. u/s Lefka Dam • U/s Lefka dam	Fish habitat (*Salmo trutta*, Other)
CY3-3-A	Ayios Nikolaos	P	r3-3-1-60 r3-3-1-68	Good	High	Pass	High	Good		Potential fish habitat
CY3-3-B	Karyiotis	P	r3-3-3-02 r3-3-3-15 r3-3-3-58 r3-3-3-82 r3-3-3-95 r3-3-4-41	Moderate	Good	Pass		Moderate	• Gef Evrychou • Kargotis confluence • Kargotis near Evrychou • Us fishfarm Kargotis	Fish habitat (Other)
CY3-3-C	Karyiotis	I							• Kargotis near Skouriotissa (Katydata) • Katydata • Skouriotisa	Fish migration ('transit') in the reach
CY3-3-D	Argaki tou Karvouna	P	r3-3-2-60 r3-3-2-62 r3-3-2-85	Good	Good	Pass		Good	• Argaki tou Karvouna near trout farm • Garillis confluence • Kakopetria Garillis • Spilia	Fish habitat (Other)
CY3-4-AB	Atsas	IH	r3-4-2-05 r3-4-2-80 r3-4-2-90	Moderate	Good	Pass		Moderate		No data
CY3-5-A	Lagoudhera	I	r3-5-1-50	Good	Good	Pass	High	Good		No data

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY3-5-C	Lagoudhera	IH							• d/sXiliatos	No data
CY3-5-D	Elia	IH	r3-5-4-40	Moderate	Good	Pass	Good & below	Moderate		No data
CY3-7-B	Peristerona	IH	r3-7-1-55	Good	High	Pass	Good & below	Good		No data
CY3-7-C	Peristerona	E	*r3-7-1-84*		Good	pass		Good		
CY3-7-DEF	Maroullenas	I	r3-7-3-25	Good	High	Pass	Good & below	Good	• Akaki U/S Akaki-Malounta Dam • Maroulena_g	Fish habitat (Other)
CY6-1-A	Pedhieos & Ayios Onouphrios	IH	r6-1-1-48 r6-1-1-72 r6-1-1-80	Good	High	Pass	High	Good		No data
CY6-1-D	Pediaios	E	*r6-1-2-38*		High	pass		Good & below		
C6-1-E	Pediaios	E	*r6-1-2-90*		Good	pass	Good & below	Good	• Pediaios R. @ Cyprus Supreme Court (Road bridge) Pediaos Lefk	Fish habitat (Other)
CY6-5-A	Yialia	IH	r6-5-1-34	Good	Good	Pass		Good		No data
CY6-5-B	Yialia	IH	r6-5-1-85	Moderate	Good	Pass	Good & below	Moderate	• Dimalikos	Fish habitat (Other)
CY6-5-C	Yialia	E	*r6-5-3-15* *r6-5-3-50*		Good	Pass		Good		
CY6-5-H	Alykos	E	r6-5-2-85		Poor	Fail		Poor		No data
CY8-3-A	Kalo Chorio	E	r8-3-2-60		Moderate	Fail		Moderate		No data
CY8-4-C	Treminthos	E	r8-4-3-40 r8-4-5-30		Good	Pass	Good & below	Good	• Trem_u/sfalls	Outside fish zone
CY8-4-D	Treminthos	E							• Trem_d/s_dam	Outside fish zone
CY8-5-AB	Pouzis	E	r8-5-1-60		Good	Pass		Good	• Pouzis R @ Coast (River mouth) • Pouzis_1 • Pouzis_ek	Fish habitat (*Anguilla anguilla*, River mouth)
CY8-7-A	Syrkatis	IH	r8-7-1-65	Good	High		High	Good	• Kyprovasa	No data
CY8-7-C	Syrkatis	IH	r8-7-2-60	Moderate	Good	Pass	Good & below	Moderate		Fish migration ('transit') in the reach (Other)
CY8-7-D	Argaki tou Mylou	IH	r8-7-3-95	Moderate	Good	Pass		Moderate		No data

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY8-7-FG	Pendaskhinos	E							• Agtheodo • Ek_Pent	Potential fish migration ('transit') in the reach
CY8-8-AB	Ayiou Mina	E							• Valva	Outside fish zone
CY8-8-C	Ayiou Mina	IH	r8-8-2-95	Moderate	Good	Pass		Moderate		Outside fish zone
CY8-9-C2G	Vasilikos	I	r8-9-3-83 r8-9-5-40	Moderate	Good	Pass	High	Moderate		No data
CY9-2-BC	Yermasogeia	I	r9-2-1-43	Good	High	Pass		Good	• Germasogeia u/s Arakapas Reservoir • U/s Arakambas dam	Fish habitat and fish migration ('transit') (Other)
CY9-2-D	Yermasogeia	I							• D/s Arakambas dam	Fish habitat and fish migration ('transit')
CY9-2-E	Yermasogeia	I	r9-2-3-05	Moderate	Good	Pass	Good & below	Moderate	• Dierona	Fish habitat and fish migration ('transit') (Other)
CY9-2-F	Yermasogeia	I	r9-2-3-85	High	Good	Pass	High	Good	• Germasogeia near Foinikaria • Germasogia d/s flowmeter • Germasogia u/s dam • Germasogia u/s flowmeter • Prastio	Fish habitat and fish migration ('transit') (Other)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY9-2-H	Yermasogeia	IH							• Germ_a_weir • Germ_b_weir • Germasogeia (Amathos) R. @ Coast (River mouth) • Germasogeia (Amathos) River @ former weir (Yermasoyia-Moutagiaka Rd) • Germasogeia (Amathos) River @ weir (Potamia locality) • Germasogia d/s dam	Fish habitat (*Anguilla anguilla*, River mouth, Other)
CY9-2-J	Yialiadhes	E	r9-2-4-27		Good	Pass		Good		Outside fish zone
CY9-2-KL	Yialiadhes	IH	r9-2-4-95	Moderate	Good	Pass		Moderate	• Akrounta confluence • Akrounta village	Potential fish migration ('transit') in the reach (Other)
CY9-4-B	Garyllis	E	r9-4-3-41		Good	Pass		Good		Outside fish zone
CY9-4-C	Garyllis	IH	r9-4-3-80	Poor	Poor	Pass		Poor		No data
CY9-4-G	Phasoula	E	r9-4-3-39		Moderate	Pass		Moderate		Outside fish zone
CY9-6-A	Ayios Ioannis	P	r9-6-5-67	Poor	Moderate			Poor		No data
CY9-6-BCD	Ambelikos-Agros	I	r9-6-5-62 r9-6-5-63 r9-6-5-74 r9-6-5-75	Moderate	Moderate	Pass		Moderate	• Agros river @ Kato Mylos bridge • Mylos • Potamitissa bridge	Fish habitat (Other)
CY9-6-E	Ambelikos-Xylourikos	P	r9-6-5-77 r9-6-6-32 r9-6-6-40	Moderate	Moderate	Pass	High	Moderate	• AgMamas Limnatis • Limnatis d/s Ambelikos-Agros confluence	Fish habitat and fish migration ('transit') (Other)
CY9-6-F	Limnatis	I	r9-6-7-70	Good	Good	Pass	Good & below	Good	• Alassa above bridge • Alassa below bridge • Limnatis flowmeter	Fish migration ('transit') in the reach (Other)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY9-6-I	Loumata	P	r9-6-3-13 r9-6-3-15	Good	Good			Good		No data
CY9-6-KL	Kouris	P	r9-6-3-31 r9-6-3-32 r9-6-3-36 r9-6-3-46 r9-6-3-47 r9-6-3-61 r9-6-3-82 r9-6-3-83	Moderate	Good	Pass		Moderate	• Amiantos • Fragma Trimiklini • U/s Trimiklini	Potential fish habitat
CY9-6-M	Kouris	P	r9-6-4-24 r9-6-4-34 r9-6-4-37 r9-6-4-90 r9-6-4-92	Moderate	Good	Pass	Good & below	Moderate	• Ag Georgios • U/s Kouris confluence	Fish habitat (Other)
CY9-6-N	Mesapotamos	P	r9-6-3-77	Good	High	Pass		Good	• Mesa potamos Kouri • Mesapot_kataract • Mesapotamos u/s Saittas diversion • Mesapotamos u/s Saittas diversion (Mesa u/diversion) • Mesopot_katgef • Mesopotamos_camp	Fish habitat (*Salmo trutta)*
CY9-6-O	Moniatis	P	r9-6-3-87	Good	Good	Pass		Good		No data
CY9-6-P	Kryos	P	r9-6-1-17 r9-6-1-33 9-6-1-44	Good	High	Pass	Good & below	Good	• Kalidonia trailhead • Kryos Potamos (Near Pumping Station) • Kryos Riv. @ Caledonian waterfall	Fish habitat (*Oncorhynchus mykiss*)
CY9-6-Q	Kryos	P	r9-6-1-68 r9-6-1-82	Good	Good			Good	• AgMaura • Kryos @ Ayia Mavri • Perapedi u/s bridge	Fish habitat (*Oncorhynchus mykiss*)

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY9-6-R	Kryos	IH	r9-6-1-87 r9-6-2-60 r9-6-2-90	Good	Good	Pass	Good & below	Good	• Agamv • Kouris d/s flowmeter • Kouris flowmeter • Kouris u/s dam • Kryos-u/s_bridge	Fish migration ('transit') in the reach (Other)
CY9-6-T	Kouris	IH							• D/s Kouris dam • D/s Kouris dam 2 • Kouris d/s culvert (Dhameftis locality) • Kouris d/s Kouris Dam (Drakontopetra locality)	Fish habitat and fish migration ('transit') (Other)
CY9-8-B3	Evdhimou (Mandalas)	I	r9-8-4-95		Good	Pass		Good	• Avdimou near Avdimou • Evdhimou (Mandalas) R. @ Mandalas diversion	Fish habitat (*Anguilla anguilla*)
CY9-8-C	Evdhimou	IH	r9-8-6-99		Good	Pass		Good	• Avdhimou river at coast	Fish habitat (*Anguilla anguilla*, River mouth)
Ephemeral rivers of RBMP										
CY6-1-K	Katevas	E	r6-1-4-34		Moderate	pass		Moderate		
CY6-1-L	Kaloyeros	E	r6-1-5-52		Moderate	pass		Moderate		
CY9-1-E	Argaki tis Monis	E	r9-1-3-80		Moderate	Pass		Moderate		No data
CY9-1-BC	Argaki tou Pyrgou	E	r9-1-4-51		Moderate	Pass		Moderate		No data
CY3-2-E	Vrountokremni Argakin	E	r3-2-3-48		Good	pass		Good		
CY8-4-G	Ayios Ioannis	E	r8-4-4-72		Good	Pass		Good		Outside fish zone
CY8-4-A	Ammos & Kalamoulia	E	r8-4-1-57		Good	pass		Good		
CY8-4-B	Xylias	E	r8-4-1-58		Good	Fail		Moderate		

WB Code	WB Name	Current Type	Stations	Biological Status	Physicochemical Status	Specific Pollutants	Hydromorphological Status	Ecological Status	Fish fauna (Stations-Species)	
CY9-5-A	Ypsonas	E	r9-5-1-99		Good	pass		Good		
CY8-6-A	Xeropotamos	E	r8-6-2-57 r8-6-3-50		Good	Pass		Good		No data
CY3-7-N	Koutis & Aloupos	E	r3-7-5-35		Good	Pass		Good		Outside fish zone
CY3-7-O	Merika	E	r3-7-5-50		Good	pass		Good		
CY8-9-H	Argaki tis Asgatas	E	r8-9-6-98		Good	Pass		Good		Outside fish zone

4.2 Reservoir (Impounded rivers) Water Bodies

4.2.1 Introduction

In Cyprus, 15 Reservoirs (Impounded rivers) which are declared as WBs of the WFD 2000/60/EC have been designated as **river HMWBs**, based on the fact that this is the initial water category of these WBs, before any hydromorphological changes from human activity occured. However, the closest comparable category of natural water to these HMWBs in the present situation is a lake, and so the descriptions used to assess the quality status are those that are suitable for lake WBs.

Table 4-15 Reservoirs of Cyprus designated as WFD WBs - river HMWBs

No	WB Code	WB Name
1.	CY1-2-C_IR	Arminou
2.	CY1-3-D_IR	Asprokremmos
3.	CY1-4-C_IR	Kannaviou
4.	CY1-6-B_IR	Mavrokolympos
5.	CY2-2-E_IR	Evretou
6.	CY3-5-B_IR	Xyliatos
7.	CY3-7-I_IR	Akaki-Malounda
8.	CY6-1-B_IR	Tamassos
9.	CY8-7-B_IR	Leukara
10.	CY8-7-E_IR	Dipotamos
11.	CY8-9-D_IR	Kalavasos
12.	CY9-2-G_IR	Germasogia
13.	CY9-4-D_IR	Polemidia
14.	CY9-6-J_IR	Pano Platres
15.	CY9-6-S_IR	Kouris

The reservoirs of Cyprus belong to the L-M8 intercalibration type (Reservoirs, deep, large, calcareous). For the assessment of the **ecological** potential of the reservoirs, the national method for phytoplankton developed by Cyprus and based on the NMASRP index (Decision (EU) 2018/229 of the European Commission) was adopted.

Table 4-16 Threshold values for the categorization of the ecological potential of reservoirs with the L-M8 intercalibration type

	MAXIMUM	MODERATE	POOR	BAD
NMASRP	**0,6**	**0,4**	**0,2**	

The physicochemical parameters - which support the biological quality elements - and were finally used to estimate the ecological potential of river-type reservoirs in Cyprus, based on local conditions, are presented in the table below.

Table 4-17 Classification system for the chemical physicochemical elements of the reservoirs

Classification system per parameter	Unit	Good	Moderate
Physicochemical parameters			
pH		(6-9)	
DO	mg/l	6,4	
EC	µS/cm	1250	
Total P	mg/l	0,05	

Classification system per parameter	Unit	Good	Moderate
Physicochemical parameters			
NH_4^+	mg/l	0,3	
Total Coliforms	/100ml	1200	
Specific Pollutants			
Cr	µg/l	50	
As	µg/l	10	
Cu	µg/l	40 µg/l (Hardness of water between 100 - 300 mg/l $CaCO_3$) 112 µg/l (Hardness of water > 300 mg/l $CaCO_3$)	
B	µg/l	1000	
Fe	µg/l	1000	
Zn	µg/l	1000 µg/l (Hardness of water between 100 - 500 mg/l $CaCO_3$) 2000 µg/l for any hardness of water > 300 mg/l $CaCO_3$)	

For the classification of stations into categories of chemical-physicochemical status, the chemical-physicochemical characteristics of a WB are grouped according to the type of pressures to which they respond to, and are then classified according to the worst-case principle.

The types of pressures and the corresponding groups of indicators are:

A) Organic load. PH, dissolved oxygen, ammonium, total phosphorus and total coliforms were used as indicators.

B) Salinity. Conductivity is taken into account.

C) Specific Pollutants. The following pollutants were taken as indicators: As, B, Cr, Cu, Fe and Zn.

The classification of each reservoir for each of the three groups of indicators of chemical - physicochemical conditions, is based on the average of the indicators of each group, while the value of each indicator (parameter) is derived from the average of the available time series of measurements.

By applying all the above threshold values for all parameters, the overall evaluation system presented in the following Table was applied, was applied, so that all water quality parameters become comparable. The quality of each group was then calculated according to the **total average value of the average values for each parameter.** Then, the total chemical-physicochemical quality of each monitoring station is classified, based on the principle "one out-all out".

Table 4-18 Water parameter evaluation system and parameter groups for water quality

Class	Value range	Average values for value range	
H (High)	>4-5	(4,1+5)/2=	4,55
G (Good)	>3-4	(3,1+4)/2=	3,55
M (Moderate)	>2-3	(2,1+3)/2=	2,55
P (Poor)	>1-2	(1,1+2)/2=	1,55
B (Bad)	<1	1/2=	0,5

4.2.2 Ecological Potential

In the case of reservoirs, the average of the period 2013-2019 was calculated, for the **May-October period** for the NMASRP index, for each year separately and finally, for the period 2013-2019 in total.

Table 4-19 Annual biological potential of reservoirs with the L-M8 intercalibration type based on Commission Decision (EU) 2018/229 (values in EQR units)

Station Code	WB Name	2013	2014	2015	2016	2017	2018	2019	Average
d1-2-4-61 _DLP	ARMINOU	0,77	0,79	0,96	0,72	0,91	0,74	0,89	0,82
d1-3-9-50 _DLP	ASPROKREMMOS	0,93	0,93	0,92		0,83		0,77	0,87
d1-4-3-95 _DLP	KANNAVIOU	1,00	0,90	0,98	0,95	1,00	0,96	0,98	0,97
d1-6-2-63 _DLP	MAVROKOLYMPOS				0,68	0,39	0,55		0,54
d2-2-6-91 _DLP	EVRETOU	0,96	0,91	0,65		0,94	0,93	0,51	0,82
d3-5-1-65 _DLP	XYLIATOS					0,82	0,71	0,97	0,83
d3-7-3-83 _DLP	AKAKI-MALOUNDA		0,67	0,75	0,71	0,72	0,59	0,65	0,68
d6-1-2-05 _DLP	TAMASSOS		0,84	0,89	0,88	0,86	0,70	0,86	0,84
d8-4-1-61 _DLP	*NEA LYMBIA**	*0,62*	*0,11*						*0,36*
d8-7-2-05 _DLP	LEUKARA	1,00	0,97	0,98		0,97	0,71	0,88	0,92
d8-7-4-05 _DLP	DIPOTAMOS	0,72	0,50	0,63		0,93	0,77	0,80	0,72
d8-9-5-60 _DLP	KALAVASOS	0,87	0,49	0,71		0,59	0,60	0,58	0,64
d9-2-5-20 _DLP	GERMASOGIA	0,79	0,78	0,38		0,68	0,60	0,72	0,66
d9-4-3-95 _DLP	POLEMIDIA	0,36	0,08	0,20		0,06		0,38	0,22
d9-6-3-17 _DLP	PANO PLATRES	1,00		1,00					1,00
d9-6-9-10 _DLP	KOURIS	0,71	0,85	0,79		0,76		0,69	0,76

** It is not a WFD WB.*

Also, the averages of the period 2013-2019 were calculated, for the May-October period for the following parameters/indicators[6]:

- Specific pollutants
- Physicochemical parameters

Table 4-20 Evaluation of specific pollutants of reservoirs averages for the period 2013-2019 (May-October)

Station Code	WB Name	As	B	Cr	Cu	Fe	Zn
		µg/l					
d1-2-4-61	ARMINOU	0,50	38,70	2,50	2,50	7,80	6,60
d1-3-9-50	ASPROKREMMOS	1,28	152,65	2,50	4,03	10,00	8,85
d1-4-3-95	KANNAVIOU	0,50	49,23	2,50	3,24	10,18	8,08
d1-6-2-63	MAVROKOLYMPOS	2,28	302,17	2,50	2,93	7,67	6,83
d2-2-6-91	EVRETOU	4,51	136,37	2,50	2,50	7,71	5,94
d3-5-1-65	XYLIATOS	0,50	21,25	2,50	2,50	16,75	5,00
d3-7-3-83	AKAKI-MALOUNDA	0,50	36,14	2,50	2,50	9,36	6,36
d6-1-2-05	TAMASSOS	0,95	42,25	2,50	2,50	12,00	13,90
d8-4-1-61	*NEA LYMBIA**	1,00	322,85	2,50	2,50	15,00	12,50
d8-7-2-05	LEUKARA	0,50	39,08	2,50	2,50	9,00	9,33
d8-7-4-05	DIPOTAMOS	0,55	176,29	2,50	2,50	14,18	7,31
d8-9-5-60	KALAVASOS	0,50	155,28	2,50	2,50	15,64	13,23
d9-2-5-20	GERMASOGIA	0,98	59,31	2,50	2,50	10,09	7,77
d9-4-3-95	POLEMIDIA	2,10	276,76	4,04	2,50	9,00	9,42
d9-6-3-17	PANO PLATRES	0,50	107,10	24,00	2,50	10,00	7,50
d9-6-9-10	KOURIS	0,78	144,47	2,50	2,50	9,92	8,57

** It is not a WFD WB.*

Table 4-21 Evaluation of physicochemical parameters of reservoirs averages for the period 2013-2019 (May-October)

Station Code	WB Name	Ammonium	Dissolved Oxygen	Conductivity	pH	Total Coliforms	Total Phosphorus
		mg/l N	mg/L	µS/cm	-	/100ml	mg/l P
d1-2-4-61	ARMINOU	0,020	7,0	548	9,0	416	0,00
d1-3-9-50	ASPROKREMMOS	0,016	7,2	683	8,9	722	0,01
d1-4-3-95	KANNAVIOU	0,099	7,1	557	8,8	2.749	0,01
d1-6-2-63	MAVROKOLYMPOS	0,016	7,5	899	8,6	808	0,01
d2-2-6-91	EVRETOU	0,033	6,8	770	8,9	902	0,00
d3-5-1-65	XYLIATOS	0,016	7,6	431	8,5	448	0,01
d3-7-3-83	AKAKI-MALOUNDA	0,042	6,4	594	8,9	488	0,01
d6-1-2-05	TAMASSOS	0,051	6,5	592	8,8	1.615	0,01
d8-4-1-61	*NEA LYMBIA**	0,155	6,2	1.821	8,6	8.723	0,01
d8-7-2-05	LEUKARA	0,056	6,3	743	8,6	312	0,01
d8-7-4-05	DIPOTAMOS	0,043	6,5	822	8,8	768	0,00
d8-9-5-60	KALAVASOS	0,051	12,1	989	9,0	1.438	0,00
d9-2-5-20	GERMASOGIA	0,041	6,5	881	9,0	994	0,01
d9-4-3-95	POLEMIDIA	0,134	6,7	1.676	9,3	15.327	0,10
d9-6-3-17	PANO PLATRES	0,034	7,1	767	9,5	27	0,00
d9-6-9-10	KOURIS	0,020	7,1	767	9,0	996	0,00

** It is not a WFD WB.*

[6] There are two sampling points in each reservoir. One at the deepest point of the lake/reservoir (DLP) and one on its bank (BNK), where "DLP" is the normal sampling site while the sampling site on the bank is only used when the "DLP" is not accessible. Both locations were used in the evaluation and were considered as a single monitoring station. For example, the stations d1-2-4-61_BNK and d1-2-4-61_DLP in the Arminou reservoir were considered as one (d1-2-4-61).

Table 4-22 Assessment of the physicochemical status of reservoirs averages for the period 2013-2019 (May-October)

WB Code	WB Name	Organic Load – O.L.						Conductivity	Specidif Pollutants – S.P.							Physicochemical Status	
		pH	DO	NH_4	TP	Total Coliforms	O.L.		As	B	Cr	Cu	Fe	Zn	S.P.		
d1-2-4-61	ARMINOU	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good
d1-3-9-50	ASPROKREMMOS	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good
d1-4-3-95	KANNAVIOU	3,55	3,55	3,55	3,55	2,55	3,35	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,35	Good
d1-6-2-63	MAVROKOLYMPOS	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good
d2-2-6-91	EVRETOU	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good
d3-5-1-65	XYLIATOS	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good
d3-7-3-83	AKAKI-MALOUNDA	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good
d6-1-2-05	TAMASSOS	3,55	3,55	3,55	3,55	2,55	3,35	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,35	Good
d8-4-1-61	*NEA LYMBIA**	*3,55*	*2,55*	*3,55*	*3,55*	*2,55*	*3,15*	*2,55*	*3,55*	*3,55*	*3,55*	*3,55*	*3,55*	*3,55*	*3,55*	*2,55*	*Moderate*
d8-7-2-05	LEUKARA	3,55	2,55	3,55	3,55	3,55	3,35	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,35	Good
d8-7-4-05	DIPOTAMOS	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good
d8-9-5-60	KALAVASOS	3,55	3,55	3,55	3,55	2,55	3,35	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,35	Good
d9-2-5-20	GERMASOGIA	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good
d9-4-3-95	POLEMIDIA	2,55	3,55	3,55	2,55	2,55	2,95	2,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	2,55	Moderate
d9-6-3-17	PANO PLATRES	2,55	3,55	3,55	3,55	3,55	3,35	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,35	Good
d9-6-9-10	KOURIS	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	3,55	Good

** It is not a WFD WB.*

OL=Average [pH, DO, NH_4, TP, Total Coliforms], SP=MIN [As, B, Cr, Cu, Fe, Zn], Physicochemical Status = MIN [OL, Conductivity, SP]

Table 4-23 Evaluation of reservoirs ecological potential

Station Code	WB Name	Biological Potential		Physicochemical Status		Ecological Potential
d1-2-4-61	ARMINOU	3,55	Good	3,55	Good	Good
d1-3-9-50	ASPROKREMMOS	3,55	Good	3,55	Good	Good
d1-4-3-95	KANNAVIOU	3,55	Good	3,35	Good	Good
d1-6-2-63	MAVROKOLYMPOS	2,55	Moderate	3,55	Good	Moderate
d2-2-6-91	EVRETOU	3,55	Good	3,55	Good	Good
d3-5-1-65	XYLIATOS	3,55	Good	3,55	Good	Good
d3-7-3-83	AKAKI-MALOUNDA	3,55	Good	3,55	Good	Good
d6-1-2-05	TAMASSOS	3,55	Good	3,35	Good	Good
d8-4-1-61	*NEA LYMBIA**	*1,55*	*Poor*	*2,55*	*Moderate*	*Poor*
d8-7-2-05	LEUKARA	3,55	Good	3,35	Good	Good
d8-7-4-05	DIPOTAMOS	3,55	Good	3,55	Good	Good
d8-9-5-60	KALAVASOS	3,55	Good	3,35	Good	Good
d9-2-5-20	GERMASOGIA	3,55	Good	3,55	Good	Good
d9-4-3-95	POLEMIDIA	1,55	Poor	2,55	Moderate	Poor
d9-6-3-17	PANO PLATRES	3,55	Good	3,35	Good	Good
d9-6-9-10	KOURIS	3,55	Good	3,55	Good	Good

** It is not a WFD WB.*

4.3 Lake Water Bodies

4.3.1 Introduction

The lake Water Bodies of Cyprus include a total of 7 natural lakes, which are brackish or salty and one (1) reservoir, which is an Artificial WB (AWB).

All lakes in Cyprus can be characterized as dynamic systems, with special characteristics. These naturally saline and brackish lakes dry out often.

Lakes Paralimni and Oroklini have been designated as HMWBs due to the significant alterations in their hydromorphological characteristics. In addition, the Achna reservoir has been designated as AWB, as it is a man-made reservoir, created for agricultural purposes.

According to the results of the projects:

- "Provision of Services for the Determination of the Reference Conditions in Lake Bodies within the Detailed Program of Measures (Measure 142) and updating of the designation of the body types according to the provisions of the Water Framework Directive", Contract number: YY 06/2013, Water Development Department
- "Purchase of Services for updating the determination of the Reference conditions in Lake Water Bodies and update of the designation of the types of bodies according to the provisions of the Water Framework Directive, based on the results of the contract YY 06/2013", Tender number: YY 02/2016D, Water Development Department

the typology and preliminary reference conditions of the lake WBs of Cyprus are described as in the following Table.

Table 4-24 Lake WB typology

Lake type	Description	WB
LB1	Hypersaline, coastal without runoff, shallow, low altitude, temporary, in a semi-arid-dry area	CY_L8-3-2-82 (Larnaka Main Salt Lake) CY_L8-3-2-96 (Salt Lake Soros) CY_L8-3-2-88 (Salt Lake Orfani)
LB2	Saline-hypersaline, coastal without runoff, shallow, low altitude, temporary, in a semi-arid-dry area	CY_L8-3-2-85 (Salt Lake Aerodromio No2) CY_L9-5-3-50 (Akrotiri Salt Lake)
LB3	Brackish, with runoff, low altitude, temporary, in a semi-arid-dry area	CY_L7-2-6-70 (Paralimni Lake)
LB4	Brackish-salty, coastal, with runoff, small and shallow, swamply, low altitude, temporary, in a semi-arid-dry area	CY_L8-1-2-94 (Oroklini Lake)
LB5	Fresh water reservoir, isolated from river, with runoff, <5 m depth, low altitude, perennial, in a semi-arid-dry area	CY_d7-1-2-70 (Achna reservoir)

Table 4-25 Proposals for the reference conditions that should be observed during the autotrophic phase of lakes - Phytoplankton - (YY 02/2016D)

WB Type	Phytoplankton species	Phytoplankton biomass (mm^3/L)	Chlorophyll concentration (µg/L)	Involvement of all species of cyanobacteria (% mm^3/L)	Participation of potentially toxic phytoplankton species (%)	Phytoplankton "blooms"
LB1	-	<50 ppt: <2* >50ppt:<3	<50 ppt: <12 >50ppt:<16	-	<50 ppt: <12 **>50ppt:<15**	no "constant blooms" should be observed
LB2	-	<50 ppt:<2* >50ppt:<2,5	<50 ppt: <10 >50ppt:<14	-	<50 ppt: <10 **>50ppt:<12**	no "constant blooms" should be observed
LB3	-	<1,5*	<8	-	<10	no "constant blooms" should be observed
LB4	-	<2,2*	<14	-	<10	no "constant blooms" should be observed
LB5	• 80-100 on an annual basis • cyanobacteria & chlorophyll <50% • golden algae, conjugate, diatoms & Dinoflagellate >40% • no of golden algae species > no of cyanobacteria species • control of the appearance of species that are likely to cause eutrophication	<1,3	<15	<10% <0,13	-	no "constant blooms" should be observed

The high rate of reproduction of zooplankton organisms, in combination with their position in the food web, allows them to respond quickly to changes, whether they come from pressures in relation to bottom-up control pressures or from top-down control trophic levels. The two theories interpret the variations of each other, while the interactions between the two are changing depending on the nutritional status of the lake. Knowledge of this part of the food web is essential for understanding the function and structure of lake ecosystems, as well as for their management and restoration. At the same time, the different food preferences of the individual groups in combination with their growth rates, can be used to assess the nutritional status of the ecosystem. However, despite its importance and the fact that it has been used in many national water monitoring programs in European countries, zooplankton has not been included in the ecological quality assessment process based on Directive 2000/60/EC. This has led to limited information available on water bodies, to lack of indicators development and, more generally, of research for reference conditions. However, based on knowledge on zooplankton and ecology, indicators have been used (Sommer et al. 1986,

Moustaka-Gouni et al. 2014) that are more indicative of the nutritional status and function of aquatic systems and they include species composition, the estimation of the body size of the zooplankton society as a whole, but also of the subgroups, the biomass, the percentage participation of the subgroups, the calanoid/cyclopoid ratio, as well as the zooplankton/phytoplankton ratio.

It should be noted that there is still no official method of monitoring zooplankton in the very peculiar lakes of Cyprus, and while zooplankton is considered a key indicator in the case of natural lakes of Cyprus, as it is not a BQE based on the WFD, nor is there yet an official method of evaluation, it will be used as a supplementary to phytoplankton.

No specific parameter values have been formulated in terms of reference conditions for **zooplankton**, while **indicators** have been proposed that should be targeted to be preserved in reference conditions. These indicators are considered **preliminary** and can be the basis for comparison with data that will emerge from future sampling. Therefore, the results of the indicators are presented in the present study as additional information and are not taken into account for the classification of the ecological status. The indicators are:

- the ratio of Calanoida/Cyclopoida indicator in the presence of Cyclopoida,
- the size of Cladocera indicator,
- the size of Anostraca, and
- ο δείκτης μεγέθους των ανόστρακων και
- the total biomass.

With regards to **nutrients**, the following thresholds have been proposed (YY 02/2016D) for maximum ecological potential/reference conditions: total phosphorus TP <10 μg/L (for the Achna reservoir) and TP <20 μg/L (for the salt lakes) and total nitrogen TN <100 μg/L (for both reservoir and salt lakes). The transparency, measured as Secchi depth, and with regards to the Achna reservoir it should be > 3m at the maximum ecological potential, while this parameter is not recommended to be used in salt lakes, due to the very shallow depth.

4.3.2 Natural lakes (LB1-4)

This Section is based on the **preliminary** assessment of the ecological quality of the lakes of Cyprus, which was made based on the Contract YY 06/2019 and is presented in the report entitled: "Ecological quality assessment of water of natural lakes of Cyprus", 2020 (**Research project 71498**), compiled by Prof. **Maria Moustaka**, of the Aristotle University of Thessaloniki.

It is known that the ecology of phytoplankton has in the long run been exhaustively examined in freshwater lakes and various successive models have been proposed at different latitudes, even for the Mediterranean climate. Also, known are the responses of dominant species to nutrient levels and nutritional status, requirements for light conditions, competitive relationships between species, and relationships with their predators. However, knowledge of saltwater-lake phytoplankton is very limited, especially for species succession standards. There is very little knowledge and no phytoplankton indicators have been developed to assess

ecological quality, as opposed to a variety of ecological indicators (Directive 2000/60/EC) for freshwater lakes.

The succession of phytoplankton in salt lakes is primarily determined by the change in salinity/conductivity, a parameter that does not affect the succession in freshwater lakes. Another important difference in succession is due to the much smaller variety of species in the phytoplankton of the salt lakes, due to the special habitat and the smaller number of habitats and species that are adapted to changes in conductivity or resistant to extreme environments. In addition, changes in salinity become more intense and to a greater extent in very shallow salt lakes whose water volume depends directly on rainfall - evaporation and may have a temporary character in some semi-arid or arid regions of the Mediterranean. In these very shallow salt lakes the water volume-lakebed surface ratio is very small and the effect of the lakebed-sediment is enormous.

The preliminary assessment of the ecological quality of lakes of Cyprus was based on program data of the proram PROVISION OF SCIENTIFIC ADVISOR SERVICES FOR PHYTOPLANKTON ANALYSIS AND EVALUATION OF BIOLOGICAL MARKERS IN SAMPLES OF WATER FROM NATURAL LAKES OF CYPRUS WITHIN THE APPLICATION OF DIRECTIVE 2000/60/EC (YY 06/2019), as well as the preliminary reference conditions for phytoplankton, based on the Contracts YY 06/2013 & YY 02/2016D.

Based on the above, using biomass, phytoplankton bloom and species dominance as metrics of **phytoplankton**, the preliminary assessment for the lakes is:

- **Larnaka Main Salt Lake:** Below Good for the years of 2018 and 2019**
- **Soros:** Unknown*
- **Orfani**: Unknown*
- **Akrotiri**: Unknown*
- **Aerodromio**: Below Good for the years of 2018 and 2019**
- **Paralimni**: Unknown*
- **Oroklini**: Below Good for the years of 2018 and 2019**

** The ecological status/ecological potential is unknown, nor does it meet the preliminary reference conditions for phytoplankton.*

*** Due to lack of sufficient data for the years 2014-2017, the result is adopted as representative for the entire evaluation period.*

Taking into account the zooplankton and the physicochemical parameters, it appears that no reference conditions are achieved for the period 2014-2019 for all natural lakes.

Table 4-26 Zooplankton and nutrients data in natural lakes (Averages)

WB	Parameters	2014	2015	2016	2017	2018	2019	Average
L7-2-6-70 Paralimni Lake	Anostraca biomass/abundance ratio							
	Calanoida/Cyclopoida abundance ratio		0,72		2,61		9,21	4,18
	Cladocera biomass/abundance ratio		4,46		5,57		13,15	7,73
	Nitrogen (mg/l N)		1	1	1		0	0,7
	Total Phosphorus (mg/l P)		0,01	0,00	0,01		0,02	0,01
	Zooplankton biomass (µg dry mass/Liter)		353		365		795	504
L8-1-2-94 Oroklini Lake	Anostraca biomass/abundance ratio							
	Calanoida/ Cyclopoida abundance ratio				6,96	21,24		14,10
	Cladocera biomass/abundance ratio	5,21	64,96	15,66	10,73	13,00	6,70	19,38
	Nitrogen (mg/l N)	3	3	2	3	2	1	2,1
	Total Phosphorus (mg/l P)	0,23	0,02	0,04	0,02	1,05	0,01	0,21
	Zooplankton biomass (µg dry mass/Liter)	6369	2229	2830	781	942	468	2270
L8-3-2-82 Larnaka Main Salt Lake	Anostraca biomass/abundance ratio	5311,57	954,55	8401,05	35,27			3675,61
	Calanoida/Cyclopoida abundance ratio				0,00			0,00
	Cladocera biomass/abundance ratio		5,37					5,37
	Nitrogen (mg/l N)	6	6		1	7	1	2,6
	Total Phosphorus (mg/l P)	0,24	0,12	0,02	0,01	0,17	0,01	0,06
	Zooplankton biomass (µg dry mass/Liter)	11314	117	99103	463	1874	229	18850
L8-3-2-85 Salt Lake Aerodromio No2	Anostraca biomass/abundance ratio	8976,52	10181,82		615,24	487,45		5065,26
	Calanoida/Cyclopoida abundance ratio				0,00	0,00		0,00
	Cladocera biomass/abundance ratio		5,11					5,11
	Nitrogen (mg/l N)	5	16		2	1	0	1,8
	Total Phosphorus (mg/l P)	0,09	0,01		0,00	0,18	0,01	0,05
	Zooplankton biomass (µg dry mass/Liter)	76570	355		1035	657	165	15756
L8-3-2-88 Salt Lake Orfani	Anostraca biomass/abundance ratio		10181,82	4590,91	75,46	16,66		3716,21
	Calanoida/Cyclopoida abundance ratio				0,00			0,00
	Cladocera biomass/abundance ratio	11,86	4,13					8,00
	Nitrogen (mg/l N)	3	2		2	5	1	2,3
	Total Phosphorus (mg/l P)	0,06	0,21	0,01	0,00	0,08	0,01	0,04
	Zooplankton biomass (µg dry mass/Liter)	5	1554	240	94	582	358	472
L8-3-2-96 Salt Lake Soros	Anostraca biomass/abundance ratio	2915,43	10181,82		16,26	20,46	198,79	2666,55
	Calanoida/Cyclopoida abundance ratio				0,00			0,00
	Cladocera biomass/abundance ratio		3,52					3,52
	Nitrogen (mg/l N)	4	3		5	4	0	2,3
	Total Phosphorus (mg/l P)	0,24	0,01		0,01	0,13	0,01	0,04
	Zooplankton biomass (µg dry mass/Liter)	4465	1330		1585	1232	227	1768
L9-5-3-50 Akrotiri Salt Lake	Anostraca biomass/abundance ratio	3030,30		2909,09				2969,70
	Calanoida/Cyclopoida abundance ratio				0,92	0,00		0,46
	Cladocera biomass/abundance ratio	10,30	4,38			5,06		6,58
	Nitrogen (mg/l N)	4	3		2	1	1	1,1
	Total Phosphorus (mg/l P)	0,02	0,15	0,02	0,00	0,10	0,00	0,03
	Zooplankton biomass (µg dry mass/Liter)	265	24	639	90	99	96	202

4.3.3 Achna Reservoir (LB5)

This is an AWB used for irrigation. The following are data on phytoplankton and physicochemical data of the AWB.

Table 4-27 Achna Reservoir – Phytoplankton data (Average)

All months	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**Average**
Chlorophyll-a FRESH (mg/m^3)	27	35	14	15	10	17		18
Total biovolume phytoplankton (mm^3/l)	29,8	63,2	7,9	2,8	4,5	6,1	2,8	23,1
May – September	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**Average**
Chlorophyll-a FRESH (mg/m^3)	23	43	18	16	10	20		20
Total biovolume phytoplankton (mm^3/l)	17,7	88,2	11,5		4,5			30,5

Table 4-28 Achna Reservoir – Physicochemical data (Average)

All months	2013	2014	2015	2016	2017	2018	2019	Average
Secchi Depth (m)	1,8	1,3	0,7	2,8	1,9	1,3	4,1	1,92
N total (mg/l N)	0,765	1,063	0,600	0,250	0,475	0,500	0,500	0,600
P total (mg/l P)	0,046	0,007	0,004	0,008	0,014	0,072	0,010	0,021
May – September	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**Average**
Secchi Depth (m)	1,8	1,5	0,8	2,5	2,5	1,3	3,3	1,87
N total (mg/l N)	0,895	1,600	0,575	0,250	0,525	1,000	0,625	0,765
P total (mg/l P)	0,002	0,004	0,005	0,010	0,013	0,015	0,011	0,008

From the results presented in the above tables, it is clear that the Achna reservoir does not achieve conditions of maximum ecological potential.

According to the results of the projects WDD YY 06/2013, YY 02/2016D and YY 03/2018, the changes of phytoplankton biomass in the reservoir of Achna seem to be affected more by the removal of water from the reservoir and its renewal rate, and less by the nutrient concentrations in the water.

The phytoplankton bloom parameter does not indicate reference conditions based on the results of the reservoir. On the contrary, the constant blooms of phytoplankton by different organisms during the warm period indicate, according to the Directive, an ecological status of moderate or lower than that (essentially, its ecological potential is unknown).

4.3.4 Conclusions

The following table summarizes the results of the classification of the ecological status - potential of the lake WBs.

Table 4-29 Assessment of the ecological status potential of the lake WBs

WB Code	WB Name	Ecological Status/Potential
CY_d7-1-2-70	Achna Reservoir	Unknown Potential*
CY_L7-2-6-70	Paralimni Lake	Unknown Potential*
CY_L8-1-2-94	Oroklini Lake	Unknown Potential (Below Good)
CY_L8-3-2-82	Larnaka Main Salt Lake	Unknown (Below Good)
CY_L8-3-2-85	Salt Lake Aerodromio No2	Unknown (Below Good)
CY_L8-3-2-88	Salt Lake Orfani	Unknown*
CY_L8-3-2-96	Salt Lake Soros	Unknown*
CY_L9-5-3-50	Akrotiri Salt Lake	Unknown*

** The ecological status/ecological potential is unknown/nor does it meet the preliminary reference conditions for the phytoplankton.*

5 Sub-activity 8.3. Classification of the stations' chemical status

5.1 General Methodology

The evaluation of data was based on Directive 2009/90/EC on "laying down technical specifications for chemical analysis and monitoring of water status, in accordance with Directive 2000/60/EC". That is, when calculating the average values:

- In cases where the amounts of physico-chemical or chemical measurands in a given sample are below the limit of quantification, the measurement results shall be set to half of the value of the limit of quantification concerned for the calculation of mean values.
- Where a calculated mean value of the measurement results, mentioned above, is below the limits of quantification, the value shall be referred to as 'less than limit of quantification'.

Paragraph 1 shall not apply to measurands that are total sums of a given group of physico-chemical parameters or chemical measurands, including their relevant metabolites, degradation and reaction products. In those cases, results below the limit of quantification of the individual substances shall be set to zero (e.g., pesticides cyclodien, total DDT, hexachlorocyclohexane, trichlorobenzene).

The calculation of the average annual bioavailable value of Lead and Nickel was done using the "bio-met" (v.5) tool. The threshold values of the model application for the calculation of the average annual bioavailable Lead concentration are pH: 6.3-8.4 and Ca: 3.6-204 mg/l. The corresponding values for Nickel are pH: 6.5-8.2 and Ca: 2-88 mg/l.

It is noted that the EQSs (environmental quality standards) for Nickel and Lead are now stricter in Directive 2013/39/EU compared to 2008/105/EC. This is why there are several exceedances (mainly of Nickel) at various localities, as described below.

In the case of reservoirs, the sampling localities for each reservoir were two. One at the deepest point of the reservoir and one on its bank. Sampling on the shore is done only when the boat cannot be reached at the deepest location. Both sites were used in the analyzes and were considered as a single monitoring station.

Data on water hardness per station and per date were used to select the cadmium EQSs per station. To estimate the water hardness class, the average of all hardness values per evaluation year was calculated for each monitoring station. Thus, most monitoring stations were found to fall into hardness category 5, with only a few falling into hardness category 4. AA-EQS and MAC-EQS are set to 0.15 and 0.9 respectively for category hardness 4 and up to 0.25 and 1.5 for hardness class 5.

In the case of the Paralimni and Oroklini Lakes, the sampling locations for each Water Body (WB) were two. Both sites were used in the analyzes and were considered as a single monitoring station. The Oroklini Lake was treated similarly, where samples are taken at the

weir station. However, some of them they were taken from the birdwatching Station, but this is not a regular chemical sampling station. Also, similarly in the Larnaka Main Salt Lake, some samples were sporadically taken at station 7, but the regular chemical sampling station is 3.

With regards to the rivers WBs (except reservoirs), in this section only the status of the stations is evaluated.

All cases of exceedances were examined separately. Exceedances attributed to a single extreme value without indication of pollution and repeatability are not taken into account in the evaluation.

5.2 River Water Bodies

5.2.1 Data available

In Cyprus there are 84 stations whose data can be used to classify the chemical status of rivers WBs (See details in the Annex).

Table 5-1 Stations in river WBs with substances of Annex I of Directive 2008/105/EC data, for the period 2013-2019

No	Station Code	Station Name
1.	r1-1-1-75	Khapotami d/s Mandria (Yophyrin Bridge)
2.	r1-1-3-95	Chapotami near Kissousa
3.	r1-2-3-94	Phini River @ Pakhnoutis Ford
4.	r1-2-4-25	Diarizos U/S Arminou Dam
5.	r1-2-6-64	Diarizos @ Ag. Georgios
6.	r1-3-5-91	Xeros River @ Rhoudias Bridge
7.	r1-3-6-53	Xeros @ Rotsos Ton Laoudion
8.	r1-3-8-60	Xeros near Foinikas
9.	r1-4-6-75	Varkas River Near Amargeti
10.	r1-4-7-10	Ezousas near Moro Nero
11.	r1-4-8-88	Kochatis River Near Koloni
12.	r1-4-9-01	Ezousas near Ag. Varvara EZ3
13.	r1-4-9-80	Ezousas near Acheleia
14.	r1-4-9-99	Ezousas at Coast EZ2
15.	r1-5-5-89	Koshinas River Near Kaliadhes Locality
16.	r1-6-2-17	Mavrokolympos R.@ Krya Vrysi
17.	r1-8-5-89	Pevkos R. @ Lara Road
18.	r2-1-8-74	Argaki tou Ayiou Ioanni near shooting range
19.	r2-2-3-95	Chrysochou near Skoulli
20.	r2-2-6-35	Stavros tis Psokas near Sarama Quarry
21.	r2-2-7-34	Chrysochou River @ Goudi bridge
22.	r2-2-8-95	Chrysochou near Coast
23.	r2-3-1-64	Mirmikoph River D/S Steni
24.	r2-3-2-96	Pelathousa R. (Argaki tis Limnis) @ Polis-Argaka Rd.
25.	r2-3-4-80	Makounta U/S Argaka Dam
26.	r2-3-7-74	Xeropotamos D/S Poros tou Sykarkou
27.	r2-9-2-50	Kambos R. Near Ag. Varvara
28.	r3-2-1-85	Marathasa U/S Kalopanagiotis Dam
29.	r3-3-1-60	Agios Nikolaos U/S Fish Farm
30.	r3-3-2-60	Platania near Kakopetria
31.	r3-3-3-15	Kargotis near Galata
32.	r3-3-3-95	Kargotis near Evrychou
33.	r3-4-2-90	Atsas near Evrychou
34.	r3-5-1-50	Lagoudera near Lagoudera Br.
35.	r3-5-4-40	Elia near Vyzakia
36.	r3-7-1-55	Peristerona R. @ Siphilos
37.	r3-7-1-84	Peristerona @ Peristerona
38.	r3-7-3-71	Akaki U/S Akaki-Malounta Dam
39.	r3-7-5-35	Aloupos R. near Arediou
40.	r3-7-5-50	Koutis R. @ Asprokremnos locality
41.	r6-1-1-72	Pediaios R. @ Philani
42.	r6-1-1-80	Agios Onoufrios near Kampia

No	Station Code	Station Name
43.	r6-1-2-38	Pediaios near Kato Deftera
44.	r6-1-4-34	Katevas near SOPAZ roundabout
45.	r6-1-5-52	Vathys @ Athalassa Park
46.	r6-5-1-34	Yialias R. near Azizis locality (Lythrodontas)
47.	r6-5-1-85	Gialias near Kotsiati
48.	r6-5-2-85	Alykos d/s Dhali Industrial Area
49.	r6-5-3-15	Gialias near Nisou
50.	r6-5-3-50	Gialias near Potamia
51.	r8-3-2-60	Kalo Chorio R. @ Kamares
52.	r8-4-1-57	Kalamoulia R. u/s Lympia Reservoir
53.	r8-4-1-58	Xylias R. u/s Lympia Reservoir
54.	r8-4-3-40	Treminthos near Agia Anna
55.	r8-4-5-30	Treminthos near Klavdia
56.	r8-5-1-60	Pouzis near Alethriko
57.	r8-6-2-57	Xeros near Ghlyki Neron (Stavrovouni Forest)
58.	r8-6-3-50	Xeropotamos near Alaminos
59.	r8-7-2-60	Syriatis near Pano Lefkara
60.	r8-7-3-95	Mylos U/S Dipotamos Dam
61.	r8-8-2-95	Maroni near Choirokoitia
62.	r8-9-3-83	Exovounia R. near Layia
63.	r8-9-5-40	Vasilikos near Lageia
64.	r8-9-6-98	Argaki Asgatas near Kalavasos
65.	r9-1-3-80	Argaki tis Monis near Moni
66.	r9-1-4-51	Argaki tou Pyrgou u/s Recharge Dam
67.	r9-2-1-43	Ayios Pavlos R. u/s Kalimera Diversion
68.	r9-2-3-05	Germasogeia R. @ Dierona
69.	r9-2-3-85	Germasogeia near Foinikaria
70.	r9-2-4-27	Argaki tou Monastiriou near Amyrou Monastery
71.	r9-2-4-95	Gialiades (Akrounta) U/S Germasogeia Dam
72.	r9-4-3-39	Phasoula d/s Paramytha
73.	r9-4-3-41	Garyllis R. @ Paramytha
74.	r9-4-3-80	Garyllis U/S Polemidia Dam
75.	r9-5-1-99	Ypsonas near Ypsonas
76.	r9-6-1-87	Kryos @ Koilani
77.	r9-6-2-60	Kryos U/S Tunnel Outlet
78.	r9-6-3-36	Kouris near Kato Amiantos
79.	r9-6-3-77	Mesapotamos u/s Saittas Diversion
80.	r9-6-3-87	Moniatis River @ Lourka (Footbridge)
81.	r9-6-4-92	Kouris @ Alassa New Weir
82.	r9-6-5-62	Agros River Near Ag. Ioannis
83.	r9-6-5-63	Ambelikos River d/s Potamitissa
84.	r9-6-6-32	Limnatis R. Near Ag. Mamas

The following table presents the substances of Annex I of Directive 2008/105/EC for which data are available during the period 2013-2019.

Table 5-2 Available data of substances of Annex I of Directive 2008/105/EC in river WBs period 2013-2019

	Substance Name	Data Available
(1)	Alachlor	Y
(2)	Anthracene	Y
(3)	Atrazine	Y
(4)	Benzene	Y
(5)	Brominated diphenylethers	Y
(6)	Cadmium and its compounds	Y
(6a)	Carbon tetrachloride	Y
(7)	Cloroalkanes C10-13	Sediment analysis
(8)	Chlorfenvinphos	Y
(9)	Chlorpyrifos (Chlorpyrifosethyl)	Y
(9a)	Cyclodiene pesticides: Aldrin, Dieldrin, Endrin, Isodrine	Y
(9b)	Total DDT	Y
	More DDT	Y
(10)	1,2-Dichloroethane	Y
(11)	Dichloromethane	Y
(12)	Bis(2-ethylhexyl) phthalate (DEHP)	Y
(13)	Diuron	Y
(14)	Endosulfan	Y
(15)	Fluoranthene	Y
(16)	Hexachlorobenzene	Y
(17)	Hexachlorbutadien	Y
(18)	Hexachlorocyclohexane	Y
(19)	Isoproturon	Y
(20)	Lead and its compounds	Y
(21)	Mercury and its compounds	Y
(22)	Naphthalene	Y
(23)	Nickel and its compounds	Y
(24)	Nonylphenol (4-n-Nonylphenol)	Y
(25)	Octylphenol ((4-(1,1,3,3-tetramethylbutyl)phenol)	Y
(26)	Pentachlorobenzene	Y
(27)	Pentachlorophenol	Y
(28)	(Polycyclic aromatic hydrocarbons (PAH)	Y
	Benzo[a]pyrene	Y
	Benzo[b]fluoranthene	Y
	Benzo(k)fluoranthene	Y
	Benzo[ghi]perylene	Y
	Indeno[1,2,3-cd]pyrene	Y
(29)	Simazine	Y
(29a)	Tetrachloroethylene	Y
(29b)	Trichloroethylene	Y
(30)	Tributyltin compounds (tributyltin cation)	The substance is not analyzed for in inland waters, since its use was in anti-pollution paints on ships.
(31)	Trichlorobenzene	Y
(32)	Trichloromethane	Y
(33)	Trifluralin	Y
(34)	Dicofol	Y
(35)	Perfluorooctane sulfonic acid and its derivatives (PFOS)	Y
(36)	Quinoxyfen	Y
(37)	Dioxins and dioxin-like compounds	Sediment analysis

	Substance Name	Data Available
(38)	Aclonifen	Y
(39)	Bifenox	Y
(40)	Cybutryne	Y
(41)	Cypermethrin	Y
(42)	Dichlorvos	Y
(43)	Hexabromocyclododecane (HBCDD)	Y
(44)	Heptachlor and Heptachlor Epoxide	Y
(45)	Terbutryn	Y

5.2.2 Data analysis

5.2.2.1 Substances of the Directive 2008/105/EC watchlist

Based on the data available from the substances of the watchlist list of the Commission Implementing Decision (EU) 2015/495 of Directive 2008/105/EC at the station Garyllis U/S Polemidia Dam, the substance Diclofenac was detected on 21/04/2016 and 04/04/2017, as well as the substance Erythromycin on 04/04/2017.

5.2.2.2 Substances of Annex I of Directive 2008/105/EC

5.2.2.2.1 r1-2-3-94 «Phini River @ Pakhnoutis Ford»

At the **r1-2-3-94 «Phini River @ Pakhnoutis Ford»** station a MAC exceedance was observed:

- **Mercury** on 09/05/2018

All other values in the group were below the detection limit. This exceedance is not taken into account furtherly due to non-repeatability.

5.2.2.2.2 r1-3-5-91 «Xeros River @ Rhoudias Bridge»

At the **r1-3-5-91«Xeros River @ Rhoudias Bridge»** station a MAC exceedance was observed:

- **Cadmium on 30/01/2019**

At the **r1-3-5-91«Xeros River @ Rhoudias Bridge»** station AA exceedances were observed:

- **Nickel in 2019 (4)**
- **Cadmium in 2019 (4)**

5.2.2.2.3 r1-3-6-53 «Xeros @ Rotsos Ton Laoudion»

At the **r1-3-6-53«Xeros @ Rotsos Ton Laoudion»** station a MAC exceedance was observed:

- **Cadmium on 30/01/2019**

At the **r1-3-6-53«Xeros @ Rotsos Ton Laoudion»** station an AA exceedance was observed:

- **Cadmium in 2019 (4)**

5.2.2.2.4 r1-4-7-10 «Ezousas near Moro Nero»

At the **r1-4-7-10«Ezousas near Moro Nero»** station an AA exceedance was observed:

- **Nickel in 2018 (6) and 2019 (5)**

5.2.2.2.5 r1-4-9-01 «Ezousas near Ag. Varvara EZ3»

At the **r1-4-9-01«Ezousas near Ag. Varvara EZ3»** station an AA exceedance was observed:

- **Nickel in 2016 (1), 2017 (1) and 2019 (1)**

5.2.2.2.6 r1-4-9-80 «Ezousas near Acheleia»

At the **r1-4-9-80«Ezousas near Acheleia»** station a MAC exceedances were observed:

- **Chlorpyrifos on 24/01/2018**
- **Mercury on 22/01/2019**

At the **r1-4-9-80«Ezousas near Acheleia»** station an AA exceedance was observed:

- **Chloropyrifos** in 2018 **(3)**

5.2.2.2.7 r1-5-5-89 «Koshinas River Near Kaliadhes Locality»

At the **r1-5-5-89«Koshinas River Near Kaliadhes Locality»** station an AA exceedance was observed:

- **Nickel in 2016 (5), 2017 (4), 2018 (4) and 2019 (5)**

5.2.2.2.8 r2-2-3-95 «Chrysochou near Skoulli»

At the **r2-2-3-95«Chrysochou near Skoulli»** station an AA exceedance was observed:

- **Nickel in 2019 (1). This exceedance is not taken into account in the classification as it concerns a single measurement**

5.2.2.2.9 r2-3-2-96 «Pelathousa R. (Argaki tis Limnis) @ Polis-Argaka Rd»

At the **r2-3-2-96 «Pelathousa R. (Argaki tis Limnis) @ Polis-Argaka Rd»** station a MAC exceedances were observed:

- **Mercury on 20/12/2018, 10/01/2019**
- **Cadmium on 20/12/2018, 10/01/2019**

Along with AA exceedances:

- **Nickel in 2018 (1) and 2019 (3)**

- **Cadmium in 2013 (4), 2018 (1) and 2019 (3)**

5.2.2.2.10 r3-3-1-60 «Agios Nikolaos U/S Fish Farm»

At the **r3-3-1-60«Agios Nikolaos U/S Fish Farm»** station a MAC exceedance was observed:

- **Mercury on 09/03/2016**

This exceedance (0.08 vs. a threshold of 0.07) is not taken into account furtherly, since all other values of the record were below the quantification threshold.

5.2.2.2.11 r3-3-2-60 «Platania near Kakopetria»

At the **r3-3-2-60«Platania near Kakopetria»** station an AA exceedance was observed:

- **Nickel in 2016 (8)**

5.2.2.2.12 r3-3-3-95 «Kargotis near Evrychou»

An AA exceedance was observed at the station:

- **Nickel in 2018 (8)**

5.2.2.2.13 r3-5-4-40 «Elia near Vyzakia»

At the **r3-5-4-40«Elia near Vyzakia»** stration a MAC exceedance was observed:

- **Cadmium on 03/02/2015, 17/03/2015, 21/04/2015, 07/05/2015, 29/01/2019, 19/03/2019, 21/05/2019**

An AA exceedance was observed at the station:

- **Cadmium in 2014 (6), 2015 (6), 2017 (5), 2018 (5) and 2019 (5)**

5.2.2.2.14 r6-1-4-34 «Katevas near SOPAZ roundabout»

At the **r6-1-4-34 «Katevas near SOPAZ roundabout»** station an AA exceedance was observed:

- **Bioavailable lead in 2016 (1). This exceedance is not taken into account in the classification as it concerns a single measurement**

5.2.2.2.15 r6-5-2-85 «Alykos d/s Dhali Industrial Area»

At the **r6-5-2-85«Alykos d/s Dhali Industrial Area»** station a MAC exceedance was observed:

- **Mercury on 31/10/2014**

At the **r6-5-2-85«Alykos d/s Dhali Industrial Area»** station an AA exceedance was observed:

- **Mercury in 2014 (2)**

The above exceedances are not furtherly taken into account since all other values in the group were below the quantification threshold.

5.2.2.2.16 r8-3-2-60 «Kalo Chorio R. @ Kamares»

An AA exceedance was observed at the station:

- **Nickel in 2016 (2) and 2017 (1)**

5.2.2.2.17 r8-4-1-58 «Xylias R. u/s Lympia Reservoir»

At the **r8-4-1-58 «Xylias R. u/s Lympia Reservoir»** station MAC exceedances were observed:

- **Cadmium on 03/02/2015, 03/03/2015, 30/01/2019, 14/02/2019, 20/03/2019, 17/04/2019, 16/05/2019**

Along with AA exceedances:

- **Nickel in 2017 (1) and 2019 (5)**
- **Cadmium in 2015 (4), 2017 (1) and 2019 (5)**

5.2.2.2.18 r9-1-3-80 «Argaki tis Monis near Moni»

An AA exceedance was observed at the station:

- **Nickel in 2018 (1). This exceedance is not taken into account in the classification since it concerns a single measurement**

5.2.2.2.19 r9-1-4-51 «Argaki tou Pyrgou u/s Recharge Dam»

A MAC exceedance was observed at the station:

- **Nickel in 2016 (2) and 2017 (1)**

An AA exceedance was observed at the station:

- **Nickel in 2018 (1). This exceedance is not taken into account in the classification since it concerns a single measurement**

5.2.2.2.20 r9-4-3-39 «Phasoula d/s Paramytha»

At the **r9-4-3-39 «Phasoula d/s Paramytha»** station, a MAC exceedance was observed:

- **Mercury on 10/02/2015**

The above exceedance is not taken into account furtherly since all other values of the record were below the quantification threshold

5.2.2.2.21 r9-4-3-41 «Garyllis R. @ Paramytha»

At the **r9-4-3-41 «Garyllis R. @ Paramytha»** station a MAC exceedance was observed:

- **Chlorpyrifos on 20/12/2018**

The above exceedance is not taken into account furtherly since all other values of the record were below the quantification threshold

At the **r9-4-3-41«Garyllis R. @ Paramytha»** station anAA exceedance was observed:

- **Chloropyrifos in 2018 (1). This exceedance is not taken into account in the classification since it concerns a single measurement**
- **Nickel in 2018 (1). This exceedance is not taken into account in the classification since it concerns a single measurement**

5.2.2.2.22 r9-4-3-80 «Garyllis U/S Polemidia Dam»

At the **r9-4-3-80 «Garyllis U/S Polemidia Dam»** station MAC exceedances were observed:

- **Mercury on 12/05/2015**
- **Nickel on 09/11/2017, 07/12/2017, 18/04/2018, 20/11/2018**

At the **r9-4-3-80«Garyllis U/S Polemidia Dam»** station an AA exceedance was observed:

- **Nickel in 2014 (2), 2016 (3) in 2019 (5)**

5.2.2.2.23 r9-5-1-99 «Ypsonas near Ypsonas»

At the **r9-5-1-99«Ypsonas near Ypsonas»** station an AA exceedance was observed:

- **Chloropyrifos in 2018 (1). This exceedance is not taken into account in the classification since it concerns a single measurement**

5.2.2.2.24 r9-6-3-36 «Kouris near Kato Amiantos»

At the **r9-6-3-36«Kouris near Kato Amiantos»** station an AA exceedance was observed:

- **Nickel in 2016 (9) and in 2017 (8)**

5.2.2.2.25 r9-6-4-92 «Kouris @ Alassa New Weir»

At the **r9-6-4-92«Kouris @ Alassa New Weir»** station an AA exceedance was observed:

- **Nickel in 2016 (7) and in 2017 (7)**

5.2.3 Conclusions

The evaluation of the chemical status was carried out in 84 stations, out of which 67 were found in good chemical status, 16 failed to achieve good status and 1 was not evaluated due to its proximity to the sea.

Table 5-3 Classification of the chemical status of stations in river WBs

Station Code	Station Name	Exceedances		Chemical Status	Remarks
		MAC	AA		
r1-1-1-75	Khapotami d/s Mandria (Yophyrin Bridge)			Good	
r1-1-3-95	Chapotami near Kissousa			Good	
r1-2-3-94	Phini River @ Pakhnoutis Ford			Good	The one and only MAC exceedance of mercury has not been taken into consideration
r1-2-4-25	Diarizos U/S Arminou Dam			Good	
r1-2-6-64	Diarizos @ Ag. Georgios			Good	
r1-3-5-91	Xeros River @ Rhoudias Bridge	Cadmium	Nickel, Cadmium	Failing to achieve good	pH, Ca within the biomet model
r1-3-6-53	Xeros @ Rotsos Ton Laoudion		Cadmium	Failing to achieve good	
r1-3-8-60	Xeros near Foinikas			Good	
r1-4-6-75	Varkas River Near Amargeti			Good	
r1-4-7-10	Ezousas near Moro Nero		Nickel	Failing to achieve good	Ca off thresholds, pH off thresholds for 2018. For 2018 the biomet model considers all Ni bioavailable and therefore, either if all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off again. For 2019 the model does not consider all Ni bioavailable. But either way, the status is bad from the calculations of 2018
r1-4-8-88	Kochatis River Near Koloni			Good	
r1-4-9-01	Ezousas near Ag. Varvara EZ3		Nickel	Failing to achieve good	No data exist regarding pH, Ca, DOC. No bioavailability can be calculated. All Nickel is considered bioavailable
r1-4-9-80	Ezousas near Acheleia	Chloropyrifos, Mercury	Chloropyrifos	Failing to achieve good	
r1-4-9-99	Ezousas at Coast EZ2				Not taken into account in the Classification due to its close proximity to the sea
r1-5-5-89	Koshinas River Near Kaliadhes Locality		Nickel	Failing to achieve good	pH, Ca within the biomet model
r1-6-2-17	Mavrokolympos R.@ Krya Vrysi			Good	

Station Code	Station Name	Exceedances		Chemical Status	Remarks
		MAC	AA		
r1-8-5-89	Pevkos R. @ Lara Road			Good	
r2-1-8-74	Argaki tou Ayiou Ioanni near shooting range			Good	
r2-2-3-95	Chrysochou near Skoulli			Good	
r2-2-6-35	Stavros tis Psokas near Sarama Quarry			Good	
r2-2-7-34	Chrysochou River @ Goudi bridge			Good	
r2-2-8-95	Chrysochou near Coast			Good	
r2-3-1-64	Mirmikoph River D/S Steni			Good	
r2-3-2-96	Pelathousa R. (Argaki tis Limnis) @ Polis-Argaka Rd.	Mercury, Cadmium	Nickel, Cadmium	Failing to achieve good	pH and Ca off thresholds. Either if all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off again
r2-3-4-80	Makounta U/S Argaka Dam			Good	
r2-3-7-74	Xeropotamos D/S Poros tou Sykarkou			Good	
r2-9-2-50	Kambos R. Near Ag. Varvara			Good	
r3-2-1-85	Marathasa U/S Kalopanagiotis Dam			Good	
r3-3-1-60	Agios Nikolaos U/S Fish Farm			Good	The one and only MAC exceedance of mercury has not been taken into consideration
r3-3-2-60	Platania near Kakopetria		Nickel	Failing to achieve good	pH slightly off the the biomet model thresholds. The biomet model considers all Ni bioavailable and therefore, either if all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off again
r3-3-3-15	Kargotis near Galata			Good	It will not be taken into consideration during the evaluation of the WB since the data available refer only to 1 measurement of heavy metals in 2014.

Station Code	Station Name	Exceedances		Chemical Status	Remarks
		MAC	AA		
r3-3-3-95	Kargotis near Evrychou		Nickel	Failing to achieve good	pH slightly off the the biomet model thresholds. The biomet model considers all Ni bioavailable and therefore, either if all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off again
r3-4-2-90	Atsas near Evrychou			Good	
r3-5-1-50	Lagoudera near Lagoudera Br.			Good	
r3-5-4-40	Elia near Vyzakia	Cadmium	Cadmium	Failing to achieve good	
r3-7-1-55	Peristerona R. @ Siphilos			Good	
r3-7-1-84	Peristerona @ Peristerona			Good	
r3-7-3-71	Akaki U/S Akaki-Malounta Dam			Good	
r3-7-5-35	Aloupos R. near Arediou			Good	
r3-7-5-50	Koutis R. @ Asprokremnos locality			Good	
r6-1-1-72	Pediaios R. @ Philani			Good	
r6-1-1-80	Agios Onoufrios near Kampia			Good	
r6-1-2-38	Pediaios near Kato Deftera			Good	
r6-1-4-34	Katevas near SOPAZ roundabout			Good	
r6-1-5-52	Vathys @ Athalassa Park			Good	
r6-5-1-34	Yialias R. near Azizis locality (Lythrodontas)			Good	
r6-5-1-85	Gialias near Kotsiati			Good	
r6-5-2-85	Alykos d/s Dhali Industrial Area			Good. The one and only MAC exceedance of mercury was not taken into consideration	
r6-5-3-15	Gialias near Nisou			Good	
r6-5-3-50	Gialias near Potamia			Good	

Station Code	Station Name	Exceedances		Chemical Status	Remarks
		MAC	AA		
r8-3-2-60	Kalo Chorio R. @ Kamares		Nickel	Failing to achieve good	2014, 2017 DOC has no data, 2017 Ca has no data, Ca off thresholds. When data are poor, all the Nickel is calculated as bioavailable. It is highlighted that during 2018-2019 no samples for PS were taken
r8-4-1-57	Kalamoulia R. u/s Lympia Reservoir			Good	
r8-4-1-58	Xylias R. u/s Lympia Reservoir	Cadmium	Nickel, Cadmium	Failing to achieve good	2017 Ca & DOC have no data, all the Ni is calculated as bioavailable 2019 Ca off thresholds. Either all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off
r8-4-3-40	Treminthos near Agia Anna			Good	
r8-4-5-30	Treminthos near Klavdia			Good	
r8-5-1-60	Pouzis near Alethriko			Good	
r8-6-2-57	Xeros near Ghlyki Neron (Stavrovouni Forest)			Good	
r8-6-3-50	Xeropotamos near Alaminos			Good	
r8-7-2-60	Syriatis near Pano Lefkara			Good	
r8-7-3-95	Mylos U/S Dipotamos Dam			Good	
r8-8-2-95	Maroni near Choirokoitia			Good	
r8-9-3-83	Exovounia R. near Layia			Good	
r8-9-5-40	Vasilikos near Lageia			Good	
r8-9-6-98	Argaki Asgatas near Kalavasos			Good	
r9-1-3-80	Argaki tis Monis near Moni			Good	
r9-1-4-51	Argaki tou Pyrgou u/s Recharge Dam	Nickel		Failing to achieve good	pH slightly off the the biomet model thresholds. The biomet model considers all Ni bioavailable and therefore, either if all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off again
r9-2-1-43	Ayios Pavlos R. u/s Kalimera Diversion			Good	

Station Code	Station Name	Exceedances		Chemical Status	Remarks
		MAC	AA		
r9-2-3-05	Germasogeia R. @ Dierona			Good	
r9-2-3-85	Germasogeia near Foinikaria			Good	
r9-2-4-27	Argaki tou Monastiriou near Amyrou Monastery			Good	
r9-2-4-95	Gialiades (Akrounta) U/S Germasogeia Dam			Good	
r9-4-3-39	Phasoula d/s Paramytha			Good	The one and only MAC exceedance of mercury was not taken into consideration
r9-4-3-41	Garyllis R. @ Paramytha			Good	The one and only MAC exceedance of Chloropyrifos was not taken into consideration
r9-4-3-80	Garyllis U/S Polemidia Dam	Mercury, Nickel	Nickel	Failing to achieve good	2014 DOC has no data. Ca 2014 and 2017 off thresholds. pH slightly off thresholds. either if all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off again
r9-5-1-99	Ypsonas near Ypsonas			Good	
r9-6-1-87	Kryos @ Koilani			Good	
r9-6-2-60	Kryos U/S Tunnel Outlet			Good	
r9-6-3-36	Kouris near Kato Amiantos		Nickel	Failing to achieve good	pH slightly off the the biomet model thresholds. The biomet model considers all Ni bioavailable and therefore, either if all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off again
r9-6-3-77	Mesapotamos u/s Saittas Diversion			Good	
r9-6-3-87	Moniatis River @ Lourka (Footbridge)			Good	
r9-6-4-92	Kouris @ Alassa New Weir		Nickel	Failing to achieve good	pH slightly off the the biomet model thresholds. The biomet model considers all Ni bioavailable and therefore, either if all Ni is considered bioavailable, or the model calculations are taken into account, Ni is off again

Station Code	Station Name	Exceedances		Chemical Status	Remarks
		MAC	AA		
r9-6-5-62	Agros River Near Ag. Ioannis			Good	
r9-6-5-63	Ambelikos River d/s Potamitissa			Good	
r9-6-6-32	Limnatis R. Near Ag. Mamas			Good	

5.3 Reservoirs (Impounded Rivers)

5.3.1 Data available

The following table presents the substances of Annex I of Directive 2008/105/EEC, as amended and as it is in force, and the available analysis per station throughout the period under review 2013-2019.

Table 5-4 Number of available substance measurements in Annex I of Directive 2008/105/EC in reservoirs for the period 2013-2019 - Part A

	Substance name	d1-2-4-61_BNK	d1-2-4-61_DLP	d1-3-9-50_BNK	d1-3-9-50_DLP	d1-4-3-95_BNK	d1-4-3-95_DLP	d1-6-2-63_BNK	d1-6-2-63_DLP	d2-2-6-91_BNK	d2-2-6-91_DLP	d3-5-1-65_BNK	d3-5-1-65_DLP	d3-7-3-83_BNK	d3-7-3-83_DLP	d6-1-2-05_BNK	d6-1-2-05_DLP	d8-4-1-61_BNK	d8-4-1-61_DLP
		Arminou	Arminou	Asprokremmos	Asprokremmos	Kannaviou	Kannaviou	Mavrokolympos	Mavrokolympos	Evretou	Evretou	Xyliatos	Xyliatos	Akaki-Malounda	Akaki-Malounda	Tamassos	Tamassos	New Lympia	New Lympia
(1)	Alachlor	2	7	7	18	2	22	5	6	2	10		8	2	19	1	19	2	4
(2)	Anthracene	2	7	7	19	2	23	5	6	2	11		7	2	19	1	20	2	3
(3)	Atrazine	2	6	6	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(4)	Benzene	2	7	7	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(5)	Brominated diphenylethers		42	18	36		18	6	36		12	6	12	6	72		48		
(6)	Cadmium and its compounds	2	8	7	19	2	24	5	7	2	11		8	2	20	1	20	3	4
(6a)	Carbon tetrachloride	2	7	7	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(7)	Cloroalkanes C10-13[7]																		
(8)	Chlorfenvinphos	2	6	6	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(9)	Chlorpyrifos (Chlorpyrifosethyl)	2	7	7	18	2	22	5	6	2	10		8	2	19	1	19	2	4
(9a)	Cyclodiene pesticides: Aldrin, Dieldrin, Endrin, Isodrine	17	20	39	2	45	8	11	8	13	10	12	3	36	10	36	5	9	6
(9b)	Total DDT	16	16	44		52	4	8	8	12	8	12		40	4	40		12	8
	More DDT	1	4	4	11	2	13	3	2	2	3		3	1	10	1	10	2	3
(10)	1,2-Dichloroethane	2	7	7	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(11)	Dichloromethane	2	7	7	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(12)	Bis(2-ethylhexyl) phthalate (DEHP)	6	4	13		13	1	4	2	3	2	3		16	1	13		3	2
(13)	Diuron	2	6	6	19	2	23	5	7	2	11		8	2	20	1	20	2	4

[7] *Sediment analysis. See the related analysis on chapter 6.*

	Substance name	d1-2-4-61_BNK	d1-2-4-61_DLP	d1-3-9-50_BNK	d1-3-9-50_DLP	d1-4-3-95_BNK	d1-4-3-95_DLP	d1-6-2-63_BNK	d1-6-2-63_DLP	d2-2-6-91_BNK	d2-2-6-91_DLP	d3-5-1-65_BNK	d3-5-1-65_DLP	d3-7-3-83_BNK	d3-7-3-83_DLP	d6-1-2-05_BNK	d6-1-2-05_DLP	d8-4-1-61_BNK	d8-4-1-61_DLP
		Arminou	Arminou	Asprokremmos	Asprokremmos	Kannaviou	Kannaviou	Mavrokolympos	Mavrokolympos	Evretou	Evretou	Xyliatos	Xyliatos	Akaki-Malounda	Akaki-Malounda	Tamassos	Tamassos	New Lympia	New Lympia
(14)	Endosulfan	1	4	4	10	2	12	3	1	2	3		3	1	9	1	9	2	3
(15)	Fluoranthene	2	7	7	19	2	23	5	6	2	11		7	2	19	1	20	2	3
(16)	Hexachlorobenzene	1	4	4	11	2	13	3	2	2	3		3	1	10	1	10	2	3
(17)	Hexachlorbutadien	2	7	7	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(18)	Hexachlorocyclohexane	9	10	34		36	1	7	6	6	4	6	1	27	4	27	1	9	6
(19)	Isoproturon	2	6	6	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(20)	Lead and its compounds	2	8	7	19	2	24	5	7	2	11		8	2	20	1	20	2	4
(21)	Mercury and its compounds	2	8	7	19	2	24	5	7	2	11	0	8	2	20	1	20	3	4
(22)	Naphthalene	2	7	7	19	2	24	5	7	2	11		9	2	20	1	20	2	4
(23)	Nickel and its compounds	2	8	7	19	2	24	5	7	2	11		8	2	20	1	20	3	4
(24)	Nonylphenol (4-n-Nonylphenol)		7	3	6		3	1	6		2	1	2	1	12		8		
(25)	Octylphenol ((4-(1,1,3,3-tetramethylbutyl)phenol)		7	3	6		3	1	6		2	1	2	1	12		8		
(26)	Pentachlorobenzene	1	6	4	3	2	4	3	3	2	2		3		11	1	7		
(27)	Pentachlorophenol		7	3	6		3	1	6		2	1	2	1	12		8		
(28)	(Polycyclic aromatic hydrocarbons (PAH)																		
	Benzo[a]pyrene	2	7	7	19	2	23	5	6	2	11		7	2	19	1	20	2	3
	Benzo[b]fluoranthene	2	7	7	19	2	23	5	6	2	11		7	2	19	1	20	2	3
	Benzo(k)fluoranthene	2	7	7	19	2	23	5	6	2	11		7	2	19	1	20	2	3
	Benzo[ghi]perylene	2	7	7	19	2	23	5	6	2	11		7	2	19	1	20	2	3
	Indeno[1,2,3-cd]pyrene	2	7	7	19	2	23	5	6	2	11		7	2	19	1	20	2	3
(29)	Simazine	2	6	6	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(29a)	Tetrachloroethylene	2	7	7	19	2	23	5	7	2	11		8	2	20	1	20	2	4

	Substance name	d1-2-4-61_BNK	d1-2-4-61_DLP	d1-3-9-50_BNK	d1-3-9-50_DLP	d1-4-3-95_BNK	d1-4-3-95_DLP	d1-6-2-63_BNK	d1-6-2-63_DLP	d2-2-6-91_BNK	d2-2-6-91_DLP	d3-5-1-65_BNK	d3-5-1-65_DLP	d3-7-3-83_BNK	d3-7-3-83_DLP	d6-1-2-05_BNK	d6-1-2-05_DLP	d8-4-1-61_BNK	d8-4-1-61_DLP
		Arminou	Arminou	Asprokremmos	Asprokremmos	Kannaviou	Kannaviou	Mavrokolympos	Mavrokolympos	Evretou	Evretou	Xyliatos	Xyliatos	Akaki-Malounda	Akaki-Malounda	Tamassos	Tamassos	New Lympia	New Lympia
(29b)	Trichloroethylene	2	7	7	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(30)	Tributyltin compounds (tributyltin cation)																		
(31)	Trichlorobenzene	4	15	13	23	4	31	8	12	4	18		17	3	29	2	28	2	4
(32)	Trichloromethane	2	7	7	19	2	23	5	7	2	11		8	2	20	1	20	2	4
(33)	Trifluralin	2	7	7	18	2	22	5	6	2	10		8	2	19	1	19	2	4
(34)	Dicofol	2	9	6	21	1	23	4	8	2	11	1	8	2	20	1	20	2	4
(35)	Perfluorooctane sulfonic acid and its derivatives (PFOS)		4	3	3		3	1	3		2	1	2	1	5		5		
(36)	Quinoxyfen		4	3	3		3	1	3		2	1	2	1	5		5		
(37)	Dioxins and dioxin-like compounds																		
(38)	Aclonifen		7	3	6		3	1	6		2	1	2	1	12		8		
(39)	Bifenox		7	3	6		3	1	6		2	1	2	1	12		8		
(40)	Cybutryne		4	3	3		3	1	3		2	1	2	1	5		5		
(41)	Cypermethrin		7	3	6		3	1	6		2	1	2	1	12		8		
(42)	Dichlorvos		7	3	6		3	1	6		2	1	2	1	12		8		
(43)	Hexabromocyclododecane (HBCDD)		20	15	15		15	5	15		10	5	10	5	25		25		
(44)	Heptachlor and Heptachlor Epoxide	2	10	12	28	4	28	6	10	4	8	2	8	4	24	2	26	4	6
(45)	Terbutryn		4	3	3		3	1	3		2	1	2	1	5		5		

Table 5-5 Number of available substance measurements in Annex I of Directive 2008/105/EC in reservoirs for the period 2013-2019 - Part B

	Substance name	d8-7-2-05_BNK	d8-7-2-05_DLP	d8-7-4-05_BNK	d8-7-4-05_DLP	d8-9-5-60_BNK	d8-9-5-60_DLP	d9-2-5-20_BNK	d9-2-5-20_DLP	d9-4-3-95_BNK	d9-4-3-95_DLP	d9-6-3-17_BNK	d9-6-3-17_DLP	d9-6-9-10_BNK	d9-6-9-10_DLP
		Lefkara	Lefkara	Dipotamos	Dipotamos	Kalavasos	Kalavasos	Germasogeia	Germasogeia	Polemidia	Polemidia	Pano Platres	Pano Platres	Kouris	Kouris
(1)	Alachlor	3	21	1	24	1	24	3	21	8	18	3	5	3	22
(2)	Anthracene	3	22	1	25	1	25	3	22	9	19	3	4	3	25
(3)	Atrazine	3	21	1	24	1	25	3	23	9	19	3	5	3	24
(4)	Benzene	3	20	1	24	1	24	3	23	9	20	3	5	2	24
(5)	Brominated diphenylethers	6	24	6	54	6	72	12	72	18	72		6	18	54
(6)	Cadmium and its compounds	3	24	1	25	1	25	7	31	11	27	3	5	3	24
(6a)	Carbon tetrachloride	3	20	1	24	1	24	3	23	9	20	3	5	2	24
(7)	Cloroalkanes C10-13[8]														
(8)	Chlorfenvinphos	3	21	1	24	1	25	3	23	9	19	3	5	3	24
(9)	Chlorpyrifos (Chlorpyrifosethyl)	3	21	1	24	1	24	3	21	8	18	3	5	3	22
(9a)	Cyclodiene pesticides: Aldrin, Dieldrin, Endrin, Isodrine	48	17	51	14	47	13	48	4	44	7	13	18	48	9
(9b)	Total DDT	56	12	60	8	56	8	56		52	4	16	20	56	4
	More DDT	1	14		15		14	2	14	5	13	2	4	1	14
(10)	1,2-Dichloroethane	3	20	1	24	1	24	3	23	9	20	3	5	2	24
(11)	Dichloromethane	3	20	1	24	1	24	3	23	9	20	3	5	2	24
(12)	Bis(2-ethylhexyl) phthalate (DEHP)	14	3	18	2	20	2	22		20	1	4	5	20	1
(13)	Diuron	3	21	1	24	1	25	3	23	9	19	3	5	3	24

[8] *Sediment analysis. See the related analysis on chapter 6.*

	Substance name	d8-7-2-05_BNK	d8-7-2-05_DLP	d8-7-4-05_BNK	d8-7-4-05_DLP	d8-9-5-60_BNK	d8-9-5-60_DLP	d9-2-5-20_BNK	d9-2-5-20_DLP	d9-4-3-95_BNK	d9-4-3-95_DLP	d9-6-3-17_BNK	d9-6-3-17_DLP	d9-6-9-10_BNK	d9-6-9-10_DLP
		Lefkara	Lefkara	Dipotamos	Dipotamos	Kalavasos	Kalavasos	Germasogeia	Germasogeia	Polemidia	Polemidia	Pano Platres	Pano Platres	Kouris	Kouris
(14)	Endosulfan	1	13		14		13	2	13	5	12	2	4	1	13
(15)	Fluoranthene	3	22	1	25	1	25	3	22	9	19	3	4	3	25
(16)	Hexachlorobenzene	1	14		15		14	2	14	5	13	2	4	1	15
(17)	Hexachlorbutadien	3	21	1	24	1	24	3	23	9	21	3	5	2	25
(18)	Hexachlorocyclohexane	42	6	42	7	42	6	43		40	3	12	12	43	3
(19)	Isoproturon	3	21	1	24	1	25	3	23	9	19	3	5	3	24
(20)	Lead and its compounds	3	24	1	25	1	25	7	31	10	27	3	5	3	24
(21)	Mercury and its compounds	3	24	1	25	1	25	7	31	11	26	3	5	3	24
(22)	Naphthalene	3	22	1	25	1	25	3	23	9	21	3	5	2	25
(23)	Nickel and its compounds	3	24	1	25	1	25	7	31	10	27	3	5	3	24
(24)	Nonylphenol (4-n-Nonylphenol)	1	4	1	9	1	12	2	12	3	12		1	3	9
(25)	Octylphenol ((4-(1,1,3,3-tetramethylbutyl)phenol)	1	4	1	9	1	12	2	12	3	12		1	3	9
(26)	Pentachlorobenzene	1	5		8		10	2	10	2	9		1	1	9
(27)	Pentachlorophenol	1	4	1	9	1	12	2	12	3	12		1	3	9
(28)	(Polycyclic aromatic hydrocarbons (PAH)														
	Benzo[a]pyrene	3	22	1	25	1	25	3	22	9	19	3	4	3	25
	Benzo[b]fluoranthene	3	22	1	25	1	25	3	22	9	19	3	4	3	25
	Benzo(k)fluoranthene	3	22	1	25	1	25	3	22	9	19	3	4	3	25
	Benzo[ghi]perylene	3	22	1	25	1	25	3	22	9	19	3	4	3	25
	Indeno[1,2,3-cd]pyrene	3	22	1	25	1	25	3	22	9	19	3	4	3	25
(29)	Simazine	3	21	1	24	1	25	3	23	9	19	3	5	3	24

	Substance name	d8-7-2-05_BNK	d8-7-2-05_DLP	d8-7-4-05_BNK	d8-7-4-05_DLP	d8-9-5-60_BNK	d8-9-5-60_DLP	d9-2-5-20_BNK	d9-2-5-20_DLP	d9-4-3-95_BNK	d9-4-3-95_DLP	d9-6-3-17_BNK	d9-6-3-17_DLP	d9-6-9-10_BNK	d9-6-9-10_DLP
		Lefkara	Lefkara	Dipotamos	Dipotamos	Kalavasos	Kalavasos	Germasogeia	Germasogeia	Polemidia	Polemidia	Pano Platres	Pano Platres	Kouris	Kouris
(29a)	Tetrachloroethylene	3	20	1	24	1	24	3	23	9	20	3	5	2	24
(29b)	Trichloroethylene	3	20	1	24	1	24	3	23	9	20	3	5	2	24
(30)	Tributyltin compounds (tributyltin cation)[9]														
(31)	Trichlorobenzene	6	25	2	32	2	32	7	30	14	25	4	6	5	32
(32)	Trichloromethane	3	20	1	24	1	24	3	23	9	20	3	5	2	24
(33)	Trifluralin	3	21	1	24	1	24	3	21	8	18	3	5	3	22
(34)	Dicofol	3	22	1	24	1	25	3	24	8	26	3	5	3	23
(35)	Perfluorooctane sulfonic acid and its derivatives (PFOS)	1	4	1	5	1	5	2	4	3	4		1	3	3
(36)	Quinoxyfen	1	4	1	5	1	5	2	4	3	4		1	3	3
(37)	Dioxins and dioxin-like compounds [10]														
(38)	Aclonifen	1	4	1	9	1	12	2	12	3	12		1	3	9
(39)	Bifenox	1	4	1	9	1	12	2	12	3	12		1	3	9
(40)	Cybutryne	1	4	1	5	1	5	2	4	3	4		1	3	3
(41)	Cypermethrin	1	4	1	9	1	12	2	12	3	12		1	3	9
(42)	Dichlorvos	1	4	1	9	1	12	2	12	3	12		1	3	9
(43)	Hexabromocyclododecane (HBCDD)	5	20	5	25	5	25	10	20	15	20		4	15	15
(44)	Heptachlor and Heptachlor Epoxide	4	30	2	34	2	34	6	32	14	32	4	8	6	30

[9] *It is not analyzed for in inland waters' samples since its was in anti-pollution paints on ships*

[10] *Sediment analysis. See the related analysis on chapter 6.*

	Substance name	d8-7-2-05_BNK	d8-7-2-05_DLP	d8-7-4-05_BNK	d8-7-4-05_DLP	d8-9-5-60_BNK	d8-9-5-60_DLP	d9-2-5-20_BNK	d9-2-5-20_DLP	d9-4-3-95_BNK	d9-4-3-95_DLP	d9-6-3-17_BNK	d9-6-3-17_DLP	d9-6-9-10_BNK	d9-6-9-10_DLP
		Lefkara	Lefkara	Dipotamos	Dipotamos	Kalavasos	Kalavasos	Germasogeia	Germasogeia	Polemidia	Polemidia	Pano Platres	Pano Platres	Kouris	Kouris
(45)	Terbutryn	1	4	1	5	1	5	2	4	3	4		1	3	3

The following table presents the substances of the watchlist of the Executive Decision (EU) 2015/495 of the Commission of 20 March 2015 based on Directive 2008/105/EC and the available analysis in reservoirs for the period 2016-2019.

Table 5-6 Number of available substances measurements of the watchlist of Directive 2008/105/EC in reservoirs - river HMWBs of the period 2013-2019

	d1-2-4-61_DLP	d1-3-9-50_DLP	d1-6-2-63_DLP	d3-7-3-83_DLP	d6-1-2-05_DLP	d8-7-4-05_DLP	d8-9-5-60_DLP	d9-2-5-20_DLP	d9-4-3-95_BNK	d9-4-3-95_DLP	d9-6-9-10_BNK	d9-6-9-10_DLP
	Arminou	Asprokremmos	Mavrokolympos	Akaki-Malounda	Tamassos	Dipotamos	Kalavasos	Germasogeia	Polemidia	Polemidia	Kouris	Kouris
17a-ethynilestradiol (EE2)									**1**	**3**		
2016										1		
2017										1		
2018									1			
2019										1		
17b-estradiol (E2)									**1**	**3**		
2016										1		
2017										1		
2018									1			
2019										1		
2,6-Ditert-butyl-4-methylphenol									**1**	**2**		
2016										1		
2017										1		
2018									1			
2-Ethylhexyl 4-methoxycinnamate									**1**	**2**		
2016										1		
2017										1		
2018									1			
Acetamiprid	**2**	**2**	**2**	**5**	**2**	**3**	**4**	**6**	**1**	**8**		**6**
2016	2	2	2	4	2	3	4	5		5		4
2017				1				1		2		2
2018									1			
2019										1		
Azythromycin									**1**	**3**		
2016										1		
2017										1		
2018									1			
2019										1		
Clarythromycin									**1**	**3**		
2016										1		

	d1-2-4-61_DLP	d1-3-9-50_DLP	d1-6-2-63_DLP	d3-7-3-83_DLP	d6-1-2-05_DLP	d8-7-4-05_DLP	d8-9-5-60_DLP	d9-2-5-20_DLP	d9-4-3-95_BNK	d9-4-3-95_DLP	d9-6-9-10_BNK	d9-6-9-10_DLP
	Arminou	Asprokremmos	Mavrokolympos	Akaki-Malounda	Tamassos	Dipotamos	Kalavasos	Germasogeia	Polemidia	Polemidia	Kouris	Kouris
2017										1		
2018									1			
2019										1		
Clothianidin									**1**	**3**		
2016										1		
2017										1		
2018									1			
2019										1		
Diclofenac									**3**	**2**	**1**	**1**
2016										1		
2017										1		
2018									3		1	1
Erythromycin									**3**	**3**	**1**	**1**
2016										1		
2017										1		
2018									3		1	1
2019										1		
Estrone (E1)									**1**	**3**		
2016										1		
2017										1		
2018									1			
2019										1		
Imidacloprid	**2**	**2**	**2**	**5**	**2**	**3**	**4**	**6**	**1**	**8**		**6**
2016	2	2	2	4	2	3	4	5		5		4
2017				1				1		2		2
2018									1			
2019										1		
Methiocarb	**2**	**2**	**2**	**5**	**2**	**3**	**4**	**6**	**1**	**8**		**6**
2016	2	2	2	4	2	3	4	5		5		4
2017				1				1		2		2
2018									1			
2019										1		
Oxadiazon									**1**	**2**		
2016										1		
2017										1		
2018									1			
Thiacloprid	**2**	**2**	**2**	**5**	**2**	**3**	**4**	**6**	**1**	**8**		**6**

	d1-2-4-61_DLP	d1-3-9-50_DLP	d1-6-2-63_DLP	d3-7-3-83_DLP	d6-1-2-05_DLP	d8-7-4-05_DLP	d8-9-5-60_DLP	d9-2-5-20_DLP	d9-4-3-95_BNK	d9-4-3-95_DLP	d9-6-9-10_BNK	d9-6-9-10_DLP
	Arminou	Asprokremmos	Mavrokolympos	Akaki-Malounda	Tamassos	Dipotamos	Kalavasos	Germasogeia	Polemidia	Polemidia	Kouris	Kouris
2016	2	2	2	4	2	3	4	5		5		4
2017				1				1		2		2
2018									1			
2019										1		
Thiamethoxam	**2**	**2**	**2**	**5**	**2**	**3**	**4**	**6**	**1**	**8**		**6**
2016	2	2	2	4	2	3	4	5		5		4
2017				1				1		2		2
2018									1			
2019										1		
Tri-allate									**1**	**2**		
2016										1		
2017										1		
2018									1			

5.3.2 Data analysis

5.3.2.1 Substances of the Directive 2008/105/EC watchlist

Based on the data available, from the substances of the Directive 2008/105/EC watchlist, Diclofenac was detected in Polemidia on 07/06/2017.

5.3.2.2 Substances of Annex I of Directive 2008/105/EC

An AA exceedance was observed in the **Germasogeia reservoir:**

- **DEHP** in 2016 **(6)**. This exceedance is no longer taken into account due to non-repeatability; it is attributed to a high value.
- **Benzo(a)pyrene** in 2016 **(4)**. This exceedance is not taken into account furtherly due to non-repeatability (it is attributed to a high value) and there is non-exceedance of the MAC value.

An AA exceedance was observed in the **Kouris reservoir:**

- **DEHP** in 2015 **(4)**. This exceedance is not taken into account furtherly due to non-repeatability, and it is attributed to a high value.

An AA exceedance was observed in the **Tamassos reservoir:**

- **Benzo(a)pyrene** in 2016 **(4)**. This exceedance is not taken into account furtherly due to non-repeatability (it is attributed to a high value) and there is non-exceedance of the MAC value.

In the Polemidia reservoir and regarding the calculation of bioavailable nickel, the pH was above the application threshold of the biomet tool for all years. An increase in pH results in an increase in bioavailable Ni which the model does not calculate. For pH greater than 8.2 (model threshold) the calculations do not change. Therefore all Ni was set as bioavailable. With this approach, the chemical statys of the reservoir will be "failing to achieve good".

5.3.3 Conclusions

Out of the 15 reservoirs, 14 are in good chemical status except for the Polemidia reservoir. The confidence of its classification was judged as of high Confidence, since data exist for all priority substances that are rejected in the RBD.

Table 5-7 Classification of the reservoir – river HMWBs chemical status

No	WB Code	WB Name	Chemical Status	Confidence
1.	CY1-2-C_IR	Arminou	Good	High
2.	CY1-3-D_IR	Asprokremmos	Good	High
3.	CY1-4-C_IR	Kannaviou	Good	High
4.	CY1-6-B_IR	Mavrokolympos	Good	High
5.	CY2-2-E_IR	Evretou	Good	High
6.	CY3-5-B_IR	Xyliatos	Good	High
7.	CY3-7-I_IR	Akaki-Malounda	Good	High
8.	CY6-1-B_IR	Tamassos	Good	High
9.	CY8-7-B_IR	Leufkara	Good	High
10.	CY8-7-E_IR	Dipotamos	Good	High
11.	CY8-9-D_IR	Kalavasos	Good	High
12.	CY9-2-G_IR	Germasogeia	Good	High
13.	CY9-4-D_IR	Polemidia	Failing to achieve good (bioavailable Nickel)	High
14.	CY9-6-J_IR	Pano Platres	Good	High
15.	CY9-6-S_IR	Kouris	Good	High

High Confidence = good data for all priority substances discarded in the RBD

5.4 Lake Water Bodies

5.4.1 Data available

The following table presents the substances of Annex I of Directive 2008/105/EEC, as amended and in force, and the available analysis per station in the whole period under review (2013-2019).

Table 5-8 Number of available substance measurements of Annex I of Directive 2008/105/EC in lake WBs during the period 2013-2019

	Substance Name	Monitoring Stations												
		Akrotiri Salt Lake (site 1)	Akrotiri Salt Lake (site 4)*	Larnaka Main Salt Lake Station 3	Larnaka Main Salt Lake Station 7*	Oroklini Lake @ weir	Oroklini Lake near Birdwatching Tower *	Paralimni Lake near shooting range	Paralimni Lake on West shore	Salt lake Aerodromio No2 Station1	Salt lake Orfani Station 1	Salt lake Soros Station 1	Achna Res. Bank	Achna Res. Deepest Lake Point
(1)	Alachlor	13		32		22	2	10	9	12	21	11	1	22
(2)	Anthracene	13		32		21	2	11	10	12	22	11	1	23
(3)	Atrazine	13		32		22	2	10	9	12	22	11	1	22
(4)	Benzene	13		32		22	2	10	9	12	22	11	1	23
(5)	Brominated diphenylethers	60		66		96	12	48	30	54	36	48	6	42
(6)	Cadmium and its compounds	14		17		23	2	11	9	13	12	12	1	24
(6a)	Carbon tetrachloride	13		32		22	2	10	9	12	22	11	1	23
(7)	Cloroalkanes C10-13[11]													
(8)	Chlorfenvinphos	13		32		22	2	10	9	12	22	11	1	22
(9)	Chlorpyrifos (Chlorpyrifos ethyl)	13		32		22	2	10	9	12	21	11	1	22
(9a)	Cyclodiene pesticides: Aldrin, Dieldrin, Endrin, Isodrine	52		111		63	8	29	29	48	77	44	43	7
(9b)	Total DDT [12]	40		120		52	8	28	28	36	76	32	52	4
	More DDT	10		30		13	2	7	7	9	19	8		13
(10)	1,2-Dichloroethane	10		30		19	2	9	8	9	19	8	1	23
(11)	Dichloromethane	13		32		22	2	10	9	12	22	11	1	23
(12)	Bis(2-ethylhexyl) phthalate (DEHP)	13		31		21	2	12	9	12	21	11	15	1
(13)	Diuron	13		32		22	2	10	9	12	22	11	1	22
(14)	Endosulfan	13		13		15	2	8	8	12	9	11		12
(15)	Fluoranthene	13		32		21	2	11	10	12	22	11	1	23
(16)	Hexachlorobenzene	14		33	1	17	2	9	9	13	23	12		13
(17)	Hexachlorbutadien	13		32		22	2	10	9	12	22	11	1	23
(18)	Hexachlorocyclohexane	13		32		16	2	8	8	12	22	11	39	3
(19)	Isoproturon	13		32		22	2	10	9	12	22	11	1	22
(20)	Lead and its compounds	14	1	19		23	2	11	9	13	12	12	1	24

[11] *Sediment analysis. See the related analysis on chapter 6.*

[12] *2,4-DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT are included*

	Substance Name	Monitoring Stations												
		Akrotiri Salt Lake (site 1)	Akrotiri Salt Lake (site 4)*	Larnaka Main Salt Lake Station 3	Larnaka Main Salt Lake Station 7*	Oroklini Lake @ weir	Oroklini Lake near Birdwatching Tower *	Paralimni Lake near shooting range	Paralimni Lake on West shore	Salt lake Aerodromio No2 Station1	Salt lake Orfani Station 1	Salt lake Soros Station 1	Achna Res. Bank	Achna Res. Deepest Lake Point
(21)	Mercury and its compounds	14	1	16		23	2	11	9	13	11	12	1	24
(22)	Naphthalene	13		32		22	2	11	10	12	22	11	1	23
(23)	Nickel and its compounds	14	1	19		23	2	11	9	13	13	12	1	24
(24)	Nonylphenol (4-n-Nonylphenol)	10		11		16	2	8	5	9	6	8	1	7
(25)	Octylphenol ((4-(1,1,3,3-tetramethylbutyl)phenol)	10		11		16	2	8	5	9	6	8	1	7
(26)	Pentachlorobenzene	14		16	1	20	2	10	7	13	12	12		5
(27)	Pentachlorophenol	10		11		16	2	8	5	9	6	8	1	7
(28)	(Polycyclic aromatic hydrocarbons (PAH)													
	Benzo[a]pyrene	13		32		21	2	11	10	12	22	11	1	23
	Benzo[b]fluoranthene	13		32		21	2	11	10	12	22	11	1	23
	Benzo(k)fluoranthene	13		32		21	2	11	10	12	22	11	1	23
	Benzo[ghi]perylene	13		32		21	2	11	10	12	22	11	1	23
	Indeno[1,2,3-cd]pyrene	13		32		21	2	11	10	12	22	11	1	23
(29)	Simazine	13		32		22	2	10	9	12	22	11	1	22
(29a)	Tetrachloroethylene	10		30		19	2	9	8	9	19	8	1	23
(29b)	Trichloroethylene	13		32		22	2	10	9	12	22	11	1	23
(30)	Tributyltin compounds (tributyltin cation)[13]													
(31)	Trichlorobenzene	20		40		31	4	14	13	18	25	16	2	30
(32)	Trichloromethane	13		32		22	2	10	9	12	22	11	1	23
(33)	Trifluralin	13		32		22	2	10	9	12	21	11	1	22
(34)	Dicofol	7		28		19	1	12	8	8	18	7	1	23
(35)	Perfluorooctane sulfonic acid and its derivatives (PFOS)	7		9		9	1	4	4	8	6	7	1	5
(36)	Quinoxyfen	7		9		9	1	4	4	8	6	7	1	5
(37)	Dioxins and dioxin-like compounds [14]													
(38)	Aclonifen	7		9		14	1	8	5	8	6	7	1	7
(39)	Bifenox	7		9		14	1	8	5	8	6	7	1	7
(40)	Cybutryne	7	0	9	0	9	1	4	4	8	6	7	1	5
(41)	Cypermethrin	7		9		14	1	8	5	8	6	7	1	7
(42)	Dichlorvos	7		9		14	1	8	5	8	6	7	1	7
(43)	Hexabromocyclododecane (HBCDD)	35		45		45	5	20	20	40	30	35	5	25

[13] *It is not identified in inland waters since its use was in anti-pollution paints on ships*

[14] *Sediment analysis. See the related analysis on chapter 6.*

	Substance Name	Monitoring Stations												
		Akrotiri Salt Lake (site 1)	Akrotiri Salt Lake (site 4)*	Larnaka Main Salt Lake Station 3	Larnaka Main Salt Lake Station 7*	Oroklini Lake @ weir	Oroklini Lake near Birdwatching Tower *	Paralimni Lake near shooting range	Paralimni Lake on West shore	Salt lake Aerodromio No2 Station1	Salt lake Orfani Station 1	Salt lake Soros Station 1	Achna Res. Bank	Achna Res. Deepest Lake Point
(44)	Heptachlor and Heptachlor Epoxide	14		56		22	2	14	14	16	38	14	2	32
(45)	Terbutryn	7		9		9	1	4	4	8	6	7	1	5

***) Akrotiri Salt Lake station 4, & Larnaka Main Salt Lake station 7 & Oroklini Lake near Birdwatching Tower are regularly used to monitor BQEs, nutrient and ionic parameters. Sometimes, however, samples were taken along with the biological ones for analysis of priority substances and for this reason the number of data for the chemical parameters in these stations is very small.*

The following table presents some of the substances of the watchlist of the Commission Implementing Decision (EU) 2015/495 based on Directive 2008/105/EC and the available analysis in lakes during the period 2016-2019.

Table 5-9 Number of available substances measurements of the watchlist of Directive 2008/105/EC in lake WBs during 2013-2019

Parameter	Oroklini Lake @ weir	Paralimni Lake near shooting range	Paralimni Lake on West shore	Achna Res. Deepest Lake Point
Acetamiprid	**3**	**2**	**1**	**2**
2016	2	1		2
2017	1	1	1	
Diclofenac	**2**			
2018	2			
Erythromycin	**2**			
2018	2			
Imidacloprid	**3**	**2**	**1**	**2**
2016	2	1		2
2017	1	1	1	
Methiocarb	**3**	**2**	**1**	**2**
2016	2	1		2
2017	1	1	1	
Thiacloprid	**3**	**2**	**1**	**2**
2016	2	1		2
2017	1	1	1	
Thiamethoxam	**3**	**2**	**1**	**2**
2016	2	1		2
2017	1	1	1	

5.4.2 Data analysis

5.4.2.1 Substances of the Directive 2008/105/EC watchlist

Based on the data available, the watchlist substances of the Executive Decision (EU) 2015/495 of the Commission of 20 March 2015 of Directive 2008/105/EC are not detected.

5.4.2.2 Substances of Annex I of Directive 2008/105/EC

5.4.2.2.1 Larnaka Main Salt Lake

In the **Larnaka Main Salt Lake Station 3** MAC exceedances were observed:

- **Cadmium** on 14/03/2013, 24/04/2013, 21/04/2015
- **Nickel** on 27/04/2017, 16/05/2017, 08/01/2019
- **Mercury** on 14/05/2013, 19/03/2014, 20/03/2018
- **Chlorpyrifos** on 27/04/2017

In the **Larnaka Main Salt Lake** AA exceedances were observed:

- **Cadmium** in 2013 **(2)**[15]**,** 2015 **(1),** 2017 **(3)**
- **Nonylphenols** in 2017 **(2).** This exceedance is not taken into account furtherly due to non-repeatability and non-exceedance of the MAC value.
- **Chlorpyrifos** in 2017 **(2)**
- **Bioavailable Nicken**[16] in 2017 **(3),** in 2018 **(6),** in 2019 **(5)**
- **Bioavailable Lead** in 2018 **(6).** This exceedance is taken into consideration sincr in 2018 2 detections were observed (5.2 and 6.1 μg/l) from 6 values leading to exceedance of AA.

5.4.2.2.2 Salt Lake Orfani

In the **Salt lake Orfani Station 1** MAC exceedances were observed:

- **Cadmium** on 24/04/2013, 01/02/2018
- **Hexachlorobenzene** on 08/01/2019, 08/05/2019
- **Mercury** on 14/05/2013, 08/05/2019
- **Nickel** on 11/12/2018, 08/01/2019

In **Salt Lake Orfani** AA exceedances were observed:

- **Cadmium** in 2013 **(2)**

[15] *In parentheses the number of samples from all relevant stations.*

[16] *In the lakes, during the calculation of bioavailable Nickel, it was observed that calcium is in very high concentrations (far off the model thresholds) (except Paralimni) and also, in some places a high pH is observed (off the model thresholds). Thus the calculations were made considering all bioavailable Nickel.*

- **Bioavailable Nickel** in 2018 **(3),** in 2019 **(6)**

5.4.2.2.3 Salt Lake Soros

In the **Salt lake Soros Station 1** MAC exceedances were observed:

- **Hexachlorobenzene** on 08/01/2019, 08/05/2019
- **Nickel** on 27/04/2017, 23/01/2018, 11/12/2018
- **Mercury** on 20/03/2018

In **Salt Lake Soros** AA exceedances were observed:

- **Nonylphenols** in 2017 **(1).** This exceedance is not taken into account furtherly due to non-repeatability and non-exceedance of the MAC value.
- **Octylphenols** in 2017 **(1).** This exceedance is not taken into account furtherly due to non-repeatability.
- **Trifluralins** in 2019 **(6).** This exceedance is not taken into account furtherly due to non-repeatability.
- **Bioavailable Nickel** in 2017 **(2),** in 2018 **(4)**
- **Bioavailable Lead** in 2018 **(4).** This exceedance is taken into account since there are also 2 values 12 and 14 μg/l) leading to an exceedance of AA. 14 μg/l is also the MAC threshold.

5.4.2.2.4 Salt Lake Aerodromio No2

In the **Salt lake Aerodromio No2 Station1** MAC exceedances were observed:

- **Hexachlorobenzene** on 08/01/2019, 08/05/2019
- **Mercury** on 20/03/2018, 08/05/2019
- **Nickel** on 27/04/2017, 11/12/2018

In the **Salt Lake Aerodromio No2** AA exceedances were observed:

- **Nonylphenols** in 2017 **(1).** This exceedance is not taken into account furtherly due to non-repeatability and non-exceedance of the MAC value.
- **Bioavailable Nickel** in 2017 **(2), in 2018 (5)**
- **Bioavailable Lead** in 2018 **(5).** This exceedance is not taken into account furtherly due to non-repeatability and non-exceedance of the MAC value.

5.4.2.2.5 Akrotiri Salt Lake

In the **Akrotiri Salt Lake (site 1)** MAC exceedances were observed:

- **Chlorpyrifos** on 26/04/2017
- **Hexachlorobenzene** on 09/01/2019
- **Nickel** on 26/04/2017, 17/05/2017, 07/06/2017, 09/01/2019

In the **Akrotiri Salt Lake** AA exceedances were observed:

- **Cadmium** in 2019 **(6).** This exceedance is not taken into account furtherly due to non-repeatability and non-exceedance of the MAC value.
- **Chlorpyrifos** in 2017 **(3).**
- **Bioavailable Nickel in 2017 (4), in 2018 (4), in 2019 (6)**

5.4.2.2.6 Oroklini Lake

In the **Oroklini Lake @ weir** station MAC exceedances were observed:

- **Endosulfan** in 16/05/2017, 06/06/2017
- **Hexachlorobenzene** in 24/05/2018, 08/05/2019
- **Mercury** in 06/06/2017, 05/07/2018, 08/05/2019
- **Nickel** in 16/05/2017, 12/12/2018

In the **Oroklini Lake near Birdwatching Tower** station MAC exceedances were observed:

- Mercury in 27/06/2017

In the Oroklini Lake AA exceedances were observed:

- **DEHP** in 2018 **(7). The intermediate exceedance is not taken into consideration furtherly due to non repeatability. It is attributed to a high value.**
- **Endosulfan** in 2017 **(3)**
- **Bioavailable Nickel** in 2017 **(5),** in 2018 **(7),** in 2019 **(6)**

5.4.2.2.7 Paralimni Lake

In the **Paralimni Lake near shooting range** station MAC exceedances were observed:

- **Fluoranthene** in 27/02/2015
- **Mercury** in 23/04/2019

In the **Paralimni Lake on West shore** station MAC exceedances were observed:

- **Hexachlorobenzene** in 10/01/2019
- **Nickel** in 19/02/2019
- **Mercury** in 23/04/2019

In the **Paralimni Lake** AA exceedances were observed:

- **DEHP** in 2019 **(10). This exceedance is not taken into consideration furtherly due to non repeatability. It is attributed to a high value..**
- **Bioavailable Nickel** in 2017 **(3),** in 2019 **(10)**

5.4.2.2.8 Achna Reservoir

In the **Achna Res. Deepest Lake Point** station MAC exceedances were observed:

- **Mercury** in 17/03/2015. The measurement was 0.08 μg/l versus 0.07 μg/l of the MAC. The remaining values for the 2014-2019 period were below the detection threshold of the method (LOQ 0.02, LOD = 0.006). This exceedance is not taken into account furtherly.

5.4.3 Conclusions

Table 5-10 Chemical status classification of Lake WBs

WB Code	WB Name	Exceedances		Chemical Status	Confidence
		MAC	AA		
CY_d7-1-2-70	Achna Reservoir	-	-	Good	High
CY_L7-2-6-70	Paralimni Lake	Fluoranthene, Nickel, Mercury, Hexachlorobenzene	Nickel	Failing to achieve good	High
CY_L8-1-2-94	Oroklini Lake	Nickel, Mercury, Hexachlorobenzene, Endosulfan	Nickel, Endosulfan	Failing to achieve good	High
CY_L8-3-2-82	Larnaka Main Salt Lake	Cadmium, Nickel, Mercury, Chlorpyrifos	Cadmium, Nickel, Lead Chlorpyrifos	Failing to achieve good	High
CY_L8-3-2-85	Salt Lake Aerodromio No2	Nickel, Mercury, Hexachlorobenzene	Nickel	Failing to achieve good	High
CY_L8-3-2-96	Salt Lake Soros	Nickel, Mercury, Hexachlorobenzene	Lead, Nickel	Failing to achieve good	High
CY_L8-3-2-88	Salt Lake Orfani	Cadmium, Nickel, Mercury, Hexachlorobenzene	Cadmium, Nickel	Failing to achieve good	High
CY_L9-5-3-50	Akrotiri Salt Lake	Nickel, Hexachlorobenzene, Chlorpyrifos	Nickel, Chlorpyrifos	Failing to achieve good	High

High Confidence = good data for all priority substances discarded in the RBD

6 Sub-activity 8.3. Evaluation of sediment monitoring results

6.1 Data available

This Section is based on the analysis of raw data of substances' concentrations in sediment data for the period 2013-2019[17], along with the Report on the Evaluation of Priority Substances (Directives 2008/105/EU and 2013/93/EU) in surface waters and in sediments of rivers, reservoirs and lakes (April 2019), written by Dr. Rodothea Moleski, officer of the Water Development Department.

The collection of sediment samples from rivers, reservoirs and lakes is performed once a year when the wet (winter and spring) period ends i.e. when fresh sediment has been deposited. In rivers and natural lakes, samples are collected during April to May, as many of the monitored rivers do not have perennial flow while most lakes fall dry after May. In reservoirs, the samples are collected in June, where water flow is negligible and fresh sediment has been deposited. In rivers and lakes one (1) sample is collected which results from the mixing of sediment from a few points along the river in the area of the monitoring station where water is usually sampled from, or from a few points around the monitoring station within the lake. With regards to reservoirs, samples are collected from three pre-determined monitoring stations located along the river axis of the impounded river. One of the points is the one from which the water is sampled from (DLP, deepest lake point).

[17] For rivers, the reference period concerns the years of 2013-2018

Table 6-1 Available sediment data (number of samples) of the 2013-2019 period

	Rivers				Reservoirs							Lakes				
	2015	2016	2017	2018	2013	2014	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Metals																
Cadmium	7	9	8	5	11	36	39	45	47	36	67	4	2	8	6	11
Chromium	7	9	8	5		36	39	45	47	36	67	4	2	8	6	11
Lead	7	9	8	5	11	36	39	45	47	36	67	4	2	8	6	11
Manganese	7	9	8	5		36	39	45	47	36	67	2	2	8	6	11
Mercury	7	9	8	5	11	36	39	45	47	36	67	4	2	8	6	11
Nickel	7	9	8	5	11	36	39	45	47	36	67	4	2	8	6	11
Zinc	7	9	8	5		36	39	45	47	36	67	4	2	8	6	11
Chlorobenzenes																
Hexachlorobenzene	7	9	8	5			39	31	32	25	30	2	2	2	6	6
Pentachloro benzene	7	9	8	5			39	31	32	25	30	2	2	2	6	6
Other chlorinated hydrocarbons																
Dioxins				2						6	9				1	
Polycyclic aromatic hydrocarbons (PAHs)																
Anthracene				5			25	45	47	26	45	2	2	8	6	11
Benzo(a)pyrene	7	9	8	5			39	45	47	26	45	2	2	8	6	11
Benzo(b)fluoranthene	7	9	8	5			39	45	47	26	45	2	2	8	6	11
Benzo(g,h,i)perylene	7	9	8	5			39	45	47	26	45	2	2	8	6	11
Benzo(k)fluoranthene	7	9	8	5			39	45	47	26	45	2	2	8	6	11
Fluoranthene	7	9	8	5			39	45	47	26	45	2	2	8	6	11
Indeno(1,2,3-cd)pyrene	7	9	8	5			39	45	47	26	45	2	2	8	6	11
Naphthalene							25	45	47			2	2	8		
Chloro-alkanes																
C10-13-chloroalkanes				5						12	14				6	6
organochlorine pesticides																
2,4-DDT		9	8	5				44	32	36	30		2	2	6	6
4,4-DDD		9	8	5				44	32	36	31		2	2	6	6
4,4-DDE		9	8	5				44	32	36	31		2	2	6	6
4,4-DDT		9	8	5				44	32	36	31		2	2	6	6
Aldrin	7	9	8	5			39	31	32	25	30	2	2	2	6	6
Dieldrin	7	9	8	5			39	31	32	25	30	2	2	2	6	6
Endrin	7	9	8	5			39	31	32	25	30	2	2	2	6	6
Isodrin		9	8	5				31	32	25	30		2	2	6	6

	Rivers				Reservoirs							Lakes				
	2015	2016	2017	2018	2013	2014	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Heptachlor epoxide	7	9	8	5			39	31	32	25	30	2	2	2	6	6
Heptachlor	7	9	8	5			39	31	32	25	30	2	2	2	6	6
Hexachlorobutadiene	7	9	8	5			39	31	32	25	30	2	2	2	6	6
Hexachlorocyclohexane	7	9	8	5			39	31	32	25	30	2	2	2	6	6
other pesticides																
Trifluralin		9	8	5				31	32	25	30		2	2	6	6
phthalates																
Di(2-ethylhexyl)phthalate (DEHP)	7	9	8	5			39	31	37	33	32	2	2	2	6	6
Polybrominated Diphenyl Ethers (PBDEs)																
hexaBDE 153		9	8	5				31	32	25	30		2	2	6	6
hexaBDE 154		9	8	5				31	32	25	30		2	2	6	6
pentaBDE 100		9	8	5				31	32	25	30		2	2	6	6
pentaBDE 99		9	8	5				31	32	25	30		2	2	6	6
tetraBDE 47		9	8	5				31	32	25	30		2	2	6	6
triBDE 28		9	8	5				31	32	25	30		2	2	6	6

6.2 Comparison with Sediment Quality Standards

The following are the available sediment parameters and the Canadian Freshwater Sediment Quality Standards, issued in 2001 by the Canadian Council of Ministers of the Environment (CCME) [18]. In order to protect aquatic life, CCME has published two benchmarks for about 30 substances in sediments: the threshold effect level (TEL) and the probable effect level (PEL)[19].

The Canadian Freshwater Sediment Quality Standards have been used since, on one hand, no national sediment thresholds have been set, and on the other hand, they provide thresholds for a larger number of substances (compared to those monitored in Cyprus) than other sediment quality standards (e.g., Florida quality guidelines, Consesus approach).

Table 6-2 The Canadian Freshwater Sediment Quality Standards

	Threshold effect level - TEL	Probable effect level - PEL
Metals		
Cadmium	0,6 mg/kg	3,5 mg/kg
Chromium	37,3 mg/kg	90,0 mg/kg
Lead	35,0 mg/kg	91,30 mg/kg
Manganese		
Mercury	0,17 mg/kg	0,486 mg/kg
Nickel		
Zinc	123 mg/kg	315 mg/kg
Chlorobenzenes		
Hexachlorobenzene		
Pentachloro benzene		
Other chlorinated hydrocarbons		
Dioxins		
Polycyclic aromatic hydrocarbons (PAHs)		
Anthracene	46,9 µg/kg	245 µg/kg
Benzo(a)pyrene	31,9 µg/kg	782 µg/kg
Benzo(b)fluoranthene		
Benzo(g,h,i)perylene		
Benzo(k)fluoranthene		
Fluoranthene	111 µg/kg	2.355 µg/kg
Indeno(1,2,3-cd)pyrene		
Naphthalene	34,6 µg/kg	391 µg/kg
Chloro-alkanes		
C10-13-chloroalkanes		
organochlorine pesticides		
2,4-DDT	Σ DDT 1,19 µg/kg	Σ DDT 4,77 µg/kg
4,4-DDT		
4,4-DDD	Σ DDD 3,54 µg/kg	Σ DDD 8,51 µg/kg
4,4-DDE	Σ DDE 1,42 µg/kg	Σ DDE 6,75 µg/kg
Aldrin		
Dieldrin	2,85 µg/kg	6,67 µg/kg
Endrin	2,67 µg/kg	62,4 µg/kg

[18] *http://st-ts.ccme.ca/en/index.html*

[19] TEL and PEL are used to determine the following three series of chemical concentrations in relation to biological effects: Below the TEL; the minimal effect range within which adverse effects rarely occur. Between the TEL and PEL; the possible effect range within which adverse effects occasionally occur. Above the PEL; the probable effect range within which adverse effects frequently occur.

	Threshold effect level - TEL	Probable effect level - PEL
Isodrin		
Heptachlor epoxide	0,60 µg/kg	2,74 µg/kg
Heptachlor		
Hexachlorobutadiene		
Hexachlorocyclohexane	0,94 µg/kg	1,38 µg/kg
other pesticides		
Trifluralin		
phthalates		
Di(2-ethylhexyl)phthalate (DEHP)		
Polybrominated Diphenyl Ethers (PBDEs)		
hexaBDE 153		
hexaBDE 154		
pentaBDE 100		
pentaBDE 99		
tetraBDE 47		
triBDE 28		

Considering the PEL, the threshold beyond which adverse reactions in aquatic organisms are often possible, the following conclusions are drawn:

- Polycyclic aromatic hydrocarbons (PAHs) are generally detected throughout the years at various points in rivers, reservoirs and lakes. The concentrations detected are in all cases lower than all thresholds set by the Canadian Standards. Of all the PAHs identified, fluoranthene is the most frequently detected in all the years identified. Systematic PAHs detections are observed in the reservoirs of Dipotamos, Germasogeia, Lympia and the Salt Lake Aerodromio No2. (Systematic detections of fluoranthene only occur in Germasogeia reservoir).
- The organic substances of Brominated diphenyl ethers (BDEs), C10-13 Chloroalkanes, Aldrin, Dieldrin, Isodrin, Endrin, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclohexane, Pentachlorobenzene, Trifluralin, Heptachlor and Heptachloride have not been detected in the sediment of any of the sampling points.
- Also, in 2018 the samples were analyzed for dioxins for the first time and they were detected at all sampling points where they were analyzed for.
- DEHP (plasticizers) is detected in all reservoirs and lakes and in a very limited number of rivers (see File 08_Sediments_R_RES_L_FINAL.xlsx, which accompanies this Report).
- The detection of the banned insecticide DDT and its breakdown products of DDD and DDE is an important finding. The literature shows that DDT derivatives degrade very slowly and similar concentrations are still measured in other countries in sediments. In particular:
  - In 2016 at the Garyllis U/S Polemidia Dam sampling station DDE exceedance was observed.
  - In 2018, DDE exceedances were observed in the reservoirs of Nea Lympia and Xyliatou.
  - In 2016 a DDE exceedance was observed in the Kalavasos reservoir.
  - In 2019 a DDE exceedance was observed in the Arminos reservoir.
  - In 2019 a DDT exceedance was observed in the Asprokremos reservoir.

- In 2015 at the sampling station of Elia near Vyzakia an exceedance of cadmium was observed.
- In 2015 at the Garyllis U/S Polemidia Dam sampling station an exceedance of chromium was observed.
- In 2015, 2016 and 2017, chromium exceedances were observed at the Kargotis near Evrychou, Koshinas River Near Kaliadhes Locality and Kouris @ Alassa New Weir sampling stations.
- In 2015 and 2017 at the sampling station of Elia near Vyzakia, an exceedance of lead was observed.
- In 2016 at the Garyllis U/S Polemidia Dam, Kargotis near Evrychou, Koshinas River Near Kaliadhes Locality, Kouris @ Alassa New Weir and Limnatis R. Near Ag. Mamas sampling stations, an exceedance of mercury was observed.
- With the exception of the Kouris and Polemidia reservoirs, cadmium was exceeded at least once in the other reservoirs.
- Chromium, except for the reservoirs of Akaki, Kannaviou, Mavrokolympos and Nea Lympia, exceeded at least once in the other reservoirs.
- In 2013 and 2016 in the reservoir of Nea Lympia, an exceedance of lead was observed.
- In 2016 lead in the Kannaviou reservoir was exceeded.
- In 2019 in the Xyliatou reservoir an exceedance of lead was observed.
- During the 2014-2019 period in the reservoir of Nea Lympia, an exceedance of zinc was observed.
- In 2014 in the Tamassos reservoir an exceedance of zinc was observed.
- In Paralimni there was an exceedance of Cadmium (2015, 2017), Lead (2017, 2019) and Chromium (2015, 2017, 2019).
- In Oroklini there was an exceedance of chromium (2019).
- In the Soros lake there was an exceedance of chromium (2019).
- In the Achna lake there was an exceedance of cadmium (2013, 2016 and 2017) and chromium (2015, 2017 and 2019).

Table 6-3 Comparison of PAHs (annual average) and PEL (Probable effect level) in sediments

µg/Kg (dry weight)	Benzo(a) pyrene^					Fluoranthene^					Anthracene^				
TEL	**32**					**111**					**47**				
PEL	**782**					**2355**					**245**				
	2015	**2016**	**2017**	**2018**	**2019**	**2015**	**2016**	**2017**	**2018**	**2019**	**2015**	**2016**	**2017**	**2018**	**2019**
Achna (d)	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Akaki-Malounda (d)	n.d.	n.d.	18,2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	12,9	n.d.	n.d.	n.d.	n.d.	n.d.
Arminou (d)	n.d.	9,9	n.d.	n.d.	n.d.	9,7	11,5	n.d.	13,5	14,7	n.d.	12,5	n.d.	n.d.	n.d.
Asprokremmos (d)	n.d.	n.d.	11,5	n.d.	n.d.	18,5	20	n.d.	n.r.	5,45	n.d.	n.d.	n.d.	n.r.	n.d.
Dipotamos (d)	n.d.	9,5	15,7	14,8	17,25	12	35	28	37	61,55	n.r.	8,1	n.d.	n.d.	n.d.
Evretou (d)	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.r.	96	n.d.	n.d.	n.d.
Germasogeia (d)	n.d.	n.d.	n.d.	n.d.	n.d.	7,7	11,2	5,8	8,4	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Kalavasos (d)	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Kannaviou (d)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	17	n.d.	n.d.	n.d.
Kouris (d)	n.d.	n.d.	n.d.	n.r.	n.d.	6,7	7,9	n.d.	n.r.	5,55	n.d.	n.d.	n.d.	n.r.	n.d.
Lefkara (d)	n.d.	n.d.	n.d.	n.d.	n.d.	5	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Lympia (d)	n.d.	15	19,5	10,9	n.d.	6,7	67,6	54,7	37	29,3	n.d.	n.d.	n.d.	n.d.	n.d.
Mavrokolympos (d)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	163	n.d.	n.d.	n.d.
Xyliatos(d)	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	12,9	n.d.	17,8	n.r.	n.r.	n.d.	n.d.	n.d.
Polemidia (d)	n.d.	n.d.	3,8	n.r.	n.d.	11	10,6	14,8	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.
Tamassos (d)	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Oroklini (l)	n.d.	n.d.	6,5	n.r.	15	13,5	n.d.	5	n.r.	21,5	n.d.	n.d.	n.d.	n.r.	n.d.
Aerodromiou lake (l)	n.r.	n.r.	10,3	n.d.	n.d.	n.r.	n.r.	15,8	20,5	10,1	n.r.	n.r.	n.d.	n.d.	n.d.
Larnaka main salt lake (l)	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.
Soros Lake (l)	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	10,7	n.r.	n.r.	n.d.	n.d.	n.d.
Elia near Vyzakia (r)	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.r.	n.r.	n.r.	n.d.	n.r.
Garyllis U/S Polemidia dam (r)	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.r.	n.r.	n.r.	n.d.	n.r.
Kargotis near Evrychou (r)	n.d.	12	n.d.	1,53	n.r.	n.d.	38	n.d.	n.d.	n.r.	n.r.	n.r.	n.r.	n.d.	n.r.
Koshinas River Near Kaliadhes (r)	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	1,1	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Kouris @ Alassa New Weir (r)	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.r.	n.r.	n.r.	n.d.	n.r.
Limnatis R. Near Ag. Mamas (r)	n.d.	n.d.	1,5	n.d.	n.r.	n.d.	16	5,7	n.d.	n.r.	n.r.	n.r.	n.r.	n.d.	n.r.
Vathys @ Athalassa Park (r)	12	n.d.	1,5	n.r.	n.r.	131	21	18	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Xeros @ Rotsos Ton Laoudion (r)	n.r.	n.d.	2,2	n.r.	n.r.	n.r.	n.d.	13	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Akrotiri no detections. n.d: not detected, n.r.: no result Reservoir (d)/river (r)/lake(l)															

Table 6-4 Comparison of organochlorine pesticides (annual average) and PEL (Probable effect level) in sediments

µg/Kg (dry weight)	4,4, DDD^					4,4, DDE^					4,4-DDT + 2,4-DDT				
TEL	3,5					1,4					1,19				
PEL	8,51					6,75					4,77				
	2015	**2016**	**2017**	**2018**	**2019**	**2015**	**2016**	**2017**	**2018**	**2019**	**2015**	**2016**	**2017**	**2018**	**2019**
Achna (d)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	1,1	n.d.	0,8	0,75	n.r.	n.d.	n.d.	n.d.	n.d.
Akaki-Malounda (d)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	5,2	n.d.	5,9	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Arminou (d)	n.r.	n.d.	n.d.	0,7	1	n.r.	0,7	n.d.	3,3	8,47[20]	n.r.	n.d.	n.d.	1,5	3,1
Asprokremmos (d)	n.r.	n.d.	n.d.	n.r.	4,8	n.r.	2,1	n.d.	n.r.	5,25	n.r.	n.d.	n.d.	n.r.	7,5
Dipotamos (d)	n.r.	n.d.	n.d.	0,9	n.d.	n.r.	1,1	n.d.	1,6	n.d.	n.r.	n.d.	n.d.	0,9	n.d.
Evretou (d)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	1,9	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Germasogeia (d)	n.r.	n.d.	n.d.	1,6	n.d.	n.r.	3,2	n.d.	3,5	n.d.	n.r.	n.d.	n.d.	2,4	n.d.
Kalavasos (d)	n.r.	1,4	n.d.	1,6	n.d.	n.r.	14	n.d.	4,5	n.d.	n.r.	n.d.	n.d.	3	n.d.
Kannaviou (d)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	1,4	n.d.	1,3	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Kouris (d)	n.r.	n.d.	n.d.	n.r.	n.d.	n.r.	2,1	n.d.	n.r.	n.d.	n.r.	n.d.	n.d.	n.r.	n.d.
Lefkara (d)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	1,3	n.d.	1	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Lympia (d)	n.r.	2	n.d.	n.d.	n.d.	n.r.	1,63	n.d.	6,8	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Mavrokolympos (d)	n.r.	n.d.	n.d.	n.d.	1,25	n.r.	2,3	n.d.	1,1	4,25	n.r.	n.d.	n.d.	n.d.	1
Xyliatos(d)	n.r.	n.r.	n.d.	0,9	3	n.r.	n.r.	n.d.	7,9	5,75	n.r.	n.d.	n.d.	0,9	1,5
Polemidia (d)	n.r.	n.d.	n.d.	n.r.	n.d.	n.r.	1,8	n.d.	n.r.	n.d.	n.r.	n.d.	n.d.	n.r.	n.d.
Tamassos (d)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	1,7	n.d.	1,2	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Oroklini (l)	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.	n.r.	n.d.	n.d.	n.d.	n.d.
Aerodromiou lake (l)	n.r.	n.r.	n.r.	n.d.	0,75	n.r.	n.r.	n.r.	2,4	n.d.	n.r.	n.r.	n.r.	n.d.	n.d.
Larnaka main salt lake (l)	n.r.	n.r.	n.d.	1,7	n.d.	n.r.	n.r.	n.d.	2,2	n.d.	n.r.	n.r.	n.d.	2,6	n.d.
Soros Lake (l)	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	1,6	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.
Elia near Vyzakia (r)	n.r.	5,8	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.
Garyllis U/S Polemidia dam (r)	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	23	2,2	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.
Kargotis near Evrychou (r)	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	0,6	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.
Koshinas River Near Kaliadhes (r)	n.r.	3,9	n.d.	n.r.	n.r.	n.r.	n.d.	3,3	n.r.	n.r.	n.r.	n.d.	2,9	n.r.	n.r.
Kouris @ Alassa New Weir (r)	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.
Limnatis R. Near Ag. Mamas (r)	n.r.	n.d.	n.d.	n.d.	n.r.	n.r.	n.d.	1,7	n.d.	n.r.	n.r.	n.d.	n.d.	n.d.	n.r.

[20] PEL exceedances

µg/Kg (dry weight)	4,4, DDD^					4,4, DDE^					4,4-DDT + 2,4-DDT				
TEL	3,5					1,4					1,19				
PEL	8,51					6,75					4,77				
Vathys @ Athalassa Park (r)	n.r.	n.d.	1	n.r.	n.r.	n.r.	37	3,4	n.r.	n.r.	n.r.	n.d.	2,8	n.r.	n.r.
Xeros @ Rotsos Ton Laoudion (r)	n.r.	n.d.	n.d.	n.r.	n.r.	n.r.	n.d.	2,9	n.r.	n.r.	n.r.	n.d.	4,5	n.r.	n.r.
n.d: not detected, n.r.: no result Akrotiri no detections															

Table 6-5 Comparison of (annual average) and PEL (Probable effect level) metals in sediments -1

mg/Kg (dry weight)	Cadmium (Cd)							Chromium (Cr)						Lead (Pb)						
TEL	0,6							37,3						35						
PEL	3,5							90						91,3						
	2013	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019
Achna (d)	3,80	2,55	3,00	3,97	3,70	2,30	3,00	77,40	100,30	88,47	91,00	87,00	131,00	45,80	37,50	44,20	68,60	42,00	47,00	65,33
Akaki-Malounda (d)	n.r	9,37	6,00	5,97	5,40	4,90	5,97	89,97	51,47	44,00	82,00	73,00	48,67	n.r	58,77	50,47	49,30	57,00	74,00	54,33
Arminou (d)	8,00	7,80	4,90	6,50	4,20	4,20	5,00	104,33	146,33	133,00	118,00	106,00	206,00	79,40	58,53	58,07	89,07	50,00	63,00	62,33
Asprokremmos (d)	5,30	5,80	3,37	4,43	4,00	n.r	3,00	98,35	99,47	81,47	85,00	n.r	91,33	74,20	58,10	62,00	83,57	53,00	n.r	61,00
Dipotamos (d)	5,60	2,10	3,60	3,63	3,00	2,90	3,00	82,57	104,87	68,90	82,00	85,00	87,00	59,50	40,63	50,13	43,50	42,00	55,00	63,33
Evretou (d)	6,00	5,40	3,43	4,43	3,50	2,20	3,67	98,90	102,50	83,47	81,00	70,00	61,67	76,70	47,17	56,27	75,73	44,00	48,00	49,00
Germasogeia (d)	5,00	2,77	3,57	3,77	3,20	3,30	3,00	133,20	156,30	128,70	134,00	148,00	133,00	59,80	45,20	51,07	36,73	42,00	55,00	66,67
Kalavasos (d)	6,80	3,73	4,83	5,53	4,30	3,50	4,50	220,00	265,30	225,70	232,00	149,00	158,75	69,30	53,83	59,57	54,07	52,00	65,00	73,25
Kouris (d)	3,00	2,17	2,10	2,83	1,70	n.r	2,00	93,87	116,33	98,40	99,00	n.r	129,00	34,50	36,73	37,77	34,97	26,00	n.r	42,00
Lefkara (d)	8,80	3,95	4,93	6,77	4,40	4,60	4,67	131,50	141,00	109,00	111,00	104,00	130,33	86,40	69,50	66,30	67,67	56,00	61,00	86,33
Lympia (d)	10,20	5,47	6,33	9,03	6,30	6,30	5,00	45,70	47,23	73,07	82,00	77,00	55,00	101,00	54,30	45,67	112,10	69,00	87,00	65,00
Oroklini Lake (l)	n.r	n.r	2,10	2,55	2,00	2,60	2,00	n.r	71,80	65,90	77,00	47,00	178,00	n.r	n.r	31,70	34,60	29,00	26,00	35,00
Polemidia (d)	3,50	1,70	1,63	2,47	1,90	n.r	2,00	86,90	71,60	93,10	106,00	n.r	142,00	37,70	28,47	25,47	25,70	26,00	n.r	43,67
Tamassos (d)	n.r	7,07	3,70	4,33	4,20	3,50	3,67	68,20	49,40	50,33	58,00	58,00	45,00	n.r	56,13	47,23	63,63	42,00	57,00	49,33
Mavrokolympos (d)	n.r	n.r	n.r	2,50	2,50	2,30	2,00	n.r	n.r	45,73	72,00	68,00	72,33	n.r	n.r	n.r	40,80	45,00	53,00	47,67
Kannaviou (d)	n.r	n.r	n.r	7,57	7,00	4,60	6,00	n.r	n.r	57,47	72,00	70,00	36,00	n.r	n.r	n.r	102,03	62,00	75,00	53,50
Xyliatos(d)	n.r	n.r	n.r	n.r	4,00	4,40	5,33	n.r	n.r	n.r	60,00	34,00	86,67	n.r	n.r	n.r	n.r	51,00	58,00	97,00
Aerodromiou No2 (l)	n.r	n.r	n.r	n.r	2,50	2,20	2,00	n.r	n.r	n.r	68,00	58,00	60,00	n.r	n.r	n.r	n.r	53,00	57,00	51,00
Akrotiri (l)	n.r	n.r	n.r	n.r	1,60	n.d.	1,00	n.r	n.r	n.r	81,00	55,50	50,00	n.r	n.r	n.r	n.r	23,00	20,00	37,00
Megali Larnakas (l)	n.r	n.r	n.r	n.r	1,20	0,75	1,00	n.r	n.r	n.r	43,00	34,00	68,50	n.r	n.r	n.r	n.r	21,00	38,00	43,50
Orfani lake (l)	n.r	n.r	n.r	n.r	1,60	n.r	2,00	n.r	n.r	n.r	48,00	n.r	50,00	n.r	n.r	n.r	n.r	30,00	n.r	39,00
Soros Lake (l)	n.r	n.r	n.r	n.r	1,20	1,00	3,00	n.r	n.r	n.r	35,00	32,00	192,00	n.r	n.r	n.r	n.r	49,00	55,00	59,00
Elea Vyzakia (r)	n.r	n.r	6,90	1,35	1,90		n.r	n.r	3,50	10,80	5,80		n.r	n.r	n.r	8,23	44,00	38,00		n.r

mg/Kg (dry weight)	Cadmium (Cd)							Chromium (Cr)						Lead (Pb)						
TEL	0,6							37,3						35						
PEL	3,5							90						91,3						
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Garillis u/s polemidia dam (r)	n.r	n.r	1,40	0,30	0,60		n.r	n.r	148,00	43,00	80,00		n.r	n.r	n.r	0,39	15,10	5,90		n.r
Kargotis near Evrychou (r)	n.r	n.r	2,10	n.d.	n.d.		n.r	n.r	532,00	379,00	921,00		n.r	n.r	n.r	0,23	6,46	n.d.		n.r
Koshinas river Kaliadhes Locality (r)	n.r	n.r	1,30	0,19	0,40		n.r	n.r	125,00	100,00	200,00		n.r	n.r	n.r	5,58	12,30	16,00		n.r
Kouris Alassa new weir (r)	n.r	n.r	1,80	n.d.	0,14		n.r	n.r	416,00	307,00	299,00		n.r	n.r	n.r	0,12	4,51	4,80		n.r
Limnatis river Ag. Mamas (r)	n.r	n.r	0,70	n.d.	n.d.		n.r	n.r	13,00	57,00	41,00		n.r	n.r	n.r	0,12	12,30	n.d.		n.r
Vathys Athalassa (r)	n.r	n.r	1,60	0,21	0,40		n.r	n.r	34,00	58,00	34,00		n.r	n.r	n.r	1,67	17,30	7,50		n.r
Xeros Rotsos ton Laoudion (r)	n.r	n.r	n.r	0,05	0,30		n.r	n.r	n.r	26,00	49,00		n.r	n.r	n.r	n.r	10,70	9,70		n.r
The river results for 2018 are not representative																				
n.d: not detected, n.r.: no result reservoir (d)/river (r)/lake(l)																				

Table 6-6 Comparison of (annual average) and PEL (Probable effect level) metals in sediments -2

mg/Kg (dry weight)	Zn (Zn)						Mercury (Hg)				
TEL	**123**						**0,17**				
PEL	**315**						**0,486**				
	2014	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Achna (d)	59,40	57,50	62,07	56,00	54,00	75,67	n.d.	n.d.	n.d.	n.d.	n.d.
Akaki-Malounda (d)	98,27	127,00	102,30	109,00	125,00	109,00	n.d.	n.d.	n.d.	n.d.	n.d.
Arminou (d)	82,60	76,90	74,63	72,00	74,00	100,33	n.d.	0,11	n.d.	n.d.	31,67
Asprokremmos (d)	156,00	129,67	127,67	115,00	n.r	88,00	n.d.	0,09	n.d.	n.r	n.d.
Dipotamos (d)	55,83	75,80	73,60	68,00	76,00	93,33	n.d.	n.d.	n.d.	0,03	n.d.
Evretou (d)	79,50	76,37	76,07	70,00	68,00	68,33	0,03	0,17	n.d.	n.d.	31,33
Germasogeia (d)	58,70	78,80	60,83	55,00	59,00	62,67	n.d.	0,02	n.d.	n.d.	n.d.
Kalavasos (d)	86,97	75,57	91,33	73,00	74,00	115,75	n.d.	0,04	n.d.	n.d.	7,75
Kouris (d)	46,60	63,20	58,40	48,00	n.r	46,00	n.d.	0,02	n.d.	n.r	n.d.
Lefkara (d)	123,00	126,67	149,67	100,00	103,00	119,33	n.d.	n.d.	0,06	0,03	n.d.
Lympia (d)	564,00	739,00	510,30	600,00	475,00	5,59	n.d.	0,10	n.d.	n.d.	n.d.
Oroklini Lake (l)	n.r	54,30	66,50	58,00	52,00	94,00	n.d.	0,04	n.d.	n.d.	n.d.
Polemidia (d)	56,97	77,93	61,03	62,00	n.r	93,67	0,02	n.d.	n.d.	n.r	n.d.
Tamassos (d)	393,00	305,70	231,70	247,00	284,00	250,33	n.d.	0,11	0,04	n.d.	n.d.
Mavrokolympos (d)	n.r	n.r	64,37	64,00	59,00	59,33	n.r	0,03	0,04	n.d.	n.d.
Kannaviou (d)	n.r	n.r	105,10	101,00	112,00	71,00	n.r	n.d.	n.d.	n.d.	16,50
Xyliatos(d)	n.r	n.r	n.r	44,00	50,00	66,67	n.r	n.r	n.d.	n.d.	n.d.
Aerodromiou No2 (l)	n.r	n.r	n.r	94,00	86,00	70,00	n.r	n.r	n.d.	n.d.	n.d.
Akrotiri (l)	n.r	n.r	n.r	16,00	14,00	13,00	n.r	n.r	n.d.	n.d.	4,00
Megali Larnakas (l)	n.r	n.r	n.r	25,00	29,50	36,50	n.r	n.r	n.d.	n.d.	3,00
Orfani lake (l)	n.r	n.r	n.r	36,00	n.r	37,00	n.r	n.r	n.d.	n.r	n.d.
Soros Lake (l)	n.r	n.r	n.r	33,00	33,00	95,00	n.r	n.r	n.d.	0,04	n.d.
Elea Vyzakia (r)	n.r	534,00	68,30	893,00		n.r	0,55	n.d.	n.d.		n.r
Garillis u/s polemidia dam (r)	n.r	15,40	40,80	62,00		n.r	0,21	7,10	n.d.		n.r
Kargotis near Evrychou (r)	n.r	11,50	20,40	36,00		n.r	0,23	3,60	n.d.		n.r
Koshinas river Kaliadhes Locality (r)	n.r	17,70	40,20	72,00		n.r	0,23	0,04	n.d.		n.r
Kouris Alassa new weir (r)	n.r	10,80	19,60	40,00		n.r	0,29	1,34	n.d.		n.r
Limnatis river Ag. Mamas (r)	n.r	6,90	34,00	69,00		n.r	0,28	1,80	n.d.		n.r

mg/Kg (dry weight)	Zn (Zn)						Mercury (Hg)				
TEL	**123**						**0,17**				
PEL	**315**						**0,486**				
Vathys Athalassa (r)	n.r	102,00	131,00	111,00		n.r	0,29	0,90	n.d.		n.r
Xeros Rotsos ton Laoudion (r)	n.r	n.r	57,90	123,00		n.r	n.r	0,03	n.d.		n.r
The river results for 2018 are not representative											
n.d: not detected, n.r.: no result reservoir (d)/river (r)/lake(l)											

6.3 Trend assessment

For metals, other than mercury[21], trends in reservoirs and lakes have been assessed, based on data collected during the period 2013-2019 and in WBs where data have been collected for more than **three years**. The assessment of long-term trends is required under Article 3(6) of the consolidated Directive 2008/105/EC.

The Mann-Kendall test is used to determine the existence of a linear monotonic trend for a given time series. The **null hypothesis H0** being studied is that there is no monotonic tendency while the alternative hypotheses are (i) upward monotonic trend, (ii) downward monotonic trend (iii) downward or upward monotonic trend. It is a powerful trend detection test widely used in the analysis of economics, climate and hydrological and environmental time series.

The Mann-Kendall test includes the following assumptions in relation to time-series data:

1. In the absence of a trend, the variables are independent and evenly distributed

2. The measurements represent the actual state of the observable at the time when the measurements are taken.

3. The methods used for sample collection, the organic measurements and data management are non-discriminatory. The following limitations must be taken into account:

The test limitations are:

1. The Mann-Kendall test is not suitable for periodic data. In order for the test to be effective, it is recommended that all known periodic results be removed from the data at a preprocessing stage prior to the calculation of the Mann-Kendall test.

2. The Mann-Kendall test tends to give more negative results for shorter data sets, meaning that **the longer the time series, the more efficient the trend detection calculation.**

The application of the Mann-Kendhall test shows that **or a 95% significance level there is no significant trend and also no clear correlation with the pressures for any WB (taking into account the average of all WB stations) there is no significant trend** and a clear correlation with the pressures.

The analysis was repeated for the individual stations of each WB. It seems that, when the averages are used (i.e. as described in the previous paragraph) no conclusion is drawn for a significant trend. However, when results of each individual station are used, a significant trend

[21] *Only sporadic detections are observed in different years and different places*

is detected at few stations. This shows the inhomogeneity of the sediment and that more points per reservoir are required as well as a longer time series to draw conclusions.

Table 6-7 Results of the Mann-Kendhall test (95%) in individual sediment monitoring stations - Cadmium[22][23]

	Cadmium in sediment	2013	2014	2015	2016	2017	2018	2019		Mann-Kendall Test
d1-2-4-61_BTM1	Arminou Res. Bottom 1		7,9	4,9	6,3	4,3	4,3	5,0		0
d1-2-4-61_BTM2	Arminou Res. Bottom 2		7,7	4,8	6,9	4,0	4,0	5,0		0
d1-2-4-61_DLP	Arminou Res. Deepest Lake Point	8,0	7,8	5,0	6,3	4,3	4,4	5,0		0
d1-3-9-50_BTM1	Asprokremmos Res. Bottom 1		5,9	3,3	4,2	3,8		3,0		0
d1-3-9-50_BTM2	Asprokremmos Res. Bottom 2		5,7	3,3	4,4	3,8		3,0		0
d1-3-9-50_DLP	Asprokremmos Res. Deepest Lake Point	5,3		3,5	4,7	4,0		3,0		0
d1-4-3-95_BTM1	Kannaviou Res. Bottom 1				8,4	7,0	4,6	6,0		0
d1-4-3-95_BTM2	Kannaviou Res. Bottom 2				7,0	7,0	4,6	6,0		0
d1-4-3-95_DLP	Kannaviou Res. Deepest Lake Point				7,3	6,6	4,5			0
d1-6-2-63_BTM1	Mavrokolympos Res. Bottom 1				2,0	2,0	2,2	2,0		0
d1-6-2-63_BTM2	Mavrokolympos Res. Bottom 2				2,9	2,6	1,6	2,0		0
d1-6-2-63_DLP	Mavrokolympos Res. Deepest Lake Point				2,6	2,8	3,0	2,0		0
d2-2-6-91_BTM1	Evretou Res. Bottom 1		5,7	3,4	3,9	3,7	2,3	4,0		0
d2-2-6-91_BTM2	Evretou Res. Bottom 2		6,6	3,3	4,3	2,8	2,6	4,0		0
d2-2-6-91_DLP	Evretou Res. Deepest Lake Point	6,0	3,9	3,6	5,1	4,1	1,8	3,0		0
d3-5-1-65_BTM1	Xyliatos Res. Bottom 1					4,4	4,5	5,0		0
d3-5-1-65_BTM2	Xyliatos Res. Bottom 2					3,6	4,4	6,0		0
d3-5-1-65_DLP	Xyliatos Res. Deepest Lake Point					4,1	4,4	5,0		0
d3-7-3-83_BTM1	Akaki-Malounda Res. Bottom 1		9,6	5,7	6,5	5,2	4,9	6,0		0
d3-7-3-83_BTM2	Akaki-Malounda Res. Bottom 2		8,1	5,6	4,9	5,5	4,8	6,0		0
d3-7-3-83_DLP	Akaki-Malounda Res. Deepest Lake Point		10,4	6,7	6,5	5,6	5,1	6,0		1
d6-1-2-05_BTM1	Tamassos Res. Bottom 1		7,9	3,9	4,8	4,3	4,1	3,0		0
d6-1-2-05_BTM2	Tamassos Res. Bottom 2		3,8	4,0	4,6	4,2	3,5	4,0		0
d6-1-2-05_DLP	Tamassos Res. Deepest Lake Point		9,5	3,2	3,6	4,1	2,8	4,0		0
d7-1-2-70_BTM1	Achna Res. Bottom 1		2,6	3,0	4,1	3,6	2,2	3,0		0
d7-1-2-70_BTM2	Achna Res. Bottom 2		2,5	3,0	3,7	3,8	2,4	3,0		0
d7-1-2-70_DLP	Achna Res. Deepest Lake Point	3,8		3,0	4,1	3,6	2,3	3,0		0
d8-4-1-61_BTM1	New Lympia Res. Bottom 1		4,9	5,5	6,9	5,0				0
d8-4-1-61_BTM2	New Lympia Res. Bottom 2		6,6	7,9	10,4	7,0				0
d8-4-1-61_DLP	New Lympia Res. Deepest Lake Part	10,2	4,9	5,6	9,8	6,8	6,3	5,0		0
d8-7-2-05_BTM1	Lefkara Res. Bottom 1		4,0	5,1	7,2	4,6	4,5	4,0		0
d8-7-2-05_BTM2	Lefkara Res. Bottom 2			5,1	6,6	4,2	5,1	5,0		0
d8-7-2-05_DLP	Lefkara Res. Deepest Lake Point	8,8	3,9	4,6	6,5	4,5	4,3	5,0		0
d8-7-4-05_BTM1	Dipotamos Res. Bottom 1		1,7	3,1	4,0	2,9	2,8	3,0		0
d8-7-4-05_BTM2	Dipotamos Res. Bottom 2		1,7	3,6	3,4	3,1	3,2	3,0		0
d8-7-4-05_DLP	Dipotamos Res. Deepest Lake Point	5,6	2,9	4,1	3,5	3,0	2,6	3,0		0
d8-9-5-60_BTM1	Kalavasos Res. Bottom 1		3,9	5,1	5,8	4,6	3,3	4,0		0
d8-9-5-60_BTM2	Kalavasos Res. Bottom 2		3,9	4,5	5,6	4,1	3,1	4,0		0
d8-9-5-60_DLP	Kalavasos Res. Deepest Lake Point	6,8	3,4	4,9	5,2	4,2	4,0	4,7		0
d9-2-5-20_BTM1	Germasogeia Res. Bottom 1		2,1	3,7	4,2	3,2	3,3	3,0		0
d9-2-5-20_BTM2	Germasogeia Res. Bottom 2		3,5	3,7	4,2			3,0		0
d9-2-5-20_DLP	Germasogeia Res. Deepest Lake Point	5,0	2,7	3,3	2,9	3,2	3,3	3,0		0
d9-4-3-95_BTM1	Polemidia Res. Bottom 1		2,0	1,6	2,3	2,0		2,0		0
d9-4-3-95_BTM2	Polemidia Res. Bottom 2		1,4	1,6	3,3	2,0		2,0		0
d9-4-3-95_DLP	Polemidia Res. Deepest Lake Point	3,5	1,7	1,7	1,8	1,7		2,0		0
d9-6-9-10_BTM1	Kouris Res. Bottom 1		1,8	2,1	3,1	1,8		2,0		0
d9-6-9-10_BTM2	Kouris Res. Bottom 2		2,4	2,1	2,5	1,6		2,0		0
d9-6-9-10_DLP	Kouris Res. Deepest Lake	3,0	2,3	2,1	2,9	1,8		2,0		0

[22] 0: there is no monotonic trend while for 1: the alternative assumptions are (i) upward monotonic trend, (ii) downward monotonic trend (iii) downward or upward monotonic trend.
[23] Annual averages

Table 6-8 Results of the Mann-Kendhall test (95%) in individual sediment monitoring stations - Chromium

	Chromium in sediment	2014	2015	2016	2017	2018	2019		Mann-Kendall Test
d1-2-4-61_BTM1	Arminou Res. Bottom 1	106,0	136,0	141,0	123,0	99,9	214,0		0
d1-2-4-61_BTM2	Arminou Res. Bottom 2	101,0	148,0	100,0	87,4	92,1	181,0		0
d1-2-4-61_DLP	Arminou Res. Deepest Lake Point	106,0	155,0	158,0	143,0	127,0	223,0		0
d1-3-9-50_BTM1	Asprokremmos Res. Bottom 1	98,6	98,0	74,2	81,0		82,0		0
d1-3-9-50_BTM2	Asprokremmos Res. Bottom 2	98,1	99,4	80,6	85,3		82,0		0
d1-3-9-50_DLP	Asprokremmos Res. Deepest Lake Point		101,0	89,6	89,9		110,0		0
d1-4-3-95_BTM1	Kannaviou Res. Bottom 1			61,9	71,0	69,3	43,0		0
d1-4-3-95_BTM2	Kannaviou Res. Bottom 2			47,3	67,9	68,0	29,0		0
d1-4-3-95_DLP	Kannaviou Res. Deepest Lake Point			63,2	77,2	72,7			0
d1-6-2-63_BTM1	Mavrokolympos Res. Bottom 1			35,2	56,3	64,5	71,0		0
d1-6-2-63_BTM2	Mavrokolympos Res. Bottom 2			49,6	71,5	44,9	73,0		0
d1-6-2-63_DLP	Mavrokolympos Res. Deepest Lake Point			52,4	87,3	93,8	73,0		0
d2-2-6-91_BTM1	Evretou Res. Bottom 1	110,0	102,0	75,9	77,6	72,5	69,0		0
d2-2-6-91_BTM2	Evretou Res. Bottom 2	110,0	95,5	82,7	81,7	80,9	64,0		1
d2-2-6-91_DLP	Evretou Res. Deepest Lake Point	76,8	110,0	91,8	84,4	57,9	52,0		0
d3-5-1-65_BTM1	Xyliatos Res. Bottom 1				65,6	35,5	85,0		0
d3-5-1-65_BTM2	Xyliatos Res. Bottom 2				51,1	35,7	88,0		0
d3-5-1-65_DLP	Xyliatos Res. Deepest Lake Point				62,6	31,8	87,0		0
d3-7-3-83_BTM1	Akaki-Malounda Res. Bottom 1	90,6	47,9	43,1	92,3	74,2	46,0		0
d3-7-3-83_BTM2	Akaki-Malounda Res. Bottom 2	75,3	46,8	26,2	74,4	69,2	46,0		0
d3-7-3-83_DLP	Akaki-Malounda Res. Deepest Lake Point	104,0	59,7	44,1	80,1	74,5	54,0		0
d6-1-2-05_BTM1	Tamassos Res. Bottom 1	79,1	50,9	52,8	57,7	62,4	45,0		0
d6-1-2-05_BTM2	Tamassos Res. Bottom 2	39,7	45,0	46,0	55,2	54,3	40,0		0
d6-1-2-05_DLP	Tamassos Res. Deepest Lake Point	85,7	52,3	52,2	60,2	57,7	50,0		0
d7-1-2-70_BTM1	Achna Res. Bottom 1	77,5	100,0	88,5	88,6	81,3	129,0		0
d7-1-2-70_BTM2	Achna Res. Bottom 2	77,3	97,9	85,6	94,4	90,1	130,0		0
d7-1-2-70_DLP	Achna Res. Deepest Lake Point		103,0	91,3	90,7	90,2	134,0		0
d8-4-1-61_BTM1	New Lympia Res. Bottom 1	40,0	47,8	73,8	76,4				0
d8-4-1-61_BTM2	New Lympia Res. Bottom 2	45,4	45,7	73,1	86,4				0
d8-4-1-61_DLP	New Lympia Res. Deepest Lake Part	51,7	48,2	72,3	84,5	77,4	55,0		0
d8-7-2-05_BTM1	Lefkara Res. Bottom 1	133,0	147,0	113,0	119,0	92,0	142,0		0
d8-7-2-05_BTM2	Lefkara Res. Bottom 2		145,0	105,0	97,3	95,5	122,0		0
d8-7-2-05_DLP	Lefkara Res. Deepest Lake Point	130,0	131,0	109,0	116,0	127,0	127,0		0
d8-7-4-05_BTM1	Dipotamos Res. Bottom 1	77,4	95,6	66,7	80,5	82,4	87,0		0
d8-7-4-05_BTM2	Dipotamos Res. Bottom 2	71,1	112,0	70,8	84,2	93,0	92,0		0
d8-7-4-05_DLP	Dipotamos Res. Deepest Lake Point	99,2	107,0	69,2	82,0	80,4	82,0		0
d8-9-5-60_BTM1	Kalavasos Res. Bottom 1	240,0	264,0	253,0	273,0	143,0	192,0		0
d8-9-5-60_BTM2	Kalavasos Res. Bottom 2	251,0	229,0	192,0	204,0	118,0	183,0		0
d8-9-5-60_DLP	Kalavasos Res. Deepest Lake Point	169,0	303,0	232,0	219,0	186,0	158,7		0
d9-2-5-20_BTM1	Germasogeia Res. Bottom 1	92,6	162,0	141,0	132,0	156,0	138,0		0
d9-2-5-20_BTM2	Germasogeia Res. Bottom 2	172,0	175,0	140,0			131,0		0
d9-2-5-20_DLP	Germasogeia Res. Deepest Lake Point	135,0	132,0	105,0	136,0	141,0	130,0		0
d9-4-3-95_BTM1	Polemidia Res. Bottom 1	128,0	69,4	95,7	118,0		139,0		0
d9-4-3-95_BTM2	Polemidia Res. Bottom 2	58,2	57,5	119,0	114,0		147,0		0
d9-4-3-95_DLP	Polemidia Res. Deepest Lake Point	74,4	87,9	64,6	85,9		140,0		0
d9-6-9-10_BTM1	Kouris Res. Bottom 1	75,6	126,0	119,0	83,5		115,0		0
d9-6-9-10_BTM2	Kouris Res. Bottom 2	103,0	122,0	89,8	74,9		114,0		0
d9-6-9-10_DLP	Kouris Res. Deepest Lake	103,0	101,0	86,5	139,0		158,0		0

Table 6-9 Results of the Mann-Kendhall test (95%) in individual sediment monitoring stations - Lead

	Lead in sediment	2013	2014	2015	2016	2017	2018	2019		Mann-Kendall Test
d1-2-4-61_BTM1	Arminou Res. Bottom 1		58,6	58,6	87,2	50,5	62,5	63,0		0
d1-2-4-61_BTM2	Arminou Res. Bottom 2		58	55	89	47,3	58,9	60,0		0
d1-2-4-61_DLP	Arminou Res. Deepest Lake Point	79,4	59	60,6	91	53,6	66,6	64,0		0
d1-3-9-50_BTM1	Asprokremmos Res. Bottom 1		58,6	60,3	76	49,8		56,0		0
d1-3-9-50_BTM2	Asprokremmos Res. Bottom 2		57,6	61,2	82,5	53,2		56,0		0
d1-3-9-50_DLP	Asprokremmos Res. Deepest Lake Point	74,2		64,5	92,2	55,5		71,0		0
d1-4-3-95_BTM1	Kannaviou Res. Bottom 1				106	61,1	75,9	58,0		0
d1-4-3-95_BTM2	Kannaviou Res. Bottom 2				96,1	62,1	74,1	49,0		0
d1-4-3-95_DLP	Kannaviou Res. Deepest Lake Point				104	61,5	74,2			0
d1-6-2-63_BTM1	Mavrokolympos Res. Bottom 1				31,5	34	50	48,0		0
d1-6-2-63_BTM2	Mavrokolympos Res. Bottom 2				46,1	47,9	35,2	51,0		0
d1-6-2-63_DLP	Mavrokolympos Res. Deepest Lake Point				44,8	53,2	72,6	44,0		0
d2-2-6-91_BTM1	Evretou Res. Bottom 1		49,7	55,2	66,5	41	48,9	56,0		0
d2-2-6-91_BTM2	Evretou Res. Bottom 2		55,3	52,2	73,4	43,2	55,3	50,0		0
d2-2-6-91_DLP	Evretou Res. Deepest Lake Point	76,7	36,5	61,4	87,3	46,2	38,5	41,0		0
d3-5-1-65_BTM1	Xyliatos Res. Bottom 1					56,3	59,8	96,0		0
d3-5-1-65_BTM2	Xyliatos Res. Bottom 2					43,6	60	98,0		0
d3-5-1-65_DLP	Xyliatos Res. Deepest Lake Point					53,6	52,6	97,0		0
d3-7-3-83_BTM1	Akaki-Malounda Res. Bottom 1		56,4	44,9	48,4	56,8	75	53,0		0
d3-7-3-83_BTM2	Akaki-Malounda Res. Bottom 2		57,3	45,2	50,3	55,9	72,5	54,0		0
d3-7-3-83_DLP	Akaki-Malounda Res. Deepest Lake Point		62,6	61,3	49,2	59,5	75,5	56,0		0
d6-1-2-05_BTM1	Tamassos Res. Bottom 1		58,2	48,4	67,4	42,8	63,8	45,0		0
d6-1-2-05_BTM2	Tamassos Res. Bottom 2		45,4	47,9	63,7	41,2	56,2	45,0		0
d6-1-2-05_DLP	Tamassos Res. Deepest Lake Point		64,8	45,4	59,8	42,9	49,9	58,0		0
d7-1-2-70_BTM1	Achna Res. Bottom 1		37,7	44,2	69,5	40,7	42,4	65,0		0
d7-1-2-70_BTM2	Achna Res. Bottom 2		37,3	43,4	66,5	43,6	50	64,0		0
d7-1-2-70_DLP	Achna Res. Deepest Lake Point	45,8		45	69,8	41,9	48,6	67,0		0
d8-4-1-61_BTM1	New Lympia Res. Bottom 1		53,5	40,9	84,4	51,7				0
d8-4-1-61_BTM2	New Lympia Res. Bottom 2		60	54,4	129	79,7				0
d8-4-1-61_DLP	New Lympia Res. Deepest Lake Part	101	49,4	41,7	123	74,6	87,4	65,0		0
d8-7-2-05_BTM1	Lefkara Res. Bottom 1		67,9	67,6	71,9	60	53,3	82,0		0
d8-7-2-05_BTM2	Lefkara Res. Bottom 2			68,8	65	50,2	62,2	85,0		0
d8-7-2-05_DLP	Lefkara Res. Deepest Lake Point	86,4	71,1	62,5	66,1	58,7	68,1	92,0		0
d8-7-4-05_BTM1	Dipotamos Res. Bottom 1		34,2	46,1	45,7	41,4	53,6	65,0		0
d8-7-4-05_BTM2	Dipotamos Res. Bottom 2		33	51,4	41,5	43,3	60,7	66,0		0
d8-7-4-05_DLP	Dipotamos Res. Deepest Lake Point	59,5	54,7	52,9	43,3	41,7	50,4	59,0		0
d8-9-5-60_BTM1	Kalavasos Res. Bottom 1		55,7	62	56	56,4	63,2	76,0		0
d8-9-5-60_BTM2	Kalavasos Res. Bottom 2		55,9	57,3	54,6	48,2	54,5	80,0		0
d8-9-5-60_DLP	Kalavasos Res. Deepest Lake Point	69,3	49,9	59,4	51,6	50,2	76,8	72,7		0
d9-2-5-20_BTM1	Germasogeia Res. Bottom 1		37,5	51,8	40,2	38,9	52	67,0		0
d9-2-5-20_BTM2	Germasogeia Res. Bottom 2		51,5	48,5	37			67,0		0
d9-2-5-20_DLP	Germasogeia Res. Deepest Lake Point	59,8	46,6	52,9	33	45,3	57,3	66,0		0
d9-4-3-95_BTM1	Polemidia Res. Bottom 1		32,8	25,3	23,6	26,6		43,0		0
d9-4-3-95_BTM2	Polemidia Res. Bottom 2		25,2	24,5	33,5	27,1		44,0		0
d9-4-3-95_DLP	Polemidia Res. Deepest Lake Point	37,7	27,4	26,6	20	23,3		44,0		0
d9-6-9-10_BTM1	Kouris Res. Bottom 1		30,9	36,9	38,5	27,3		41,0		0
d9-6-9-10_BTM2	Kouris Res. Bottom 2		41,4	37,4	31,2	25		42,0		0
d9-6-9-10_DLP	Kouris Res. Deepest Lake	34,5	37,9	39	35,2	27		43,0		0

Table 6-10 Results of the Mann-Kendhall test (95%) in individual sediment monitoring stations - Manganese

	Manganese in sediment	2014	2015	2016	2017	2018	2019		Mann-Kendall Test
d1-2-4-61_BTM1	Arminou Res. Bottom 1	711	739	808	805	850	796		0
d1-2-4-61_BTM2	Arminou Res. Bottom 2	615	673	815	650	592	598		0
d1-2-4-61_DLP	Arminou Res. Deepest Lake Point	791	793	841	967	940	855		0
d1-3-9-50_BTM1	Asprokremmos Res. Bottom 1	744	813	831	830		838		0
d1-3-9-50_BTM2	Asprokremmos Res. Bottom 2	668	740	796	796		749		0
d1-3-9-50_DLP	Asprokremmos Res. Deepest Lake Point		825	719	785		911		0
d1-4-3-95_BTM1	Kannaviou Res. Bottom 1			1200	1093	1277	1162		0
d1-4-3-95_BTM2	Kannaviou Res. Bottom 2			1079	1567	1379	949		0
d1-4-3-95_DLP	Kannaviou Res. Deepest Lake Point			1262	3561	2085			0
d1-6-2-63_BTM1	Mavrokolympos Res. Bottom 1			223	297	410	390		0
d1-6-2-63_BTM2	Mavrokolympos Res. Bottom 2			431	750	282	431		0
d1-6-2-63_DLP	Mavrokolympos Res. Deepest Lake Point			302	491	511	432		0
d2-2-6-91_BTM1	Evretou Res. Bottom 1	911	1095	1195	1124	907	1217		0
d2-2-6-91_BTM2	Evretou Res. Bottom 2	1087	1047	1133	1075	1065	1148		0
d2-2-6-91_DLP	Evretou Res. Deepest Lake Point	1019	1092	1075	1032	694	854		0
d3-5-1-65_BTM1	Xyliatos Res. Bottom 1				509	515	693		0
d3-5-1-65_BTM2	Xyliatos Res. Bottom 2				409	477	707		0
d3-5-1-65_DLP	Xyliatos Res. Deepest Lake Point				519	490	671		0
d3-7-3-83_BTM1	Akaki-Malounda Res. Bottom 1	868	1046	809	1056	1104	1264		0
d3-7-3-83_BTM2	Akaki-Malounda Res. Bottom 2	626	906	562	972	928	1204		0
d3-7-3-83_DLP	Akaki-Malounda Res. Deepest Lake Point	889	1097	722	1097	1044	1293		0
d6-1-2-05_BTM1	Tamassos Res. Bottom 1	845	857	828	830	884	874		0
d6-1-2-05_BTM2	Tamassos Res. Bottom 2	786	845	794	816	921	880		0
d6-1-2-05_DLP	Tamassos Res. Deepest Lake Point	827	679	736	816	774	990		0
d7-1-2-70_BTM1	Achna Res. Bottom 1	510	485	502	545	494	773		0
d7-1-2-70_BTM2	Achna Res. Bottom 2	498	478	463	575	504	758		0
d7-1-2-70_DLP	Achna Res. Deepest Lake Point		495	504	548	496	778		0
d8-4-1-61_BTM1	New Lympia Res. Bottom 1	689	1085	1073	1092				0
d8-4-1-61_BTM2	New Lympia Res. Bottom 2	944	1211	1083	1032				0
d8-4-1-61_DLP	New Lympia Res. Deepest Lake Part	938	1076	1020	1019	979	1055		0
d8-7-2-05_BTM1	Lefkara Res. Bottom 1	1245	1216	1384	1191	928	1116		0
d8-7-2-05_BTM2	Lefkara Res. Bottom 2		1062	1173	805	1042	1311		0
d8-7-2-05_DLP	Lefkara Res. Deepest Lake Point	1241	863	1067	1209	1078	1281		0
d8-7-4-05_BTM1	Dipotamos Res. Bottom 1	768	836	867	922	976	1799		1
d8-7-4-05_BTM2	Dipotamos Res. Bottom 2	747	800	766	812	898	1940		0
d8-7-4-05_DLP	Dipotamos Res. Deepest Lake Point	713	705	832	809	1027	1853		0
d8-9-5-60_BTM1	Kalavasos Res. Bottom 1	862	990	912	932	873	1691		0
d8-9-5-60_BTM2	Kalavasos Res. Bottom 2	938	897	900	936	543	1725		0
d8-9-5-60_DLP	Kalavasos Res. Deepest Lake Point	928	917	955	981	888	1999		0
d9-2-5-20_BTM1	Germasogeia Res. Bottom 1	772	729	553	664	713	1012		0
d9-2-5-20_BTM2	Germasogeia Res. Bottom 2	802	731	548			1024		0
d9-2-5-20_DLP	Germasogeia Res. Deepest Lake Point	870	765	430	925	894	1004		0
d9-4-3-95_BTM1	Polemidia Res. Bottom 1	450	371	323	465		1097		0
d9-4-3-95_BTM2	Polemidia Res. Bottom 2	326	369	444	468		1107		0
d9-4-3-95_DLP	Polemidia Res. Deepest Lake Point	390	373	293	427		1117		0
d9-6-9-10_BTM1	Kouris Res. Bottom 1	603	548	609	573		621		0
d9-6-9-10_BTM2	Kouris Res. Bottom 2	505	560	529	513		633		0
d9-6-9-10_DLP	Kouris Res. Deepest Lake	504	561	603	599		613		0

Table 6-11 Results of the Mann-Kendhall test (95%) in individual sediment monitoring stations - Nickel

	Nickel in sediment	2013	2014	2015	2016	2017	2018	2019		Mann-Kendall Test
d1-2-4-61_BTM1	Arminou Res. Bottom 1		65,7	121	170	107	86,3	126,0		0
d1-2-4-61_BTM2	Arminou Res. Bottom 2		64,7	149	120	57,9	66,4	109,0		0
d1-2-4-61_DLP	Arminou Res. Deepest Lake Point	51,5	60,7	146	206	137	125	131,0		0
d1-3-9-50_BTM1	Asprokremmos Res. Bottom 1		69,1	68,1	63,5	57,3		79,0		0
d1-3-9-50_BTM2	Asprokremmos Res. Bottom 2		67,8	68,2	64,3	57		80,0		0
d1-3-9-50_DLP	Asprokremmos Res. Deepest Lake Point	59,3		69,3	69,1	61,1		85,0		0
d1-4-3-95_BTM1	Kannaviou Res. Bottom 1				26,1	24	26,1	34,0		0
d1-4-3-95_BTM2	Kannaviou Res. Bottom 2				23,4	25	25,3	23,0		0
d1-4-3-95_DLP	Kannaviou Res. Deepest Lake Point				31,5	29	28,6			0
d1-6-2-63_BTM1	Mavrokolympos Res. Bottom 1				30	31,6	40,4	54,0		0
d1-6-2-63_BTM2	Mavrokolympos Res. Bottom 2				43,6	41,5	25,8	57,0		0
d1-6-2-63_DLP	Mavrokolympos Res. Deepest Lake Point				47,8	51,4	61,3	63,0		0
d2-2-6-91_BTM1	Evretou Res. Bottom 1		52,4	57,7	53,4	42,3	40,6	71,0		0
d2-2-6-91_BTM2	Evretou Res. Bottom 2		55,1	54	57,4	42,3	47	64,0		0
d2-2-6-91_DLP	Evretou Res. Deepest Lake Point	53,4	41,8	62	59,5	45,4	35,8	55,0		0
d3-5-1-65_BTM1	Xyliatos Res. Bottom 1					19,4	20,2	33,0		0
d3-5-1-65_BTM2	Xyliatos Res. Bottom 2					14,5	20,4	33,0		0
d3-5-1-65_DLP	Xyliatos Res. Deepest Lake Point					19,4	16,9	34,0		0
d3-7-3-83_BTM1	Akaki-Malounda Res. Bottom 1		23,5	17,9	24,5	26	24,9	33,0		0
d3-7-3-83_BTM2	Akaki-Malounda Res. Bottom 2		22,1	16	20,1	20,8	22,7	33,0		0
d3-7-3-83_DLP	Akaki-Malounda Res. Deepest Lake Point		27,5	24,9	25,3	23,2	24,1	35,0		0
d6-1-2-05_BTM1	Tamassos Res. Bottom 1		39,8	49,8	44,1	40,2	38,4	58,0		0
d6-1-2-05_BTM2	Tamassos Res. Bottom 2		21,9	42,4	38,1	36,6	35,5	47,0		0
d6-1-2-05_DLP	Tamassos Res. Deepest Lake Point		28,5	56,5	52,5	43,4	44	54,0		0
d7-1-2-70_BTM1	Achna Res. Bottom 1		66,5	70,5	72,9	62,7	56,7	97,0		0
d7-1-2-70_BTM2	Achna Res. Bottom 2		64	69,3	68,3	65,9	62,8	96,0		0
d7-1-2-70_DLP	Achna Res. Deepest Lake Point	54,9		72,3	73	62,6	61,9	98,0		0
d8-4-1-61_BTM1	New Lympia Res. Bottom 1		24,3	29	46,6	35				0
d8-4-1-61_BTM2	New Lympia Res. Bottom 2		27,4	23,8	33,3	26,1				0
d8-4-1-61_DLP	New Lympia Res. Deepest Lake Part	19,7	38	30	35,4	27,2	30,9	45,0		0
d8-7-2-05_BTM1	Lefkara Res. Bottom 1		62,1	71,7	67,6	52,5	57,3	69,0		0
d8-7-2-05_BTM2	Lefkara Res. Bottom 2			66,1	61,8	38,9	55	55,0		0
d8-7-2-05_DLP	Lefkara Res. Deepest Lake Point	57,4	52,9	61,1	63,9	50	58,7	57,0		0
d8-7-4-05_BTM1	Dipotamos Res. Bottom 1		65,8	59,7	48,6	43,9	46,8	74,0		0
d8-7-4-05_BTM2	Dipotamos Res. Bottom 2		58,3	65,5	53,3	47,1	51,7	77,0		0
d8-7-4-05_DLP	Dipotamos Res. Deepest Lake Point	42,7	51,9	57,4	51,3	46,6	45,2	68,0		0
d8-9-5-60_BTM1	Kalavasos Res. Bottom 1		244	255	276	268	123	251,0		0
d8-9-5-60_BTM2	Kalavasos Res. Bottom 2		258	225	219	186	62,5	228,0		0
d8-9-5-60_DLP	Kalavasos Res. Deepest Lake Point	214	176	310	257	201	106	196,0		0
d9-2-5-20_BTM1	Germasogeia Res. Bottom 1		85,4	170	188	110	135	121,0		0
d9-2-5-20_BTM2	Germasogeia Res. Bottom 2		174	180	167			116,0		0
d9-2-5-20_DLP	Germasogeia Res. Deepest Lake Point	120	150	134	150	121	126	117,0		0
d9-4-3-95_BTM1	Polemidia Res. Bottom 1		178	79,3	157	147		292,0		0
d9-4-3-95_BTM2	Polemidia Res. Bottom 2		61,4	71,3	171	152		306,0		0
d9-4-3-95_DLP	Polemidia Res. Deepest Lake Point	102	57,8	117	107	109		286,0		0
d9-6-9-10_BTM1	Kouris Res. Bottom 1		76	161	166	94,9		142,0		0
d9-6-9-10_BTM2	Kouris Res. Bottom 2		121	156	117	85,3		143,0		0
d9-6-9-10_DLP	Kouris Res. Deepest Lake	96,4	120	127	115	183		228,0		0

Table 6-12 Results of the Mann-Kendhall test (95%) in individual sediment monitoring stations - Zinc

	Zinc in sediment	2014	2015	2016	2017	2018	2019		Mann-Kendall Test
d1-2-4-61_BTM1	Arminou Res. Bottom 1	85,5	80,6	72,6	72,6	78	100,0		0
d1-2-4-61_BTM2	Arminou Res. Bottom 2	75,4	68,5	76,5	68,3	66,5	96,0		0
d1-2-4-61_DLP	Arminou Res. Deepest Lake Point	86,9	81,6	74,8	75	78	105,0		0
d1-3-9-50_BTM1	Asprokremmos Res. Bottom 1	187	124	127	115		90,0		0
d1-3-9-50_BTM2	Asprokremmos Res. Bottom 2	125	125	128	110		83,0		0
d1-3-9-50_DLP	Asprokremmos Res. Deepest Lake Point		140	128	119		91,0		0
d1-4-3-95_BTM1	Kannaviou Res. Bottom 1			110	91,7	114	84,0		0
d1-4-3-95_BTM2	Kannaviou Res. Bottom 2			89,3	100	106	58,0		0
d1-4-3-95_DLP	Kannaviou Res. Deepest Lake Point			116	110	115			0
d1-6-2-63_BTM1	Mavrokolympos Res. Bottom 1			48,2	53,1	56,7	58,0		0
d1-6-2-63_BTM2	Mavrokolympos Res. Bottom 2			73,6	66,9	42,4	60,0		0
d1-6-2-63_DLP	Mavrokolympos Res. Deepest Lake Point			71,3	72,8	77,7	60,0		0
d2-2-6-91_BTM1	Evretou Res. Bottom 1	82,4	74,2	70,8	66,4	68,9	77,0		0
d2-2-6-91_BTM2	Evretou Res. Bottom 2	96,6	76,6	75,7	71,8	77,1	71,0		0
d2-2-6-91_DLP	Evretou Res. Deepest Lake Point	59,4	78,3	81,7	72,9	58	57,0		0
d3-5-1-65_BTM1	Xyliatos Res. Bottom 1				52,7	47,2	64,0		0
d3-5-1-65_BTM2	Xyliatos Res. Bottom 2				32	49,4	69,0		0
d3-5-1-65_DLP	Xyliatos Res. Deepest Lake Point				46,9	52,6	67,0		0
d3-7-3-83_BTM1	Akaki-Malounda Res. Bottom 1	102	125	121	97,2	122	109,0		0
d3-7-3-83_BTM2	Akaki-Malounda Res. Bottom 2	81,8	107	63,8	107	112	110,0		0
d3-7-3-83_DLP	Akaki-Malounda Res. Deepest Lake Point	111	149	122	123	140	108,0		0
d6-1-2-05_BTM1	Tamassos Res. Bottom 1	498	345	277	284	361	275,0		0
d6-1-2-05_BTM2	Tamassos Res. Bottom 2	334	303	225	190	263	245,0		0
d6-1-2-05_DLP	Tamassos Res. Deepest Lake Point	347	269	193	266	229	231,0		0
d7-1-2-70_BTM1	Achna Res. Bottom 1	61	57,4	63,4	55,1	49,3	75,0		0
d7-1-2-70_BTM2	Achna Res. Bottom 2	57,8	56,9	59,2	58,5	57,3	75,0		0
d7-1-2-70_DLP	Achna Res. Deepest Lake Point		58,2	63,6	55,3	56	77,0		0
d8-4-1-61_BTM1	New Lympia Res. Bottom 1	320	433	325	411				0
d8-4-1-61_BTM2	New Lympia Res. Bottom 2	908	1198	636	676				0
d8-4-1-61_DLP	New Lympia Res. Deepest Lake Part	464	586	570	712	475	559,0		0
d8-7-2-05_BTM1	Lefkara Res. Bottom 1	121	137	161	122	86,3	109,0		0
d8-7-2-05_BTM2	Lefkara Res. Bottom 2		130	146	62,8	117	119,0		0
d8-7-2-05_DLP	Lefkara Res. Deepest Lake Point	125	113	142	115	105	130,0		0
d8-7-4-05_BTM1	Dipotamos Res. Bottom 1	52,3	72,1	77,3	68,2	75,3	95,0		0
d8-7-4-05_BTM2	Dipotamos Res. Bottom 2	50,9	82,2	70,7	70,7	81,9	96,0		0
d8-7-4-05_DLP	Dipotamos Res. Deepest Lake Point	64,3	73,1	72,8	66,3	72	89,0		0
d8-9-5-60_BTM1	Kalavasos Res. Bottom 1	79,5	79,6	86	75,5	84,1	106,0		0
d8-9-5-60_BTM2	Kalavasos Res. Bottom 2	81,4	75	106	70,5	51,7	118,0		0
d8-9-5-60_DLP	Kalavasos Res. Deepest Lake Point	100	72,1	82	72,9	85,6	113,7		0
d9-2-5-20_BTM1	Germasogeia Res. Bottom 1	49,5	75	63	48,4	52,4	63,0		0
d9-2-5-20_BTM2	Germasogeia Res. Bottom 2	64,6	85,8	55,3			63,0		0
d9-2-5-20_DLP	Germasogeia Res. Deepest Lake Point	62	75,6	64,2	61,5	65,1	62,0		0
d9-4-3-95_BTM1	Polemidia Res. Bottom 1	64,9	76,5	65,2	64,1		92,0		0
d9-4-3-95_BTM2	Polemidia Res. Bottom 2	46,8	77,2	61,5	64,8		95,0		0
d9-4-3-95_DLP	Polemidia Res. Deepest Lake Point	59,2	80,1	56,4	58,2		94,0		0
d9-6-9-10_BTM1	Kouris Res. Bottom 1	41,8	56	63,1	50		45,0		0
d9-6-9-10_BTM2	Kouris Res. Bottom 2	50,3	73,7	50	43,8		47,0		0
d9-6-9-10_DLP	Kouris Res. Deepest Lake	47,7	59,9	62,1	49,1		46,0		0

6.4 Conclusions on sediment monitoring

It seems that, when the location averages are used (of all stations of each WB) no conclusion is drawn for a significant trend. However, when results of each individual station are used, a significant trend is detected at few stations. This shows the inhomogeneity of the sediment and that more points per reservoir are required as well as a longer time series to draw conclusions.

It is recommended to study the increase of river sediment monitoring points, especially in places where pressures exist, but with no significant water flow throughout the year.

It is recommended to introduce other substances in the monitoring as well, especially those that tend to accumulate in sediments.

7 Sub-activity 8.3. WB Classification – Confidence levels

7.1 Methodology of the ecological status classification

The classification of the **ecological status** of **WBs** was based primarily on the data of the monitoring network. Thus, the river WBS that had 1 monitoring station were classified based on the station status. For the cases of WBs with more than one monitoring stations, the averages of all primary data of the relevant stations were calculated (see also section 4.1).

The status classification of natural lakes is presented in detail in section 4.3. It is pointed out that each natural lake WB has at least one suitable station for the monitoring of the individual parameters that compose the ecological status.

The classification of the **ecological status of river WBs with no monitoring data** was based on pressure indicators described in the deliverable of Activity 7 (Table 3-1). The types of pressures and status to which they corresponded are summarized as follows:

- For the P type there are two groups of pressures: P-minor corresponding to a good status and P-important corresponding to a moderate status.
- For the I type, there are three pressure groups: I-negligible corresponding to a high status, I-minor corresponding to a good status and I-Important, corresponding to a moderate status.
- For the Ih type there are three pressure groups: Ih-negligible corresponding to a good status, Ih-minor corresponding to a good status and Ih-Important corresponding to a moderate status.
- For the E type there are three pressure groups: Ih-negligible corresponding to a good status, E-minor corresponding to a good status and E-Important corresponding to a moderate status.

Table 7-3 presents the ecological status of rivers WBs and the confidence in the declared status.

The criteria used for the confidence assessment are: Low = no monitoring data, Moderate = data for supplementary Quality Elements and/or limited data for a single Biological Quality Element, High = satisfactory data for at least one Biological Quality Element and the most relevant supplementary Quality Element.

7.2 Methodology for the classification of the HMWB & AWB ecological potential

The methodology for classifying the ecological potential of reservoirs and of lake HMWBs & AWBs is described in paragraphs 4.2 and 4.3.

With regards to river HMWBs, the classification of the potential was based on the methodology developed in the 2nd RBMP, taking into account the results of the monitoring network and the progress of the implementation of the measures proposed in the 2nd RBMP.

Table 7-1 River HMWBs of the 3rd Management Cycle

No	HMWB Code	HMWB Name	% implementation of measures for the achievement of the GEP from the 2nd RBMP
1	CY1-1-D	Khapotami	0
2	CY1-2-D1	Dhiarizos	0
3	CY1-2-D2	Dhiarizos	0
4	CY1-4-DE	Ezousa	0
5	CY1-4-F	Ezousa	0
6	CY1-4-G	Ezousa	0
7	CY1-4-H	Ezousa	0
8	CY1-6-C	Mavrokolymbos	No specific measures have been proposed
9	CY2-2-F	Stavros tis Psokas	No specific measures have been proposed
10	CY2-2-G	Khrysokhou	0
11	CY2-2-H	Khrysokhou	0
12	CY2-3-D	Magounda	0
13	CY2-4-B	Xeros	No specific measures have been proposed
14	CY2-4-E	Livadhi	75
15	CY3-5-C	Lagoudhera	0
16	CY3-5-D	Elia	No specific measures have been proposed
17	CY3-7-J	Akaki	No specific measures have been proposed
18	CY6-1-C	Pediaios	70
19	CY8-7-C	Syrkatis	47
20	CY8-7-FG	Pendaskhinos	No specific measures have been proposed
21	CY8-8-C	Ayiou Mina	No specific measures have been proposed
22	CY8-9-EF	Vasilikos	0
23	CY9-2-H	Yermasogeia	74
24	CY9-4-E	Garyllis	No specific measures have been proposed
25	CY9-6-T	Kouris	0
26	CY2-3-F2	Yialia	New HMWBs. The implementation of the measures proposed in this RBMP will be taken into account during the the Ecological Potential assessment in the future.
27	CY2-3-G	Yialia	
28	CY8-4-C	Treminthos	
29	CY8-9-ABC1	Vasilikos	
30	CY9-4-F	Garyllis	
31	CY9-6-BCD	Ambelikos-Agros	

It is highlighted that the original methodology provided that the classification of good ecological potential in the categories of Good, Moderate, Poor and Bad will be based on the effort made to complete all the proposed measures as follows (Prague approach):

- Each measure, depending on its importance and effectiveness, is rated with 1 when it is low, 2 when it is moderate and 3 when it is high. The rating is made by evaluating for each measure its effectiveness, its priority and its need/importance (expert judgment).
- The above rating is added together and the total rating that results is the measure that corresponds to the expected values of the BQEs during the classification of values with regards to the Good Ecological Potential for the WB. The classification of the water body's ecological potential is based on the percentage of implementation of the required measures as shown in the table below:

Table 7-2 Classification of the Ecological Potential of river HMWBs

Potential	Implementation percentage of the required defined measures
GOOD	>70%
MODERATE	50% - 70%
POOR	25%- <50%
BAD	<25%

Priority was given to the Monitoring Program data and the lack of an appropriate indicator for the evaluation of the condition of fish fauna. Thus, the HMWBs with a station in a moderate status and without special measures for the Ecological Potential were considered to have a Moderate Ecological Potential. In HMWBs with a station in a good status, the historical presence of the fish fauna was taken into account (Moderate Ecological Potential if there was eel presence in the past, Ecological Potential if there were no historical eels).

Priority was then given to the classification of the ecological potential of the WBs with no monitoring stations, but with measures determined by the 2nd RBMP. The implementation rate of the measures was taken into account only in cases where it was greater than 0% and only for HMWBs that did not have any monitoring data.

In cases of HMWBs with no monitoring stations, with no implemented measures and with a moderate status resulting from the grouping of natural WBs, the Ecological Potential was considered moderate and was not furtherly degraded to poor (Such cases are the CY1-4-DE, CY1-4-F, CY1-4 -G and CY2-3-D).

In cases of HMWBs with no monitoring stations, with no implemented measures and good status resulting from the grouping of natural WBs, the Ecological Potential was considered **moderate**.

In cases of HMWBs with no monitoring stations, with no initially proposed measures and good status resulting from the grouping of natural WBs, the Ecological Potential was considered **good**. However, in the case of HMWB CY1-6-C, although no measures have been proposed, there are eels in the WB, an investigation of the ecological flow is required and therefore the Ecological Potential was considered moderate.

7.3 Ecological status – potential results of river water bodies

The following tables summarize the results of the classification of the ecological status/potential of river WBs, along with the confidence classification in the declared ecological status/potential.

In the present study, which concerns the 3rd Management Cycle, 170 river WBs were identified. From those:

- 31 are related to Heavily Modified Water Bodies, of which 6 are new HMWBs, (see Activity 9) and
- 139 are related to natural Water Bodies.

The potential of the 31 HMWBs was evaluated based on the existing monitoring data, the implementation of the measures provided by the 2nd RBMP, the grouping by pressures, as well as the expert judgment. Based on this assessment:

- 5 HMWBs are in a good and above potential and
- 26 HMWBs are in a moderate potential.

From the 139 natural WBs,

- 9 of them are in a high status
- 82 of them are in a good status
- 42 of them are in a moderate status, and
- 6 are in a poor status.

In addition to the above WBs, 57 ephemeral rivers were identified (14 of which in previous RBMPs were characterized as HMWBs) which were classified in terms of their status and potential as follows:

- 3 of them were not classified in relation to their potential due to lack of data
- 2 of them were classified as good and above potential
- 9 of them were classified as moderate potential
- 17 of them were in a good status
- 26 of them were in a moderate status

Table 7-3 Classification of the ecological status of river WBs and levels of confidence

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Status from grouping	Ecological Potential 2019	Confidence in the declared ecological situation
River WBs of the 3rd Management Cycle								
CY1-1-AB	Khapotami	I	I	I-minor	Good	-	Good	High
CY1-1-C	Khapotami	IH	IH	IH-minor	Poor	-	Poor	High
CY1-1-E	Malleta	E	E	E_important		Moderate	Moderate	Low
CY1-2-A	Dhiarizos	P	P	P-minor	Good	-	Good	High
CY1-2-B	Dhiarizos	P	P	P-minor	High	-	High	High
CY1-2-E	Tholos	IH	IH	IH-minor	Good	-	Good	High
CY1-2-F1	Yerovasinos	I	I	I-minor		Good	Good	Low
CY1-2-F2	Yerovasinos	P	P	P-minor	Good	-	Good	High
CY1-3-A1	Roudhias	P	P	P-minor	High	-	High	High
CY1-3-A2	Stenous	IH	IH	IH-negligible		Good	Good	Low
CY1-3-A3	Roudhias	P	P	P-minor	Good	-	Good	High
CY1-3-B	Xeros Potamos	I	**IH**	IH_important	Good	-	Good	High
CY1-3-C	Xeros Potamos	IH	IH	IH_important	Moderate	-	Moderate	High
CY1-3-E	Xeros Potamos	E	E	E-minor		Good	Good	Low
CY1-3-F	Lazaridhaes	I	I	I-negligible		High	High	Low
CY1-3-G	Lefkarkon	I	I	I-minor		Good	Good	Low
CY1-4-A	Ayia & Klimadhiou	P	P	P-minor	Good	-	Good	High
CY1-4-B	Ayia	I	I	I-negligible	Good	-	Good	High
CY1-4-I	Paleomylou	IH	IH	IH-minor		Good	Good	Low
CY1-4-J	Ayios Nepios	E	E	E_important		Moderate	Moderate	Low
CY1-4-K	Varkas	E	E	E-minor	Good	-	Good	Moderate
CY1-4-L1	Milarkou	E	E	E-minor		Good	Good	Low
CY1-4-L2	Rinou & Kyparishon	P	P	P-minor		Good	Good	Low
CY1-4-L3	Mylari	E	E	E-negligible		Good	Good	Low
CY1-4-M	Kochatis	E	E	E_important	Good	-	Good	Moderate
CY1-5-D1	Kochinas	I	I	I-Important	Poor	-	Poor	High
CY1-5-D2	Kochinas	P	P	P-minor		Good	Good	Low
CY1-5-E1	Agriokalami	IH	IH	IH-minor		Good	Good	Low
CY1-5-E2	Agriokalami & Taisi	P	P	P-important		Moderate	Moderate	Low
CY1-6-A1	Mavrokolymbos	IH	IH	IH-minor		Good	Good	Low

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Status from grouping	Ecological Potential 2019	Confidence in the declared ecological situation
CY1-6-A2	Mavrokolymbos	P	P	P-important	Moderate	-	Moderate	High
CY1-6-D	Xeros	E	E	E-minor		Good	Good	Low
CY1-8-A1	Kalamoulli (Avgas)	IH	IH	IH-minor	Good	-	Good	Moderate
CY1-8-A2	Avgas	P	P	P-minor		Good	Good	Low
CY1-8-A3	Khardjotis	E	E	E-minor		Good	Good	Low
CY1-8-B	Pevkos	E	E	E-minor	Good	-	Good	Moderate
CY2-1-A	Ayiou Ioanni	E	E	E_important	Good	-	Good	Moderate
CY2-1-B	Argaki tou Pyrgou (Loutra Aphroditis)	IH	IH	IH-negligible		Good	Good	Low
CY2-1-C	Argaki tou Pyrgou (Loutra Aphroditis)	P	P	P-minor	Poor	-	Poor	Moderate
CY2-2-A	Neraidhes & Ammadhkiou	IH	IH	IH_important		Moderate	Moderate	Low
CY2-2-B	Garyllis	I	I	I-Important	Moderate	-	Moderate	High
CY2-2-C	Stavros tis Psokas	I	I	I-negligible		High	High	Low
CY2-2-D	Stavros tis Psokas	I	I	I-Important	Good	-	Good	High
CY2-2-I	Klavaris	IH	IH	IH_important		Moderate	Moderate	Low
CY2-2-J	Klavaris	P	P	P-important	Moderate	-	Moderate	High
CY2-2-K	Kryos (Kritou Terra)	IH	IH	IH_important		Moderate	Moderate	Low
CY2-2-L	Kryos (Kritou Terra)	P	P	P-important	Moderate	-	Moderate	High
CY2-3-A	Mirmikoph	E	E	E_important	Moderate	-	Moderate	Moderate
CY2-3-B	Argaki tis Limnis	E	E	E_important	Moderate	-	Moderate	Moderate
CY2-3-C1	Ayios Merkourios	I	I	I-negligible		High	High	Low
CY2-3-C2	Magounda	I	I	I-minor	Good	-	Good	High
CY2-3-E	Xeropotamos	E	E	E-negligible	Good	-	Good	Moderate
CY2-3-F1	Yialia	P	P	P-minor	Good	-	Good	High
CY2-4-A	Xeros	IH	IH	IH-negligible		Good	Good	Low
CY2-4-C	Maroti & Diali	I	I	I-negligible		High	High	Low
CY2-4-D	Livadhi	IH	IH	IH-minor	Good	-	Good	High
CY2-5-A	Ayios Theodoros	IH	IH	IH-minor		Good	Good	Low
CY2-6-A	Katouris	E	E	E-negligible	High	-	High	Moderate
CY2-6-B	Katouris	E	E	E-minor		Good	Good	Low

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Status from grouping	Ecological Potential 2019	Confidence in the declared ecological situation
CY2-7-A	Pyrgos	I	I	I-negligible	High	-	High	High
CY2-8-A	Limnitis	P	P	P-minor	Good	-	Good	High
CY2-9-A	Kambos	I	I	I-Important		Moderate	**Moderate**	Low
CY2-9-B	Kambos	P	**I**	I-minor	Good	-	Good	High
CY2-9-C	Kambos	I	I	I-negligible		High	Good	Low
CY2-9-D	Kambos	IH	IH	IH-negligible		Good	Good	Low
CY3-1-A	Xeros	P	P	P-minor	Good	-	Good	Moderate
CY3-1-BC	Xeros	I	I	I-negligible	High	-	High	High
CY3-2-A	Marathasa	P	P	P-minor	Good	-	Good	High
CY3-2-B	Marathasa	P	P	P-minor	Good	-	Good	High
CY3-2-D	Rkondas	IH	IH	IH_important		Moderate	Moderate	Low
CY3-3-A	Ayios Nikolaos	P	P	P-minor	Good	-	Good	High
CY3-3-B	Karyiotis	P	P	P-minor	Moderate	-	**Moderate**	High
CY3-3-C	Karyiotis	I	I	I-Important		Moderate	Moderate	Low
CY3-3-D	Argaki tou Karvouna	P	P	P-minor	Good	-	Good	High
CY3-3-E	Alykhnos	I	I	I-minor		Good	Good	Low
CY3-4-AB	Atsas	IH	IH	IH_important	Moderate	-	Moderate	High
CY3-4-C	Atsas	IH	IH	IH_important		Moderate	Moderate	Low
CY3-5-A	Lagoudhera	I	I	I-minor	Good	-	Good	High
CY3-5-E	Kannavia	IH	IH	IH_important		Moderate	Moderate	Low
CY3-7-A	Peristerona	I	I	I-minor		Good	Good	Low
CY3-7-B	Peristerona	IH	IH	IH_important	Good	-	Good	High
CY3-7-C	Peristerona	E	E	E_important	Good	-	Good	Moderate
CY3-7-DEF	Maroullenas	I	I	I-minor	Good	-	Good	High
CY3-7-GH	Pharmakas	IH	IH	IH_important		Moderate	Moderate	Low
CY3-7-K	Akakiou	E	E	E_important		Moderate	Moderate	Low
CY3-7-M	Likythia	E	E	E-minor		Good	Good	Low
CY6-1-A	Pedhieos & Ayios Onouphrios	IH	IH	IH-minor	Good	-	Good	High
CY6-1-D	Pediaios	E	E	E_important	Good	-	Good	Moderate
CY6-1-E	Pediaios	E	E	E_important	Good	-	Good	Moderate
CY6-5-A	Yialias	IH	IH	IH-negligible	Good	-	Good	High

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Status from grouping	Ecological Potential 2019	Confidence in the declared ecological situation
CY6-5-B	Yialias	IH	IH	IH_important	Moderate	-	Moderate	High
CY6-5-C	Yialias	E	E	E_important	Good	-	Good	Moderate
CY6-5-E	Koutsos	IH	IH	IH-minor		Good	Good	Low
CY6-5-F	Koutsos	IH	IH	IH-negligible		Good	Good	Low
CY6-5-G	Villourkon	E	E	E-minor		Good	Good	Low
CY6-5-H	Alykos	E	E	E-minor	Poor	-	Poor	Moderate
CY6-5-I	Almyros	E	E	E-minor		Good	Good	Low
CY7-2-A	Vathys	IH	IH	IH-minor		Good	Good	Low
CY8-3-A	Kalo Chorio	E	E	E_important	Moderate	-	**Moderate**	Moderate
CY8-3-B	NoName	E	E	E_important		Moderate	Moderate	Low
CY8-4-D	Treminthos	E	E	E_important		Moderate	Moderate	Low
CY8-5-AB	Pouzis	E	E	E_important	Good	-	Good	Moderate
CY8-7-A	Syrkatis	IH	IH	IH-minor	Good	-	Good	High
CY8-7-D	Argaki tou Mylou	IH	IH	IH-minor	Moderate	-	Moderate	High
CY8-8-AB	Ayiou Mina	IH	**E**	E-minor		Good	Good	Low
CY8-8-D	Ayiou Mina	E	E	E_important		Moderate	Moderate	Low
CY8-9-C2G	Vasilikos	I	I	I-Important	Moderate	-	Moderate	High
CY9-2-A	Karydhaki	I	I	I-minor		Good	Good	Low
CY9-2-BC	Yermasogeia	I	I	I-Important	Good	-	Good	High
CY9-2-D	Yermasogeia	I	I	I-minor		Good	Good	Low
CY9-2-E	Yermasogeia	I	I	I-Important	Moderate	-	**Moderate**	High
CY9-2-F	Yermasogeia	I	I	I-minor	Good	-	Good	High
CY9-2-I	Pissokamina	E	E	E_important		Moderate	Moderate	Low
CY9-2-J	Yialiadhes	E	E	E-negligible	Good	-	Good	Moderate
CY9-2-KL	Yialiadhes	IH	IH	IH_important	Moderate	-	Moderate	High
CY9-4-B	Garyllis	E	E	E_important	Good	-	Good	Moderate
CY9-4-C	Garyllis	IH	IH	IH_important	Poor	-	Poor	High
CY9-4-G	Phasoula	E	E	E_important	Moderate	-	Moderate	Moderate
CY9-6-A	Ayios Ioannis	P	P	P-important	Poor	-	Poor	High
CY9-6-E	Ambelikos-Xylourikos	P	P	P-important	Moderate	-	Moderate	High
CY9-6-F	Limnatis	I	I	I-minor	Good	-	Good	High
CY9-6-G	Pelendri	I	I	I-Important		Moderate	Moderate	Low

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Status from grouping	Ecological Potential 2019	Confidence in the declared ecological situation
CY9-6-H	Ayios Mamas	IH	IH	IH_important		Moderate	Moderate	Low
CY9-6-I	Loumata	P	P	P-minor	Good	-	Good	High
CY9-6-KL	Kouris	P	P	P-important	Moderate	-	**Moderate**	High
CY9-6-M	Kouris	P	P	P-important	Moderate	-	**Moderate**	High
CY9-6-N	Mesapotamos	P	P	P-minor	Good	-	Good	High
CY9-6-O	Moniatis	P	P	P-minor	Good	-	Good	High
CY9-6-P	Kryos	P	P	P-minor	Good	-	Good	High
CY9-6-Q	Kryos	P	P	P-important	Good	-	**Good**	High
CY9-6-R	Kryos	I	**IH**	IH_important	Good	-	Good	High
CY9-7-B	Symvoulas	IH	IH	IH-minor		Good	Good	Low
CY9-7-C	Symvoulas	E	E	E_important		Moderate	Moderate	Low
CY9-8-A1	Perthikias	E	E	E-minor		Good	Good	Low
CY9-8-A2	Siapani	I	I	I-Important		Moderate	Moderate	Low
CY9-8-B1	Vromonero	I	I	I-Important		Moderate	Moderate	Low
CY9-8-B2	Pefkeri (Mandalas)	P	P	P-important		Moderate	Moderate	Low
CY9-8-B3	Evdhimou (Mandalas)	I	I	I-Important	Good	-	Good	Moderate
CY9-8-C	Evdhimou	IH	IH	IH-minor	Good	-	Good	Moderate
Ephemeral rivers of the 3rd Management Cycle								
CY1-5-A	Limnarka	E	E	E_important		Moderate	Moderate	Low
CY1-5-C	Kochinas	E	E	E_important		Moderate	Moderate	Low
CY3-2-E	Vrountokremni Argakin	E	E	E-negligible	Good	-	Good	Moderate
CY3-5-F	Asinou	E	E	E-minor		Good	Good	Low
CY3-5-G	Galouropniktis Potamos	E	E	E-minor		Good	Good	Low
CY3-6-A	Xeropotamos	E	E	E-minor		Good	Good	Low
CY3-6-B	Potami	E	E	E_important		Moderate	Moderate	Low
CY3-6-C	Komitis	E	E	E_important		Moderate	Moderate	Low
CY3-7-L	Korivas	E	E	E_important		Moderate	Moderate	Low
CY3-7-N	Koutis & Aloupos	E	E	E-minor	Good	-	Good	Moderate
CY3-7-O	Merika	E	E	E_important	Good	-	Good	Moderate
CY3-7-P	Kokkinitrimithia	E	E	E_important		Moderate	Moderate	Low
CY3-7-R	Ovgos	E	E	E-minor		Good	Good	Low
CY6-1-G	Kouphos	E	E	E-minor		Good	Good	Low

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Status from grouping	Ecological Potential 2019	Confidence in the declared ecological situation
CY6-1-H	Argaki	E	E	E_important		Moderate	Moderate	Low
CY6-1-I	Klemos	E	E	E_important		Moderate	Moderate	Low
CY6-1-L	Kaloyeros	E	E	E_important	Moderate	-	Moderate	Moderate
CY6-1-O	Vyzakotos	E	E	E_important		Moderate	Moderate	Low
CY6-1-P	Almyros	E	E	E_important		Moderate	Moderate	Low
CY7-2-B	Liopetri	E	E	E_important		Moderate	Moderate	Low
CY8-1-A	Avdellero	E	E	E_important		Moderate	Moderate	Low
CY8-2-A	Aradippou	E	E	E-minor		Good	Good	Low
CY8-4-A	Ammos & Kalamoulia	E	E	E_important	Good	-	Good	Moderate
CY8-4-B	Xylias	E	E	E_important	Moderate	-	Moderate	Moderate
CY8-4-E	Ayia Marina	E	E	E_important		Moderate	Moderate	Low
CY8-4-F	Mosfiloti	E	E	E_important		Moderate	Moderate	Low
CY8-4-G	Ayios Ioannis	E	E	E-minor	Good	-	Good	Moderate
CY8-5-C	Xeropouzos	E	E	E_important		Moderate	Moderate	Low
CY8-6-A	Xeropotamos	E	E	E-minor	Good	-	Good	Moderate
CY8-7-H		E	E	E-minor		Good	Good	Low
CY8-9-H	Asinou	E	E	E-minor	Good	-	Good	Moderate
CY9-1-A	Pendakomo	E	E	E_important		Moderate	Moderate	Low
CY9-1-BC	Argaki tou Pyrgou	E	E	E_important	Moderate	-	Moderate	Moderate
CY9-1-D	Argaki tou Pyrgou	E	E	E_important		Moderate	Moderate	Low
CY9-1-E	Argaki tis Monis	E	E	E_important	Moderate	-	Moderate	Moderate
CY9-3-A	Vathias (Ag. Athanasios)	E	E	E_important		Moderate	Moderate	Low
CY9-5-A	Ypsonas	E	E	E_important	Good	-	Good	Moderate
CY9-6-U	Batsounis	E	E	E_important		Moderate	Moderate	Low
CY9-6-V	Tapakhna	E	E	E_important		Moderate	Moderate	Low
CY9-7-A	Krommya	E	E	E_important		Moderate	Moderate	Low
CY9-8-D	Pantijo	E	E	E_important		Moderate	Moderate	Low
CY9-8-E	Argaki Paleomylos	E	E	E-minor		Good	Good	Low
CY9-9-A	Villourka	E	E	E-minor		Good	Good	Low

Confidence in the declared ecological status: Low = no monitoring data, Moderate= supplementary QE data and/or limited data for a single BQE, High = satisfactory data for at least one BQE and the most relevant supplementary QE

Table 7-4 Classification of the ecological potential of river WBs and levels of confidence

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Ecological Status - Grouping	Ecological Potential from measures	Ecolgical Potential from Expert Judgement	Ecological Potential 2019	Confidence
River WBs of the 3rd Management Cycle										
CY1-1-D	Khapotami	IH	E	E-negligible		Good	(0% percentage of measure implementation)	Moderate. No measures were taken	Moderate	Low
CY1-2-D1	Dhiarizos	I	Ih	IH_important	Good	-	(0% percentage of measure implementation)	Moderate. although monitoring shows a good status. No measures were applied. WB with eels	Moderate	Moderate
CY1-2-D2	Dhiarizos	P	P	P-minor	Good	-	(0% percentage of measure implementation)	Moderate. although monitoring shows a good status. No measures were applied. WB with eels	Moderate	Moderate
CY1-4-DE	Ezousa	I	IH	IH_important		Moderate	(0% percentage of measure implementation)	-	Moderate	Low
CY1-4-F	Ezousa	P	P	P-minor	Moderate	-	(0% percentage of measure implementation)	-	Moderate	Moderate
CY1-4-G	Ezousa	I	I	I-Important		Moderate	(0% percentage of measure implementation)	-	Moderate	Low
CY1-4-H	Ezousa	IH	E	E_important	Moderate	-	(0% percentage of measure implementation)	-	Moderate	Moderate
CY1-6-C	Mavrokolymbos	IH	E	E-minor		Good	(No specific measures were proposed for the GEP)	Moderate.Although no measures were proposed, eels exist within the WB and an ecological flow investigation is required	Moderate	Low
CY2-2-F	Stavros tis Psokas	I	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Ecological Status - Grouping	Ecological Potential from measures	Ecolgical Potential from Expert Judgement	Ecological Potential 2019	Confidence
CY2-2-G	Khrysokhou	I	I	I-Important		Moderate	(0% percentage of measure implementation)	-	Moderate	Low
CY2-2-H	Khrysokhou	IH	IH	IH_important		Moderate	(0% percentage of measure implementation)	-	Moderate	Low
CY2-3-D	Magounda	IH	E	E_important		Moderate	(0% percentage of measure implementation)	-	Moderate	Low
CY2-3-F2	Yialia	P	I	I-Important		Moderate	(New HMWB)	-	Moderate	Low
CY2-3-G	Yialia	IH	IH	IH_important		Moderate	(New HMWB)	-	Moderate	Low
CY2-4-B	Xeros	IH	E	E-minor		Good	(No specific measures were proposed for the GEP)	-	Good and above	Low
CY2-4-E	Livadhi	IH	IH	IH_important		Moderate	Good (75%)	-	Good and above	Low
CY3-5-C	Lagoudhera	I	IH	IH_important		Moderate	(0% percentage of measure implementation)	-	Moderate	Low
CY3-5-D	Elia	IH	IH	IH_important	Moderate	-	(0% percentage of measure implementation)	-	Moderate	Moderate
CY3-7-J	Akaki	IH	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low
CY6-1-C	Pediaios	IH	E	E-negligible		Good	Good (70%)	-	Good and above	Low
CY8-4-C	Treminthos	IH	E	E_important	Good	-	(New WB)	Good. There is no fish fauna neither it ever historically existed	Good and above	Moderate
CY8-7-C	Syrkatis	I	IH	IH_important	Moderate	-	Poor (47%)	Moderate P.	Moderate	Moderate

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Ecological Status - Grouping	Ecological Potential from measures	Ecolgical Potential from Expert Judgement	Ecological Potential 2019	Confidence
CY8-7-FG	Pendaskhinos	IH	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low
CY8-8-C	Ayiou Mina	IH	IH	IH-minor	Moderate	-	(No specific measures were proposed for the GEP)	-	Moderate	Moderate
CY8-9-ABC1	Vasilikos	I	I	I-Important		Moderate	(New HMWB)	-	Moderate	Low
CY8-9-EF	Vasilikos	IH	E	E_important		Moderate	(0% percentage of measure implementation)	-	Moderate	Low
CY9-2-H	Yermasogeia	IH	IH	IH_important		Moderate	Good (74%)	-	Good and above	Low
CY9-4-E	Garyllis	IH	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low
CY9-4-F	Garyllis	E	E	E-minor		Good	(New HMWB)	Moderate	Moderate	Low
CY9-6-BCD	Ambelikos-Agros	P	I	I-Important	Moderate	-	(New HMWB)	-	Moderate	Moderate
CY9-6-T	Kouris	I	IH	IH_important		Moderate	(0% percentage of measure implementation)	-	Moderate	Low
Ephemeral rivers of the 3rd Management Cycle										
CY1-5-B	Limnarka	E	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low
CY2-9-E	Potamos tou Kambou	E	E	E-minor		Good	(No specific measures were proposed for the GEP)	-	Unknown	There is no information

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Ecological Status - Grouping	Ecological Potential from measures	Ecolgical Potential from Expert Judgement	Ecological Potential 2019	Confidence
CY3-4-D	Atsas	E	E	E-minor		Good	(No specific measures were proposed for the GEP)	-	Unknown	There is no information
CY3-7-Q	Serrakhis	E	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Unknown	There is no information
CY6-1-J	Klemos	E	E	E-minor		Good	(No specific measures were proposed for the GEP)	-	Good and above	Low
CY6-1-K	Katevas	E	E	E_important	Moderate	-	(No specific measures were proposed for the GEP)	-	Moderate	Moderate
CY6-1-M	Vathys	E	E	E-minor		Good	(No specific measures were proposed for the GEP)	-	Good and above	Low
CY6-1-N	Dhrakondias	E	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low
CY7-2-C	Liopetri	E	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low
CY8-1-B	Avdellero	E	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Ecological Status - Monitoring	Ecological Status - Grouping	Ecological Potential from measures	Ecolgical Potential from Expert Judgement	Ecological Potential 2019	Confidence
CY8-2-B	Aradippou	E	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low
CY9-3-B	Vathias (Ag. Athanasios)	E	E	E-minor		Good	(No specific measures were proposed for the GEP)	Moderate	Moderate	Low
CY9-4-A	Vathias	E	E	E-minor		Good	(No specific measures were proposed for the GEP)	Moderate	Moderate	Low
CY9-6-W	Tapakhna	E	E	E_important		Moderate	(No specific measures were proposed for the GEP)	-	Moderate	Low

Υπόμνημα / Legend

Οικολογική Κατάσταση/Δυναμικό Ποτάμιων Υδάτινων Σωμάτων/ Ecological Status/Potential of River Water Bodies

Φυσικά / Natural

Υψηλη / High

Καλή / Good

Μέτρια / Moderate

Ελλιπής / Poor

ΙΤΥΣ / HMWB

Καλό και ανώτερο Οικ. Δυν./Good and Above Ecol. Pot.

Μέτριο Οικ. Δυν./ Moderate Ecol. Pot.

Οικολογική Κατάσταση/Δυναμικό Εφήμερων ποταμιών/ Ecological Status/Potential of Ephemeral rivers

Καλή / Good

Μέτρια / Moderate

Καλό και ανώτερο Οικ. Δυν./ Good and Above Ecol. Pot.

Μέτριο Οικ. Δυν./ Moderate Ecol. Pot.

Άγνωστο Οικ. Δυν./ Unknowon Ecol. Pot.

Οικολογική Κατάσταση/Δυναμικό Λιμναίων Υδάτινων Σωμάτων/ Ecological Status/Potential of Lake Water Bodies

Φυσικά / Natural

Άγνωστη/Unknown

ΙΤΥΣ - Τεχνητά / HMWB - Artificial

Άγνωστη Οικ. Δυν./ Unknown Ecol. Pot.

Οικολογικό Δυναμικό Ποτάμιων Ταμιευτήρων (ΙΤΥΣ) /Ecological Potential of River Reservoirs (HMWB)

Καλό και ανώτερο Οικ. Δυν./ Good and Above Ecol. Pot.

Μέτριο Οικ. Δυν./ Moderate Ecol. Pot.

Ελλιπές Οικ. Δυν./ Poor Ecol. Pot.

Μεγάλοι οικισμοί / Big settlements

Πρωτεύον οδικό δίκτυο / Primary road network

Δευτερεύον οδικό δίκτυο / Secondary road network

Ισοϋψείς / Contours

0 5 10 20 30 40 Km

N W E S

CY9-6-J_IR Πάνω Πλάτρες

CY1-2-C_IR Αρμίνου

CY1-4-C_IR Κανναβιού

CY2-2-E_IR Ευρέτου

CY1-6-B_IR Μαυροκόλυμπος

CY1-3-D_IR Ασπρόκρεμμος

CY9-6-S_IR Κούρης

CY9-4-D_IR Πολεμίδια

CY_L9-5-3-50 Αλμυρή Λίμνη Ακρωτήρι

CY8-9-D_IR Καλαβασός

CY9-2-G_IR Γερμασόγεια

CY_L8-3-2-96 Αλμυρή Λίμνη Σορός

CY_L8-3-2-88 Αλμυρή Λίμνη Ορφανή

CY3-5-B_IR Ξυλιάτος

CY3-7-I_IR Ακάκι-Μαλούντα

CY6-1-B_IR Ταμασσός

CY8-7-B_IR Λεύκαρα

CY8-7-E_IR Διπόταμος

CY_L8-3-2-82 Λάρνακα Κύρια Αλμυρή Λίμνη

CY_L8-1-2-94 Λίμνη Ορόκλινη

CY_d7-1-2-70 Ταμιευτήρας Άχνα

CY_L7-2-6-70 Λίμνη Παραλίμνι

CY_L8-3-2-85 Αλμυρή Λίμνη Αεροδρομίου Αρ.2

ΚΕΡΥΝΕΙΑ

ΛΕΥΚΩΣΙΑ

ΑΜΜΟΧΩΣΤΟΣ

ΛΑΡΝΑΚΑ

ΠΑΦΟΣ

ΛΕΜΕΣΟΣ

ΠΗΓΗ ΔΕΔΟΜΕΝΩΝ: ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ - ΤΜΗΜΑ ΑΝΑΠΤΥΞΕΩΣ ΥΔΑΤΩΝ, ΤΜΗΜΑ ΑΛΙΕΙΑΣ ΚΑΙ ΘΑΛΑΣΣΙΩΝ ΕΡΕΥΝΩΝ, ΤΜΗΜΑ ΠΕΡΙΒΑΛΛΟΝΤΟΣ, ΤΜΗΜΑ ΓΕΩΛΟΓΙΚΗΣ ΕΠΙΣΚΟΠΗΣΗΣ

DATA SOURCE: REPUBLIC OF CYPRUS - WATER DEVELOPMENT DEPARTMENT, DEPARTMENT OF FISHERIES AND MARINE RESEARCH, DEPARTMENT OF ENVIRONMENT, GEOLOGICAL SURVEY DEPARTMENT

Ευρωπαϊκή Ένωση
Ταμείο Συνοχής

Κυπριακή Δημοκρατία

Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο

Τμήμα Αναπτύξεως Υδάτων

ΠΡΟΠΑΡΑΣΚΕΥΑΣΤΙΚΕΣ ΜΕΛΕΤΕΣ ΠΟΥ ΘΑ ΑΠΟΤΕΛΕΣΟΥΝ ΤΗ ΒΑΣΗ ΓΙΑ ΤΗΝ ΚΑΤΑΡΤΙΣΗ ΤΟΥ 3ΟΥ ΣΧΕΔΙΟΥ ΔΙΑΧΕΙΡΙΣΗΣ ΛΕΚΑΝΗΣ ΑΠΟΡΡΟΗΣ ΠΟΤΑΜΟΥ (ΣΔΛΑΠ) ΤΗΣ ΚΥΠΡΟΥ - ΕΦΑΡΜΟΓΗ ΟΔΗΓΙΑΣ ΠΛΑΙΣΙΟ ΓΙΑ ΤΑ ΥΔΑΤΑ 2000/60/ΕΚ
ΑΡ.: ΥΥ 07/2019

PREPARATORY STUDIES TO BE THE BASIS FOR THE 3ND RIVER BASIN MANAGEMENT PLAN IN CYPRUS (RBMP) - IMPLEMENTATION OF THE WATER DIRECTIVE FRAMEWORK 2000/60 / EC
N.: YY 07/2019

ΑΝΑΔΟΧΟΣ/ CONTRACTOR

adens ADVANCED ENVIRONMENTAL STUDIES

ΤΙΤΛΟΣ ΧΑΡΤΗ / MAP TITLE :

ΟΙΚΟΛΟΓΙΚΗ ΚΑΤΑΣΤΑΣΗ ΕΠΙΦΑΝΕΙΑΚΩΝ ΥΔΑΤΙΝΩΝ ΣΩΜΑΤΩΝ ECOLOGICAL STATUS OF SURFACE WATER BODIES

ΗΜΕΡΟΜΗΝΙΑ / DATE	ΚΛΙΜΑΚΑ / SCALE	ΑΡΙΘΜΟΣ ΧΑΡΤΗ / MAP NUMBER
Δεκέμβριος 2020 /December 2020	1:600.000	03

7.4 Methodology for the classification of river WB chemical status

The following methodological approach was used to assess the chemical status of river WBs (see Table 7-5):

- For WBs where there is one or more monitoring stations, then their status is the same with the status of the monitoring station (37 WBs).
- Water bodies that are upstream of WBs of "Good" chemical status, then their chemical status is defined as "Good", assuming that if there was a source of priority substances upstream from the monitoring station, this would have been seen during the monitoring.
- WBs that are downstream of a WB of "Failing to achieve good" chemical status, are classified as "Failing to achieve good" chemical status. This rule was applied in the downstream direction up to:
  - Dams that overflow very rarely, and
  - Water bodies with monitoring stations of good chemical status.
- WBs in assessment groups with negligible or low pressures were assigned good chemical status only after point pressure sources in their river basins such as mines, industrial plants and industrial areas had been evaluated.
- Where appropriate, WBs belonging to groups of significant pressures, received good chemical status only after the assessment of pressures in their river basins, in relation to mines (Extractive Waste Facilities - EWF), industrial facilities and industrial areas and important urban areas.
- WBs that could not be classified in a status according to the above criteria, they were defined as Unknown chemical status.

The criteria used for the confidence assessment are: Low = no monitoring data, Medium = limited or insufficiently strong monitoring data for some or all of the priority substances discarded in the RBD, High = good data for all priority substances discarded in the RBD.

7.5 Chemical status results of river water bodies

The following table summarizes the classification results of the chemical status of river WBs,along with the confidence classification in the declared chemical status. From the 170 rivers WBs:

- 143 are in good chemical status,
- 18 are in a “failing to achieve good” chemical status, and
- 9 were not classified due to insufficient data.

As for the 57 ephemeral rivers (which are not designated as WBs), 19 are in unknown status, 36 in good chemical status and 2 in a “failing to achieve good” status.

Table 7-5 Classification of River Water Body (RWB) chemical status and confidence

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Monitoring Station of Chemical Status	Chemical Status of Station	Downstream WB in "Good Status"	Downstream Station in "Good Status"	Upstream WB in "Failing to achieve good" status	Upstream Station in "Failing to achieve good" status	Mine or mining waste site within the hydrological basin or upstream	Rainwater runoff from cities and industrial areas	RWB Chemical Status 2019	Remarks	Confidence in the defined chemical status
River WBs of the 3rd Management Cycle															
CY1-1-AB	Khapotami	I	I	I-minor	r1-1-1-75 r1-1-3-95	Good							Good	Monitoring Station	High
CY1-1-C	Khapotami	IH	IH	IH-minor	-	-							Good	Expert Judgment	Low
CY1-1-D	Khapotami	IH	**E**	E-negligible	-	-							Good	Expert Judgment	Low
CY1-1-E	Malleta	E	E	E_important	-	-							Good	Expert Judgment	Low
CY1-2-A	Dhiarizos	P	P	P-minor	r1-2-3-94 r1-2-4-25	Good					Xatzipavlou		Good	Monitoring Station	High
CY1-2-B	Dhiarizos	P	P	P-minor	-	-	CY1-2-A	r1-2-4-25					Good	WB upstream of a WB in "good" status	Moderate
CY1-2-D1	Dhiarizos	I	**Ih**	IH_important	r1-2-6-64	Good							Good	Monitoring Station	High
CY1-2-D2	Dhiarizos	P	P	P-minor	-	-	CY1-2-D1	r1-2-6-64					Good	WB upstream of a WB in "good" status	Moderate
CY1-2-E	Tholos	IH	IH	IH-minor	-	-	CY1-2-D1	r1-2-6-64					Good	WB upstream of a WB in "good" status	Moderate
CY1-2-F1	Yerovasinos	I	I	I-minor	-	-	CY1-2-D1	r1-2-6-64					Good	WB upstream of a WB in "good" status	Moderate
CY1-2-F2	Yerovasinos	P	P	P-minor	-	-	CY1-2-D1	r1-2-6-64					Good	WB upstream of a WB in "good" status	Moderate
CY1-3-A1	Roudhias	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY1-3-A2	Stenous	IH	IH	IH-negligible	-	-							Good	Expert Judgment	Low
CY1-3-A3	Roudhias	P	P	P-minor	r1-3-5-91	Failing to achieve good					Vretsia, Panagia		Failing to achieve good	Monitoring Station	High
CY1-3-B	Xeros Potamos	I	**IH**	IH_important	r1-3-6-53	Failing to achieve good							Failing to achieve good	Monitoring Station	High
CY1-3-C	Xeros Potamos	IH	IH	IH_important	r1-3-8-60	Good							Good	Monitoring Station	High
CY1-3-E	Xeros Potamos	E	E	E-minor	-	-	CY1-3-C	r1-3-8-60					Good	WB upstream of a WB in "good" status	Moderate
CY1-3-F	Lazaridhaes	I	I	I-negligible	-	-							Good	Expert Judgment	Low
CY1-3-G	Lefkarkon	I	I	I-minor	-	-							Good	Expert Judgment	Low
CY1-4-A	Ayia & Klimadhiou	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY1-4-B	Ayia	I	I	I-negligible	-	-							Good	Expert Judgment	Low
CY1-4-DE	Ezousa	I	**IH**	IH_important	-	-							Good	Expert Judgment	Low
CY1-4-F	Ezousa	P	P	P-minor	r1-4-7-10	Failing to achieve good							Failing to achieve good	Monitoring Station	High
CY1-4-G	Ezousa	I	I	I-Important	-	-			CY1-4-F	r1-4-7-10			Failing to achieve good	WB downstream of a WB in a "failing to achieve good" status	Low
CY1-4-H	Ezousa	IH	**E**	E_important	r1-4-9-01 r1-4-9-80	Failing to achieve good						Significant pressure	Failing to achieve good	Monitoring Station	High
CY1-4-I	Paleomylou	IH	IH	IH-minor	-	-							Good	Expert Judgment	Low
CY1-4-J	Ayios Nepios	E	E	E_important	-	-							Good	Expert Judgment	Low
CY1-4-K	Varkas	E	E	E-minor	r1-4-6-75	Good							Good	Monitoring Station	High
CY1-4-L1	Milarkou	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY1-4-L2	Rinou & Kyparishon	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY1-4-L3	Mylari	E	E	E-negligible	-	-							Good	Expert Judgment	Low
CY1-4-M	Kochatis	E	E	E_important	r1-4-8-88	Good							Good	Monitoring Station	Moderate
CY1-5-D1	Kochinas	I	I	I-Important	r1-5-5-89	Failing to achieve good							Failing to achieve good	Monitoring Station	High

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Monitoring Station of Chemical Status	Chemical Status of Station	Downstream WB in "Good Status"	Downstream Station in "Good Status"	Upstream WB in "Failing to achieve good" status	Upstream Station in "Failing to achieve good" status	Mine or mining waste site within the hydrological basin or upstream	Rainwater runoff from cities and industrial areas	RWB Chemical Status 2019	Remarks	Confidence in the defined chemical status
CY1-5-D2	Kochinas	P	P	P-minor	-	-			CY1-5-D1	r1-5-5-89			Failing to achieve good	WB downstream of a WB in a "failing to achieve good" status	Low
CY1-5-E1	Agriokalami	IH	IH	IH-minor	-	-							Good	Expert Judgment	Low
CY1-5-E2	Agriokalami & Taisi	P	P	P-important	-	-							Good	Expert Judgment	Low
CY1-6-A1	Mavrokolymbos	IH	IH	IH-minor	-	-	CY1-6-A2	r1-6-2-17					Good	WB upstream of a WB in "good" status	Moderate
CY1-6-A2	Mavrokolymbos	P	P	P-important	r1-6-2-17	Good							Good	Monitoring Station	Moderate
CY1-6-C	Mavrokolymbos	IH	E	E-minor	-	-							Good	Expert Judgment	Low
CY1-6-D	Xeros	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY1-8-A1	Kalamoulli (Avgas)	IH	IH	IH-minor	-	-							Good	Expert Judgment	Low
CY1-8-A2	Avgas	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY1-8-A3	Khardjotis	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY1-8-B	Pevkos	E	E	E-minor	r1-8-5-89	Good							Good	Monitoring Station	Moderate
CY2-1-A	Ayiou Ioanni	E	E	E_important	r2-1-8-74	Good							Good	Monitoring Station	Moderate
CY2-1-B	Argaki tou Pyrgou (Loutra Aphroditis)	IH	IH	IH-negligible	-	-							Good	Expert Judgment	Low
CY2-1-C	Argaki tou Pyrgou (Loutra Aphroditis)	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY2-2-A	Neraidhes & Ammadhkiou	IH	IH	IH_important	-	-	CY2-2-B	r2-2-3-95					Good	WB upstream of a WB in "good" status	Moderate
CY2-2-B	Garyllis	I	I	I-Important	r2-2-3-95	Good							Good	Monitoring Station	High
CY2-2-C	Stavros tis Psokas	I	I	I-negligible	-	-	CY2-2-D	r2-2-6-35					Good	WB upstream of a WB in "good" status	Moderate
CY2-2-D	Stavros tis Psokas	I	I	I-Important	r2-2-6-35	Good							Good	Monitoring Station	Moderate
CY2-2-F	Stavros tis Psokas	I	E	E_important	-	-	CY2-2-G	r2-2-7-34					Good	WB upstream of a WB in "good" status	Moderate
CY2-2-G	Khrysokhou	I	I	I-Important	r2-2-7-34	Good							Good	Monitoring Station	Moderate
CY2-2-H	Khrysokhou	IH	IH	IH_important	r2-2-8-95	Good							Good	Monitoring Station	Moderate
CY2-2-I	Klavaris	IH	IH	IH_important	-	-	CY2-2-B	r2-2-3-95					Good	WB upstream of a WB in "good" status	Moderate
CY2-2-J	Klavaris	P	P	P-important	-	-	CY2-2-B	r2-2-3-95					Good	WB upstream of a WB in "good" status	Moderate
CY2-2-K	Kryos (Kritou Terra)	IH	IH	IH_important	-	-	CY2-2-B	r2-2-3-95					Good	WB upstream of a WB in "good" status	Moderate
CY2-2-L	Kryos (Kritou Terra)	P	P	P-important	-	-	CY2-2-B	r2-2-3-95					Good	WB upstream of a WB in "good" status	Moderate
CY2-3-A	Mirmikoph	E	E	E_important	r2-3-1-64	Good							Good	Monitoring Station	Moderate
CY2-3-B	Argaki tis Limnis	E	E	E_important	r2-3-2-96	Failing to achieve good					Evlogimeni & Konousa		Failing to achieve good	Monitoring Station	High
CY2-3-C1	Ayios Merkourios	I	I	I-negligible	-	-	CY2-3-C2	r2-3-4-80					Good	WB upstream of a WB in "good" status	Moderate
CY2-3-C2	Magounda	I	I	I-minor	r2-3-4-80	Good							Good	Monitoring Station	High
CY2-3-D	Magounda	IH	E	E_important	-	-					Kynouysa		Unknown	The impact of the EWF on the WB remains unknown	There is no information
CY2-3-E	Xeropotamos	E	E	E-negligible	r2-3-7-74	Good							Good	Monitoring Station	High
CY2-3-F1	Yialia	P	P	P-minor	-	-							Good	Expert Judgment	Low

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Monitoring Station of Chemical Status	Chemical Status of Station	Downstream WB in "Good Status"	Downstream Station in "Good Status"	Upstream WB in "Failing to achieve good" status	Upstream Station in "Failing to achieve good" status	Mine or mining waste site within the hydrological basin or upstream	Rainwater runoff from cities and industrial areas	RWB Chemical Status 2019	Remarks	Confidence in the defined chemical status
CY2-3-F2	Yialia	P	I	I-Important	-	-							Good	Expert Judgment	Low
CY2-3-G	Yialia	IH	IH	IH_important	-	-							Good	Expert Judgment	Low
CY2-4-A	Xeros	IH	IH	IH-negligible	-	-							Good	Expert Judgment	Low
CY2-4-B	Xeros	IH	E	E-minor	-	-							Good	Expert Judgment	Low
CY2-4-C	Maroti & Diali	I	I	I-negligible	-	-							Good	Expert Judgment	Low
CY2-4-D	Livadhi	IH	IH	IH-minor	-	-							Good	Expert Judgment	Low
CY2-4-E	Livadhi	IH	IH	IH_important	-	-							Good	Expert Judgment	Low
CY2-5-A	Ayios Theodoros	IH	IH	IH-minor	-	-							Good	Expert Judgment	Low
CY2-6-A	Katouris	E	E	E-negligible	-	-							Good	Expert Judgment	Low
CY2-6-B	Katouris	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY2-7-A	Pyrgos	I	I	I-negligible	-	-							Good	Expert Judgment	Low
CY2-8-A	Limnitis	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY2-9-A	Kambos	I	I	I-Important	-	-	CY2-9-B	r2-9-2-50					Good	WB upstream of a WB in "good" status	Moderate
CY2-9-B	Kambos	P	I	I-minor	r2-9-2-50	Good							Good	Monitoring Station	High
CY2-9-C	Kambos	I	I	I-negligible	-	-							Good	Expert Judgment	Low
CY2-9-D	Kambos	IH	IH	IH-negligible	-	-							Good	Expert Judgment	Low
CY3-1-A	Xeros	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY3-1-BC	Xeros	I	I	I-negligible	-	-							Good	Expert Judgment	Low
CY3-2-A	Marathasa	P	P	P-minor	r3-2-1-85	Good							Good	Monitoring Station	High
CY3-2-B	Marathasa	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY3-2-D	Rkondas	IH	IH	IH_important	-	-							Good	Expert Judgment	Low
CY3-3-A	Ayios Nikolaos	P	P	P-minor	r3-3-1-60	Good					Kannoures, Kokkinorotsos		Good	Monitoring Station	High
CY3-3-B	Karyiotis	P	P	P-minor	r3-3-3-95	Failing to achieve good							Failing to achieve good	Monitoring Station	High
CY3-3-C	Karyiotis	I	I	I-Important	-	-			CY3-3-B	r3-3-3-95			Failing to achieve good	WB downstream of a WB in a "failing to achieve good" status	Low
CY3-3-D	Argaki tou Karvouna	P	P	P-minor	r3-3-2-60	Failing to achieve good							Failing to achieve good	Monitoring Station	High
CY3-3-E	Alykhnos	I	I	I-minor	-	-							Good	Expert Judgment	Low
CY3-4-AB	Atsas	IH	IH	IH_important	r3-4-2-90	Good							Good	Monitoring Station	High
CY3-4-C	Atsas	IH	IH	IH_important	-	-					Skouriotissa		Unknown	The impact of the EWF on the WB remains unknown	There is no information
CY3-5-A	Lagoudhera	I	I	I-minor	r3-5-1-50	Good							Good	Monitoring Station	High
CY3-5-C	Lagoudhera	I	IH	IH_important	-	-							Good	-	Low
CY3-5-D	Elia	IH	IH	IH_important	r3-5-4-40	Failling to achieve good					Alestos, Memi, Agia Marina		Failing to achieve good	Monitoring Station	High
CY3-5-E	Kannavia	IH	IH	IH_important	-	-							Good	Expert Judgment	Low
CY3-7-A	Peristerona	I	I	I-minor	-	-	CY3-7-B	r3-7-1-55					Good	WB upstream of a WB in "good" status	Moderate
CY3-7-B	Peristerona	IH	IH	IH_important	r3-7-1-55	Good							Good	Monitoring Station	High
CY3-7-C	Peristerona	E	E	E_important	r3-7-1-84	Good							Good	Monitoring Station	High
CY3-7-DEF	Maroullenas	I	I	I-minor	r3-7-3-71	Good							Good	Monitoring Station	High
CY3-7-GH	Pharmakas	IH	IH	IH_important	-	-	CY3-7-DEF	r3-7-3-71					Good	WB upstream of a WB in "good" status	Moderate
CY3-7-J	Akaki	IH	E	E_important	-	-							Unknown	-	There is no inrformation

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Monitoring Station of Chemical Status	Chemical Status of Station	Downstream WB in "Good Status"	Downstream Station in "Good Status"	Upstream WB in "Failing to achieve good" status	Upstream Station in "Failing to achieve good" status	Mine or mining waste site within the hydrological basin or upstream	Rainwater runoff from cities and industrial areas	RWB Chemical Status 2019	Remarks	Confidence in the defined chemical status
CY3-7-K	Akakiou	E	E	E_important	-	-					Agrokipia, Kokkinogeia, Mitsero, Kokkinopezoula		Unknown	The impact of the EWF on the WB remains unknown	There is no information
CY3-7-M	Likythia	E	E	E-minor	-	-					Agrokipia, Kokkinogeia, Mitsero, Kokkinopezoula		Unknown	The impact of the EWF on the WB remains unknown	There is no information
CY6-1-A	Pedhieos & Ayios Onouphrios	IH	IH	IH-minor	r6-1-1-72 r6-1-1-80	Good					Peristerka-Pytharochoma, Kampia		Good	Monitoring Station	High
CY6-1-C	Pediaios	IH	**E**	E-negligible	-	-							Good	Expert Judgment	Low
CY6-1-D	Pediaios	E	E	E_important	r6-1-2-38	Good							Good	Monitoring Station	High
CY6-1-E	Pediaios	E	E	E_important	-	-							Good	Expert Judgment	Low
CY6-5-A	Yialias	IH	IH	IH-negligible	r6-5-1-34	Good							Good	Monitoring Station	Moderate
CY6-5-B	Yialias	IH	IH	IH_important	r6-5-1-85	Good							Good	Monitoring Station	High
CY6-5-C	Yialias	E	E	E_important	r6-5-3-15 r6-5-3-50	Good							Good	Monitoring Station	High
CY6-5-E	Koutsos	IH	IH	IH-minor	-	-	CY6-5-B	r6-5-1-85					Good	WB upstream of a WB in "good" status	Moderate
CY6-5-F	Koutsos	IH	IH	IH-negligible	-	-	CY6-5-B	r6-5-1-85					Good	WB upstream of a WB in "good" status	Moderate
CY6-5-G	Villourkon	E	E	E-minor	-	-	CY6-5-B	r6-5-1-85					Good	WB upstream of a WB in "good" status	Moderate
CY6-5-H	Alykos	E	E	E-minor	r6-5-2-85	Good					Kapedes, Kokkinonero		Good	Monitoring Station	High
CY6-5-I	Almyros	E	E	E-minor	-	-	CY6-5-H	r6-5-2-85				Significant pressure	Good	WB upstream of a WB in "good" status	Moderate
CY7-2-A	Vathys	IH	IH	IH-minor	-	-							Unknown	-	There is no information
CY8-3-A	Kalo Chorio	E	E	E_important	r8-3-2-60	Failing to achieve good						Significant pressure	Failing to achieve good	Monitoring Station	High
CY8-3-B	NoName	E	E	E_important	-	-							Unknown	-	There is no information
CY8-4-C	Treminthos	IH	**E**	E_important	r8-4-3-40 r8-4-5-30	Good							Good	Monitoring Station	High
CY8-4-D	Treminthos	E	E	E_important	-	-							Good	Expert Judgment	Low
CY8-5-AB	Pouzis	E	E	E_important	r8-5-1-60	Good							Good	Monitoring Station	Moderate
CY8-7-A	Syrkatis	IH	IH	IH-minor	-	-	CY8-7-C	r8-7-2-60					Good	WB upstream of a WB in "good" status	Moderate
CY8-7-C	Syrkatis	I	**IH**	IH_important	r8-7-2-60	Good							Good	Monitoring Station	High
CY8-7-D	Argaki tou Mylou	IH	IH	IH-minor	r8-7-3-95	Good							Good	Monitoring Station	Moderate
CY8-7-FG	Pendaskhinos	IH	**E**	E_important	-	-							Good	Expert Judgment	Low
CY8-8-AB	Ayiou Mina	IH	**E**	E-minor	-	-	CY8-8-C	r8-8-2-95					Good	WB upstream of a WB in "good" status	Moderate
CY8-8-C	Ayiou Mina	IH	IH	IH-minor	r8-8-2-95	Good							Good	Monitoring Station	Moderate
CY8-8-D	Ayiou Mina	E	E	E_important	-	-							Good	Expert Judgment	Low
CY8-9-ABC1	Vasilikos	**I**	**I**	I-Important		Good		r8-9-5-40					Good	WB upstream of a WB in "good" status	Moderate

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Monitoring Station of Chemical Status	Chemical Status of Station	Downstream WB in "Good Status"	Downstream Station in "Good Status"	Upstream WB in "Failing to achieve good" status	Upstream Station in "Failing to achieve good" status	Mine or mining waste site within the hydrological basin or upstream	Rainwater runoff from cities and industrial areas	RWB Chemical Status 2019	Remarks	Confidence in the defined chemical status
CY8-9-C2G	Vasilikos	**I**	**I**	I-Important	r8-9-3-83 r8-9-5-40	Good				High = good data for all the priority substances discharged into the RBD			Good	Monitoring Station	High
CY8-9-EF	Vasilikos	IH	**E**	E_important	-	-					Mavridia, Mousoulas, Kalavasos		Unknown	The impact of the EWF on the WB remains unknown	There is no information
CY9-2-A	Karydhaki	I	I	I-minor	-	-	CY9-2-E	r9-2-3-05					Good	WB upstream of a WB in "good" status	Moderate
CY9-2-BC	Yermasogeia	I	I	I-Important	r9-2-1-43	Good							Good	Monitoring Station	High
CY9-2-D	Yermasogeia	I	I	I-minor	-	-	CY9-2-E	r9-2-3-05					Good	WB upstream of a WB in "good" status	Moderate
CY9-2-E	Yermasogeia	I	I	I-Important	r9-2-3-05	Good							Good	Monitoring Station	High
CY9-2-F	Yermasogeia	I	I	I-minor	r9-2-3-85	Good							Good	Monitoring Station	High
CY9-2-H	Yermasogeia	IH	IH	IH_important	-	-							Good	Expert Judgment	Low
CY9-2-I	Pissokamina	E	E	E_important	-	-							Good	Expert Judgment	Low
CY9-2-J	Yialiadhes	E	E	E-negligible	r9-2-4-27	Good							Good	Monitoring Station	High
CY9-2-KL	Yialiadhes	IH	IH	IH_important	r9-2-4-95	Good							Good	Monitoring Station	High
CY9-4-B	Garyllis	E	E	E_important	r9-4-3-41	Good							Good	Monitoring Station	High
CY9-4-C	Garyllis	IH	IH	IH_important	r9-4-3-80	Failing to achieve good							Failing to achieve good	Monitoring Station	High
CY9-4-E	Garyllis	IH	**E**	E_important	-	-			CY9-4-C	r9-4-3-80		Significant pressure	Failing to achieve good	**WB Downstream of WB in "Failing to achieve good" status and of overflowing reservoir (Polemidia -CY9-4-D_RI_HM_IR)**	Low
CY9-4-F	Garyllis	E	E	E-minor	-	-			CY9-4-C	r9-4-3-80			Failing to achieve good	**WB Downstream of WB in "Failing to achieve good" status and of overflowing reservoir (Polemidia -CY9-4-D_RI_HM_IR)**	Low
CY9-4-G	Phasoula	E	E	E_important	r9-4-3-39	Good							Good	Monitoring Station	High
CY9-6-A	Ayios Ioannis	P	P	P-important	-	-	CY9-6-BCD CY9-6-E	r9-6-6-32					Good	WB upstream of a WB in "good" status	Moderate
CY9-6-BCD	Ambelikos-Agros	P	**I**	I-Important	r9-6-5-62 r9-6-5-63	Good							Good	Monitoring Station	High
CY9-6-E	Ambelikos-Xylourikos	P	P	P-important	r9-6-6-32	Good							Good	Monitoring Station	High
CY9-6-F	Limnatis	I	I	I-minor	-	-							Good	Expert Judgment	Low
CY9-6-G	Pelendri	I	I	I-Important	-	-	CY9-6-E	r9-6-6-32					Good	WB upstream of a WB in "good" status	Moderate
CY9-6-H	Ayios Mamas	IH	IH	IH_important	-	-	CY9-6-E	r9-6-6-32					Good	WB upstream of a WB in "good" status	Moderate
CY9-6-I	Loumata	P	P	P-minor	-	-							Good	Expert Judgment	Low
CY9-6-KL	Kouris	P	P	P-important	r9-6-3-36	Failing to achieve good							Failing to achieve good	Monitoring Station	High
CY9-6-M	Kouris	P	P	P-important	r9-6-4-92	Failing to achieve good							Failing to achieve good	Monitoring Station	High
CY9-6-N	Mesapotamos	P	P	P-minor	r9-6-3-77	Good							Good	Monitoring Station	Moderate
CY9-6-O	Moniatis	P	P	P-minor	r9-6-3-87	Good							Good	Monitoring Station	High

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Monitoring Station of Chemical Status	Chemical Status of Station	Downstream WB in "Good Status"	Downstream Station in "Good Status"	Upstream WB in "Failing to achieve good" status	Upstream Station in "Failing to achieve good" status	Mine or mining waste site within the hydrological basin or upstream	Rainwater runoff from cities and industrial areas	RWB Chemical Status 2019	Remarks	Confidence in the defined chemical status
CY9-6-P	Kryos	P	P	P-minor	-	-	CY9-6-R	r9-6-1-87					Good	WB upstream of a WB in "good" status	Moderate
CY9-6-Q	Kryos	P	P	P-important	-	-	CY9-6-R	r9-6-1-87					Good	WB upstream of a WB in "good" status	Moderate
CY9-6-R	Kryos	I	**IH**	IH_important	r9-6-1-87 r9-6-2-60	Good							Good	Monitoring Station	High
CY9-6-T	Kouris	I	**IH**	IH_important	-	-							Unknown	-	There is no information
CY9-7-B	Symvoulas	IH	IH	IH-minor	-	-							Good	Expert Judgment	Low
CY9-7-C	Symvoulas	E	E	E_important	-	-							Good	Expert Judgment	Low
CY9-8-A1	Perthikias	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY9-8-A2	Siapani	I	I	I-Important	-	-							Good	Expert Judgment	Low
CY9-8-B1	Vromonero	I	I	I-Important	-	-							Good	Expert Judgment	Low
CY9-8-B2	Pefkeri (Mandalas)	P	P	P-important	-	-							Good	Expert Judgment	Low
CY9-8-B3	Evdhimou (Mandalas)	I	I	I-Important	-	-							Good	Expert Judgment	Low
CY9-8-C	Evdhimou	IH	IH	IH-minor	-	-							Good	Expert Judgment	Low
Ephemeral rivers of the 3rd Management Cycle															
CY1-5-A	Limnarka	E	E	E_important	-	-							Good	Expert Judgment	Low
CY1-5-B	Limnarka	E	E	E_important	-	-							Good	Expert Judgment	Low
CY1-5-C	Kochinas	E	E	E_important	-	-						Significant pressure	Unknown	The impact of pressures on the WB remains unknown	There is no information
CY2-9-E	Potamos tou Kambou	E	E	E-minor	-	-							Unknown	-	There is no information
CY3-2-E	Vrountokremni Argakin	E	E	E-negligible	-	-							Good	Expert Judgment	Low
CY3-4-D	Atsas	E	E	E-minor	-	-					Skouriotissa		Unknown	The impact of the EWF on the WB remains unknown	There is no information
CY3-5-F	Asinou	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY3-5-G	Galouropniktis Potamos	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY3-6-A	Xeropotamos	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY3-6-B	Potami	E	E	E_important	-	-							Good	Expert Judgment	Low
CY3-6-C	Komitis	E	E	E_important	-	-							Unknown	-	There is no information
CY3-7-L	Korivas	E	E	E_important	-	-							Good	Expert Judgment	Low
CY3-7-N	Koutis & Aloupos	E	E	E-minor	r3-7-5-35	Good							Good	Monitoring Station	High
CY3-7-O	Merika	E	E	E_important	r3-7-5-50	Good							Good	Monitoring Station	High
CY3-7-P	Kokkinitrimithia	E	E	E_important	-	-						Significant pressure	Unknown	The impact of pressures on the WB remains unknown	There is no information
CY3-7-Q	Serrakhis	E	E	E_important	-	-							Unknown	-	There is no information
CY3-7-R	Ovgos	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY6-1-G	Kouphos	E	E	E-minor	-	-	CY_6-1-d	r6-1-2-38					Good	WB upstream of a WB in "good" status	Moderate
CY6-1-H	Argaki	E	E	E_important	-	-							Good	Expert Judgment	Low
CY6-1-I	Klemos	E	E	E_important	-	-							Unknown	-	There is no information
CY6-1-J	Klemos	E	E	E-minor	-	-						Significant pressure	Άγνωστη	The impact of pressures on the WB remains unknown	There is no information

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Monitoring Station of Chemical Status	Chemical Status of Station	Downstream WB in "Good Status"	Downstream Station in "Good Status"	Upstream WB in "Failing to achieve good" status	Upstream Station in "Failing to achieve good" status	Mine or mining waste site within the hydrological basin or upstream	Rainwater runoff from cities and industrial areas	RWB Chemical Status 2019	Remarks	Confidence in the defined chemical status
CY6-1-K	Katevas	E	E	E_important	r6-1-4-34	Good						Significant pressure	Good	Monitoring Station	High
CY6-1-L	Kaloyeros	E	E	E_important	r6-1-5-52	Good						Significant pressure	Good	Monitoring Station	High
CY6-1-M	Vathys	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY6-1-N	Dhrakondias	E	E	E_important	-	-						Significant pressure	Unknown	The impact of pressures on the WB remains unknown	There is no information
CY6-1-O	Vyzakotos	E	E	E_important	-	-							Unknown	-	There is no information
CY6-1-P	Almyros	E	E	E_important	-	-						Significant pressure	Unknown	The impact of pressures on the WB remains unknown	There is no information
CY7-2-B	Liopetri	E	E	E_important	-	-							Good	Expert Judgment	Low
CY7-2-C	Liopetri	E	E	E_important	-	-							Good	Expert Judgment	Low
CY8-1-A	Avdellero	E	E	E_important	-	-							Good	Expert Judgment	Low
CY8-1-B	Avdellero	E	E	E_important	-	-							Unknown	-	There is no information
CY8-2-A	Aradippou	E	E	E-minor	-	-							Unknown	-	There is no information
CY8-2-B	Aradippou	E	E	E_important	-	-							Unknown	-	There is no information
CY8-4-A	Ammos & Kalamoulia	E	E	E_important	r8-4-1-57	Good					Mathiatis		Good	Monitoring Station	Moderate
CY8-4-B	Xylias	E	E	E_important	r8-4-1-58	Failing to achieve good					Σιά		Failing to achieve good	Monitoring Station	High
CY8-4-E	Ayia Marina	E	E	E_important	-	-	CY8-4-C	r8-4-3-40					Good	WB upstream of a WB in "good" status	Moderate
CY8-4-F	Mosfiloti	E	E	E_important	-	-	CY8-4-C	r8-4-3-40					Good	WB upstream of a WB in "good" status	Moderate
CY8-4-G	Ayios Ioannis	E	E	E-minor	-	-	CY8-4-C	r8-4-5-30					Good	WB upstream of a WB in "good" status	Moderate
CY8-5-C	Xeropouzos	E	E	E_important	-	-							Good	Expert Judgment	Low
CY8-6-A	Xeropotamos	E	E	E-minor	r8-6-2-57 r8-6-3-50	Good							Good	Monitoring Station	High
CY8-7-H		E	E	E-minor	-	-							Good	Expert Judgment	Low
CY8-9-H	Argaki tis Asgatas	E	E	E-minor	r8-9-6-98	Good					Plateies, Asgata		Good	Monitoring Station	High
CY9-1-A	Pendakomo	E	E	E_important	-	-							Good	Expert Judgment	Low
CY9-1-BC	Argaki tou Pyrgou	E	E	E_important	r9-1-4-51	Failing to achieve good							Failing to achieve good	Monitoring Station	High
CY9-1-D	Argaki tou Pyrgou	E	E	E_important	-	-							Unknown	-	There is no information
CY9-1-E	Argaki tis Monis	E	E	E_important	r9-1-3-80	Good							Good	Monitoring Station	High
CY9-3-A	Vathias (Ag. Athanasios)	E	E	E_important	-	-							Good	Expert Judgment	Low
CY9-3-B	Vathias (Ag. Athanasios)	E	E	E-minor	-	-						Significant pressure	Unknown	The impact of pressures on the WB is unknown	There is no information
CY9-4-A	Vathias	E	E	E-minor	-	-							Unknown	-	There is no information
CY9-5-A	Ypsonas	E	E	E_important	r9-5-1-99	Good						Significant pressure	Good	Watercourse with extremely episodic flow. Sampling was not possible	Low

RWB Code	River Name	Historical Type	Present Type	Pressure Group	Monitoring Station of Chemical Status	Chemical Status of Station	Downstream WB in “Good Status”	Downstream Station in “Good Status”	Upstream WB in “Failing to achieve good” status	Upstream Station in “Failing to achieve good” status	Mine or mining waste site within the hydrological basin or upstream	Rainwater runoff from cities and industrial areas	RWB Chemical Status 2019	Remarks	Confidence in the defined chemical status
CY9-6-U	Batsounis	E	E	E_important	-	-							Unknown	-	There is no information
CY9-6-V	Tapakhna	E	E	E_important	-	-							Good	Expert Judgment	Low
CY9-6-W	Tapakhna	E	E	E_important	-	-							Unknown	-	There is no information
CY9-7-A	Krommya	E	E	E_important	-	-							Good	Expert Judgment	Low
CY9-8-D	Pantijo	E	E	E_important	-	-							Good	Expert Judgment	Low
CY9-8-E	Argaki Paleomylos	E	E	E-minor	-	-							Good	Expert Judgment	Low
CY9-9-A	Villourka	E	E	E-minor	-	-							Good	Expert Judgment	Low

"Expert Judgment": these cases concern the two relevant bullets of the methodology above: "WBs in assessment teams of negligible or low pressures received good chemical status only after being evaluated, also pressure points such as mines, industrial plants and industrial areas and" where appropriate, WBs belonging to groups with significant pressures that have received good chemical statu,s only after pressure assessment took place, in relation to mines, industrial plants and industrial areas and important urban areas "

Confidence in chemical status: Low = no monitoring data, Medium = limited or insufficiently strong monitoring data for some or all of the priority substances discharged in the RBD, High = good data for all of the priority substances discharged in the RBD.

Υπόμνημα / Legend

Χημική Κατάσταση Ποτάμιων Υδάτινων Σωμάτων/ Chemical Status of River Water Bodies

Φυσικά / Natural	ΙΤΥΣ / HMWB
Καλή / Good	Καλή / Good
Κατώτερη της καλής / Failing to achieve good	Κατώτερη της καλής / Failing to achieve good
Άγνωστη / Unknown	Άγνωστη / Unknown

Χημική Κατάσταση Ποτάμιων Ταμιευτήρων (ΙΤΥΣ) / Chemical Status of River Reservoirs (HMWB)

- Καλή / Good
- Κατώτερη της καλής / Failing to achieve good

Χημική Κατάσταση Εφήμερων Ποταμιών/ Chemical Status of Ephemeral Rivers

- Καλή / Good
- Κατώτερη της καλής / Failing to achieve good
- Άγνωστη / Unknown

Χημική Κατάσταση Λιμναίων Υδάτινων Σωμάτων/ Chemical Status of Lake Water Bodies

Φυσικά / Natural	ΙΤΥΣ - Τεχνητά / HMWB - Artificial
Κατώτερη της καλής / Failing to achieve good	Καλή / Good
	Κατώτερη της καλής / Failing to achieve good

Μεγάλοι οικισμοί / Big settlements — Πρωτεύον οδικό δίκτυο / Primary road network — Δευτερεύον οδικό δίκτυο / Secondary road network — Ισοϋψείς / Contours

0 5 10 20 30 40 Km

N W E S

CY9-6-J_IR Πάνω Πλάτρες
CY1-2-C_IR Αρμίνου
CY1-4-C_IR Κανναβιού
CY2-2-E_IR Ευρέτου
CY1-6-B_IR Μαυροκόλυμπος
CY1-3-D_IR Ασπρόκρεμμος
CY9-6-S_IR Κούρης
CY9-4-D_IR Πολεμίδια
CY_L9-5-3-50 Αλμυρή Λίμνη Ακρωτήρι
CY8-9-D_IR Καλαβασός
CY9-2-G_IR Γερμασόγεια
CY_L8-3-2-96 Αλμυρή Λίμνη Σορός
CY_L8-3-2-88 Αλμυρή Λίμνη Ορφανή
CY3-5-B_IR Ξυλιάτος
CY3-7-I_IR Ακάκι-Μαλούντα
CY6-1-B_IR Ταμασσός
CY8-7-B_IR Λεύκαρα
CY8-7-E_IR Διπόταμος
CY_L8-1-2-94 Λίμνη Ορόκλινη
CY_L8-3-2-85 Αλμυρή Λίμνη Αεροδρομίου Αρ.2
CY_L8-3-2-82 Λάρνακα Κύρια Αλμυρή Λίμνη
CY_L8-1-2-94 Λίμνη Ορόκλινη
CY_d7-1-2-70 Ταμιευτήρας Άχνα
CY_L7-2-6-70 Λίμνη Παραλίμνι
CY_d7-1-2-70 Ταμιευτήρας Άχνα
CY_L7-2-6-70 Λίμνη Παραλίμνι

ΚΕΡΥΝΕΙΑ, ΛΕΥΚΩΣΙΑ, ΠΟΜΟΣ, ΠΑΦΟΣ, ΛΕΜΕΣΟΣ, ΑΜΜΟΧΩΣΤΟΣ, ΛΑΡΝΑΚΑ

ΠΗΓΗ ΔΕΔΟΜΕΝΩΝ: ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ - ΤΜΗΜΑ ΑΝΑΠΤΥΞΕΩΣ ΥΔΑΤΩΝ, ΤΜΗΜΑ ΑΛΙΕΙΑΣ ΚΑΙ ΘΑΛΑΣΣΙΩΝ ΕΡΕΥΝΩΝ, ΤΜΗΜΑ ΠΕΡΙΒΑΛΛΟΝΤΟΣ, ΤΜΗΜΑ ΓΕΩΛΟΓΙΚΗΣ ΕΠΙΣΚΟΠΗΣΗΣ

DATA SOURCE: REPUBLIC OF CYPRUS - WATER DEVELOPMENT DEPARTMENT, DEPARTMENT OF FISHERIES AND MARINE RESEARCH, DEPARTMENT OF ENVIRONMENT, GEOLOGICAL SURVEY DEPARTMENT

Ευρωπαϊκή Ένωση
Ταμείο Συνοχής

Κυπριακή Δημοκρατία

Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο

Τμήμα Αναπτύξεως Υδάτων

ΠΡΟΠΑΡΑΣΚΕΥΑΣΤΙΚΕΣ ΜΕΛΕΤΕΣ ΠΟΥ ΘΑ ΑΠΟΤΕΛΕΣΟΥΝ ΤΗ ΒΑΣΗ ΓΙΑ ΤΗΝ ΚΑΤΑΡΤΙΣΗ ΤΟΥ 3ΟΥ ΣΧΕΔΙΟΥ ΔΙΑΧΕΙΡΙΣΗΣ ΛΕΚΑΝΗΣ ΑΠΟΡΡΟΗΣ ΠΟΤΑΜΟΥ (ΣΔΛΑΠ) ΤΗΣ ΚΥΠΡΟΥ - ΕΦΑΡΜΟΓΗ ΟΔΗΓΙΑΣ ΠΛΑΙΣΙΟ ΓΙΑ ΤΑ ΥΔΑΤΑ 2000/60/ΕΚ
ΑΡ.: ΥΥ 07/2019

PREPARATORY STUDIES TO BE THE BASIS FOR THE 3ND RIVER BASIN MANAGEMENT PLAN IN CYPRUS (RBMP) - IMPLEMENTATION OF THE WATER DIRECTIVE FRAMEWORK 2000/60 / EC
N.: YY 07/2019

ΑΝΑΔΟΧΟΣ/ CONTRACTOR

adens ADVANCED ENVIRONMENTAL STUDIES

ΤΙΤΛΟΣ ΧΑΡΤΗ / MAP TITLE :

ΧΗΜΙΚΗ ΚΑΤΑΣΤΑΣΗ ΕΠΙΦΑΝΕΙΑΚΩΝ ΥΔΑΤΙΝΩΝ ΣΩΜΑΤΩΝ CHEMICAL STATUS OF SURFACE WATER BODIES

ΗΜΕΡΟΜΗΝΙΑ / DATE	ΚΛΙΜΑΚΑ / SCALE	ΑΡΙΘΜΟΣ ΧΑΡΤΗ / MAP NUMBER
Δεκέμβριος 2020 /December 2020	1:600.000	04

8 Sub-activity 8.3. Status summary and comparison between the 2nd and the 3rd Management Cycle

8.1 Ecological status/potential

8.1.1 River WBs

In the present study, which concerns the 3rd Management Cycle, 170 river WBs were identified. From those:

- 31 are designated as to Heavily Modified Water Bodies, 6 of which are new HMWBs (see Activity 9), and
- 139 are natural.

The potential of the 31 HMWBs was evaluated based on the existing monitoring data, the implementation of the measures provided by the 2nd RBMP, the grouping of pressures, along with expert judgment. Based on this assessment:

- 5 HMWBs are in a good and high potential, and
- 26 HMWBs are in a moderate potential.

From the 139 natural WBs,

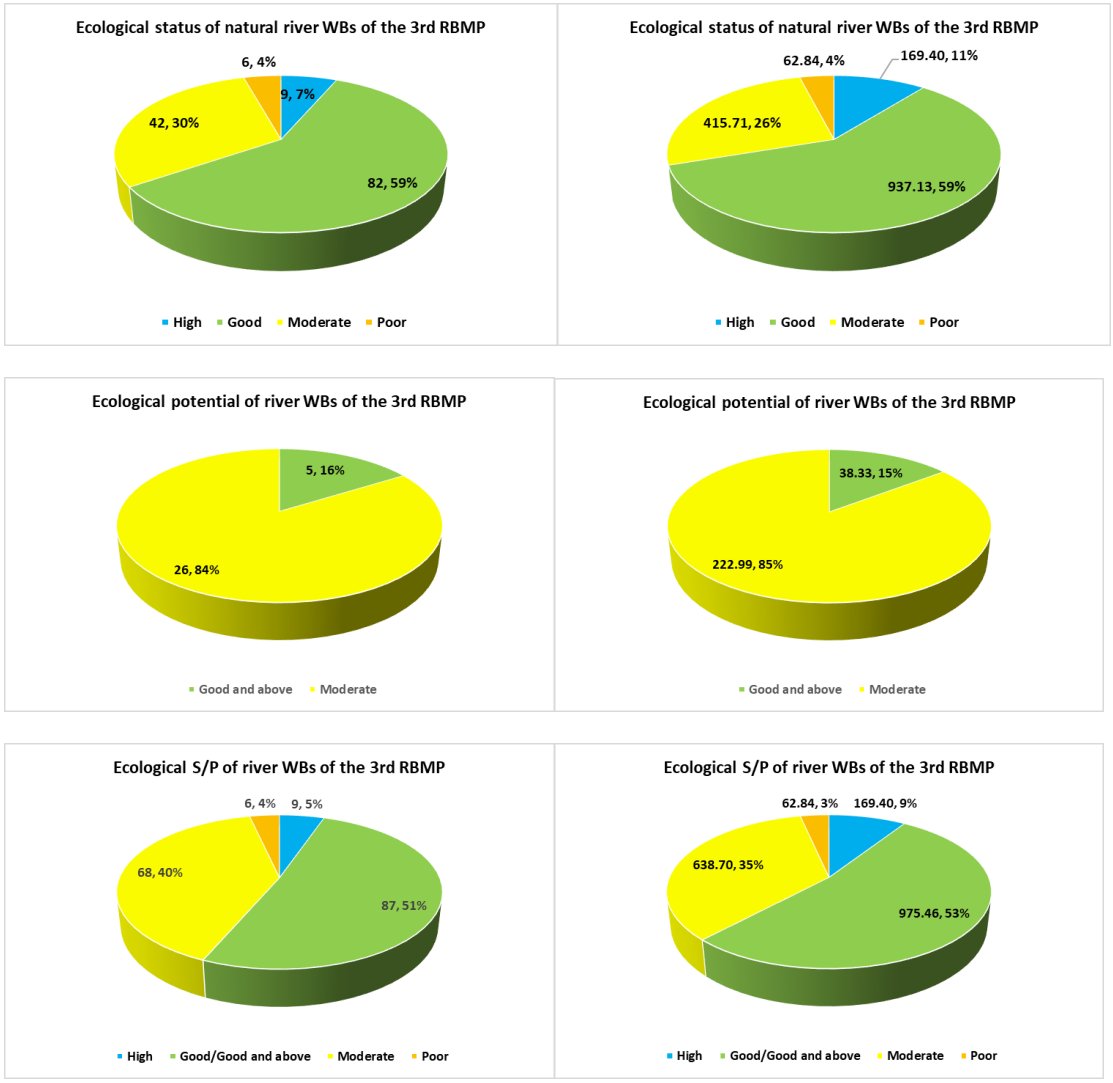
- 9 are in a high status
- 82 are in a good status
- 42 are in a moderate status, and
- 6 are in a poor status.

From the 170 river WBs,

- 37 are upgraded in terms of their status
- 36 are degraded in terms of their status
- 91 maintain their status, and
- With regards to 6 of them, no conclusions can be drawn since they are new WBs.

Table 8-1 Aggregate data of ecological status - potential of river WBs

Natural WBs							
Ecological Status	High	Good	Moderate	Poor	Bad	Unknown	Total
WB Number	9	82	42	6	0	0	139
WB Length (Km)	169,40	937,13	415,71	62,84	0,00	0,00	1.585,08
HMWBs							
Ecological Potential		Good and above	Moderate	Poor	Bad	Unknown	Total
WB Number	-	5	26	0	0	0	31
WB Length (Km)	-	38,33	222,99	0,00	0,00	0,00	261,32
Total number of river WBs (excluding reservoirs)							
Ecological Status/Potential	High	Good/Good and above	Moderate	Poor	Bad	Unknown	Total
Total number of WBs	9	87	68	6	0	0	170
Total length (Km)	169,40	975,46	638,70	62,84	0,00	0,00	1.846,40
Natural WBs							
Ecological Status	High	Good	Moderate	Poor	Bad	Unknown	Total
WB Number	6,47%	58,99%	30,22%	4,32%	0,00%	0,00%	100,00%
WB Length (Km)	10,69%	59,12%	26,23%	3,96%	0,00%	0,00%	100,00%
HMWBs							
Ecological Potential		Good and above	Moderate	Poor	Bad	Unknown	Total
WB Number	-	16,13%	83,87%	0,00%	0,00%	0,00%	100,00%
WB Length (Km)	-	14,67%	85,33%	0,00%	0,00%	0,00%	100,00%
Total number of river WBs (excluding reservoirs)							
Ecological Status/Potential	High	Good/Good and above	Moderate	Poor	Bad	Unknown	Total
Total number of WBs	5,29%	51,18%	40,00%	3,53%	0,00%	0,00%	100,00%
Total Length (Km)	9,17%	52,83%	34,59%	3,40%	0,00%	0,00%	100,00%



a. WB Number **b. WB Length (km)**

Chart 8-1 Ecological status/potential of river WBs of the 3rd Management Cycle

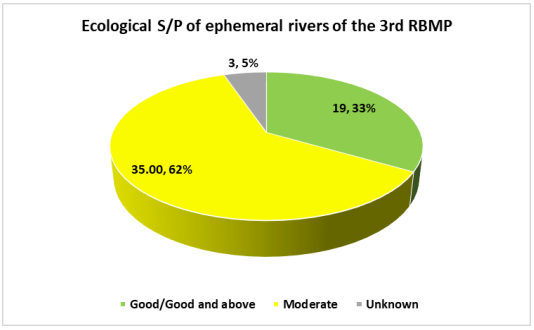
In addition to the above WBs, 57 ephemeral rivers were identified which were classified in terms of their status and potential as follows:

- 3 have not been classified in terms of their potential due to lack of data
- 2 were classified as "good and above" potential
- 9 were classified as "moderate" potential
- 17 were in a good status, and
- 26 were in a moderate status.

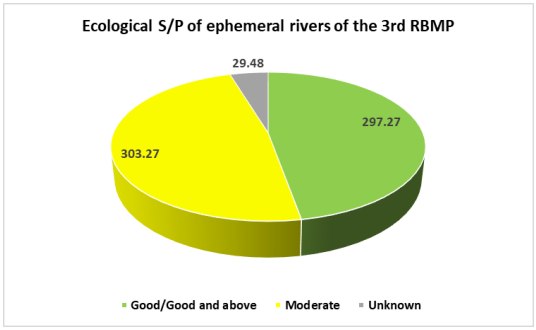
Out of these rivers, 31 did not change in status/potential, 5 were upgraded and 21 were degraded.

Table 8-2 Ecological status/potential of the ephemeral rivers of the 3rd Management C ycle

	High	Good/Good and above	Moderate	Poor	Bad	Unknown	Total
WB Number	0	19	35,00	0	0	3	57
WB Length (Km)	0,00	297,27	303,27	0,00	0,00	29,48	630,02
WB Number	0,00%	33,33%	61,40%	0,00%	0,00%	5,26%	100,00%
WB Length (Km)	0,00%	47,18%	48,14%	0,00%	0,00%	4,68%	100,00%



a. WB Number



b. WB Length (km)

Chart 8-2 Ecological status/potential of ephemeral rivers of the 3rd Management Cycle

Table 8-3 Comparison of the ecological status & potential between 2009, 2013 and 2019

RWB Code	River Name	Length (Km)	HMWB 1st or 2nd RBMP	HMWB 2020	Ecological S/P 2009	Ecological S/P 2013	Ecological S/P 2019	Comparison 2013-2019
River WBs of the 3rd Management Cycle								
CY1-1-AB	Khapotami	23,23			Moderate	Moderate	Good	Upgrade
CY1-1-C	Khapotami	19,33			Moderate	Good	Poor	Degredation
CY1-1-D	Khapotami	4,82	HMWB	Y	Moderate P.	Good and above P.	Moderate P.	Degredation
CY1-1-E	Malleta	9,64			Moderate	Moderate	Moderate	No change
CY1-2-A	Dhiarizos	38,75			Good	Good	Good	No change
CY1-2-B	Dhiarizos	20,13			Good	Good	High	Upgrade
CY1-2-D1	Dhiarizos	28,40	HMWB	Y	Good and above P.	Good and above P.	Moderate P.	Degredation
CY1-2-D2	Dhiarizos	3,22	HMWB	Y	Good and above P.	Good and above P.	Moderate P.	Degredation
CY1-2-E	Tholos	7,49			Good	Good	Good	No change
CY1-2-F1	Yerovasinos	9,14			Good	Good	Good	No change
CY1-2-F2	Yerovasinos	2,07			Good	Good	Good	No change
CY1-3-A1	Roudhias	27,53			Good	High	High	No change
CY1-3-A2	Stenous	9,07			Good	High	Good	Degredation
CY1-3-A3	Roudhias	5,36			Good	High	Good	Degredation
CY1-3-B	Xeros Potamos	6,49			Moderate	Good	Good	No change
CY1-3-C	Xeros Potamos	11,79	HMWB		Moderate P.	Moderate P.	Moderate	No change
CY1-3-E	Xeros Potamos	3,89			Poor	Moderate	Good	Upgrade
CY1-3-F	Lazaridhaes	6,49			Good	Good	High	Upgrade
CY1-3-G	Lefkarkon	8,12			Moderate	Good	Good	No change
CY1-4-A	Ayia & Klimadhiou	13,66			Good	High	Good	Degredation
CY1-4-B	Ayia	7,54			Good	Good	Good	No change

RWB Code	River Name	Length (Km)	HMWB 1st or 2nd RBMP	HMWB 2020	Ecological S/P 2009	Ecological S/P 2013	Ecological S/P 2019	Comparison 2013-2019
CY1-4-DE	Ezousa	12,32	HMWB	Y	Good and above P.	Moderate P.	Moderate P.	No change
CY1-4-F	Ezousa	5,19	HMWB	Y	Good and apove P.	Good and above P.	Moderate P.	Degredation
CY1-4-G	Ezousa	5,92	HMWB	Y	Good and above P.	Good and above P.	Moderate P.	Degredation
CY1-4-H	Ezousa	8,23	HMWB	Y	Good and above P.	Good and above P.	Moderate P.	Degredation
CY1-4-I	Paleomylou	5,58			Good	Good	Good	No change
CY1-4-J	Ayios Nepios	7,03			Good	Moderate	Moderate	No change
CY1-4-K	Varkas	14,21			Good	Moderate	Good	Upgrade
CY1-4-L1	Milarkou	10,41			Good	Moderate	Good	Upgrade
CY1-4-L2	Rinou & Kyparishon	1,74			Good	Moderate	Good	Upgrade
CY1-4-L3	Mylari	1,50			Good	Moderate	Good	Upgrade
CY1-4-M	Kochatis	13,21			Unknown	Moderate	Good	Upgrade
CY1-5-D1	Kochinas	2,65			Unknown	Moderate	Poor	Degredation
CY1-5-D2	Kochinas	0,41			Unknown	Moderate	Good	Upgrade
CY1-5-E1	Agriokalami	5,30			Unknown	Good	Good	No change
CY1-5-E2	Agriokalami & Taisi	2,17			Unknown	Good	Moderate	Degredation
CY1-6-A1	Mavrokolymbos	10,04			Good	Moderate	Good	Upgrade
CY1-6-A2	Mavrokolymbos	1,85			Good	Moderate	Moderate	No change
CY1-6-C	Mavrokolymbos	2,70	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change
CY1-6-D	Xeros	17,17			Unknown	Moderate	Good	Upgrade
CY1-8-A1	Kalamoulli (Avgas)	6,83			Unknown	Good	Good	No change
CY1-8-A2	Avgas	3,16			Unknown	Good	Good	No change
CY1-8-A3	Khardjotis	8,39			Unknown	Good	Good	No change
CY1-8-B	Pevkos	15,44			Unknown	Good	Good	No change
CY2-1-A	Ayiou Ioanni	12,80			Unknown	Moderate	Good	Upgrade
CY2-1-B	Argaki tou Pyrgou (Loutra Aphroditis)	2,92			(New WB)	(New WB)	Good	-
CY2-1-C	Argaki tou Pyrgou (Loutra Aphroditis)	0,36			(New WB)	(New WB)	Poor	-
CY2-2-A	Neraidhes & Ammadhkiou	21,03			Good	Moderate	Moderate	No change
CY2-2-B	Garyllis	6,18			Good	Moderate	Moderate	No change
CY2-2-C	Stavros tis Psokas	36,86			Good	Good	High	Upgrade
CY2-2-D	Stavros tis Psokas	5,80			Good	Good	Good	No change
CY2-2-F	Stavros tis Psokas	2,72	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change
CY2-2-G	Khrysokhou	2,80	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change
CY2-2-H	Khrysokhou	6,77	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change
CY2-2-I	Klavaris	9,31			(New WB)	(New WB)	Moderate	-
CY2-2-J	Klavaris	2,31			(New WB)	(New WB)	Moderate	-

RWB Code	River Name	Length (Km)	HMWB 1st or 2nd RBMP	HMWB 2020	Ecological S/P 2009	Ecological S/P 2013	Ecological S/P 2019	Comparison 2013-2019
CY2-2-K	Kryos (Kritou Terra)	6,93			(New WB)	(New WB)	Moderate	-
CY2-2-L	Kryos (Kritou Terra)	2,93			(New WB)	(New WB)	Moderate	-
CY2-3-A	Mirmikoph	14,91			Good	Moderate	Moderate	No change
CY2-3-B	Argaki tis Limnis	8,39			Moderate	Moderate	Moderate	No change
CY2-3-C1	Ayios Merkourios	20,17			Good	Good	High	Upgrade
CY2-3-C2	Magounda	4,62			Good	Good	Good	No change
CY2-3-D	Magounda	3,99	HMWB	**Y**	Moderate P.	Good and above P.	Moderate P.	Degredation
CY2-3-E	Xeropotamos	7,57			Unknown	Good	Good	No change
CY2-3-F1	Yialia	6,85			Good	Good	Good	No change
CY2-3-F2	Yialia	3,99		**Y**	Good	Good	Moderate P.	Degredation
CY2-3-G	Yialia	1,11		**Y**	Good	Good	Moderate P.	Degredation
CY2-4-A	Xeros	4,22			Good	Good	Good	No change
CY2-4-B	Xeros	2,86	HMWB	**Y**	Moderate P.	Good and above P.	Good and above P.	No change
CY2-4-C	Maroti & Diali	6,04			Good	High	High	No change
CY2-4-D	Livadhi	8,60			Good	Good	Good	No change
CY2-4-E	Livadhi	4,01	HMWB	**Y**	Moderate P.	Good and above P.	Good and above P.	No change
CY2-5-A	Ayios Theodoros	9,61			Unknown	Good	Good	No change
CY2-6-A	Katouris	9,88			Good	Good	High	Upgrade
CY2-6-B	Katouris	5,32	HMWB		Good and above P.	Moderate P.	Good	Upgrade
CY2-7-A	Pyrgos	30,17			Good	Good	High	Upgrade
CY2-8-A	Limnitis	33,24			Good	Good	Good	No change
CY2-9-A	Kambos	2,43			NO CORRESPONDENCE	Good	**Moderate**	Degredation
CY2-9-B	Kambos	7,30			Good	Moderate	Good	Upgrade
CY2-9-C	Kambos	2,64			Good	Good	Good	Upgrade
CY2-9-D	Kambos	3,01			Good	Good	Good	No change
CY3-1-A	Xeros	9,87			Good	High	Good	Degredation
CY3-1-BC	Xeros	12,12			Good	Good	High	Upgrade
CY3-2-A	Marathasa	15,73			Moderate	Good	Good	No change
CY3-2-B	Marathasa	12,10	HMWB		Moderate P.	Good and above P.	Good	No change
CY3-2-D	Rkondas	5,81			NO CORRESPONDENCE	Good	Moderate	Degredation
CY3-3-A	Ayios Nikolaos	14,91			Moderate	Good	Good	No change
CY3-3-B	Karyiotis	13,41			Moderate	Moderate	**Moderate**	No change
CY3-3-C	Karyiotis	11,36	HMWB		Moderate P.	Moderate P.	Moderate	No change
CY3-3-D	Argaki tou Karvouna	12,62			Moderate	Moderate	Good	Upgrade
CY3-3-E	Alykhnos	6,09			Moderate	Good	Good	No change
CY3-4-AB	Atsas	17,33			Good	Good	Moderate	Degredation
CY3-4-C	Atsas	5,95	HMWB		Moderate P.	Moderate P.	Moderate	No change
CY3-5-A	Lagoudhera	11,88			Good	Good	Good	No change

RWB Code	River Name	Length (Km)	HMWB 1st or 2nd RBMP	HMWB 2020	Ecological S/P 2009	Ecological S/P 2013	Ecological S/P 2019	Comparison 2013-2019
CY3-5-C	Lagoudhera	3,36	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No changes
CY3-5-D	Elia	22,25	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change
CY3-5-E	Kannavia	15,52			Good	Good	Moderate	Degredation
CY3-7-A	Peristerona	48,62			Moderate	Good	Good	No change
CY3-7-B	Peristerona	11,34			Moderate	Good	Good	No change
CY3-7-C	Peristerona	7,95			Moderate	Good	Good	No change
CY3-7-DEF	Maroullenas	33,62			Good	Good	Good	No change
CY3-7-GH	Pharmakas	16,18			Moderate	Good	Moderate	Degredation
CY3-7-J	Akaki	4,50	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change
CY3-7-K	Akakiou	16,74	eph. HMWB		Moderate/Poor P.	Moderate P.	Moderate	No change
CY3-7-M	Likythia	32,18			Poor	Good	Good	No change
CY6-1-A	Pedhieos & Ayios Onouphrios	30,07			Moderate	Good	Good	No change
CY6-1-C	Pediaios	0,97	HMWB	Y	Moderate P.	Moderate P.	Good and above P.	Upgrade
CY6-1-D	Pediaios	20,42	eph. HMWB		Poor P.	Good and above P.	Good	No change
CY6-1-E	Pediaios	9,12	eph. HMWB		Poor P.	Moderate P.	Good	Upgrade
CY6-5-A	Yialias	13,09			Good	Good	Good	No change
CY6-5-B	Yialias	12,90			Good/Moderate	Poor	Moderate	No change
CY6-5-C	Yialias	18,78			Moderate	Moderate	Good	Upgrade
CY6-5-E	Koutsos	8,62			Good	Good	Good	No change
CY6-5-F	Koutsos	6,25	HMWB		Moderate P.	Moderate P.	Good	Upgrade
CY6-5-G	Villourkon	9,57			NO CORRESPONDENCE	Good	Good	No change
CY6-5-H	Alykos	31,33			Moderate	Moderate	Poor	Degredation
CY6-5-I	Almyros	21,00			Moderate	Good	Good	No change
CY7-2-A	Vathys	6,60			Unknown	Moderate	Good	Upgrade
CY8-3-A	Kalo Chorio	7,34			NO CORRESPONDENCE	Moderate	**Moderate**	No change
CY8-3-B	NoName	3,74			NO CORRESPONDENCE	Moderate	Moderate	No change
CY8-4-C	Treminthos	24,16		Y	Moderate	Moderate	**Good and above P.**	Upgrade
CY8-4-D	Treminthos	6,78	eph. HMWB		Poor P.	Good and above P.	Moderate	Degredation
CY8-5-AB	Pouzis	24,12			Moderate	Good	Good	No change
CY8-7-A	Syrkatis	20,03			Good	Good	Good	No change
CY8-7-C	Syrkatis	6,65	HMWB	Y	Poor P.	Moderate P.	Moderate P.	No change
CY8-7-D	Argaki tou Mylou	16,81			Good	Good	Moderate	Degredation
CY8-7-FG	Pendaskhinos	16,72	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change
CY8-8-AB	Ayiou Mina	19,63			Good	Good	Good	No change
CY8-8-C	Ayiou Mina	8,06	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change

RWB Code	River Name	Length (Km)	HMWB 1st or 2nd RBMP	HMWB 2020	Ecological S/P 2009	Ecological S/P 2013	Ecological S/P 2019	Comparison 2013-2019
CY8-8-D	Ayiou Mina	7,35	eph. HMWB		Moderate P.	Good and above P.	Moderate	Degredation
CY8-9-ABC1	Vasilikos	17,09		Y	Moderate	Good	Moderate P.	**Degredation**
CY8-9-C2G	Vasilikos	33,03			Moderate	Moderate	Moderate	No change
CY8-9-EF	Vasilikos	13,40	HMWB	Y	Moderate P.	Moderate P.	Moderate P.	No change
CY9-2-A	Karydhaki	17,55			Good	Good	Good	No change
CY9-2-BC	Yermasogeia	11,61			NO CORRESPONDENCE	Moderate	Good	Upgrade
CY9-2-D	Yermasogeia	2,64	HMWB		Moderate P.	Moderate P.	Good	Upgrade
CY9-2-E	Yermasogeia	5,69			Good/Moderate	Good	**Moderate**	Degredation
CY9-2-F	Yermasogeia	9,15			Moderate	Good	Good	No change
CY9-2-H	Yermasogeia	6,33	HMWB	Y	Moderate P.	Moderate P.	Good and above P.	No change
CY9-2-I	Pissokamina	7,63			Moderate	Moderate	Moderate	No change
CY9-2-J	Yialiadhes	9,10			Good	High	Good	Degredation
CY9-2-KL	Yialiadhes	6,33			Good	Good	Moderate	Degredation
CY9-4-B	Garyllis	24,34			Bad	Good	Good	No change
CY9-4-C	Garyllis	3,89			Bad	Poor	Poor	No change
CY9-4-E	Garyllis	3,75	HMWB	Y	Bad P.	Moderate P.	Moderate P.	No change
CY9-4-F	Garyllis	4,36	eph. HMWB	Y	Bad P.	Moderate P.	Moderate P.	No change
CY9-4-G	Phasoula	7,89			NO CORRESPONDENCE	Moderate	Moderate	No change
CY9-6-A	Ayios Ioannis	5,28			Moderate	Moderate	Poor	Degredation
CY9-6-BCD	Ambelikos-Agros	19,23		Y	Moderate/Good	Moderate	Moderate P.	No change
CY9-6-E	Ambelikos-Xylourikos	11,46			Moderate	Moderate	Moderate	No change
CY9-6-F	Limnatis	7,03			Moderate	Moderate	Good	Upgrade
CY9-6-G	Pelendri	6,13			NO CORRESPONDENCE	Good	Moderate	Degredation
CY9-6-H	Ayios Mamas	5,84			NO CORRESPONDENCE	Good	Moderate	Degredation
CY9-6-I	Loumata	3,07			Moderate	High	Good	Degredation
CY9-6-KL	Kouris	22,43			Moderate	Good	**Moderate**	Degredation
CY9-6-M	Kouris	13,13			Moderate	Moderate	**Moderate**	No change
CY9-6-N	Mesapotamos	6,46			Good	High	Good	Degredation
CY9-6-O	Moniatis	5,83			Moderate	Moderate	Good	Upgade
CY9-6-P	Kryos	8,03			Moderate	Good	Good	No change
CY9-6-Q	Kryos	3,66			Moderate	Good	**Good**	No change
CY9-6-R	Kryos	17,36	HMWB		Moderate P.	Moderate P.	Good	Upgrade
CY9-6-T	Kouris	11,42	HMWB	Y	Poor P.	Moderate P.	Moderate P.	No change
CY9-7-B	Symvoulas	7,87			Unknown	Good	Good	No change
CY9-7-C	Symvoulas	5,07	eph. HMWB		Unknown P.	Good and above P.	Moderate	Degredation
CY9-8-A1	Perthikias	9,08			Unknown P.	Moderate	Good	Upgrade
CY9-8-A2	Siapani	18,98			Unknown	Moderate	Moderate	No change
CY9-8-B1	Vromonero	3,27			Unknown	Moderate	Moderate	No change

RWB Code	River Name	Length (Km)	HMWB 1st or 2nd RBMP	HMWB 2020	Ecological S/P 2009	Ecological S/P 2013	Ecological S/P 2019	Comparison 2013-2019
CY9-8-B2	Pefkeri (Mandalas)	4,72			Unknown	Moderate	Moderate	No change
CY9-8-B3	Evdhimou (Mandalas)	3,34			Unknown	Moderate	Good	Upgrade
CY9-8-C	Evdhimou	4,14			Unknown	Moderate	Good	Upgrade
Ephemeral rivers of the 3rd Management Cycle								
CY1-5-A	Limnarka	12,00			Unknown	Moderate	Moderate	No change
CY1-5-B	Limnarka	1,53	eph. HMWB	(eph. HMWB)	Unknown P.	Moderate P.	Moderate P.	No change
CY1-5-C	Kochinas	7,69			Unknown	Moderate	Moderate	No change
CY2-9-E	Potamos tou Kambou	3,72	eph. HMWB	(eph. HMWB)	Good and above P.	Unknown P.	Unknown P.	No change
CY3-2-E	Vrountokremni Argakin	12,83			Moderate	Good	Good	No change
CY3-4-D	Atsas	6,46	eph. HMWB	(eph. HMWB)	Moderate P.	Unknown P.	Unknown P.	No change
CY3-5-F	Asinou	15,31			Good	Good	Good	No change
CY3-5-G	Galouropniktis Potamos	13,07			NO CORRESPONDENCE	Good	Good	No change
CY3-6-A	Xeropotamos	12,77			Unknown	Good	Good	No change
CY3-6-B	Potami	18,06			Unknown	Good	Moderate	Degredation
CY3-6-C	Komitis	19,62			Unknown	Moderate	Moderate	No change
CY3-7-L	Korivas	10,30			NO CORRESPONDENCE	Good	Moderate	Degredation
CY3-7-N	Koutis & Aloupos	22,35			Moderate	Moderate	Good	Upgrade
CY3-7-O	Merika	24,85			Moderate/Poor	Good	Good	No change
CY3-7-P	Kokkinitrimithia	13,62			Poor	Good	Moderate	Degredation
CY3-7-Q	Serrakhis	19,31	eph. HMWB	(eph. HMWB)	Poor P.	Unknown P.	Unknown P.	No change
CY3-7-R	Ovgos	27,73			Poor	Good	Good	No change
CY6-1-G	Kouphos	6,85			NO CORRESPONDENCE	Good	Good	No change
CY6-1-H	Argaki	9,92			NO CORRESPONDENCE	Good	Moderate	Degredation
CY6-1-I	Klemos	4,48			NO CORRESPONDENCE	Good	Moderate	Degredation
CY6-1-J	Klemos	8,59	eph. HMWB	(eph. HMWB)	NO CORRESPONDENCE	Moderate P.	Good and above P.	Upgrade
CY6-1-K	Katevas	10,33	eph. HMWB	(eph. HMWB)	NO CORRESPONDENCE	Moderate P.	Moderate P.	No change
CY6-1-L	Kaloyeros	15,56			Poor	Moderate	Moderate	No change
CY6-1-M	Vathys	13,13	eph. HMWB	(eph. HMWB)	Poor P.	Good and above P.	Good and above P.	No change
CY6-1-N	Dhrakondias	6,86	eph. HMWB	(eph. HMWB)	NO CORRESPONDENCE	Good and above P.	Moderate P.	Degredation
CY6-1-O	Vyzakotos	4,23			NO CORRESPONDENCE	Good	Moderate	Degredation
CY6-1-P	Almyros	24,31			Unknown	Good	Moderate	Degredation
CY7-2-B	Liopetri	5,74			Unknown	Good	Moderate	Degredation
CY7-2-C	Liopetri	2,46	eph. HMWB	(eph. HMWB)	Unknown P.	Good and above P.	Moderate P.	Degredation
CY8-1-A	Avdellero	6,69			Unknown	Good	Moderate	Degredation

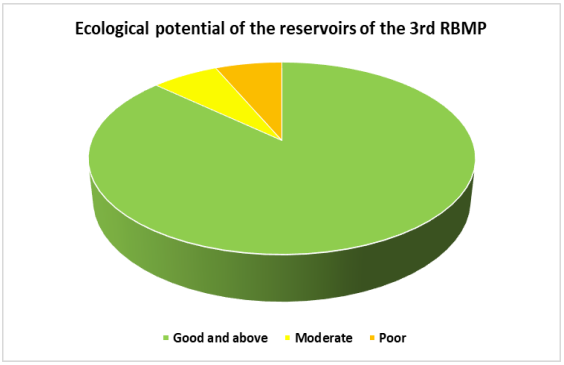
RWB Code	River Name	Length (Km)	HMWB 1st or 2nd RBMP	HMWB 2020	Ecological S/P 2009	Ecological S/P 2013	Ecological S/P 2019	Comparison 2013-2019
CY8-1-B	Avdellero	6,84	eph. HMWB	(eph. HMWB)	Unknown P.	Moderate P.	Moderate P.	No change
CY8-2-A	Aradippou	32,61			Unknown	Moderate	Good	Upgrade
CY8-2-B	Aradippou	5,17	eph. HMWB	(eph. HMWB)	Unknown P.	Moderate P.	Moderate P.	No change
CY8-4-A	Ammos & Kalamoulia	19,35			Moderate	Good	Good	No change
CY8-4-B	Xylias	8,62			Moderate	Good	Moderate	Degredation
CY8-4-E	Ayia Marina	2,16			NO CORRESPONDENCE	Good	Moderate	Degredation
CY8-4-F	Mosfiloti	11,56			Moderate	Good	Moderate	Degredation
CY8-4-G	Ayios Ioannis	15,25			Moderate	Good	Good	No change
CY8-5-C	Xeropouzos	13,33			Moderate	Good	Moderate	Degredation
CY8-6-A	Xeropotamos	18,94			Moderate	Moderate	Good	Upgrade
CY8-7-H		10,48			Moderate	Good	Good	No change
CY8-9-H	Argaki tis Asgatas	13,11			NO CORRESPONDENCE	Good	Good	No change
CY9-1-A	Pendakomo	7,92			NO CORRESPONDENCE	Good	Moderate	Degredation
CY9-1-BC	Argaki tou Pyrgou	14,75			Moderate	Moderate	Moderate	No change
CY9-1-D	Argaki tou Pyrgou	2,94			Moderate	Good	Moderate	Degredation
CY9-1-E	Argaki tis Monis	10,06			NO CORRESPONDENCE	Moderate	Moderate	No change
CY9-3-A	Vathias (Ag. Athanasios)	6,87			NO CORRESPONDENCE	Good	Moderate	Degredation
CY9-3-B	Vathias (Ag. Athanasios)	4,98	eph. HMWB	(eph. HMWB)	NO CORRESPONDENCE	Moderate P.	Moderate P.	No change
CY9-4-A	Vathias	5,59	eph. HMWB	(eph. HMWB)	Bad P.	Moderate P.	Moderate P.	No change
CY9-5-A	Ypsonas	12,99			Unknown	Moderate	Good	Upgrade
CY9-6-U	Batsounis	5,90			Moderate	Moderate	Moderate	No change
CY9-6-V	Tapakhna	5,51			Moderate	Good	Moderate	Degredation
CY9-6-W	Tapakhna	1,62	eph. HMWB	(eph. HMWB)	Moderate P.	Good and above P.	Moderate P.	Degredation
CY9-7-A	Krommya	9,75			NO CORRESPONDENCE	Good	Moderate	Degredation
CY9-8-D	Pantijo	6,29			NO CORRESPONDENCE	Moderate	Moderate	No change
CY9-8-E	Argaki Paleomylos	5,33			NO CORRESPONDENCE	Good	Good	No change
CY9-9-A	Villourka	11,73			Unknown	Good	Good	No change

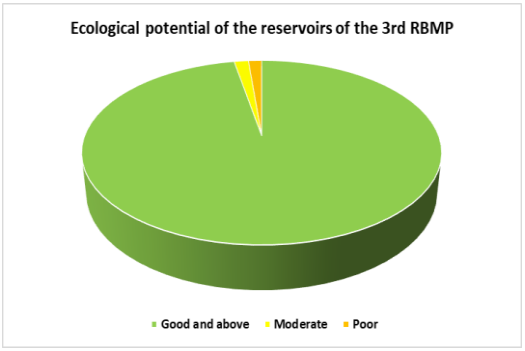
8.1.2 Reservoirs (Impounded Rivers)

Out of the 15 reservoirs, which are WBs, 13 are in good and above Ecological Potential. Mavrokolymbos was classified as moderate and Polemidia as poor. In relation to the 2nd RBMP with the exception of Mavrokolympos, the potential of the reservoirs is stable or even improved (Germasogeia, Polemidia).

Table 8-4 Aggregate data on the ecological potential of Reservoirs (Impounded Rivers)

	Good and above	Moderate	Poor	Total
WB Number	13	1	1	15
Area (Km²)	11,55	0,18	0,17	11,90
WB Number	86,67%	6,67%	6,67%	100,00%
Area (Km²)	97,06%	1,53%	1,42%	100,00%





a. WB Number **b. WB Area(km²)**

Chart 8-3 Ecological potential of the reservoirs of the 3rd Management Cycle

Table 8-5 Comparison of the ecological potential between 2009, 2013 and 2019

WB Code	WB Name	Ecological Potential 2009	Ecological Potential 2013	Ecological Potential 2019	Comparison 2013-2019
CY1-2-C_IR	ARMINOU	(New WB 2nd RBMP)	Good and above P.	Good and above P.	No change
CY1-3-D_IR	ASPROKREMMOS	Good and above P.	Good and above P.	Good and above P.	No change
CY1-4-C_IR	KANNAVIOU	(New WB 2nd RBMP)	Good and above P.	Good and above P.	No change
CY1-6-B_IR	MAVROKOLYMPOS	Good and above P.	Good and above P.	Moderate P.	Degradation
CY2-2-E_IR	EVRETOU	Good and above P.	Good and above P.	Good and above P.	No change
CY3-5-B_IR	XYLIATOS	Good and above P.	Good and above P.	Good and above P.	No change
CY3-7-I_IR	AKAKI-MALOUNDA	(New WB 2nd RBMP)	Good and above P.	Good and above P.	No change
CY6-1-B_IR	TAMASSOS	(New WB 2nd RBMP)	Good and above P.	Good and above P.	No change
CY8-7-B_IR	LEUKARA	Good and above P.	Good and above P.	Good and above P.	No change
CY8-7-E_IR	DIPOTAMOS	Good and above P.	Good and above P.	Good and above P.	No change
CY8-9-D_IR	KALAVASOS	Good and above P.	Good and above P.	Good and above P.	No change
CY9-2-G_IR	GERMASOGIA	Good and above P.	Moderate P.	Good and above P.	Upgrade
CY9-4-D_IR	POLEMIDIA	Bad P.	Bad P.	Poor P.	Upgrade
CY9-6-J_IR	PANO PLATRES	Good and above P.	Good and above P.	Good and above P.	No change
CY9-6-S_IR	KOURIS	Good and above P.	Good and above P.	Good and above P.	No change

8.1.3 Lake Water Bodies

Out of the 8 lake WBs of Cyprus, 5 are natural, 2 are HMWBs and 1 is an AWB. Their ecological status and potential have not been classified. For the Larnaka Main Salt Lake and the Salt Lake Aerodromio No2, however, based on the data, the ecological status is unknown but it is clear that it fails to achieve good. The same applies to the ecological potential of the Oroklini Lake, where the potential has failed to achieve good.

Natural WBs		
Ecological Status	Unknown	Total
WB Number	5	5
Area(Km^2)	16,55	16,55
HMWBs & AWB		
Ecological Potential	Unknown	Total
WB Number	3	3
Area (Km^2)	3,63	3,63
Total of lake WBs		
Ecological Status/Potential	Unknown	Total
WB Number	8	8
Area (Km2)	20,18	20,18
Natural WBs		
Ecological Status	Unknown	Σύνολο
WB Number	100,00%	100,00%
Area (Km^2)	100,00%	100,00%
HMWBs & AWB		
Ecological Potential	Unknown	Σύνολο
WB Number	100,00%	100,00%
Area (Km^2)	100,00%	100,00%
Total of lake WBs		
Ecological Status/Potential	Unknown	Σύνολο
WB Number	100,00%	100,00%
Area (Km^2)	100,00%	100,00%

Table 8-6 Comparison of ecological status/potential between 2009, 2013 and 2019

WB Code	WB Name	Ecological Status/Potential 2009	Ecological Status/Potential 2013	Ecological Status/Potential 2019	Comparison 2013-2019
CY_d7-1-2-70	Achna reservoir	Moderate	Unknown	Unknown P.*	No change
CY_L7-2-6-70	Paralimni Lake	Unknown	Unknown	Unknown P.*	No change
CY_L8-1-2-94	Oroklini Lake	(New WB 2nd RBMP)	Unknown	Unknown (Failing to achieve good P.)	No change
CY_L8-3-2-82	Larnaka Main Salt Lake	Moderate	Moderate	Unknown (Failing to achieve good)	-
CY_L8-3-2-85	Salt Lake Aerodromio No2	Moderate	Moderate	Unknown (Failing to achieve good)	
CY_L8-3-2-88	Salt Lake Orfani	Moderate	Moderate	Unknown*	-
CY_L8-3-2-96	Salt Lake Soros	Moderate	Moderate	Unknown*	-
CY_L9-5-3-50	Akrotiri Salt Lake	Moderate	Moderate	Unknown*	-

** The ecological status/ecological potential is unknown/nor does it meet the preliminary phytoplankton reference conditions.*

8.2 Chemical status

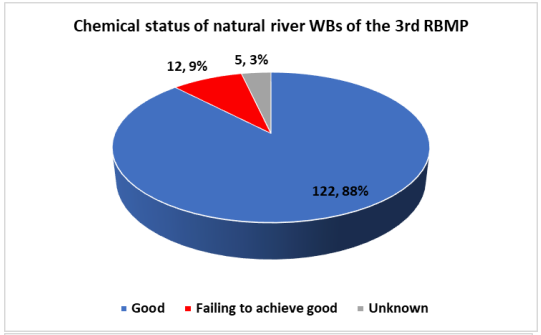
8.2.1 River WBs

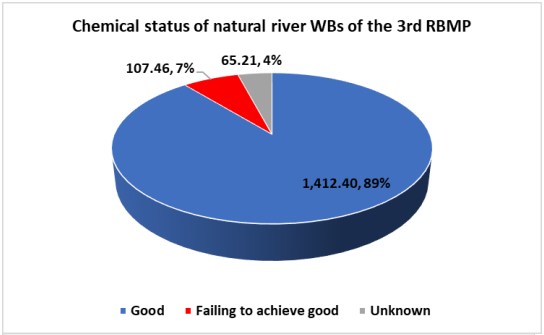
From the 170 river WBs:

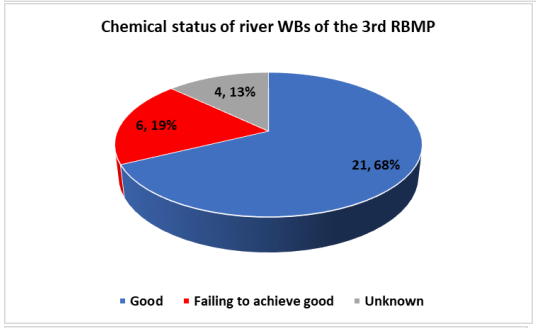
- 143 are in a good chemical status,
- 18 are in a "failing to achieve good" chemical status, and
- 9 were not classified due to lack of sufficient data with regards to their chemical status.

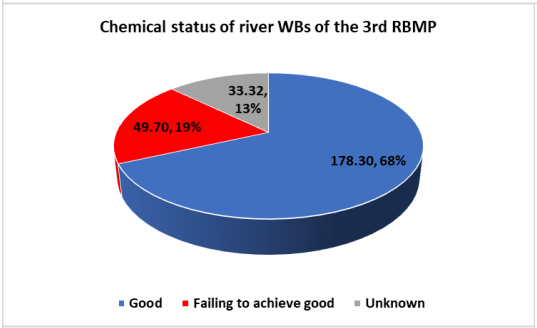
Table 8-7 Aggregate data of chemical status of rivers WBs

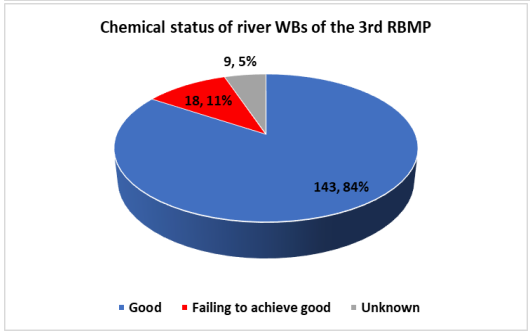
Chemical Status	Good	Failing to achieve good	Unknown	Total
Natural WBs				
WB Number	122	12	5	139
WB Length (Km)	1.412,40	107,46	65,21	1.585,08
HMWBs				
WB Number	21	6	4	31
WB Length (Km)	178,30	49,70	33,32	261,32
Total of River WBs (excluding reservoirs)				
Total number of WBs	143	18	9	170
Total length of WBs (Km)	1.590,70	157,16	98,53	1.846,40
Natural WBs				
WB Number	87,77%	8,63%	3,60%	100,00%
WB Length (Km)	89,11%	6,78%	4,11%	100,00%
HMWBs				
WB Number	67,74%	19,35%	12,90%	100,00%
WB Length (Km)	68,23%	19,02%	12,75%	100,00%
Σύνολο ποτάμιων ΥΣ (πλην ταμιευτήρων)				
Total number of WBs	84,12%	10,59%	5,29%	100,00%
Total length of WBs (Km)	86,15%	8,51%	5,34%	100,00%

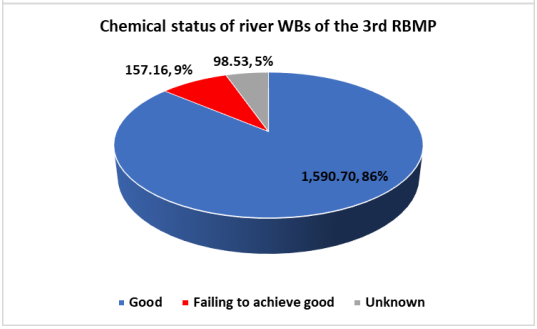












a. WB Number **b. WB Length (km)**

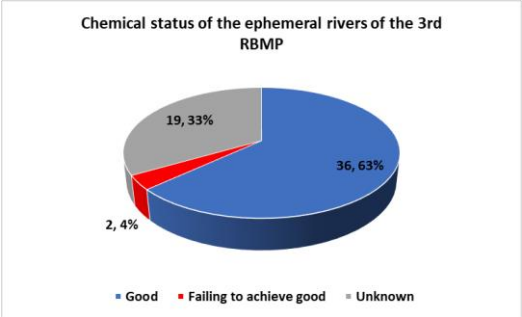
Chart 8-4 Chemical status of river WBs of the 3rd Management Cycle

In relation to the 2nd RBMP, out of the 170 river WBs, 8 are degraded in terms of their chemical status. For 7 of them the confidence in the classification is high since the data are obtained directly from the monitoring program. Finally, and with regards to the rest, the confidence of the classification is low as the status arose indirectly from the data of the monitoring program.

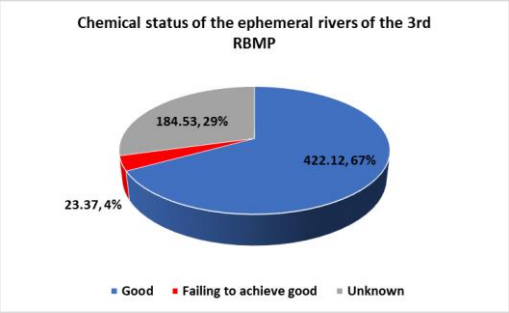
Table 8-8 Chemical status of ephemeral rivers of the 3rd Management Cycle

Chemical Status	Good	Failing to achieve good	Unknown	Total
Total number	36	2	19	57
Total length (Km)	422,12	23,37	184,53	630,02
Total number	63,16%	3,51%	33,33%	100,00%
Total length (Km)	67,00%	3,71%	29,29%	100,00%

As for the 57 ephemeral rivers (which are not WBs), 19 are in an unknown status, 36 in a good chemical status and 2 in "failing to achieve good" status. The chemical status was upgraded in one (1) WB (according to the monitoring program), in 48 their status was not changed and in 8 of them their chemical status was finally assigned (unknown in the 2nd RBMP).



a. WB Number



b. WB Length (km)

Chart 8-5 Chemical status of the ephemeral rivers of the 3rd Management Cycle

The degradation of the chemical status of the rivers WBs is due to Nickel exceedances. The Nickel EQSs (environmental quality standards) of Directive 2013/39/EU, which was the basis of the present assessment of chemical status, are stricter than in the former Directive 2008/105/EC, which was used to assess chemical status in 2009 and 2013.

Table 8-9 Comparison of the chemical status of river WBs between 2009 and 2019

River Code	River Name	Length (Km)	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
River WBs of the 3rd Management Cycle						
CY1-1-AB	Khapotami	23,23	Good	Good	Good	No change
CY1-1-C	Khapotami	19,33	Good	Good	Good	No change
CY1-1-D	Khapotami	4,82	Good	Good	Good	No change
CY1-1-E	Malleta	9,64	Good	Good	Good	No change
CY1-2-A	Dhiarizos	38,75	Good	Good	Good	No change
CY1-2-B	Dhiarizos	20,13	Good	Good	Good	No change
CY1-2-D1	Dhiarizos	28,40	Good	Good	Good	No change
CY1-2-D2	Dhiarizos	3,22	Good	Good	Good	No change
CY1-2-E	Tholos	7,49	Good	Good	Good	No change
CY1-2-F1	Yerovasinos	9,14	Good	Good	Good	No change
CY1-2-F2	Yerovasinos	2,07	Good	Good	Good	No change
CY1-3-A1	Roudhias	27,53	Good	Good	Good	No change
CY1-3-A2	Stenous	9,07	Good	Good	Good	No change
CY1-3-A3	Roudhias	5,36	Good	Good	Failing to achieve good	Degradation
CY1-3-B	Xeros Potamos	6,49	Good	Good	Failing to achieve good	Degradation
CY1-3-C	Xeros Potamos	11,79	Good	Good	Good	No change
CY1-3-E	Xeros Potamos	3,89	Good	Unknown	Good	-
CY1-3-F	Lazaridhaes	6,49	Good	Good	Good	No change
CY1-3-G	Lefkarkon	8,12	Good	Good	Good	No change
CY1-4-A	Ayia & Klimadhiou	13,66	Good	Good	Good	No change
CY1-4-B	Ayia	7,54	Good	Good	Good	No change
CY1-4-DE	Ezousa	12,32	Good	Good	Good	No change
CY1-4-F	Ezousa	5,19	Good	Good	Failing to achieve good	Degradation
CY1-4-G	Ezousa	5,92	Good	Good	Failing to achieve good	Degradation

River Code	River Name	Length (Km)	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
CY1-4-H	Ezousa	8,23	Good	Unknown	Failing to achieve good	-
CY1-4-I	Paleomylou	5,58	Good	Good	Good	No change
CY1-4-J	Ayios Nepios	7,03	Good	Good	Good	No change
CY1-4-K	Varkas	14,21	Good	Good	Good	No change
CY1-4-L1	Milarkou	10,41	Good	Good	Good	No change
CY1-4-L2	Rinou & Kyparishon	1,74	Good	Good	Good	No change
CY1-4-L3	Mylari	1,50	Good	Good	Good	No change
CY1-4-M	Kochatis	13,21	Unknown	Good	Good	No change
CY1-5-D1	Kochinas	2,65	Unknown	Unknown	Failing to achieve good	-
CY1-5-D2	Kochinas	0,41	Unknown	Unknown	Failing to achieve good	-
CY1-5-E1	Agriokalami	5,30	Unknown	Good	Good	No change
CY1-5-E2	Agriokalami & Taisi	2,17	Unknown	Good	Good	No change
CY1-6-A1	Mavrokolymbos	10,04	Good	Good	Good	No change
CY1-6-A2	Mavrokolymbos	1,85	Good	Good	Good	No change
CY1-6-C	Mavrokolymbos	2,70	Good	Good	Good	No change
CY1-6-D	Xeros	17,17	Unknown	Good	Good	No change
CY1-8-A1	Kalamoulli (Avgas)	6,83	Unknown	Good	Good	No change
CY1-8-A2	Avgas	3,16	Unknown	Good	Good	No change
CY1-8-A3	Khardjotis	8,39	Unknown	Good	Good	No change
CY1-8-B	Pevkos	15,44	Unknown	Good	Good	No change
CY2-1-A	Ayiou Ioanni	12,80	Unknown	Good	Good	No change
CY2-1-B	Argaki tou Pyrgou (Loutra Aphroditis)	2,92	(New WB)	(New WB)	Good	-
CY2-1-C	Argaki tou Pyrgou (Loutra Aphroditis)	0,36	(New WB)	(New WB)	Good	-
CY2-2-A	Neraidhes & Ammadhkiou	21,03	Good	Good	Good	No change
CY2-2-B	Garyllis	6,18	Good	Good	Good	No change
CY2-2-C	Stavros tis Psokas	36,86	Good	Good	Good	No change
CY2-2-D	Stavros tis Psokas	5,80	Good	Good	Good	No change
CY2-2-F	Stavros tis Psokas	2,72	Good	Good	Good	No change
CY2-2-G	Khrysokhou	2,80	Good	Good	Good	No change
CY2-2-H	Khrysokhou	6,77	Good	Good	Good	No change
CY2-2-I	Klavaris	9,31	(New WB)	(New WB)	Good	-
CY2-2-J	Klavaris	2,31	(New WB)	(New WB)	Good	-
CY2-2-K	Kryos (Kritou Terra)	6,93	(New WB)	(New WB)	Good	-
CY2-2-L	Kryos (Kritou Terra)	2,93	(New WB)	(New WB)	Good	-
CY2-3-A	Mirmikoph	14,91	Good	Good	Good	No change
CY2-3-B	Argaki tis Limnis	8,39	Good	Failing to achieve good	Failing to achieve good	No change
CY2-3-C1	Ayios Merkourios	20,17	Good	Good	Good	No change

River Code	River Name	Length (Km)	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
CY2-3-C2	Magounda	4,62	Good	Good	Good	No change
CY2-3-D	Magounda	3,99	Good	Good	Unknown	-
CY2-3-E	Xeropotamos	7,57	Unknown	Good	Good	No change
CY2-3-F1	Yialia	6,85	Good	Good	Good	No change
CY2-3-F2	Yialia	3,99	Good	Good	Good	No change
CY2-3-G	Yialia	1,11	Good	Good	Good	No change
CY2-4-A	Xeros	4,22	Good	Good	Good	No change
CY2-4-B	Xeros	2,86	Good	Good	Good	No change
CY2-4-C	Maroti & Diali	6,04	Good	Good	Good	No change
CY2-4-D	Livadhi	8,60	Good	Good	Good	No change
CY2-4-E	Livadhi	4,01	Good	Good	Good	No change
CY2-5-A	Ayios Theodoros	9,61	Unknown	Good	Good	No change
CY2-6-A	Katouris	9,88	Good	Good	Good	No change
CY2-6-B	Katouris	5,32	Good	Goods	Good	No change
CY2-7-A	Pyrgos	30,17	Good	Good	Good	No change
CY2-8-A	Pyrgos	33,24	Good	Good	Good	No change
CY2-9-A	Kambos	2,43	NO CORRESPONDENCE	Good	Good	No change
CY2-9-B	Kambos	7,30	Good	Good	Good	No change
CY2-9-C	Kambos	2,64	Good	Good	Good	No change
CY2-9-D	Kambos	3,01	Good	Good	Good	No change
CY3-1-A	Xeros	9,87	Good	Good	Good	No change
CY3-1-BC	Xeros	12,12	Good	Good	Good	No change
CY3-2-A	Marathasa	15,73	Good	Good	Good	No change
CY3-2-B	Marathasa	12,10	Good	Good	Good	No change
CY3-2-D	Rkondas	5,81	NO CORRESPONDENCE	Good	Good	No change
CY3-3-A	Ayios Nikolaos	14,91	Good	Good	Good	No change
CY3-3-B	Karyiotis	13,41	Good	Good	Failing to achieve good	Degradation
CY3-3-C	Karyiotis	11,36	Good	Unknown	Failing to achieve good	-
CY3-3-D	Argaki tou Karvouna	12,62	Good	Good	Failing to achieve good	Degradation
CY3-3-E	Alykhnos	6,09	Good	Good	Good	No change
CY3-4-AB	Atsas	17,33	Good	Good	Good	No change
CY3-4-C	Atsas	5,95	Good	Unknown	Unknown	No change
CY3-5-A	Lagoudhera	11,88	Good	Good	Good	No change
CY3-5-C	Lagoudhera	3,36	Good	Failing to achieve good	Failing to achieve good	Upgrade
CY3-5-D	Elia	22,25	Good	Failing to achieve good	Failing to achieve good	No change
CY3-5-E	Kannavia	15,52	Good	Good	Good	No change
CY3-7-A	Peristerona	48,62	Good	Good	Good	No change
CY3-7-B	Peristerona	11,34	Good	Good	Good	No change
CY3-7-C	Peristerona	7,95	Good	Good	Good	No change
CY3-7-DEF	Maroullenas	33,62	Good	Good	Good	No change
CY3-7-GH	Pharmakas	16,18	Good	Good	Good	No change

River Code	River Name	Length (Km)	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
CY3-7-J	Akaki	4,50	Good	Unknown	Unknown	No change
CY3-7-K	Akakiou	16,74	Good	Unknown	Unknown	No change
CY3-7-M	Likythia	32,18	Good	Unknown	Unknown	No change
CY6-1-A	Pedhieos & Ayios Onouphrios	30,07	Good	Good	Good	No change
CY6-1-C	Pediaios	0,97	Good	Good	Good	No change
CY6-1-D	Pediaios	20,42	Good	Good	Good	No change
CY6-1-E	Pediaios	9,12	Good	Good	Good	No change
CY6-5-A	Yialias	13,09	Good	Good	Good	No change
CY6-5-B	Yialias	12,90	Good	Good	Good	No change
CY6-5-C	Yialias	18,78	Good	Good	Good	No change
CY6-5-E	Koutsos	8,62	Good	Good	Good	No change
CY6-5-F	Koutsos	6,25	Good	Good	Good	No change
CY6-5-G	Villourkon	9,57	NO CORRESPONDENCE	Good	Good	No change
CY6-5-H	Alykos	31,33	Good	Unknown	Good	-
CY6-5-I	Almyros	21,00	Good	Unknown	Good	-
CY7-2-A	Vathys	6,60	Unknown	Unknown	Unknown	No change
CY8-3-A	Kalo Chorio	7,34	NO CORRESPONDENCE	Unknown	Failing to achieve good	-
CY8-3-B	NoName	3,74	NO CORRESPONDENCE	Unknown	Unknown	No change
CY8-4-C	Treminthos	24,16	Good	Good	Good	No change
CY8-4-D	Treminthos	6,78	Good	Good	Good	No change
CY8-5-AB	Pouzis	24,12	Good	Good	Good	No change
CY8-7-A	Syrkatis	20,03	Good	Good	Good	No change
CY8-7-C	Syrkatis	6,65	Good	Good	Hood	No change
CY8-7-D	Argaki tou Mylou	16,81	Good	Good	Good	No changes
CY8-7-FG	Pendaskhinos	16,72	Good	Good	Good	No changes
CY8-8-AB	Ayiou Mina	19,63	Good	Good	Good	No change
CY8-8-C	Ayiou Mina	8,06	Good	Good	Good	No charge
CY8-8-D	Ayiou Mina	7,35	Good	Good	Good	No change
CY8-9-ABC1	Vasilikos	17,09	Good	Good	Good	No change
CY8-9-C2G	Vasilikos	33,03	Good	Good	Good	No change
CY8-9-EF	Vasilikos	13,40	Good	Unknown	Unknown	No change
CY9-2-A	Karydhaki	17,55	Good	Good	Good	No change
CY9-2-BC	Yermasogeia	11,61	NO CORRESPONDENCE	Good	Good	No change
CY9-2-D	Yermasogeia	2,64	Good	Good	Good	No change
CY9-2-E	Yermasogeia	5,69	Good	Good	Good	No change
CY9-2-F	Yermasogeia	9,15	Good	Good	Good	No change
CY9-2-H	Yermasogeia	6,33	Good	Good	Good	No change
CY9-2-I	Pissokamina	7,63	Good	Good	Good	No change
CY9-2-J	Yialiadhes	9,10	Good	Good	Good	No change
CY9-2-KL	Yialiadhes	6,33	Good	Good	Good	No change
CY9-4-B	Garyllis	24,34	Failing to achieve good	Good	Food	No change
CY9-4-C	Garyllis	3,89	Failing to achieve good	Failing to achieve good	Failing to achieve good	No change

River Code	River Name	Length (Km)	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
CY9-4-E	Garyllis	3,75	Failing to achieve good	Unknown	Failing to achieve good	-
CY9-4-F	Garyllis	4,36	Failing to achieve good	Unknown	Failing to achieve good	-
CY9-4-G	Phasoula	7,89	NO CORRESPONDENCE	Good	Good	No change
CY9-6-A	Ayios Ioannis	5,28	Good	Good	Good	No change
CY9-6-BCD	Ambelikos-Agros	19,23	Good	Good	Good	No change
CY9-6-E	Ambelikos-Xylourikos	11,46	Good	Good	Good	No change
CY9-6-F	Limnatis	7,03	Good	Good	Good	No change
CY9-6-G	Pelendri	6,13	NO CORRESPONDENCE	Good	Good	No change
CY9-6-H	Ayios Mamas	5,84	NO CORRESPONDENCE	Good	Good	No change
CY9-6-I	Loumata	3,07	Failing to achieve good	Good	Good	No change
CY9-6-KL	Kouris	22,43	Failing to achieve good	Good	Failing to achieve good	Degradation
CY9-6-M	Kouris	13,13	Failing to achieve good	Good	Failing to achieve good	Degradation
CY9-6-N	Mesapotamos	6,46	Good	Good	Good	No change
CY9-6-O	Moniatis	5,83	Good	Good	Good	No change
CY9-6-P	Kryos	8,03	Good	Good	Good	No change
CY9-6-Q	Kryos	3,66	Good	Good	Good	No change
CY9-6-R	Kryos	17,36	Good	Good	Good	No change
CY9-6-T	Kouris	11,42	Good	Unknown	Unknown	No change
CY9-7-B	Symvoulas	7,87	Unknown	Good	Good	No change
CY9-7-C	Symvoulas	5,07	Unknown	Good	Good	No change
CY9-8-A1	Perthikias	9,08	Unknown	Good	Good	No change
CY9-8-A2	Siapani	18,98	Unknown	Good	GHood	No change
CY9-8-B1	Vromonero	3,27	Unknown	Good	Good	No change
CY9-8-B2	Pefkeri (Mandalas)	4,72	Unknown	Good	Good	No change
CY9-8-B3	Evdhimou (Mandalas)	3,34	Unknown	Good	Good	No change
CY9-8-C	Evdhimou	4,14	Unknown	Good	Good	No change
Ephemeral rivers of the 3rd Management Cycle						
CY1-5-A	Limnarka	12,00	Unknown	Good	Good	No change
CY1-5-B	Limnarka	1,53	Unknown	Good	Good	No change
CY1-5-C	Kochinas	7,69	Unknown	Unknown	Unknown	No change
CY2-9-E	Potamos tou Kambou	3,72	Good	Unknown	Unknown	No change
CY3-2-E	Vrountokremni Argakin	12,83	Good	Good	Good	No change
CY3-4-D	Atsas	6,46	Good	Unknown	Unknown	No change
CY3-5-F	Asinou	15,31	Good	Good	Good	No change

River Code	River Name	Length (Km)	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
CY3-5-G	Galouropniktis Potamos	13,07	NO CORRESPONDENCE	Good	Good	No change
CY3-6-A	Xeropotamos	12,77	Unknown	Good	Good	No change
CY3-6-B	Potami	18,06	Unknown	Good	Good	No change
CY3-6-C	Komitis	19,62	Unknown	Unknown	Unknown	No change
CY3-7-L	Korivas	10,30	NO CORRESPONDENCE	Good	Good	No change
CY3-7-N	Koutis & Aloupos	22,35	Good	Good	Good	No change
CY3-7-O	Merika	24,85	Good	Unknown	Unknown	-
CY3-7-P	Kokkinitrimithia	13,62	Good	Unknown	Unknown	No change
CY3-7-Q	Serrakhis	19,31	Good	Unknown	Unknown	No change
CY3-7-R	Ovgos	27,73	Good	Unknown	Good	-
CY6-1-G	Kouphos	6,85	NO CORRESPONDENCE	Good	Good	No change
CY6-1-H	Argaki	9,92	NO CORRESPONDENCE	Good	Good	No change
CY6-1-I	Klemos	4,48	NO CORRESPONDENCE	Unknown	Unknown	No change
CY6-1-J	Klemos	8,59	NO CORRESPONDENCE	Unknown	Unknown	No change
CY6-1-K	Katevas	10,33	NO CORRESPONDENCE	Unknown	Good	-
CY6-1-L	Kaloyeros	15,56	Good	Failing to achieve good	Good	Upgrade
CY6-1-M	Vathys	13,13	Good	Unknown	Good	-
CY6-1-N	Dhrakondias	6,86	NO CORRESPONDENCE	Unknown	Unknown	No change
CY6-1-O	Vyzakotos	4,23	NO CORRESPONDENCE	Unknown	Unknown	No change
CY6-1-P	Almyros	24,31	Unknown	Unknown	Unknown	No change
CY7-2-B	Liopetri	5,74	Unknown	Good	Good	No change
CY7-2-C	Liopetri	2,46	Unknown	Good	Good	No change
CY8-1-A	Avdellero	6,69	Unknown	Good	Good	No change
CY8-1-B	Avdellero	6,84	Unknown	Unknown	Unknown	No change
CY8-2-A	Aradippou	32,61	Unknown	Unknown	Unknown	No change
CY8-2-B	Aradippou	5,17	Unknown	Unknown	Unknown	No change
CY8-4-A	Ammos & Kalamoulia	19,35	Good	Good	Good	No change
CY8-4-B	Xylias	8,62	Good	Failing to achieve good	Failing to achieve good	No change
CY8-4-E	Ayia Marina	2,16	NO CORRESPONDENCE	Good	Good	No change
CY8-4-F	Mosfiloti	11,56	Good	Good	Good	No change

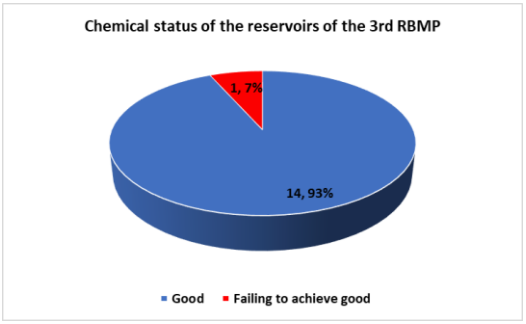
River Code	River Name	Length (Km)	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
CY8-4-G	Ayios Ioannis	15,25	Good	Good	Good	No change
CY8-5-C	Xeropouzos	13,33	Good	Good	Good	No change
CY8-6-A	Xeropotamos	18,94	Good	Good	Good	No change
CY8-7-H		10,48	Good	Good	Good	No change
CY8-9-H	Argaki tis Asgatas	13,11	NO CORRESPONDENCE	Unknown	Good	-
CY9-1-A	Pendakomo	7,92	NO CORRESPONDENCE	Good	Good	No change
CY9-1-BC	Argaki tou Pyrgou	14,75	Good	Unknown	Failing to achieve good	-
CY9-1-D	Argaki tou Pyrgou	2,94	Good	Unknown	Unknown	No change
CY9-1-E	Argaki tis Monis	10,06	NO CORRESPONDENCE	Unknown	Good	-
CY9-3-A	Vathias (Ag. Athanasios)	6,87	NO CORRESPONDENCE	Good	Good	No change
CY9-3-B	Vathias (Ag. Athanasios)	4,98	NO CORRESPONDENCE	Unknown	Unknown	No change
CY9-4-A	Vathias	5,59	Failing to achieve good	Unknown	Unknown	No change
CY9-5-A	Ypsonas	12,99	Unknown	Unknown	Good	-
CY9-6-U	Batsounis	5,90	Good	Unknown	Unknown	No change
CY9-6-V	Tapakhna	5,51	Good	Good	Good	No change
CY9-6-W	Tapakhna	1,62	Good	Unknown	Unknown	No change
CY9-7-A	Krommya	9,75	NO CORRESPONDENCE	Good	Good	No change
CY9-8-D	Pantijo	6,29	NO CORRESPONDENCE	Good	Good	No change
CY9-8-E	Argaki Paleomylos	5,33	NO CORRESPONDENCE	Good	Good	No change
CY9-9-A	Villourka	11,73	Unknown	Good	Good	No change

8.2.2 Reservoirs (Impounded Rivers)

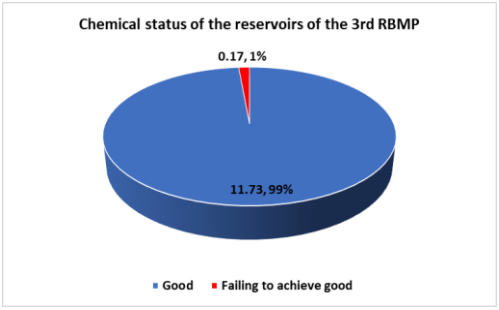
Out of the 15 reservoirs in Cyprus, 14 are in good chemical status. Polemidia, however, has failed again to achieve good chemical status due to exceedance in bioavailable nickel. In relation to the 2nd RBMP with the exception of Polemidia, the chemical status is stable or even improved (**Germasogeia**). Compared to the 2nd RBMP, now there are data for Akaki-Malounda and for Tamassos and they could be now assessed.

Table 8-10 Aggregate data of reservoir chemical status

Chemical Status	Good	Failing to achieve good	Unknown	Total
WB Number	14	1	0	15
WB Area (Km²)	11,73	0,17	0	11,90
WB Number	93,33%	6,67%	0,00%	100,00%
WB Area (Km²)	98,58%	1,42%	0,00%	100,00%



a. WB Number



β. WB Area (km²)

Chart 8-6 Chemical status of the reservoirs of the 3rd Management Cycle

Table 8-11 Comparison of the chemical status of reservoirs between 2009 and 2019

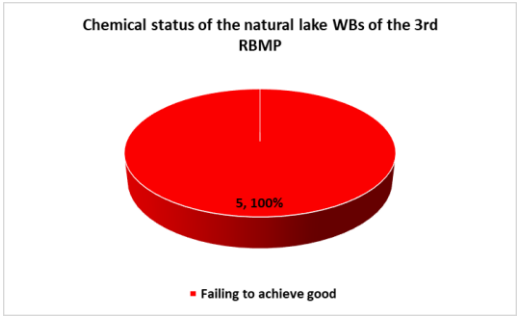
WB Code	WB Name	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
CY1-2-C_IR	ARMINOU	-	Good	Good	No change
CY1-3-D_IR	ASPROKREMMOS	Good	Good	Good	No change
CY1-4-C_IR	KANNAVIOU	-	Good	Good	No change
CY1-6-B_IR	MAVROKOLYMPOS	Good	Good	Good	No change
CY2-2-E_IR	EVRETOU	Good	Good	Good	No change
CY3-5-B_IR	XYLIATOS	Good	Good	Good	No change
CY3-7-I_IR	AKAKI-MALOUNDA	-	Unknown	Good	-
CY6-1-B_IR	TAMASSOS	-	Unknown	Good	-
CY8-7-B_IR	LEUKARA	Failing to achieve good	Good	Good	No change
CY8-7-E_IR	DIPOTAMOS	Good	Good	Good	No change
CY8-9-D_IR	KALAVASOS	Good	Good	Good	No change
CY9-2-G_IR	GERMASOGIA	Failing to achieve good	Failing to achieve good	Good	Upgrade
CY9-4-D_IR	POLEMIDIA	Failing to achieve good	Failing to achieve good	Failing to achieve good (bioavailable Nickel)	No change
CY9-6-J_IR	PANO PLATRES	Good	Good	Good	No change
CY9-6-S_IR	KOURIS	Good	Good	Good	No change

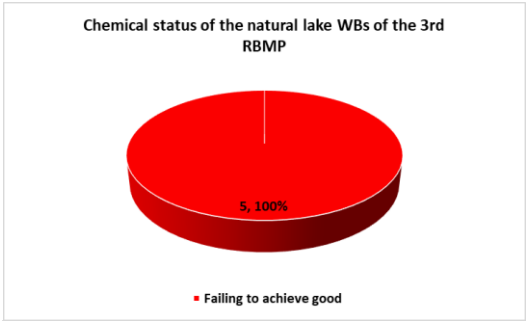
8.2.3 Lake Water Bodies

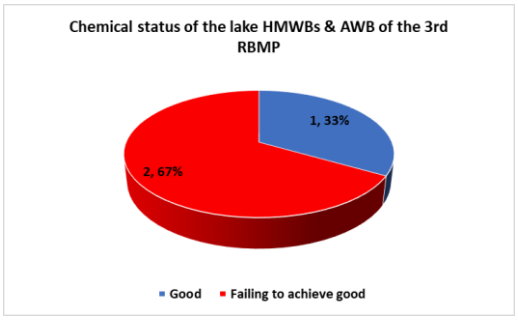
Out of the lake WBs of Cyprus, only the Achna Reservoir (AWB) is in a good chemical status. In relation to the 2nd RBMP and with regards to the lake WBs, there is now a clear picture of their chemical status.

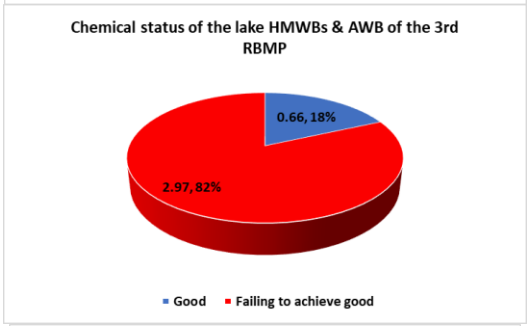
Table 8-12 Aggregate data of lake chemical status

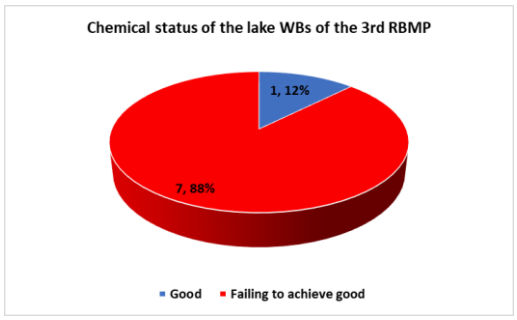
Chemical Status	Good	Failing to achieve good	Unknown	Total
Natural lake WBs				
WB Number	0	5	0	5
WB Area (Km²)	0,00	16,55	0,00	16,55
HMWBs & AWB				
WB Number	1	2	0	3
WB Area (Km²)	0,66	2,97	0,00	3,63
Total of lake WBs				
WB Number	1	7	0	8
WB Area (Km²)	0,66	19,51	0,00	20,18
Natural lake WBs				
WB Number	0,00%	100,00%	0,00%	100,00%
WB Area (Km²)	0,00%	100,00%	0,00%	100,00%
HMWBs & AWB				
WB Number	33,33%	66,67%	0,00%	100,00%
WB Area (Km²)	18,32%	81,68%	0,00%	100,00%
Total of lake WBs				
WB Number	12,50%	87,50%	0,00%	100,00%
WB Area (Km²)	3,30%	96,70%	0,00%	100,00%

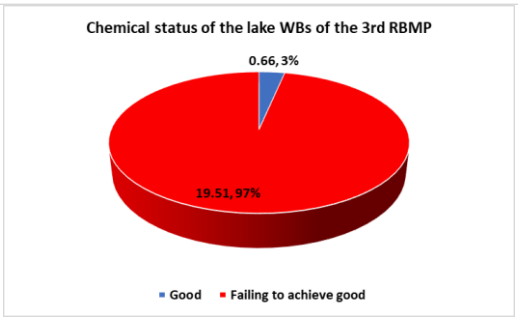












a. WB Number **b. WB Area(km²)**

Chart 8-7 Chemical status of lake WBs of the 3rd Management Cycle

Table 8-13 Comparison of the chemical status of lake WBs between 2009 and 2019

WB Code	WB Name	Chemical Status 2009	Chemical Status 2013	Chemical Status 2019	Comparison 2013-2019
CY_d7-1-2-70	Achna Reservoir	Unknown	Good	Good	No change
CY_L7-2-6-70	Paralimni Lake	Unknown	Unknown	Failing to achieve good	-
CY_L8-3-2-82	Larnaka Main Salt Lake	Good	Unknown	Failing to achieve good	-
CY_L8-3-2-85	Salt Lake Aerodromio No2	Good	Unknown	Failing to achieve good	-
CY_L8-3-2-88	Salt Lake Orfani	Good	Unknown	Failing to achieve good	-
CY_L8-1-2-94	Oroklini Lake	(New WB 2nd RBMP)	Unknown	Failing to achieve good	-
CY_L8-3-2-96	Salt Lake Soros	Good	Unknown	Failing to achieve good	-
CY_L9-5-3-50	Akrotiri Salt Lake	Good	Unknown	Failing to achieve good	-

ANNEX - Available data of the Annex substances of Directive 2008/105/EC in river WBs of the 2013-2019 period - Part A

Station ID	Station Name	1,2,3-TRICHLOROBENZENE	1,2-DICHLOROETHANE	1,3,5-TRICHLOROBENZENE	2,4-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	ACLONIFEN	ALACHLOR	ALDRIN	ANTHRACENE	ATRAZINE	BENZENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(GHI)PERYLENE	BENZO(K)FLUORANTHENE	BIFENOX	CADMIUM	CCL4	CHLORFENVINPHOS	CHLOROPYRIFOS	CYPERMETHRIN	DEHP	DICHLORVOS	DICOFOL	DIELDRIN	DIURON	ENDOSULFAN	ENDRIN	FLUORANTHENE	HCH-ALPHA	HCH-BETA	HCH-GAMMA (LINDANE)
r1-1-1-75	Khapotami d/s Mandria (Yophyrin Bridge)								3										3					3	2	3	3								
r1-1-3-95	Chapotami near Kissousa	13	13		8	8	8	8	1	13	8	8	13	13	8	8	8	8	1	13	13	13	13	1	9	1	13	8	13	8	8	8	8	8	8
r1-2-3-94	Phini River @ Pakhnoutis Ford	14	14	1	5	5	5	5	3	13	5		14	14					3	15	14	14	13	3	5	3	14	5	14	5	5		4	4	4
r1-2-4-25	Diarizos U/S Arminou Dam	6	6		5	5	5	5		6	5	5	6	6	5	5	5	5		6	6	6	6		5		6	5	6	5	5	5	5	5	5
r1-2-6-64	Diarizos @ Ag. Georgios	18	18	1	9	9	9	9	6	18	9	6	17	18	6	6	6	6	6	18	18	17	18	6	9	6	19	9	17	9	9	6	8	8	8
r1-3-5-91	Xeros River @ Rhoudias Bridge																			4															
r1-3-6-53	Xeros @ Rotsos Ton Laoudion																			14															
r1-3-8-60	Xeros near Foinikas	16	16	1	4	4	4	4	7	16	4	1	16	16	1	1	1	1	7	16	16	16	16	7	6	7	16	4	16	4	4	1	3	3	3
r1-4-6-75	Varkas River Near Amargeti	8	8		3	3	3	3	5	8	3	2	8	8	2	2	2	2	5	8	8	8	8	5	5	5	10	3	8	3	3	2	3	3	3
r1-4-7-10	Ezousas near Moro Nero	17	17	1	8	8	8	8	6	16	8	5	17	17	5	5	5	5	6	17	17	17	16	6	8	6	18	8	17	8	8	5	7	7	7
r1-4-8-88	Kochatis River Near Koloni	1	1		1	1	1	1		1	1	1	1	1	1	1	1	1		1	1	1	1		1		1	1	1	1	1	1	1	1	1
r1-4-9-01	Ezousas near Ag. Varvara EZ3	9	9		9	9	9	9		9	9	5	9	9	5	5	5	5		9	9	9	9		9		8	9	9	8	9	5	9	9	9
r1-4-9-80	Ezousas near Acheleia	13	13	1	5	5	5	5	7	13	5	2	13	13	2	2	2	2	7	13	13	13	13	7	5	7	16	5	13	5	5	2	4	4	4
r1-4-9-99	Ezousas at Coast EZ2	16	16		16	16	16	16		15	16	6	16	16	6	6	6	6		16	16	16	15		16		15	16	16	13	16	6	16	16	16
r1-5-5-89	Koshinas River Near Kaliadhes Locality	22	22	1	10	10	10	10	14	24	10	3	24	22	3	3	3	3	14	25	22	24	24	14	14	14	25	10	24	9	10	3	9	9	9
r1-6-2-17	Mavrokolympos R.@ Krya Vrysi								2										2					2	1	2	2								
r1-8-5-89	Pevkos R. @ Lara Road								2										2					2	2	2	2								
r2-1-8-74	Argaki tou Ayiou Ioanni near shooting range								4										4					4	3	4	4								
r2-2-3-95	Chrysochou near Skoulli	6	6		6	6	6	6	2	7	6	6	7	6	6	6	6	6	2	7	6	7	7	2	6	2	9	6	7	6	6	6	6	6	6
r2-2-6-35	Stavros tis Psokas near Sarama Quarry								4										4	1				4	4	4	4								
r2-2-7-34	Chrysochou River @ Goudi bridge									1			1									1	1				1		1						
r2-2-8-95	Chrysochou near Coast									1													1				1								
r2-3-1-64	Mirmikoph River D/S Steni								2										2	1				2	2	2	2								
r2-3-2-96	Pelathousa R. (Argaki tis Limnis) @ Polis-Argaka Rd.	6	6	1	6	6	6	6	1	6	6	5	6	6	5	5	5	5	1	10	6	6	6	1	6	1	6	6	6	6	6	5	5	5	5
r2-3-4-80	Makounta U/S Argaka Dam								1										1	20				1		1	1								
r2-3-7-74	Xeropotamos D/S Poros tou Sykarkou																			1															
r2-9-2-50	Kambos R. Near Ag. Varvara	24	24	1	16	16	16	16	2	26	16	11	26	24	11	11	11	11	2	26	24	26	26	2	16	2	26	16	26	16	16	11	15	15	15
r3-2-1-85	Marathasa U/S Kalopanagiotis Dam	14	14		4	4	4	4	2	14	4		15	14					2	15	14	15	14	2	6	2	16	4	15	3	4		4	4	4
r3-3-1-60	Agios Nikolaos U/S Fish Farm																			20															
r3-3-2-60	Platania near Kakopetria	6	6		5	5	5	5	2	6	5	5	6	6	5	5	5	5	2	20	6	6	6	2	7	2	8	5	6	5	5	5	5	5	5
r3-3-3-15	Kargotis near Galata																			1															
r3-3-3-95	Kargotis near Evrychou	25	25	1	15	15	15	15	10	25	15	11	24	25	11	11	11	11	10	25	25	24	25	10	15	10	27	15	24	15	15	11	14	14	14
r3-4-2-90	Atsas near Evrychou	6	6		4	4	4	4	6	6	4	4	6	6	4	4	4	4	6	6	6	6	6	6	5	6	10	4	6	4	4	4	4	4	4
r3-5-1-50	Lagoudera near Lagoudera Br.	3	3		1	1	1	1	2	3	1		3	3					2	3	3	3	3	2	1	2	4	1	3	1	1		1	1	1
r3-5-4-40	Elia near Vyzakia	21	21		14	14	14	14	8	22	14	13	21	21	13	13	13	13	8	37	21	21	22	8	19	8	30	14	21	13	14	13	14	14	14
r3-7-1-55	Peristerona R. @ Siphilos	9	9		3	3	3	3	1	9	3	2	9	9	2	2	2	2	1	11	9	9	9	1	4	1	10	3	9	2	3	2	3	3	3

Station ID	Station Name	1,2,3-TRICHLOROBENZENE	1,2-DICHLOROETHANE	1,3,5-TRICHLOROBENZENE	2,4-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	ACLONIFEN	ALACHLOR	ALDRIN	ANTHRACENE	ATRAZINE	BENZENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(GHI)PERYLENE	BENZO(K)FLUORANTHENE	BIFENOX	CADMIUM	CCL4	CHLORFENVINPHOS	CHLOROPYRIFOS	CYPERMETHRIN	DEHP	DICHLORVOS	DICOFOL	DIELDRIN	DIURON	ENDOSULFAN	ENDRIN	FLUORANTHENE	HCH-ALPHA	HCH-BETA	HCH-GAMMA (LINDANE)
r3-7-1-84	Peristerona @ Peristerona	2	2		2	2	2	2	1	2	2	2	2	2	2	2	2	2	1	2	2	2	2	1	2	1	3	2	2	2	2	2	2	2
r3-7-3-71	Akaki U/S Akaki-Malounta Dam	10	10	1	3	3	3	3	8	9	3		10	10					8	18	10	10	8	8	3	8	10	3	10	3	3		2	2	2
r3-7-5-35	Aloupos R. near Arediou	5	5		3	3	3	3	2	5	3	2	5	5	2	2	2	2	2	5	5	5	5	2	3	2	5	3	5	3	3	2	3	3	3
r3-7-5-50	Koutis R. @ Asprokremnos locality	5	5		3	3	3	3	2	5	3	2	5	5	2	2	2	2	2	5	5	5	5	2	3	2	5	3	5	3	3	2	3	3	3
r6-1-1-72	Pediaios R. @ Philani																			2					0										
r6-1-1-80	Agios Onoufrios near Kampia																			5					0										
r6-1-2-38	Pediaios near Kato Deftera	6	6		2	2	2	2	3	6	2	1	6	6	1	1	1	1	3	6	6	6	5	3	2	3	6	2	6	2	2	1	2	2	2
r6-1-4-34	Katevas near SOPAZ roundabout	6	6	2	3	3	3	3	6	6	3		6	6					6	6	6	6	5	6	4	6	6	3	6	3	3		1	1	1
r6-1-5-52	Vathys @ Athalassa Park	16	16	1	9	9	9	9	8	13	9	6	13	16	6	6	6	6	8	16	16	13	13	8	10	8	14	9	13	9	9	6	8	8	8
r6-5-1-34	Yialias R. near Azizis locality (Lythrodontas)	1	1						1	1			1	1					1	2	1	1	1	1	1	1	2		1						
r6-5-1-85	Gialias near Kotsiati	10	10		3	3	3	3	4	10	3	2	9	10	2	2	2	2	4	10	10	9	10	4	3	4	10	3	9	3	3	2	3	3	3
r6-5-2-85	Alykos d/s Dhali Industrial Area	4	4		3	3	3	3	2	4	3	2	4	4	2	2	2	2	2	4	4	4	4	2	3	2	4	3	4	3	3	2	3	3	3
r6-5-3-15	Gialias near Nisou	9	9		2	2	2	2	4	9	2	1	9	9	1	1	1	1	4	9	9	9	8	4	2	4	9	2	9	2	2	1	2	2	2
r6-5-3-50	Gialias near Potamia																			1					0										
r8-3-2-60	Kalo Chorio R. @ Kamares	10	10		5	5	5	5	2	10	5	5	10	10	5	5	5	5	2	10	10	10	10	2	7	2	10	5	10	5	5	5	5	5	5
r8-4-1-57	Kalamoulia R. u/s Lympia Reservoir								1										1	1				1	1	1	1								
r8-4-1-58	Xylias R. u/s Lympia Reservoir								1										1	10				1	1	1	1								
r8-4-3-40	Treminthos near Agia Anna	13	13		6	6	6	6	4	13	6	5	12	13	5	5	5	5	4	13	13	12	12	4	6	4	13	6	12	6	6	5	6	6	6
r8-4-5-30	Treminthos near Klavdia	6	6		2	2	2	2	4	6	2	1	6	6	1	1	1	1	4	6	6	6	5	4	2	4	6	2	6	2	2	1	2	2	2
r8-5-1-60	Pouzis near Alethriko								1										1					1	0	1	1								
r8-6-2-57	Xeros near Ghlyki Neron (Stavrovouni Forest)	5	5		1	1	1	1	3	5	1		5	5					3	5	5	5	5	3	1	3	5	1	5	1	1		1	1	1
r8-6-3-50	Xeropotamos near Alaminos	1	1							1			1	1						1	1	1	1		0		1		1						
r8-7-2-60	Syriatis near Pano Lefkara	9	9		3	3	3	3	3	9	3	2	9	9	2	2	2	2	3	10	9	9	9	3	3	3	9	3	9	3	3	2	3	3	3
r8-7-3-95	Mylos U/S Dipotamos Dam								5										5					5	3	5	5								
r8-8-2-95	Maroni near Choirokoitia	2	2						2	2			2	2					2	2	2	2	2	2	1	2	2		2						
r8-9-3-83	Exovounia R. near Layia								5										5					5	4	5	5								
r8-9-5-40	Vasilikos near Lageia	20	20		13	13	13	13	2	19	13	12	20	20	12	12	12	12	2	20	20	20	19	2	15	2	20	13	20	12	13	12	13	13	13
r8-9-6-98	Argaki Asgatas near Kalavasos																			9					0										
r9-1-3-80	Argaki tis Monis near Moni	9	9	1	4	4	4	4	4	9	4	3	9	9	3	3	3	3	4	9	9	9	8	4	4	4	9	4	9	4	4	3	3	3	3
r9-1-4-51	Argaki tou Pyrgou u/s Recharge Dam	10	10	1	4	4	4	4	6	10	4	3	10	10	3	3	3	3	6	10	10	10	9	6	4	6	12	4	10	4	4	3	3	3	3
r9-2-1-43	Ayios Pavlos R. u/s Kalimera Diversion	18	18	1	5	5	5	5	11	19	5		19	18					11	19	18	19	19	11	9	11	20	5	19	4	5		4	4	4
r9-2-3-05	Germasogeia R. @ Dierona	12	12		4	4	4	4	3	12	4	3	12	12	3	3	3	3	3	12	12	12	12	3	7	3	13	4	12	3	4	3	4	4	4
r9-2-3-85	Germasogeia near Foinikaria								3										3	23				3	1	3	3								
r9-2-4-27	Argaki tou Monastiriou near Amyrou Monastery																			8					0										
r9-2-4-95	Gialiades (Akrounta) U/S Germasogeia Dam	6	6		3	3	3	3	2	6	3	2	6	6	2	2	2	2	2	10	6	6	6	2	5	2	7	3	6	2	3	2	3	3	3
r9-4-3-39	Phasoula d/s Paramytha	4	4		2	2	2	2	3	4	2	2	4	4	2	2	2	2	3	4	4	4	4	3	2	3	7	2	4	2	2	2	2	2	2
r9-4-3-41	Garyllis R. @ Paramytha	10	10	1	6	6	6	6	6	10	6	5	9	10	5	5	5	5	6	10	10	9	10	6	6	6	11	6	9	6	6	5	5	5	5
r9-4-3-80	Garyllis U/S Polemidia Dam	16	16	1	8	8	8	8	17	16	8	4	15	16	4	4	4	4	17	33	16	15	16	17	13	17	24	8	15	8	8	4	7	7	7

Station ID	Station Name	1,2,3-TRICHLOROBENZENE	1,2-DICHLOROETHANE	1,3,5-TRICHLOROBENZENE	2,4-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	ACLONIFEN	ALACHLOR	ALDRIN	ANTHRACENE	ATRAZINE	BENZENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(GHI)PERYLENE	BENZO(K)FLUORANTHENE	BIFENOX	CADMIUM	CCL4	CHLORFENVINPHOS	CHLOROPYRIFOS	CYPERMETHRIN	DEHP	DICHLORVOS	DICOFOL	DIELDRIN	DIURON	ENDOSULFAN	ENDRIN	FLUORANTHENE	HCH-ALPHA	HCH-BETA	HCH-GAMMA (LINDANE)
r9-5-1-99	Ypsonas near Ypsonas	1	1		1	1	1	1		1	1	1	1	1	1	1	1	1		1	1	1	1		1		1	1	1	1	1	1	1	1	1
r9-6-1-87	Kryos @ Koilani	11	11	1	3	3	3	3	9	11	3		11	11					9	12	11	11	10	9	3	9	12	3	11	3	3		2	2	2
r9-6-2-60	Kryos U/S Tunnel Outlet								1										1					1	1	1	1								
r9-6-3-36	Kouris near Kato Amiantos	15	15	1	7	7	7	7	12	16	7	5	15	15	5	5	5	5	12	55	15	15	15	12	9	12	20	7	15	7	7	5	6	6	6
r9-6-3-77	Mesapotamos u/s Saittas Diversion								2										2					2	2	2	2								
r9-6-3-87	Moniatis River @ Lourka (Footbridge)	13	13	1	6	6	6	6	7	14	6		14	13					7	13	13	14	14	7	8	7	14	6	14	6	6		5	5	5
r9-6-4-92	Kouris @ Alassa New Weir	26	26		15	15	15	15	5	25	15	11	26	26	11	11	11	11	5	32	26	26	25	5	18	5	26	15	26	14	15	11	15	15	15
r9-6-5-62	Agros River Near Ag. Ioannis	20	20	1	6	6	6	6	15	20	6		20	20					15	20	20	20	20	15	7	15	21	6	20	6	6		5	5	5
r9-6-5-63	Ambelikos River d/s Potamitissa	18	18		5	5	5	5	6	16	5	2	18	18	2	2	2	2	6	19	18	18	16	6	9	6	18	5	18	4	5	2	5	5	5
r9-6-6-32	Limnatis R. Near Ag. Mamas	12	12		11	11	11	11	1	12	11	11	12	12	11	11	11	11	1	13	12	12	12	1	11	1	13	11	12	11	11	11	11	11	11

ANNEX - Available data of the Annex I substances of Directive 2008/105/EC in river WBs of the 2013-2019 period - Part B

Station ID	Station Name	HEPTACHLOR	HEPTACHLOR EPOXIDE	HEXABDE 153	HEXABDE 154	HEXACHLOROBENZENE	HEXACHLOROBUTADIENE	HEXACHLOROCYCLOHEXANE(LINDANE)	INDENO(1,2,3-CD)PYRENE	ISONDRIN	ISOPROTURON	LEAD	MERCURY	METHYLENE CHLORIDE (DICHLOROMETHANE)	NAPHTHALENE	NICKEL	NONYLPHENOLS	OCTYLPHENOLS	PENTABDE 100	PENTABDE 99	PENTACHLOROBENZENE	PENTACHLOROPHENOL	SIMAZINE	TETRABDE 47	TETRACHLOROETHYLENE	TRIBDE 28	TRICHLOROBENZENES	TRICHLOROETHELENE	TRICHLOROMETHANE (CHLOROFORM)	TRIFLURALIN
r1-1-1-75	Khapotami d/s Mandria (Yophyrin Bridge)	1	1	3	3												3	3	3	3	2	3		3		3				
r1-1-3-95	Chapotami near Kissousa	8	8	1	1	8	13		8		13	13	13	13	13	13	1	1	1	1	1	1	13	1	13	1		13	13	13
r1-2-3-94	Phini River @ Pakhnoutis Ford	6	6	3	3	5	14	1		5	14	15	15	14	14	15	3	3	3	3	5	3	14	3	14	3	14	14	14	13
r1-2-4-25	Diarizos U/S Arminou Dam	5	5			5	6		5		6	6	6	6	6	6							6		6			6	6	6
r1-2-6-64	Diarizos @ Ag. Georgios	13	13	6	6	9	18	1	6	3	17	18	18	18	18	18	6	6	6	6	3	6	17	6	18	6	11	18	18	18
r1-3-5-91	Xeros River @ Rhoudias Bridge											4	4			4														
r1-3-6-53	Xeros @ Rotsos Ton Laoudion											14	14			14														
r1-3-8-60	Xeros near Foinikas	6	6	7	7	4	16	1	1	4	16	16	16	16	16	16	7	7	7	7	6	7	16	7	16	7	15	16	16	16
r1-4-6-75	Varkas River Near Amargeti	5	5	5	5	3	8		2	1	8	8	8	8	8	8	5	5	5	5	3	5	8	5	8	5	3	8	8	8
r1-4-7-10	Ezousas near Moro Nero	13	13	6	6	8	17	1	5	3	17	17	17	17	17	17	6	6	6	6	3	6	17	6	17	6	11	17	17	16
r1-4-8-88	Kochatis River Near Koloni	1	1			1	1		1		1	1	1	1	1	1							1		1			1	1	1
r1-4-9-01	Ezousas near Ag. Varvara EZ3	9	9			9	9		5	4	9	9	9	9	9	9					4		9		9			9	9	9
r1-4-9-80	Ezousas near Acheleia	10	10	7	7	5	13	1	2	3	13	13	13	13	13	13	7	7	7	7	3	7	13	7	13	6	9	13	13	13
r1-4-9-99	Ezousas at Coast EZ2	16	16			16	16		6	10	16	16	16	16	16	16					10		16		16			16	15	15
r1-5-5-89	Koshinas River Near Kaliadhes Locality	16	16	14	14	10	22	1	3	7	24	25	25	22	22	25	14	14	14	14	10	14	24	14	22	14	13	22	22	24
r1-6-2-17	Mavrokolympos R.@ Krya Vrysi	1	1	2	2								0				2	2	2	2	1	2		2		2				
r1-8-5-89	Pevkos R. @ Lara Road			2	2								0				2	2	2	2	2	2		2		2				
r2-1-8-74	Argaki tou Ayiou Ioanni near shooting range	1	1	4	4								0				4	4	4	4	3	4		4		4				
r2-2-3-95	Chrysochou near Skoulli	8	8	2	2	6	6		6		7	7	7	6	6	7	2	2	2	2		2	7	2	6	2		6	6	7
r2-2-6-35	Stavros tis Psokas near Sarama Quarry			4	4							1	1			1	4	4	4	4	4	4		4		4				
r2-2-7-34	Chrysochou River @ Goudi bridge										1		0										1							1
r2-2-8-95	Chrysochou near Coast												0																	1
r2-3-1-64	Mirmikoph River D/S Steni			2	2							1	1			1	2	2	2	2	2	2		2		2				
r2-3-2-96	Pelathousa R. (Argaki tis Limnis) @ Polis-Argaka Rd.	6	6	1	1	6	6	1	5	2	6	10	10	6	6	10	1	1	1	1	2	1	6	1	6	1	1	6	6	6
r2-3-4-80	Makounta U/S Argaka Dam	1	1	1	1							20	20			20	1	1	1	1		1		1		1				
r2-3-7-74	Xeropotamos D/S Poros tou Sykarkou											1	1			1														
r2-9-2-50	Kambos R. Near Ag. Varvara	17	17	2	2	16	24	1	11	5	26	26	26	24	23	26	2	2	2	2	5	2	26	2	24	2	11	24	24	26
r3-2-1-85	Marathasa U/S Kalopanagiotis Dam	4	4	2	2	4	14			4	15	15	15	14	14	15	2	2	2	2	5	2	15	2	14	2	9	14	14	14
r3-3-1-60	Agios Nikolaos U/S Fish Farm											20	20			20														
r3-3-2-60	Platania near Kakopetria	5	5	2	2	5	6		5		6	20	20	6	6	20	2	2	2	2	2	2	6	2	6	2		6	6	6
r3-3-3-15	Kargotis near Galata											1	1			1														
r3-3-3-95	Kargotis near Evrychou	22	22	10	10	15	25	1	11	4	24	25	25	25	24	25	10	10	10	10	4	10	24	10	25	10	12	25	25	25
r3-4-2-90	Atsas near Evrychou	8	8	6	6	4	6		4	1	6	6	6	6	6	6	6	6	6	6	2	6	6	6	6	6	3	6	6	6
r3-5-1-50	Lagoudera near Lagoudera Br.	2	2	2	2	1	3			1	3	3	3	3	3	3	2	2	2	2	1	2	3	2	3	2	3	3	3	3
r3-5-4-40	Elia near Vyzakia	17	17	8	8	14	21		13	1	21	37	37	21	21	37	8	8	8	8	6	8	21	8	21	8		21	21	22
r3-7-1-55	Peristerona R. @ Siphilos	3	3	1	1	3	9		2	1	9	11	11	9	9	11	1	1	1	1	2	1	9	1	9	1		9	9	9
r3-7-1-84	Peristerona @ Peristerona	3	3	1	1	2	2		2		2	2	2	2	2	2	1	1	1	1		1	2	1	2	1		2	2	2

Station ID	Station Name	HEPTACHLOR	HEPTACHLOR EPOXIDE	HEXABDE 153	HEXABDE 154	HEXACHLOROBENZENE	HEXACHLOROBUTADIENE	HEXACHLOROCYCLOHEXANE(LINDANE)	INDENO(1,2,3-CD)PYRENE	ISONDRIN	ISOPROTURON	LEAD	MERCURY	METHYLENE CHLORIDE (DICHLOROMETHANE)	NAPHTHALENE	NICKEL	NONYLPHENOLS	OCTYLPHENOLS	PENTABDE 100	PENTABDE 99	PENTACHLOROBENZENE	PENTACHLOROPHENOL	SIMAZINE	TETRABDE 47	TETRACHLOROETHYLENE	TRIBDE 28	TRICHLOROBENZENES	TRICHLOROETHELENE	TRICHLOROMETHANE (CHLOROFORM)	TRIFLURALIN
r3-7-3-71	Akaki U/S Akaki-Malounta Dam	8	8	8	8	3	10	1		3	10	18	18	10	10	18	8	8	8	8	3	8	10	8	10	8	10	10	10	9
r3-7-5-35	Aloupos R. near Arediou	4	4	2	2	3	5		2	1	5	5	5	5	5	5	2	2	2	2	1	2	5	2	5	2	2	5	5	5
r3-7-5-50	Koutis R. @ Asprokremnos locality	4	4	2	2	3	5		2	1	5	5	5	5	5	5	2	2	2	2	1	2	5	2	5	2	2	5	5	5
r6-1-1-72	Pediaios R. @ Philani											2	2			2														
r6-1-1-80	Agios Onoufrios near Kampia											5	5			5														
r6-1-2-38	Pediaios near Kato Deftera	4	4	3	3	2	6		1	1	6	6	6	6	6	6	3	3	3	3	1	3	6	3	6	3	3	6	6	6
r6-1-4-34	Katevas near SOPAZ roundabout	5	5	6	6	3	6	2		3	6	6	6	6	4	6	6	6	6	6	4	6	6	6	6	6	3	6	6	6
r6-1-5-52	Vathys @ Athalassa Park	13	13	8	8	9	16	1	6	3	13	16	16	16	15	16	8	8	8	8	4	8	13	8	16	8	8	16	16	13
r6-5-1-34	Yialias R. near Azizis locality (Lythrodontas)			1	1		1				1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1		1	1	1
r6-5-1-85	Gialias near Kotsiati	6	6	4	4	3	10		2	1	9	10	10	10	10	10	4	4	4	4	1	4	9	4	10	4	5	10	10	10
r6-5-2-85	Alykos d/s Dhali Industrial Area	4	4	2	2	3	4		2	1	4	4	4	4	4	4	2	2	2	2	1	2	4	2	4	2	2	4	4	4
r6-5-3-15	Gialias near Nisou	5	5	4	4	2	9		1	1	9	9	9	9	9	9	4	4	4	4	1	4	9	4	9	4	5	9	9	9
r6-5-3-50	Gialias near Potamia											1	1			1														
r8-3-2-60	Kalo Chorio R. @ Kamares	5	5	2	2	5	10		5		10	10	10	10	10	10	2	2	2	2	2	2	10	2	10	2	1	10	10	10
r8-4-1-57	Kalamoulia R. u/s Lympia Reservoir			1	1							1	1			1	1	1	1	1	1	1		1		1				
r8-4-1-58	Xylias R. u/s Lympia Reservoir			1	1							10	10			10	1	1	1	1	1	1		1		1				
r8-4-3-40	Treminthos near Agia Anna	9	9	4	4	6	13		5	1	12	13	13	13	13	13	4	4	4	4	1	4	12	4	13	4	5	13	13	13
r8-4-5-30	Treminthos near Klavdia	5	5	4	4	2	6		1	1	6	6	6	6	6	6	4	4	4	4	1	4	6	4	6	4	5	6	6	6
r8-5-1-60	Pouzis near Alethriko	1	1	1	1								0				1	1	1	1		1		1		1				
r8-6-2-57	Xeros near Ghlyki Neron (Stavrovouni Forest)	3	3	3	3	1	5			1	5	5	5	5	5	5	3	3	3	3	1	3	5	3	5	3	5	5	5	5
r8-6-3-50	Xeropotamos near Alaminos						1				1	1	1	1	1	1							1		1			1	1	1
r8-7-2-60	Syriatis near Pano Lefkara	5	5	3	3	3	9		2	1	9	10	10	9	9	10	3	3	3	3	1	3	9	3	9	3	5	9	9	9
r8-7-3-95	Mylos U/S Dipotamos Dam	2	2	5	5								0				5	5	5	5	3	5		5		5				
r8-8-2-95	Maroni near Choirokoitia	1	1	2	2		2				2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2
r8-9-3-83	Exovounia R. near Layia	1	1	5	5								0				5	5	5	5	4	5		5		5				
r8-9-5-40	Vasilikos near Lageia	13	13	2	2	13	20		12	1	20	20	20	20	20	20	2	2	2	2	2	2	20	2	20	2		20	20	19
r8-9-6-98	Argaki Asgatas near Kalavasos											9	9			9														
r9-1-3-80	Argaki tis Monis near Moni	6	6	4	4	4	9	1	3	2	9	9	9	9	9	9	4	4	4	4	2	4	9	4	9	4	5	9	9	9
r9-1-4-51	Argaki tou Pyrgou u/s Recharge Dam	8	8	6	6	4	10	1	3	2	10	10	10	10	10	10	6	6	6	6	2	6	10	6	10	6	5	10	10	10
r9-2-1-43	Ayios Pavlos R. u/s Kalimera Diversion	10	10	11	11	5	18	1		5	19	19	19	18	18	19	11	11	11	11	8	11	19	11	18	11	12	18	18	19
r9-2-3-05	Germasogeia R. @ Dierona	4	4	3	3	4	12		3	1	12	12	12	12	12	12	3	3	3	3	3	3	12	3	12	3		12	12	12
r9-2-3-85	Germasogeia near Foinikaria	2	2	3	3							23	23			23	3	3	3	3	1	3		3		3				
r9-2-4-27	Argaki tou Monastiriou near Amyrou Monastery											8	8			8														
r9-2-4-95	Gialiades (Akrounta) U/S Germasogeia Dam	3	3	2	2	3	6		2	1	6	10	10	6	6	10	2	2	2	2	2	2	6	2	6	2		6	6	6
r9-4-3-39	Phasoula d/s Paramytha	5	5	3	3	2	4		2		4	4	4	4	4	4	3	3	3	3		3	4	3	4	3		4	4	4
r9-4-3-41	Garyllis R. @ Paramytha	10	10	6	6	6	10	1	5	2	9	10	10	10	10	10	6	6	6	6	2	6	9	6	10	6	5	10	10	10
r9-4-3-80	Garyllis U/S Polemidia Dam	16	16	17	17	8	16	1	4	4	15	33	32	16	16	33	17	17	17	17	9	17	15	17	16	17	11	16	16	16
r9-5-1-99	Ypsonas near Ypsonas	1	1			1	1		1		1	1	1	1	1	1							1		1			1	1	1
r9-6-1-87	Kryos @ Koilani	10	10	9	9	3	11	1		3	11	12	12	11	11	12	9	9	9	9	3	9	11	9	11	9	11	11	11	11

Station ID	Station Name	HEPTACHLOR	HEPTACHLOR EPOXIDE	HEXABDE 153	HEXABDE 154	HEXACHLOROBENZENE	HEXACHLOROBUTADIENE	HEXACHLOROCYCLOHEXANE(LINDANE)	INDENO(1,2,3-CD)PYRENE	ISONDRIN	ISOPROTURON	LEAD	MERCURY	METHYLENE CHLORIDE (DICHLOROMETHANE)	NAPHTHALENE	NICKEL	NONYLPHENOLS	OCTYLPHENOLS	PENTABDE 100	PENTABDE 99	PENTACHLOROBENZENE	PENTACHLOROPHENOL	SIMAZINE	TETRABDE 47	TETRACHLOROETHYLENE	TRIBDE 28	TRICHLOROBENZENES	TRICHLOROETHELENE	TRICHLOROMETHANE (CHLOROFORM)	TRIFLURALIN
r9-6-2-60	Kryos U/S Tunnel Outlet			1	1								0				1	1	1	1	1	1		1		1				
r9-6-3-36	Kouris near Kato Amiantos	15	15	12	12	7	15	1	5	3	15	55	55	15	15	55	12	12	12	12	5	12	15	12	15	12	9	15	15	16
r9-6-3-77	Mesapotamos u/s Saittas Diversion			2	2								0				2	2	2	2	2	2		2		2				
r9-6-3-87	Moniatis River @ Lourka (Footbridge)	8	8	7	7	6	13	1		6	14	13	13	13	13	13	7	7	7	7	8	7	14	7	13	7	13	13	13	14
r9-6-4-92	Kouris @ Alassa New Weir	15	15	5	5	15	26		11	4	26	32	32	26	26	32	5	5	5	5	6	5	26	5	26	5	7	26	26	25
r9-6-5-62	Agros River Near Ag. Ioannis	16	16	15	15	6	20	1		6	20	20	20	20	20	20	15	15	15	15	7	15	20	15	20	15	20	20	20	20
r9-6-5-63	Ambelikos River d/s Potamitissa	5	5	6	6	5	18		2	3	18	19	19	18	18	19	6	6	6	6	6	6	18	6	18	6	6	18	18	16
r9-6-6-32	Limnatis R. Near Ag. Mamas	12	12	1	1	11	12		11		12	13	13	12	12	13	1	1	1	1		1	12	1	12	1		12	12	12

ANNEX - Available data of the Annex I substances of Directive 2008/105/EC in river WBs of the 2013-2019 period - Part C

Station ID	Station Name	1,2,5,6,9,10-Hexabromocyclododecane	1,3,5,7,9,11-Hexabromocyclododecane	a-Hexabromocyclododecane	b-Hexabromocyclododecane	c-Hexabromocyclododecane	Perfluorooctane sulfonic acid	Quinoxyfen	Terbutryn	Cybutryne
r9-6-5-62	Agros River Near Ag. Ioannis	13	13	13	13	13	13	13	13	13
r3-7-3-71	Akaki U/S Akaki-Malounta Dam	8	8	8	8	8	8	8	8	8
r3-7-5-35	Aloupos R. near Arediou	2	2	2	2	2	2	2	2	2
r6-5-2-85	Alykos d/s Dhali Industrial Area	2	2	2	2	2	2	2	2	2
r9-6-5-63	Ambelikos River d/s Potamitissa	1	1	1	1	1	1	1	1	1
r9-1-3-80	Argaki tis Monis near Moni	4	4	4	4	4	4	4	4	4
r2-1-8-74	Argaki tou Ayiou Ioanni near shooting range	1	1	1	1	1	1	1	1	1
r9-1-4-51	Argaki tou Pyrgou u/s Recharge Dam	6	6	6	6	6	6	6	6	6
r3-4-2-90	Atsas near Evrychou	4	4	4	4	4	4	4	4	4
r9-2-1-43	Ayios Pavlos R. u/s Kalimera Diversion	7	7	7	7	7	7	7	7	7
r2-2-3-95	Chrysochou near Skoulli	2	2	2	2	2	2	2	2	2
r1-2-6-64	Diarizos @ Ag. Georgios	6	6	6	6	6	6	6	6	6
r3-5-4-40	Elia near Vyzakia	3	3	3	3	3	3	3	3	3
r8-9-3-83	Exovounia R. near Layia	1	1	1	1	1	1	1	1	1
r1-4-9-80	Ezousas near Acheleia	6	6	6	6	6	6	6	6	6
r1-4-7-10	Ezousas near Moro Nero	6	6	6	6	6	6	6	6	6
r9-4-3-41	Garyllis R. @ Paramytha	6	6	6	6	6	6	6	6	6
r9-4-3-80	Garyllis U/S Polemidia Dam	12	12	12	12	12	12	12	12	12
r9-2-3-85	Germasogeia near Foinikaria	2	2	2	2	2	2	2	2	2
r6-5-1-85	Gialias near Kotsiati	4	4	4	4	4	4	4	4	4
r6-5-3-15	Gialias near Nisou	4	4	4	4	4	4	4	4	4
r2-9-2-50	Kambos R. Near Ag. Varvara	2	2	2	2	2	2	2	2	2
r3-3-3-95	Kargotis near Evrychou	10	10	10	10	10	10	10	10	10
r6-1-4-34	Katevas near SOPAZ roundabout	5	5	5	5	5	5	5	5	5
r1-1-1-75	Khapotami d/s Mandria (Yophyrin Bridge)	1	1	1	1	1	1	1	1	1
r1-5-5-89	Koshinas River Near Kaliadhes Locality	9	9	9	9	9	9	9	9	9
r9-6-4-92	Kouris @ Alassa New Weir	1	1	1	1	1	1	1	1	1
r9-6-3-36	Kouris near Kato Amiantos	10	10	10	10	10	10	10	10	10
r3-7-5-50	Koutis R. @ Asprokremnos locality	2	2	2	2	2	2	2	2	2
r9-6-1-87	Kryos @ Koilani	9	9	9	9	9	9	9	9	9
r3-5-1-50	Lagoudera near Lagoudera Br.	2	2	2	2	2	2	2	2	2

Station ID	Station Name	1,2,5,6,9,10-Hexabromocyclododecane	1,3,5,7,9,11-Hexabromocyclododecane	a-Hexabromocyclododecane	b-Hexabromocyclododecane	c-Hexabromocyclododecane	Perfluorooctane sulfonic acid	Quinoxyfen	Terbutryn	Cybutryne
r9-6-6-32	Limnatis R. Near Ag. Mamas	1	1	1	1	1	1	1	1	1
r2-3-4-80	Makounta U/S Argaka Dam	1	1	1	1	1	1	1	1	1
r8-8-2-95	Maroni near Choirokoitia	1	1	1	1	1	1	1	1	1
r1-6-2-17	Mavrokolympos R.@ Krya Vrysi	1	1	1	1	1	1	1	1	1
r9-6-3-87	Moniatis River @ Lourka (Footbridge)	4	4	4	4	4	4	4	4	4
r8-7-3-95	Mylos U/S Dipotamos Dam	2	2	2	2	2	2	2	2	2
r6-1-2-38	Pediaios near Kato Deftera	3	3	3	3	3	3	3	3	3
r2-3-2-96	Pelathousa R. (Argaki tis Limnis) @ Polis-Argaka Rd.	1	1	1	1	1	1	1	1	1
r3-7-1-84	Peristerona @ Peristerona	1	1	1	1	1	1	1	1	1
r9-4-3-39	Phasoula d/s Paramytha	3	3	3	3	3	3	3	3	3
r1-2-3-94	Phini River @ Pakhnoutis Ford	3	3	3	3	3	3	3	3	3
r8-5-1-60	Pouzis near Alethriko	1	1	1	1	1	1	1	1	1
r8-7-2-60	Syriatis near Pano Lefkara	3	3	3	3	3	3	3	3	3
r8-4-3-40	Treminthos near Agia Anna	4	4	4	4	4	4	4	4	4
r8-4-5-30	Treminthos near Klavdia	4	4	4	4	4	4	4	4	4
r1-4-6-75	Varkas River Near Amargeti	2	2	2	2	2	2	2	2	2
r6-1-5-52	Vathys @ Athalassa Park	6	6	6	6	6	6	6	6	6
r1-3-8-60	Xeros near Foinikas	4	4	4	4	4	4	4	4	4