



GENERAL DIRECTORATE FOR WATER



2nd UPDATE OF RIVER BASIN MANAGEMENT PLAN

River Basin District of Attica (EL06)

Summary



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General Directorate for Water

2nd Update of the River Basin Management Plan for the RBD of Attica (EL06)

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ATTICA RIVER BASIN DISTRICT (EL06)

2ND UPDATE OF THE RIVER BASIN MANAGEMENT PLAN (RBMP) FOR THE RIVER BASIN DISTRICT OF ATTICA (EL06)

MANAGEMENT PLAN SUMMARY-ENGLISH VERSION

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2ND RIVER BASIN MANAGEMENT PLAN REVISION

RIVER BASIN DISTRICT OF ATTICA (EL06)

MANAGEMENT PLAN SUMMARY- ENGLISH VERSION

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1 INTRODUCTION – 2ND RIVER BASIN MANAGEMENT PLANS REVISION

1.1 INTRODUCTION

The **water management framework** is determined at the European level by the Water Framework Directive 2000/60/EC (WFD), as incorporated into the National Institutional Framework by Law 3199/2003, as amended and in force, and PD 51/ 2007. The Directive requires appropriate measures to be taken to promote the sustainable use of water, as well as to protect and/or improve the condition of surface waters (rivers, lakes, transitional and coastal) and groundwater through the preparation of a River Basin Management Plan (RBMP), which is reviewed every six years. The RBMP is a strategic text, in which the goals for the state of the waters at the level of the River Basin District (RBD) are defined and the necessary measures and actions are proposed to achieve these goals. With its approval, the RBMP is an institutional obligation and must be taken into account by all public bodies when making decisions.

In this context, the first RBMP of the RBD of Attica (EL06) was approved by the National Water Commission in 2013 (Government Gazette 1004/B/24.04.2013), while its 1st Revision in 2017 (Government Gazette 4672/B/29.12.2017).

The Management Plans drawn up with the 2nd Management Plans Revision of the River Basins of the 14 River Basin Districts of the country, in accordance with the specifications of Directive 2000/60/EC, pertain to the 3rd Management Cycle (2022-2027).

The 2nd River Basin Management Plan Revision of Attica (EL06), was implemented by the General Directorate of Waters (GDW), of the Ministry of Environment and Energy.

1.2 PREPARATION OF THE 2ND RIVER BASIN MANAGEMENT PLANS REVISION

1.2.1 Requirements of Directive 2000/60/EC and objectives of the 2nd Revision

The Directive 2000/60/EC places the protection of the aquatic environment and ecological objectives at the heart of an approach based on integrated water management at the RBD scale. For this purpose, appropriate implementation planning is required with the planning and coordination of individual actions so that the final outcome is the "good status" (or "good potential") of the water bodies.

The implementation of the Directive includes the following main components:

1. Current situation assessment and preliminary gap analysis.
2. Organization of environmental objectives.
3. Preparation of Monitoring Programs.
4. Gap analysis.
5. Preparation of the Program of Measures.
6. Preparation of the RBD Management Plan of the country.

7. Implementation of the Program of Measures.

8. Evaluation of Program of Measures.

9. Public consultation, active involvement of stakeholders.

For the Attica RBD (EL06), in the context of the 2nd RBMP Revision, the following actions are being carried out.

- Revision of the identification and characterization of surface (rivers, lakes, transitional and coastal) and underground water systems.
- Revision of the assessment/classification of the state/potential of surface (ecological, chemical), including highly modified and artificial, and underground (quantitative, qualitative) water bodies, based on the new data available from the operation of the National Water Monitoring Network.
- Re-evaluation of the surface water bodies that show significant hydromorphological modifications, in order to determine those that constitute highly modified water bodies (HMWB) and artificial water bodies (AWB).
- Revision and further development of the list of significant pressures, as they have been included in the 1st RBMP Revision, as well as their effects per Catchment Basin and water bodies (WB).
- Revision of the Register of Protected Areas (PA), based on new information that has emerged from the implementation of relevant Union Directives.
- Revision of the information on the planned projects/activities of water resources utilization.
- Review of the environmental objectives for all surface water bodies (SWB) and groundwater bodies (GWB), including highly modified and artificial ones.
- Assessment of progress in relation to the achievement of the environmental objectives of the WFD, as defined in the 1st RBMP Revision, and clarifications for the environmental objectives that were not achieved.
- Review of the Programs of Basic and Supplementary Measures for the protection and restoration of water resources, as included in the 1st RBMP Revision, in accordance with Article 11 and Annex VI of the WFD (Article 12 and Annex VIII of the Decree 51/ 2007).
- Revision of the economic analysis of water uses.
- Preparation of the Strategic Environmental Impact Study (SEIS) to identify, describe and evaluate the environmental impacts from the implementation of the aforementioned Programs of Measures and Management Plans.
- Informing the public and promoting its active participation, as well as publication and public consultation of the Draft Management Plans, in accordance with article 14 of the WFD and article 15 of the P.D. 51/2007.
- Coverage of the country's obligations in relation to the submission of the required data to the EU regarding the 2nd RBMP Revision, through the electronic system WISE (Water Information System for Europe), in accordance with the specifications of the European Environment Agency.
- Revision of the data as well as the results from the implementation of the Project: "Development of water resource management systems and tools in 13 River Basin Districts

of the country", which was completed by the Ministry of Development, in December 2008 as far as the part concerning River Basin Districts of Attica (EL06) and Eastern Central Greece (EL07).

- Training of the personnel of the Contracting Authority and the competent Regional Authorities, in the objects of the deliverables

1.2.2 Strategic Environmental Assessment

For the 2nd RBMP Revision of the River Basin Districts of the Country, the process of the Strategic Environmental Assessment (SEA) is being followed in accordance with the JMD with Num D. MINISTRY OF ECONOMY/EFPE/oik.107017/ 28.08.2006 for the "assessment of the environmental impacts of certain plans and programs, in compliance with the provisions of Directive 2001/42/EC" (Government Gazette B' 1225/2006), as amended by the Num D. oik. 40238/2017 (Government Gazette 3759/B/25.10.2017), M.D. YPEN/DIPA/38181/2695/2022 (Government Gazette 1923/B` 18.4.2022) and M.D. YPEN/DIPA/94750/6235/2023 (Government Gazette 5774/B` 4.10.2023) and is valid.

The approval of the Plan and the SEA is done by a single administrative act (Act of the Council of Ministers in accordance with Law 3199/2003 as applicable) proposed by the Minister of the Environment following a proposal from the Planning Authority (GDY/YPEN), based on the "approval proposal EISP" from the Environmental Agency responsible for the environmental approval of the Plan (DIPA/YPEN) to the Planning Authority [article 7 of the YA YPECHODE/EYPE/ok.107017/2006 (Government Gazette 1225B'/5.9.2006) as amended by the Num D. oik. 40238/2017 (Government Gazette 3759/B/25.10.2017), M.D. YPEN/DIPA/38181/2695/2022 (Government Gazette 1923/B` 18.4.2022) and M.D. Ministry of Foreign Affairs/DIPA/94750/6235/2023 (Government Gazette 5774/B` 4.10.2023) and is valid.

1.3 CONSULTATION PROCEDURE

1.3.1 Consultation Results and Integration

The consultation process on the 2nd RBMP Revision of the RBD of Attica (EL06) started in March 2019 and ended in December 2023 and included the following:

Phase A: In March 2019, the content of the foreseen activities for the 2nd RBMP Revision was posted on the website of the Ministry of Environment and Energy (<http://wfdver.ypeka.gr/el/consultation-gr/>) as well as their detailed schedule for the information of the public.

Phase B: In September 2019, data on the important issues of water resources management in each RBD were posted on the website of the Ministry of Environment & Energy, which briefly included the results of the National Water Monitoring Network for the RBD, the main pressures, the identification of the competent authorities and bodies participating in the consultation.

Phase C: In May 2023, the Draft of the 2nd River Basin Management Plan Revision of the River Basin District, as well as the Detailed Documentation, was posted on a special website of the Ministry of Environment & Energy (<http://wfdver.ypeka.gr/>).

On October 24th, 2023, the scheduled Consultation Day was held in Athens on the subject of the Draft of the 2nd River Basin Management Plan Revision for the RBD of Attica (EL06) with the aim of more fully informing the public and recording opinions.

The Conference was a hybrid event, in which stakeholders and citizens were given the opportunity to attend the conference as well as to express their opinions, comments and positions online and in

person. Therefore, the observations and comments of the participants could be submitted online in a live chat of the youtube and facebook platform, and with a physical presence in the room.

In summary, the changes / completions / additions included in the Final Plan and in the Detailed Documentation as a result of the consultation concern the following:

- New data presented in the Final Management Plan based on the data made available and/or points raised during the consultation.
- Reform of the final Program of Measures which includes:
 - the improvement of the description of certain measures as well as the addition of comments where deemed necessary, regarding the concretization/specification of restrictions as well as actions defined therein
 - revision of the final Program of Measures taking into account observations and comments made in the context of the consultation
 - the Revision of the bodies implementing the measures.
- Revision the detailed documentation texts based on the data made available and/or points raised during the consultation.

The final Program of Measures of the Attica RBD (EL06) was formulated taking into account comments and observations received in the context of the consultation of both the specific RBD and the rest RBD of the country.

On January 22nd, 2024, a proposal was made by the Environmental Licensing Directorate of the Ministry of Environment & Energy to the General Directorate of Water for the approval of the EIA.

2 DIFFERENTIATIONS IN COMPARISON WITH THE 1st RBMP REVISION

For the 2nd RBMP Revision of the country, new analytical methodologies were developed for critical aspects of the implementation of Directive 2000/60/EC.

The revision of the national methodologies was done in the context of the implementation of the 2nd RBMP Revision and concerned the following methodologies:

- Definitive formulation of a national methodology for the definition of ecological flows of river water bodies.
- Revision of the analytical methodology for the analysis of anthropogenic pressures and their effects on surface water and groundwater bodies.
- Revision of the analytical methodology formulated by the Competent Authority (AA) "Determining the "exceptions" of paragraphs 4 to 6 of Article 4 of Directive 2000/60/EC (4.4 - 4.6)", with the review of the application specifications of the exceptions of article 4.5
- Revision of the analytical methodology formulated by the AA "Determining the "exceptions" of paragraph 4.7, of article 4 of Directive 2000/60/EC
- Revision of Methodology for Classification of Ecological, Chemical and Overall Status of Surface Water Bodies

All the analytical methodologies are available on the website <http://wfdver.ypeka.gr/>.

The following table summarizes the differences found in each individual subject of the 2nd RBMP Revision in relation to the 1st RBMP Revision, based on the above and the results obtained.

Table 2-1: Main differentiations in comparison with the 1st RBMP Revision

Revised Content of RBMP/ Activity	Differentiation in comparison with the 1st RBMP Revision	Briefly presentation of the results
COMPETENT AUTHORITIES	The competent authorities are amended in accordance with Law 5037/2023	The current situation is briefly presented in Paragraph 3.3 .
HEAVILY MODIFIED WATER BODIES (HMWB) AND ARTIFICIAL WATER BODIES (AWB)	The HMWB that were defined under the 1st RBMP Revision are re-examined based on the new methodology and the data from the NWMN.	The results are summarized in Chapter 4.3 and in the Detailed Documentation- Final Determination of Specially Modified and Artificial Water Bodies
PRESSURES AND IMPACTS	The assessment of pressures and impacts in the revision is based on the Revised common methodology developed and the latest evidence resulting from the approval of the 1st RBMP Revision	The results are summarized in Chapter 5 and in the Analytical Documentation Text – Analysis of anthropogenic pressures and their effects on surface and groundwater bodies
CLASSIFICATION OF THE STATUS OF SURFACE WATER BODIES	The Methodology for Classification of Ecological, Chemical and Overall Status of Surface Water bodies was Revised in the context of the 2nd RBMP Revision. During the revision, the classification of the state of the surface water bodies is implemented based on the data of the Water Status Monitoring Network 2018-2021. For the WB that are not monitored, their status is classified by grouping based on their typology and the pressures they receive according to the Revised methodology.	The results are presented in summary in Chapter 4.1 and in the Analytical Documentation Text - Characterization, typology, type-characteristic conditions, references and assessment/classification of the state/potential of all categories of surface water systems, including highly modified and artificial water bodies.
CLASSIFICATION OF THE STATUS OF GROUNDWATER BODIES	The methodology for classifying the state of the WBs does not differ in relation to the 1st RBMP. The classification of the WB is based on the newest data of the national monitoring network 2018-2020, as well as any other newer data that has emerged (studies, benefits, levels, etc.)	The results are presented briefly in Chapter 4.2 and in the Analytical Documentation Text – State of Groundwater Bodies.
NATIONAL WATER MONITORING NETWORK	The 2nd Revision in relation to the 1st Revision, includes the results of the National Water Monitoring Network of the country with a larger number of samples for the period 2018 – 2021. It also includes monitoring of the chemical and quantitative status of the GWB.	The data for the monitoring program used are presented in the Analytical Documentation Texts - Type-characteristic Conditions and- Status of Groundwater bodies for the Surface and Groundwater network respectively.

Revised Content of RBMP/ Activity	Differentiation in comparison with the 1st RBMP Revision	Briefly presentation of the results
ECONOMIC ANALYSIS OF WATER USE	<p>For the economic analysis of water uses, specific directions of the General Directorate for Water are taken in consideration.</p> <p>The elements of the information system, created to assist the SSW in the supervision and monitoring of the degree of implementation of the water management policies, created after the end of the 1st revision, were used (where possible and in cases where they were considered reliable).</p>	<p>The results are presented in summary in Chapter 6 hereof and in the Analytical Documentation Text – Economic Analysis of Water Uses.</p>
ENVIRONMENTAL OBJECTIVES – EXEMPTIONS	<p>During the 2nd Revision, the determination of the environmental objectives and exceptions is based on the new methodological approaches developed in accordance with the EU guidelines (see Chapter 2.2.1 above)</p>	<p>The results are summarized in Chapter 7 herein and in the Analytical Documentation Text – Environmental Objectives.</p>
PROGRAMME OF MEASURES	<p>The program of measures as defined in this 2nd RBMP Revision was revised in relation to the 1st RBMP Revision.</p> <p>The differences in the program of measures in relation to the 1st Revision concern:</p> <ul style="list-style-type: none"> - specialization/reformulation of measures of the 1st RBMP Revision that continue in the current management cycle - formulation of new measures to deal with the pressures faced by the WBs and to achieve the goals set - removal of measures of the 1st Revision where it was judged that their continuation in the current management cycle is not necessary 	<p>The new program of measures is briefly presented in Chapter 8 hereof and in the Detailed Documentation - Programs of Basic and Supplementary Measures.</p>

3 DESCRIPTION OF RIVER BASIN DISTRICTS– COMPETENT AUTHORITIES

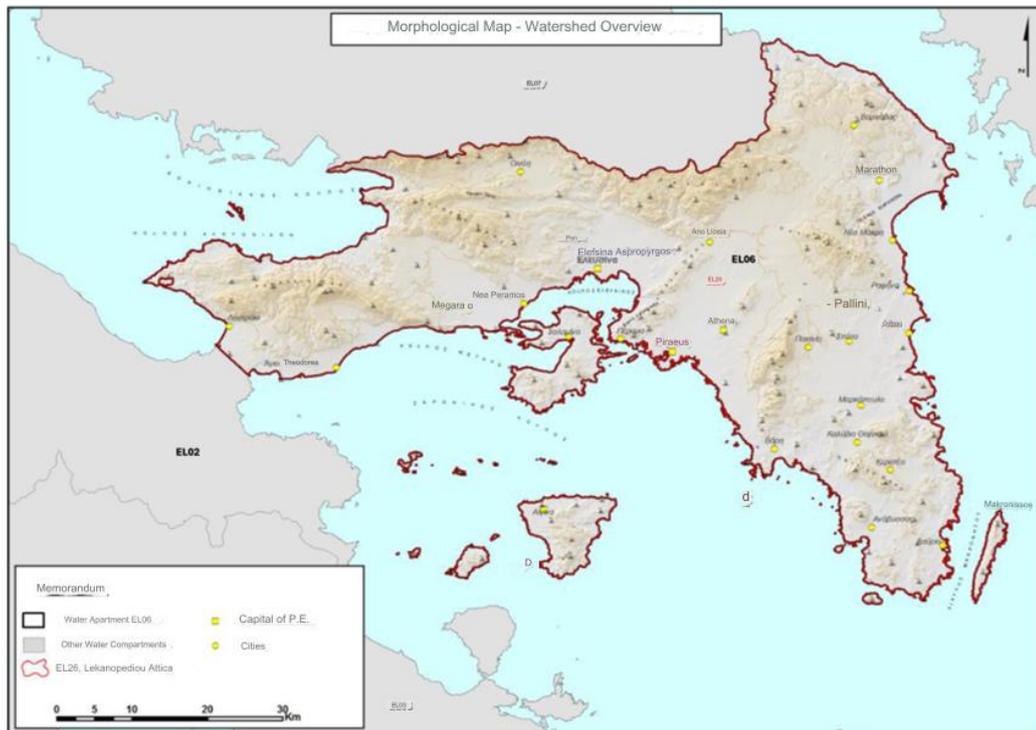
3.1 RIVER BASINS

With the decision 706/16-7-2010 (Government Gazette B' 1383 /2.9.2010 & Government Gazette B' 1572/ 28.9.2010), of the National Water Commission "on defining the River Basins of the country and defining the competent Regions for the their management and protection" and the approval decisions of the National Water Commission of the 1st RBMP, the forty-six (46) River Basins were defined, which fall under fourteen (14) River Basin Areas (corresponding to the term Water Divisions of article 3 of Presidential Decree 51/2007).

The Attica RBD (EL06) consists of the **Attica Watershed (EL0626)**, which includes the islands of Salamina, Aegina, Agistri and Makronissos.

Table 3 1: Attica River Basin District (EL06)

River Basin (RB)	RB Area /EL06 (km ²)
Attica Watershed (EL0626)	3.187



Map 3-1: Overview of the Attica River Basin District (EL06)- Morphology

3.2 NATURAL CHARACTERISTICS

The geomorphological image of the district is characterized by relief diversity. It includes four mountains with an altitude of over 1,000 m (Parnitha with 1,413 m, Kithaironas with 1,401 m, Penteli with 1,108 m, Ymittos with 1,025 m), while most of the lowlands are located in the coastal zone. The average altitude of the mainland part is 115 m, while the islands of Aegina and Salamina are 60 and 20 m respectively. The Attica District (EL06) is developed in an area with a multifaceted relief characterized by elongated mountain masses of varying direction, distinguished by intermediate lowland basins. In the northern and western parts of the area, the mountain masses of Parnitha, Kithairona, Patera and Geraneia stand, which extend mainly in an E-W direction. In the eastern part, Penteli with the mountains of Grammatikou - Marathona and the mountain masses of Ymittos and Lavreotiki develops in the north. Penteli has an approximately circular development, while in Ymittos and Lavreotiki the oreographic axes are from North to South. In the middle of the area stretches the basin of Kifisos which flows from the river of the same name in a direction from NE to SW. In the eastern part there is still the internal basin of the Mediterranean with the coastal zone of Marathon- Nea Makri, while in the west the basins of Tŕriassiou Pediou and Megara.

The climate is characterized as Mediterranean, with the exception of the high points, where the climate is mountainous. The average annual rainfall ranges from 350 mm in the Attica basin to 1,000 mm in the mountainous parts (Parnitha), while the rainy days range from 50 to 100 per year. Snowfall is rare in the coastal areas, while it increases significantly inland. The average annual temperature ranges from 16°C to 18°C, depending on altitude and distance from the sea, while the annual thermometric range is 16°C.

3.3 COMPETENT AUTHORITIES

Law 3199/2003 (Government Gazette A' 280) on the Protection and Management of Water Bodies harmonises the National Law with the provisions of the Directive 2000/60/EC and defines the competent authorities for the protection and management of Water Bodies. More specifically, regarding the competent authorities, the following applies:

- According to Article 26 of Law 5037/2023 (Government Gazette A' 78/28.03.2023), from March 28, 2023, the **National Water Committee** means the Minister of Environment and Energy, subject to more specific provisions. The Ministry of Environment and Energy (MEE) draws up the policy for the protection and management of water and controls its implementation.
- According to article 4 of Law 3199/2003, the **General Directorate for Water** of the Ministry of the Environment and Energy, among other things, coordinates the services and state bodies and participates in the competent authorities of the EU. for every issue related to the protection and management of water, recommends the general rules for costing and invoicing water and monitors their compliance, recommends legislative and administrative measures for the protection and management of water, monitors the quality and quantity at a national level of water in collaboration with the Water

Directorates of the Decentralized Administrations and ensures the development and operation of the national network for monitoring the quality and quantity of water.

In addition, the following Ministries are involved in the implementation of Directive 2000/60/EC at the National Level: Min. of Rural Development and Food, Min. of Infrastructure and Transport, Min. of Development, Min. of National Economy and Finance, Min. of Health, Ministry of Shipping and Insular Policy, Min. Interior.

Designated competent authorities at regional level:

- The **Decentralized Administration Water Council (D.A.W.C.)**, which is formed in each Water District that extends to the administrative boundaries of one or more Decentralized Administrations and is an instrument of social dialogue and consultation on matters of water protection and management.
- The **Water Directorates of the Decentralized Administration**, through which the responsibilities of the Decentralized Administration for the protection and management of water are exercised. The Decentralized Administration of Attica, to which the RB of the Department of Attica (EL06) falls, includes the Water Administration of Attica.

In addition, in matters of implementation of the Directive 2000/60/EC, the Regions and Municipalities are involved at the Regional and Local Level.

The table below provides an overview of the nature of the role played by each competent authority by thematic area in the context of water management and protection.

Table 3-2: Role of competent authority by subject matter

Competent Authority	Main Role															
	Pressure and Economic analysis	Monitoring of surface water	Monitoring of groundwater	Assessment of status of surface water	Assessment of status of water	Preparation of plans	Preparation of PoM	Implementation of measures	Public participation	Enforcement of regulations	Co-ordination of implementation	Reporting to the European Commission				
General Directorate for Water of the Hellenic Ministry of Environment & Energy	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Water Directorate of the Decentralised Administration	O	O	O	O	O	O	O	O	M	O	M	M	-			
Hellenic Ministry of Rural Development and Food	-	-	-	-	-	-	-	-	M	-	O	-	-			
Hellenic Ministry of Infrastructure and Transport	-	-	-	-	-	-	-	-	M	-	O	-	-			
Hellenic Ministry of Development	-	-	-	-	-	-	-	-	O	-	M	-	-			
Hellenic Ministry of Economy and Development	-	-	-	-	-	-	-	-	O	-	M	-	-			
Hellenic Ministry of Health	-	-	-	-	-	-	-	-	M	-	O	-	-			
Hellenic Ministry of Shipping and Island	-	-	-	-	-	-	-	-	-	-	M	-	-			

Policy														
Hellenic Ministry of Interior	-	-	-	-	-	-	-	-	-	O	-	M	-	-
Municipalities	-	-	-	-	-	-	-	-	-	M	-	O	-	-
Regions	-	-	-	-	-	-	-	-	-	M	-	O	-	-
<i>M</i>	<i>Main Role</i>													
<i>O</i>	<i>Other Role</i>													
-	<i>No role</i>													

4 DESIGNATION AND CLASSIFICATION OF WATER BODIES

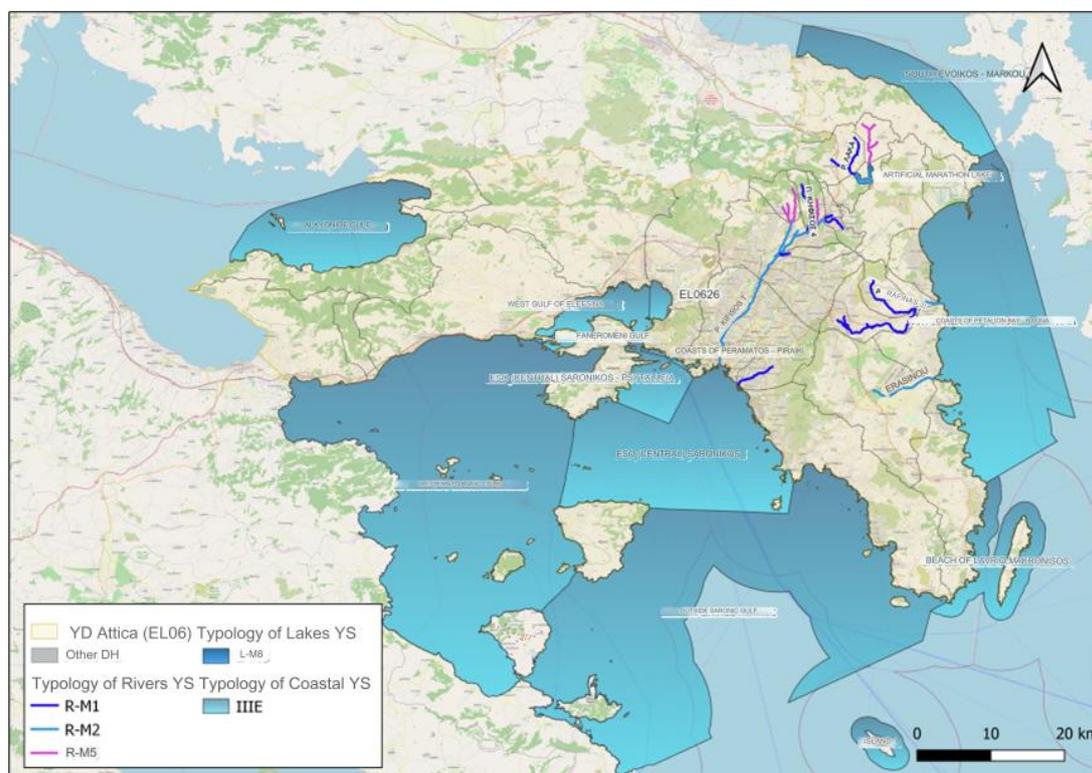
4.1 SURFACE WATER BODIES (SWB)

According to the 2nd River Basin Management Plan Revision in the Attica RBD (EL06), no changes occurred in terms of defining the WB in relation to those that had arisen during the 1st Revision.

More specifically, in the context of the 2nd Revision, a total of **thirty (30)** surface water bodies were identified in the Attica RBD (EL06), the distribution of which in the RBD is shown in the following table. No transitional water bodies were identified in the Attica RBD (EL06).

Table 4-1: Number of surface water bodies in the Attica RBD (EL06) for each RB

Type of WB	RBD	Total
	RB EL0626	WB
River WB	15	15
River – Lake WB	1	1
Lake WB	0	0
Transitional WB	0	0
Coastal WB	14	14
Type of WB	RBD	Total WB



Map 4-1: Identification and typology of Surface WB in the RBD of Attica (EL06)

4.1.1 River WB

The typology and classification of the state of river water bodies of the RBD of Attica (EL06) is presented in the following tables. Also recorded are the differences in ecological and chemical status between the 1st RBMP and its 1st and 2nd Revisions.

Table 4-1: River water bodies and typology, according to the European Decision 2018/229/EE and the MED GIG, according to WB of the Attica Basin (EL0626) of the Attica Water District (EL06)

No	WB Name	WB Code	HMWB/ AWB	Length (km)	Immediate Catchment Area (km ²)	Upstream Catchment area (km ²)	Mean Annual Flow (hm ³)	WB Type
Attica RB (EL0626)								
1	R. PALIOMIAOULI	EL0626R000002009N	NAT	9,09	24,6	24,6	9,36	R-M5
2	S. LAKA	EL0626R000000008N	NAT	9,02	69,1	69,1	26,33	R-M1
3	R. KIFISOS 1	EL0626R000200001H	HMWB	14,04	160,5	422,2	58,41	R-M2
4	R. KIFISOS 7	EL0626R000210007N	NAT	3,53	11,3	11,3	1,52	R-M1
5	R. KIFISOS 5	EL0626R000206005N	NAT	3,44	9,4	9,4	3,74	R-M5
6	R. KIFISOS 4	EL0626R000204004N	NAT	7,24	14,6	14,6	1,95	R-M1
7	R. KIFISOS 6	EL0626R000208006N	NAT	1,35	7,2	7,2	0,96	R-M1
8	S. RAFINA 1	EL0626R000100010N	NAT	3,93	13,2	102,5	20,72	R-M2
9	S. RAFINA 3	EL0626R000100011N	NAT	9,81	34,7	34,7	7,01	R-M1
10	S. RAFINA 2	EL0626R000100012N	NAT	18,22	54,6	54,6	11,04	R-M1

No	WB Name	WB Code	HMWB/ AWB	Length (km)	Immediate Catchment Area (km ²)	Upstream Catchment area (km ²)	Mean Annual Flow (hm ³)	WB Type
11	S. PIKRODAFNI	EL0626R000300013N	NAT	5,91	36,3	36,3	4,73	R-M1
12	R. KIFISOS 2	EL0626R000200002N	NAT	19,83	177,6	261,7	3,74	R-M2
13	R. KIFISOS 3	EL0626R000202003N	NAT	9,20	27,0	27,0	3,61	R-M5
14	R. ERASINOU	EL0626R000300014N	NAT	10,01	213,4	213,4	49,33	R-M2
15	R. KIFISOS 8 – S. PYRNAS	EL0626R000212008H	HMWB	1,38	14,65	14,7	2,37	R-M1

NAT: Natural WB, **HMWB:** Heavily Modified WB

Table 4-2: Classification of the status of the Rivers Water bodies in the RBD of Attica (EL06) and differences in the status between the 1st RBMP as well as the 1st and 2nd RBMP Revisions

WB Code	WB Name	Ecological Status of the 1st RBMP	Chemical Status of the 1st RBMP	Overall Status of the 1st RBMP	Ecological Status of the 1st Revision	Eco-classification Confidence Level **	Chemical Status of the 1st Revision	Chemical Classification Confidence Level **	Overall Status of the 1st Revision	Ecological Status / Potential of the 2nd Revision	Eco-classification Confidence Level **	Chemical Status 2nd Revision	Chemical Classification Confidence Level **	Overall Status of 2nd Revision
EL0626R000200001H	R. KIFISOS 1	POOR	UNKNOWN	UNKNOWN	UNKNOWN	0	LESS THAN GOOD	2	UNKNOWN	MODERATE	0	LESS THAN GOOD	2	MODERATE
EL0626R000212008H	R. KIFISOS 8 – R. PYRNAS	DID NOT EXIST AS WB	DID NOT EXIST AS WB	-	UNKNOWN	0	UNKNOWN	0	UNKNOWN	POOR	0	GOOD	1	POOR

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WB Code	WB Name	Ecological Status of the 1st RBMP	Chemical Status of the 1st RBMP	Overall Status of the 1st RBMP	Ecological Status of the 1st Revision	Eco-classification Confidence Level **	Chemical Status of the 1st Revision	Chemical Classification Confidence Level **	Overall Status of the 1st Revision	Ecological Status / Potential of the 2nd Revision	Eco-classification Confidence Level **	Chemical Status 2nd Revision	Chemical Classification Confidence Level **	Overall Status of 2nd Revision
EL0626R000002009N	R. PALIOMIAOULI	MODERATE	GOOD	MODERATE	GOOD	3	GOOD	1	GOOD	GOOD	2	GOOD	2	GOOD
EL0626R000000008N	S. LAKA	MODERATE	GOOD	MODERATE	MODERATE	1	GOOD	1	MODERATE	MODERATE	1	GOOD	0	MODERATE
EL0626R000210007N	R. KIFISOS 7	UNKNOWN	UNKNOWN	UNKNOWN	POOR	3	GOOD	1	POOR	MODERATE	1	GOOD	1	MODERATE
EL0626R000206005N	R. KIFISOS 5	UNKNOWN	UNKNOWN	UNKNOWN	GOOD	3	GOOD	1	GOOD	MODERATE	1	GOOD	0	MODERATE
EL0626R000204004N	R. KIFISOS 4	GOOD	GOOD	GOOD	MODERATE	1	GOOD	1	MODERATE	GOOD	1	GOOD	1	GOOD
EL0626R000208006N	R. KIFISOS 6	UNKNOWN	UNKNOWN	UNKNOWN	MODERATE	1	GOOD	1	MODERATE	MODERATE	1	GOOD	1	MODERATE
EL0626R000100010N	S. RAFINAS 1	POOR	UNKNOWN	UNKNOWN	MODERATE	1	UNKNOWN	0	UNKNOWN	MODERATE	1	GOOD	1	MODERATE
EL0626R000100011N	S. RAFINAS 3	UNKNOWN	UNKNOWN	UNKNOWN	MODERATE	1	GOOD	1	MODERATE	BAD	3	GOOD	1	BAD
EL0626R000100012N	S. RAFINAS 2	MODERATE	UNKNOWN	UNKNOWN	MODERATE	1	GOOD	1	MODERATE	MODERATE	1	GOOD	1	MODERATE
EL0626R000202003N	R. KIFISOS 3	GOOD	GOOD	GOOD	MODERATE	3	GOOD	2	MODERATE	GOOD	1	GOOD	1	GOOD
EL0626R000300014N	S. ERASINOU	MODERATE	UNKNOWN	UNKNOWN	MODERATE	1	UNKNOWN	0	UNKNOWN	MODERATE	1	LESS THAN GOOD	0	MODERATE

WB Code	WB Name	Ecological Status of the 1st RBMP	Chemical Status of the 1st RBMP	Overall Status of the 1st RBMP	Ecological Status of the 1st Revision	Eco-classification Confidence Level **	Chemical Status of the 1st Revision	Chemical Classification Confidence Level **	Overall Status of the 1st Revision	Ecological Status / Potential of the 2nd Revision	Eco-classification Confidence Level **	Chemical Status 2nd Revision	Chemical Classification Confidence Level **	Overall Status of 2nd Revision
EL0626R000200002N	R. KIFISOS 2	BAD	GOOD	BAD	POOR	3	GOOD	2	POOR	POOR	2	LESS THAN GOOD	2	POOR
EL0626R000300013N	S. PIKRODAFNIS	UNKNOWN	GOOD	UNKNOWN	MODERATE	1	GOOD	1	MODERATE	MODERATE	0	GOOD	1	MODERATE

Classification Confidence Score: «0» = Unknown, «1» = Low Confidence, «2» = MODERATE Confidence, «3» = High Confidence

4.1.2 Lake WB

The typology and classification of the state of lake water bodies of Attica RBD (EL06) is presented in the following tables. Also recorded are the differences in ecological and chemical status between the 1st RBMP and its 1st and 2nd Revisions.

Table 4-3: Lake WB and Heavily Modified WB rivers of lake type (reservoirs) with a new typology, per RB of the Attica RBD (EL06)

No	WB Name	WB Code	Category	Surface (km2)	Perimeter (Km)	WB Type
WB District of Attica (EL0626)						
1	ARTIFICIAL LAKE OF MARATHON	EL0626RL00000001H	HMWB	2,98	11,41	L-M8
<i>HMWB: Heavily Modified WB</i>						

Table 4-4: Classification of the state of the Lake Water bodies in the Attica RBD (EL06) and differences in the state between the 1st RBMP as well as the 1st and 2nd RBMP Revisions.

WB Code	WB Name	Ecological Status of the 1st RBMP	Chemical Status of the 1st RBMP	Overall Status of the 1st RBMP	Ecological Status of the 1st Revision	Eco-classification Confidence Level **	Chemical Status of the 1st Revision	Chemical Classification Confidence Level **	Overall Status of the 1st Revision	Ecological Status / Potential of the 2nd Revision	Eco-classification Confidence Level **	Chemical Status 2nd Revision	Chemical Classification Confidence Level **	Overall Status of 2nd Revision
EL0626RL00000001H	ARTIFICIAL LAKE OF MARATHON	MODERATE	GOOD	MODERATE	GOOD & HIGH	3	GOOD	2	GOOD	GOOD	2	GOOD	2	GOOD
<i>Classification Confidence Score: «0» = Unknown, «1» = Low Confidence, «2» = MODERATE Confidence, «3» = High Confidence</i>														

4.1.3 Coastal WB

The typology and classification of the state of the coastal water bodies of the Attica RBD (EL06) is presented in the following tables. The differences in ecological and chemical status between the 1st RBMP and its 1st and 2nd Revisions are also recorded.

Table 4-5: Coastal Attica RBD RB (EL06)

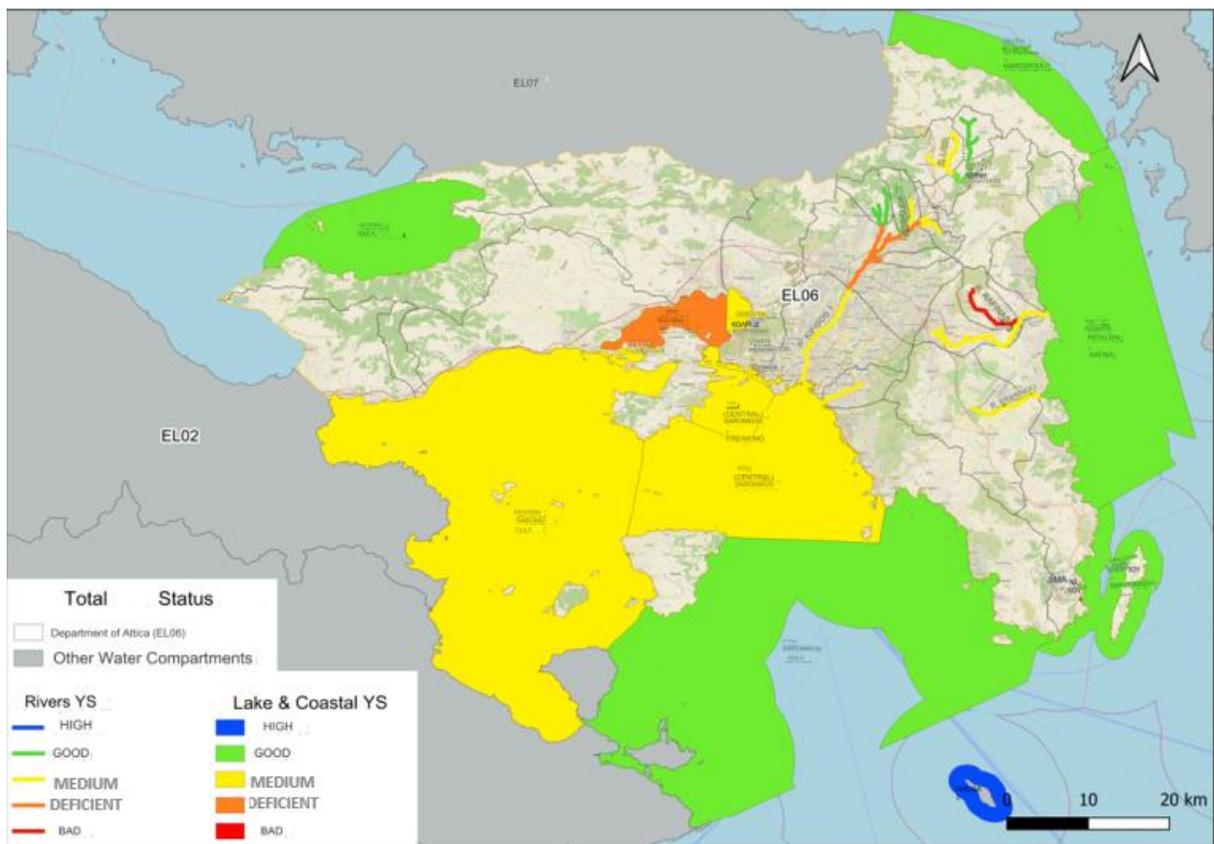
No	WB Name	WB Code	HMWB/ AWB	Surface (Km ²)	Perimeter (Km)	WB Type
Attica RBD RB (EL0626)						
1	KOLPOS FANERWMENIS	EL0626C0009N	NAT	6,34	23,5	IIIE
2	WESTERN SARONIKOS KOLPOS	EL0626C0010N	NAT	1,125	366,4	IIIE
3	SOUTH EVOIKOS- MARKOPOULO	EL0626C0001N	NAT	142,74	78,7	IIIE
4	COASTS OF PETALION- RAFINA	EL0626C0002N	NAT	535,68	186,8	IIIE
5	THALASSA LAVRIO- MAKRONISSO	EL0626C0003N	NAT	111,02	177,2	IIIE
6	KOLPOS ALKYONIDWN	EL0626C0005N	NAT	214,11	107,8	IIIE
7	WEST KOLPOS OF GREFSINA	EL0626C0006N	NAT	58,76	76,7	IIIE
8	ESO (CENTRAL) SARONIKOS	EL0626C0012N	NAT	417,29	183,9	IIIE
9	EAST KOLPOS OF GREFSINA	EL0626C0007H	HMWB	12,78	22,1	IIIE
10	NHSIDA 1	EL0626C0014N	NAT	32,85	36,0	IIIE
11	ESO (CENTRAL) SARONIKOS- PSYTALLEIA	EL0626C0011N	NAT	65,01	79,4	IIIE
12	EXO KOPLOS SARONIKOS	EL0626C0013N	NAT	1029,94	342,9	IIIE
13	PORT OF LAVRIO	EL0626C0004H	HMWB	0,36	3,6	IIIE
14	COASTS OF PERAMA – PIRAIKI	EL0626C0008H	HMWB	5,74	41,4	IIIE
NAT: Natural WB, HMWB: Heavily Modified WB						

Table 4-6: Classification of the state of the Coastal Water bodies in the Attica RBD (EL06) and differences in the state between the 1st RBMP as well as the 1st and 2nd Revision.

WB Code	WB Name	Ecological Status of the 1st RBMP	Chemical Status of the 1 st RBMP	Overall Status of the 1 st RBMP	Ecological Status of the 1 st Revision	Eco-classification Confidence Level **	Chemical Status of the 1 st Revision	Chemical Classification Confidence Level **	Overall Status of the 1 st Revision	Ecological Status / Potential of the 2nd Revision	Eco-classification Confidence Level **	Chemical Status 2nd Revision	Chemical Classification Confidence Level **	Overall Status of 2nd Revision
EL0626C0006N	WEST KOLPOS OF GREFSINA	POOR	UNKNOWN	UNKNOWN	MODERATE	3	GOOD	2	MODERATE	POOR	3	GOOD	2	POOR
EL0626C0011N	ESO (CENTRAL) SARONIKOS-PSYTALLEIA	POOR	UNKNOWN	UNKNOWN	MODERATE	3	GOOD	2	MODERATE	MODERATE	3	GOOD	2	MODERATE
EL0626C0009N	KOLPOS FANERWMENIS	MODERATE	UNKNOWN	UNKNOWN	MODERATE	3	GOOD	2	MODERATE	MODERATE	3	GOOD	1	MODERATE
EL0626C0012N	ESO (CENTRAL) SARONIKOS	MODERATE	UNKNOWN	UNKNOWN	MODERATE	3	GOOD	2	MODERATE	MODERATE	3	GOOD	1	MODERATE
EL0626C0003N	THALASSA LAVRIO-MAKRONISSO	HIGH	UNKNOWN	UNKNOWN	GOOD	1	GOOD	1	GOOD	GOOD	0	GOOD	0	GOOD
EL0626C0014N	NHSIDA 1	HIGH	UNKNOWN	UNKNOWN	HIGH	1	UNKNOWN	0	UNKNOWN	HIGH	0	GOOD	0	HIGH
EL0626C0001N	SOUTH EVOIKOS-MARKOPOULO	GOOD	UNKNOWN	UNKNOWN	GOOD	3	UNKNOWN	0	UNKNOWN	GOOD	3	GOOD	1	GOOD
EL0626C0007H	EAST KOLPOS OF GREFSINA	POOR	UNKNOWN	UNKNOWN	MODERATE	1	GOOD	1	MODERATE	MODERATE	0	GOOD	0	MODERATE

WB Code	WB Name	Ecological Status of the 1st RBMP	Chemical Status of the 1 st RBMP	Overall Status of the 1 st RBMP	Ecological Status of the 1 st Revision	Eco-classification Confidence Level **	Chemical Status of the 1 st Revision	Chemical Classification Confidence Level **	Overall Status of the 1 st Revision	Ecological Status / Potential of the 2nd Revision	Eco-classification Confidence Level **	Chemical Status 2nd Revision	Chemical Classification Confidence Level **	Overall Status of 2nd Revision
EL0626C0008H	COASTS OF PERAMA – PIRAIKI	POOR	UNKNOWN	UNKNOWN	MODERATE	1	GOOD	1	MODERATE	MODERATE	0	GOOD	0	MODERATE
EL0626C0004H	PORT OF LAVRIO	UNKNOWN	UNKNOWN	UNKNOWN	GOOD AND HIGH	3	GOOD	1	GOOD	GOOD	0	GOOD	0	GOOD
EL0626C0013N	EXO KOPLOS SARONIKOS	GOOD	UNKNOWN	UNKNOWN	GOOD	3	GOOD	2	GOOD	GOOD	3	GOOD	1	GOOD
EL0626C0005N	KOLPOS ALKYONIDWN	GOOD	UNKNOWN	UNKNOWN	GOOD	3	GOOD	2	GOOD	GOOD	0	GOOD	0	GOOD
EL0626C0010N	WESTERN SARONIKOS KOLPOS	MODERATE	UNKNOWN	UNKNOWN	MODERATE	3	GOOD	2	MODERATE	MODERATE	3	GOOD	1	MODERATE
EL0626C0002N	COASTS OF PETALION-RAFINA	GOOD	UNKNOWN	UNKNOWN	GOOD	3	GOOD	2	GOOD	GOOD	3	GOOD	2	GOOD

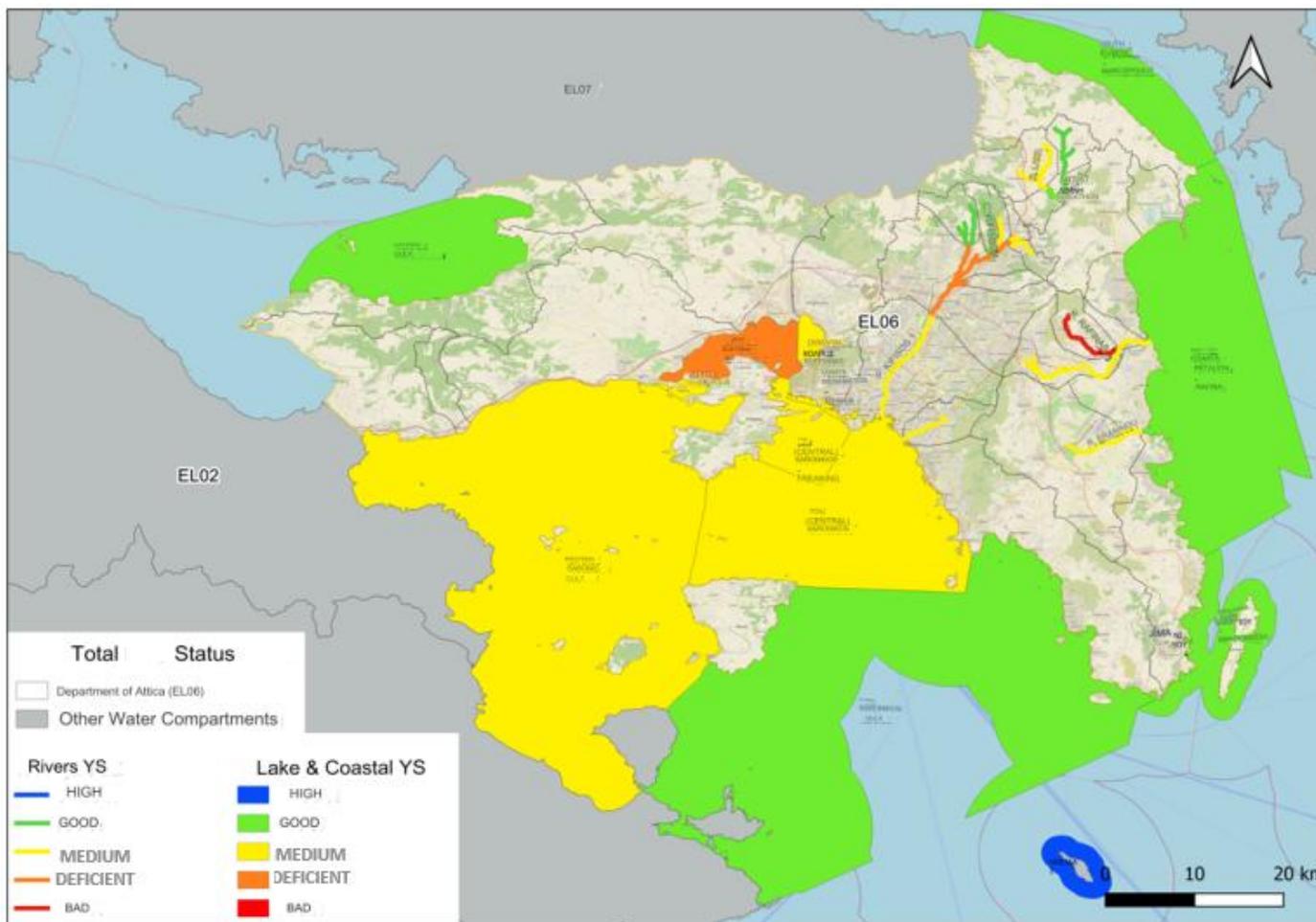
Classification Confidence Score: «0» = Unknown, «1» = Low Confidence, «2» = MODERATE Confidence, «3» = High Confidence



Map 4-2: Classification of the ecological status of Surface Water bodies in the Attica RBD (EL06)



Map 4-3: Classification of chemical status of Surface Water bodies in the Attica RBD (EL06)



Map 4-4: Classification of the overall situation of Surface Water bodies in the District of Attica (EL06)

4.2 GROUNDWATER BODIES

In the context of the 2nd RBMP Revision of the Attica RBD (EL06) a Revision was made of the delimitation and characterization/evaluation of the Ground Water Bodies (GWB) that had been done during the 1st Revision, from the results of which the number and limits of the GWB remained the same.

The twenty-four (24) Ground Water Bodies of the Attica RBD (EL06), as they were configured in the context of the 2nd RBMP Revision are presented in the following table.

Table 4-7: The GWB of the RB of Attica (EL06)

No	GWB Code	GWB Name
1	EL0600010	Loutrakiou
2	EL0600020	Western Geraneia
3	EL0600030	Central Geraneia- Kalamaki
4	EL0600040	Eastern Geraneia- Mavrovouni
5	EL0600051	Megaron- Alepochoriou (a)
6	EL0600052	Megaron- Alepochoriou (b)
7	EL0600060	Patera
8	EL0600070	Oinois
9	EL0600081	Northeast Parnitha (a)
10	EL0600082	North-eastern Parnitha (b – Aegaleo)
11	EL0600090	Thriassiou Pediou
12	EL0600100	Kapandritiou
13	EL0600110	Kifisou Pedio (Athens Pedio)
14	EL0600120	Marathona (a)
15	EL0600130	Marathona (b)
16	EL0600140	Penteli
17	EL0600151	Mesogaia (a)
18	EL0600152	Mesogaia (b)
19	EL0600160	Hymettou
20	EL0600170	Lavreotikis
21	EL0600180	Anavissou
22	EL0600190	Salamina
23	EL0600200	Aegina
24	EL0600210	Agistri Island

The status of a GWB depends on both the assessment of its chemical and quantitative status. The good chemical status of the waters indicates low or even lack of pollution, while the good quantitative status indicates non-depletion of the aquifer.

The following Tables include the status and classification data of the GWB of the Attica RBD (EL06) as they emerged during the 2nd RBMP Revision.

Table 4-8: GWB of Attica RBD- Chemical and Quantitative status

No	Code	Name	Quality Status	Quantity Status	Increased element values due to natural background	Exceeded quality parameters	Main pressures	Marine penetration	Protected areas
1	EL0600010	Loutrakiou	GOOD	GOOD	Magnesium 160 mg/L	Cl, NO ₃ , metals	Urbanization, Agriculture, livestock farming, WWTP	Locally in the coastal zone	YES
2	EL0600020	Western Geraneia	GOOD	GOOD	Magnesium 130 mg/L	EC, Cl	Agriculture, livestock farming	Locally, in part of the coastal zone (natural)	YES
3	EL0600030	Central Geraneia-Kalamaki	GOOD	POOR	Magnesium 100 mg/L	-	secondary sector, Agriculture, livestock farming, WWTP	NO	NO
4	EL0600040	Eastern Geraneia-Mavrovouni	GOOD	GOOD	-	EC, Cl, NO ₃ , & metals	Urbanization, Agriculture, livestock farming, WWTP	Locally in the coastal zone	NO
5	EL0600051	Megaron-Alepochoriou (a)	POOR	POOR	-	EC, Cl, NO ₃ , & metals	Agriculture, livestock farming, WWTP	YES	NO
6	EL0600052	Megaron-Alepochoriou (b)	GOOD	GOOD	-	-	Agriculture, livestock farming, Urbanization	YES (natural)	NO
7	EL0600060	Patera	GOOD	GOOD	-	-	Agriculture, livestock farming, Urbanization	Locally, in part of the coastal zone (natural)	NO
8	EL0600070	Oinois	GOOD	GOOD	Magnesium 300 mg/L	-	Agriculture, livestock farming, Urbanization	NO	NO
9	EL0600081	Northeast Parnitha (a)	GOOD	GOOD	-	EC, Cl	Agriculture, livestock farming	Locally in the coastal zone (natural)	YES
10	EL0600082	North-eastern Parnitha (b – Aegaleo)	GOOD	GOOD	-	EC, Cl, NO ₃ , & metals	Agriculture, livestock farming, Urbanization, landfill	YES (natural)	NO

No	Code	Name	Quality Status	Quantity Status	Increased element values due to natural background	Exceeded quality parameters	Main pressures	Marine penetration	Protected areas
11	EL0600090	Thriassiou Pediou	POOR	POOR	-	EC, Cl, SO ₄	Urbanization, Agriculture, livestock farming, WWTP	YES	NO
12	EL0600100	Kapandritiou	GOOD	GOOD	-	NO ₃ , metals	Agriculture, livestock farming, Urbanization	NO	NO
13	EL0600110	Kifisou Pedio (Athens Pedio)	POOR	GOOD	-	EC, NO ₃ , Cl, SO ₄ & metals	Urbanization, Agriculture, livestock farming, WWTP	Locally in the coastal zone	NO
14	EL0600120	Marathona (a)	GOOD	GOOD	-	EC, NO ₃ , Cl, & SO ₄	Agriculture, livestock farming	Locally in the coastal zone (natural)	NO
15	EL0600130	Marathona (b)	POOR	POOR	-	EC, NO ₃ , Cl, SO ₄ & metals	Agriculture, livestock farming, WWTP	YES	NO
16	EL0600140	Penteli	GOOD	GOOD	-	-	Urbanization, Agriculture, livestock farming	NO	NO
17	EL0600151	Mesogaias (a)	POOR	POOR	-	-	Urbanization, livestock farming	YES	NO
18	EL0600152	Mesogaias (b)	POOR	GOOD	E.C. (4100mS/cm), Cl (880mg/l), SO ₄ (860 mg/l)	EC, NO ₃ , Cl & metals	Urbanization, Agriculture, livestock farming, WWTP	Yes, locally	NO
19	EL0600160	Hymettou	GOOD	GOOD	-	EC, NO ₃ , & Cl	Agriculture, livestock farming, WWTP	In the coastal zone (natural) and inland	NO
20	EL0600170	Lavreotikis	GOOD	GOOD	-	EC, Cl & metals	Urbanization, Agriculture, livestock farming, WWTP	Locally in the coastal zone (natural)	NO
21	EL0600180	Anavissou	GOOD	GOOD	-	NO ₃ , & Cl	Urbanization, Agriculture, livestock farming, WWTP	Locally in the coastal zone	NO

No	Code	Name	Quality Status	Quantity Status	Increased element values due to natural background	Exceeded quality parameters	Main pressures	Marine penetration	Protected areas
22	EL0600190	Salamina	POOR	GOOD	-	EC, NO ₃ , Cl, & SO ₄	Urbanization, Agriculture, livestock farming, WWTP	In the coastal zone (natural) and inland	NO
23	EL0600200	Aegina	POOR	POOR	-	EC, NO ₃ , Cl, SO ₄ & metals	Urbanization, Agriculture, livestock farming	In the coastal zone (natural) and inland	NO
24	EL0600210	Agistri Island	GOOD	GOOD	-		Urbanization	Locally in the coastal zone (natural)	NO



Map 4-5: Qualitative (Chemical) State of the GWB of the RB of Attica (EL06)



Map 4-6: Quantitative (Chemical) State of the GWB of the RB of Attica (EL06)

The following Table shows the differences in the qualitative and quantitative status of the GWB of the Attica RBD (EL06) between the 1st RBMP, the 1st and the 2nd River Basin Management Plan Revision

Table 4-9: Change in the status of the GWB between the 1st Management Plan, 1st and 2nd RBMP Revision

1 ^o RBMP				Code	Name	1 st Revision		2 nd Revision	
Code	Name	qualitative status	quantitative status			qualitative status	quantitative status	qualitative status	quantitative status
EL0600010	Loutrakiou	GOOD	GOOD	EL0600010	Loutrakiou	GOOD	GOOD	GOOD	GOOD
EL0600020	Western Geraneia	GOOD	GOOD	EL0600020	Western Geraneia	GOOD	GOOD	GOOD	GOOD
EL0600030	Central Geraneia-Kalamaki	GOOD	GOOD	EL0600030	Central Geraneia-Kalamaki	GOOD	GOOD	GOOD	POOR
EL0600040	Eastern Geraneia-Mavrovouni	GOOD	POOR	EL0600040	Eastern Geraneia-Mavrovouni	GOOD	GOOD	GOOD	GOOD
EL0600050	Megaron- Alepochoriou	POOR	POOR	EL0600051	Megaron-Alepochoriou (a)	POOR	POOR	POOR	POOR
				EL0600052	Megaron-Alepochoriou (b)	GOOD	GOOD	GOOD	GOOD
EL0600060	Patera	GOOD	GOOD	EL0600060	Patera	GOOD	GOOD	GOOD	GOOD
EL0600070	Oinois	GOOD	GOOD	EL0600070	Oinois	GOOD	GOOD	GOOD	GOOD
EL0600080	Northeast Parnitha	GOOD	GOOD	EL0600081	Northeast Parnitha (a)	GOOD	GOOD	GOOD	GOOD
				EL0600082	North-eastern Parnitha (b – Aegaleo)	GOOD	GOOD	GOOD	GOOD

1 ^o RBMP				Code	Name	1 st Revision		2 nd Revision	
Code	Name	qualitative status	quantitative status			qualitative status	quantitative status	qualitative status	quantitative status
EL0600090	Thriassiou Pediou	POOR	POOR	EL0600090	Thriassiou Pediou	POOR	POOR	POOR	POOR
EL0600100	Kapandritiou	GOOD	GOOD	EL0600100	Kapandritiou	GOOD	GOOD	GOOD	GOOD
EL0600110	Kifisou Pedio (Athens Pedio)	POOR	GOOD	EL0600110	Kifisou Pedio (Athens Pedio)	POOR	GOOD	POOR	GOOD
EL0600120	Marathona (a)	GOOD	GOOD	EL0600120	Marathona (a)	GOOD	GOOD	GOOD	GOOD
EL0600130	Marathona (b)	POOR	POOR	EL0600130	Marathona (b)	POOR	POOR	POOR	POOR
EL0600140	Penteli	GOOD	GOOD	EL0600140	Penteli	GOOD	GOOD	GOOD	GOOD
EL0600150	Mesogaias	POOR	GOOD	EL0600151	Mesogaias (a)	POOR	GOOD	POOR	POOR
				EL0600152	Mesogaias (b)	POOR	GOOD	POOR	GOOD
EL0600160	Hymettou	GOOD	GOOD	EL0600160	Hymettou	GOOD	GOOD	GOOD	GOOD
EL0600170	Lavreotikis	GOOD	GOOD	EL0600170	Lavreotikis	GOOD	GOOD	GOOD	GOOD
EL0600180	Anavissou	GOOD	GOOD	EL0600180	Anavissou	GOOD	GOOD	GOOD	GOOD
EL0600190	Salamina (a)	POOR	POOR	EL0600190	Salamina Aegina	POOR	POOR	POOR	GOOD
EL0600200	Salamina (b)	POOR	POOR						
EL0600210	Salamina (c)	POOR	POOR						
EL0600220	Aegina (a)	POOR	POOR	EL0600200	Marathona (b) Penteli Mesogaias (a)	POOR	POOR	POOR	POOR
EL0600230	Aegina (b)	POOR	POOR						
EL0600240	Aegina (c)	POOR	POOR						
-	-	-	-	EL0600210	Mesogaias (b)	GOOD	GOOD	GOOD	GOOD

4.3 HEAVILY MODIFIED WATER BODIES (HMWB) AND ARTIFICIAL WATER BODIES (AWB)

In summary, during the present 2nd RBMP Revision, the same methodology as the 2nd Administrative Cycle was applied with the following improvements:

1. Data collected for projects built after 2015 and/or to be built by 2027
2. All surface water bodies (SWB) were examined and all projects/uses were recorded, per criteria in a geographic information system (GIS) so that their subsequent geographic comparison with future projects was possible
3. Following a change in the EU directives, the HMWBs resulting from the construction of dams (inland reservoirs) are identified as river HMWBs of the lake type
4. The recent results of the EDP were taken into account for the final determination of the HMWB

In the context of the 2nd Revision, Special Measures are proposed to achieve the Good Ecological Potential of HMWB defined in the 2nd Revision (Deliverable Special measures to achieve the good ecological potential in HMWB) so that they can be considered in the context of the Program of Measures of the 2nd Revision.

Following the application of the HMWB and AWB determination methodology, **5 particularly modified and no artificial water bodies were found in the Attica RBD (EL06) out of a total of 30 surface water bodies.**

The following tables list the water bodies that were definitively characterized as Heavily Modified and Artificial per river basin of the RBD of Attica (EL06).

Table 4-10: Heavily Modified Rivers WB in the RBD of Attica (EL06)

HMWB code	Name	Type	Length (km)	Area (km ²)	Designated Water Use
RBD of Attica (EL0626)					
EL0626R000200001H	KIFISOS P. 1	R-M2	14,04	160,5	Flood protection, urbanization
EL0626R000212008H	KIFISOS P. 8 – R.PYRNAS	R-M1	1,38	14,7	Flood protection, urbanization

Table 4-11: Heavily Modified Lakes WB and Rivers (reservoirs) in the RBD of Attica (EL06)

HMWB code	Name	Type	Area (km ²)	Designated Water Use
RBD of Attica (EL0626)				
EL0626RL00000001H	A.L. of Marathona	L-M8	2,98	Athens Water supply

Table 4-12: Heavily Modified Coastal WB in the RBD of Attica (EL06)

HMWB code	Name	Type	Area (km ²)	Designated Water Use
EL0626C0007H	EAST COAST OF GREFSINA	III3	12,77	Navigation – Industrial activity

HMWB code	Name	Type	Area (km ²)	Designated Water Use
EL0626C0008H	COASTS OF PERAMA – PIRAIKI	III3	5,74	Navigation – Port of Piraeus
EL0626C0004H	PORT OF LAVRIO	IIIE	0,36	Navigation



Map 4-7: Heavily Modified and Artificial Water Bodies in the RBD of Attica (EL06)

4.4 PROTECTED AREAS

The Register of Protected Areas includes, in accordance with Annex V of PD 51/2007, all the following types of areas:

- a. Areas intended for the abstraction of water for human consumption, in accordance with Article 7 of PD 51/2007 (Article 7 of Directive 2000/60/EC),
- b. Areas intended for the protection of aquatic species of economic importance,
- c. Water bodies designated as recreational waters, including areas designated as bathing waters,
- d. Areas sensitive to the presence of nutrients, including areas designated as vulnerable zones, and areas designated as sensitive;

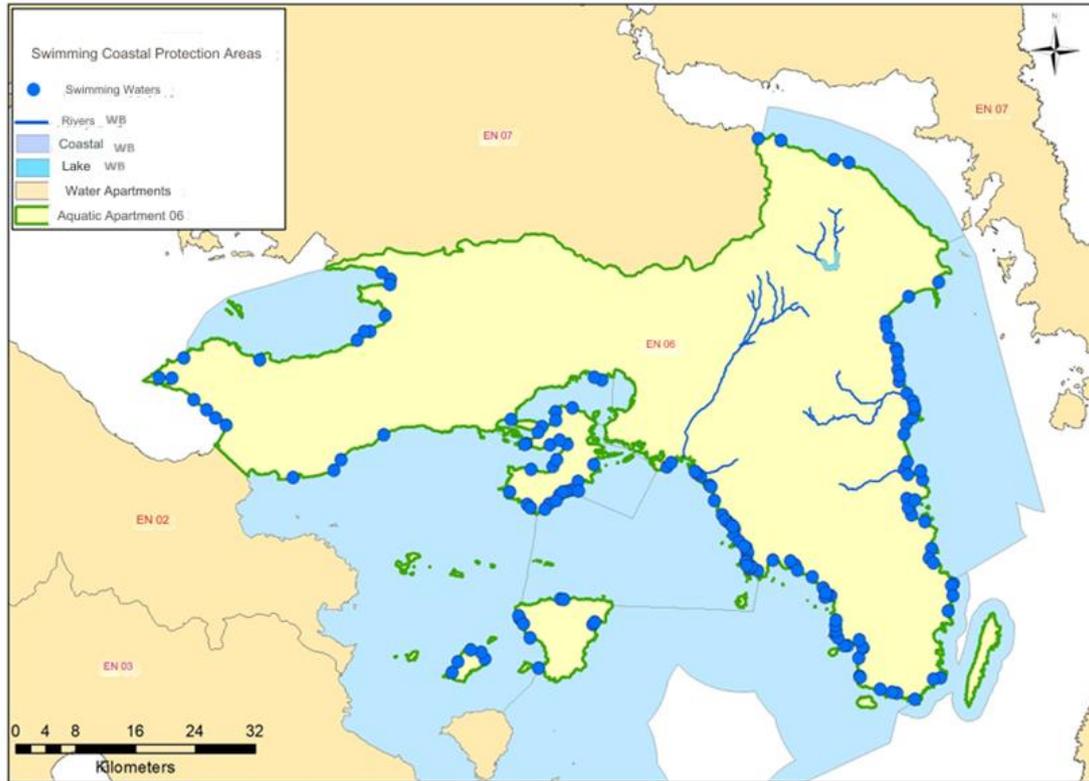
e. estimation of permanent and regulatory reserves per underground water system based on hydraulic parameters (hydraulic conductivity, water conductivity, storage factor and aquifer thickness where determined) and

f. areas intended for the protection of habitats or species, when maintaining or improving the state of the waters is important for their protection, including the relevant sites of the NATURE 2000 program (NATURA 2000).

Below are presented on maps the regions of the RPA by category.



Map 4-8: Protected areas of drinking water of the RBD of Attica (EL06)



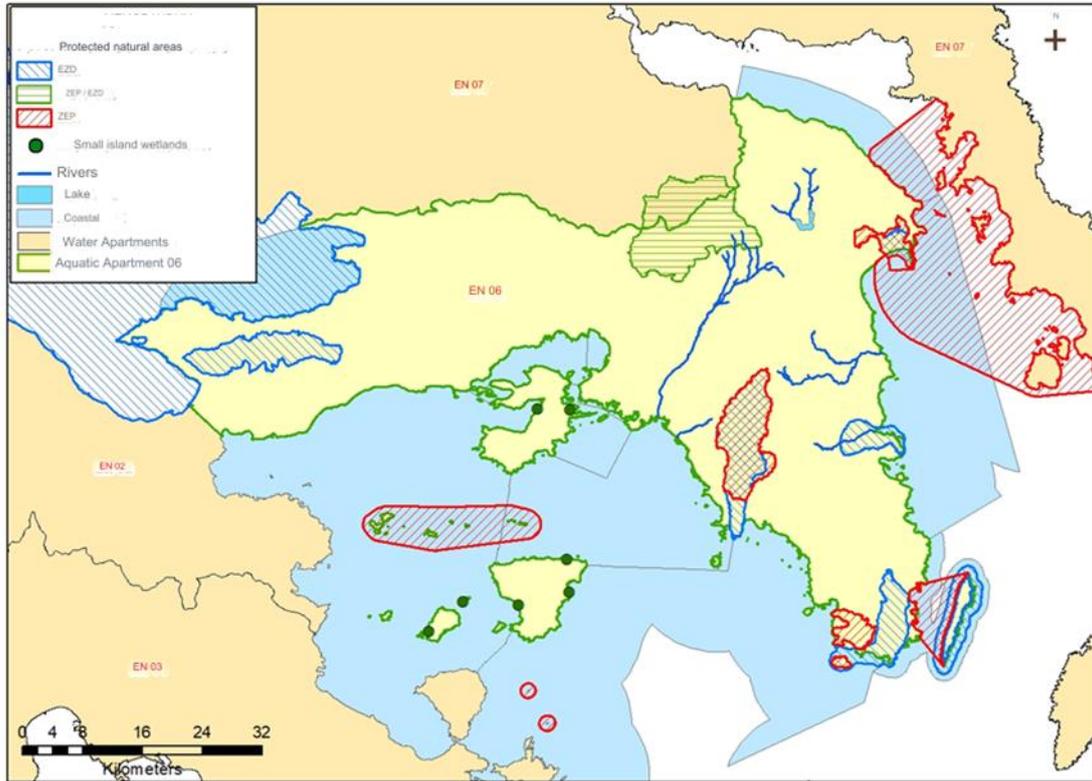
Map 4-9: Established Bathing Waters of the RBD of Attica (EL06)



Map 4-10: Established Vulnerable Zones of the RBD of Attica (EL06)



Map 4-11: Sensitive areas of the RBD of Attica (EL06)



Map 4-12: Protected natural areas of the Natura network and small island wetlands of the RBD of Attica (EL06)

5 PRESSURES AND IMPACTS

5.1 POINT SOURCES OF POLLUTION

All point sources of pollution that produce conventional pollutants (BOD, N, P) are described in this section. The list with the categories of pressures in question includes: Waste Water Treatment Plants (WWTP), Discharges not connected to WWTP, Large hotel units, Industrial sites, Livestock Farming, Aquacultures- Fish farming, Waste disposal sites and landfills.

From the above point sources of pollution derives the annual load of BOD, N and P produced.

Table 5-1: Total annual loads of BOD, N and P that are produced from point sources of pollution in the Attica RBD (EL06)

Point Sources of Pollution	BOD (tn/ year)	N (tn/ year)	P (tn/ year)
Industrial Units	247,37	20,29	3,87
Livestock facilities	124,38	180,63	25,42
Waste disposal sites	0,34	0,01	2,39
Waste Water Treatment Plants (WWTP),	1.696,54	3.137,05	759,18
Hotels	6,03	2,72	2,01
Aquaculture- Fish farming	0,00	3.308,52	450,40
TOTAL	2.074,67	6.649,22	1.243,27
Total in surface WB	1.697,72	6.451,18	1.220,40
Total in the underground WB	376,95	198,04	22,87

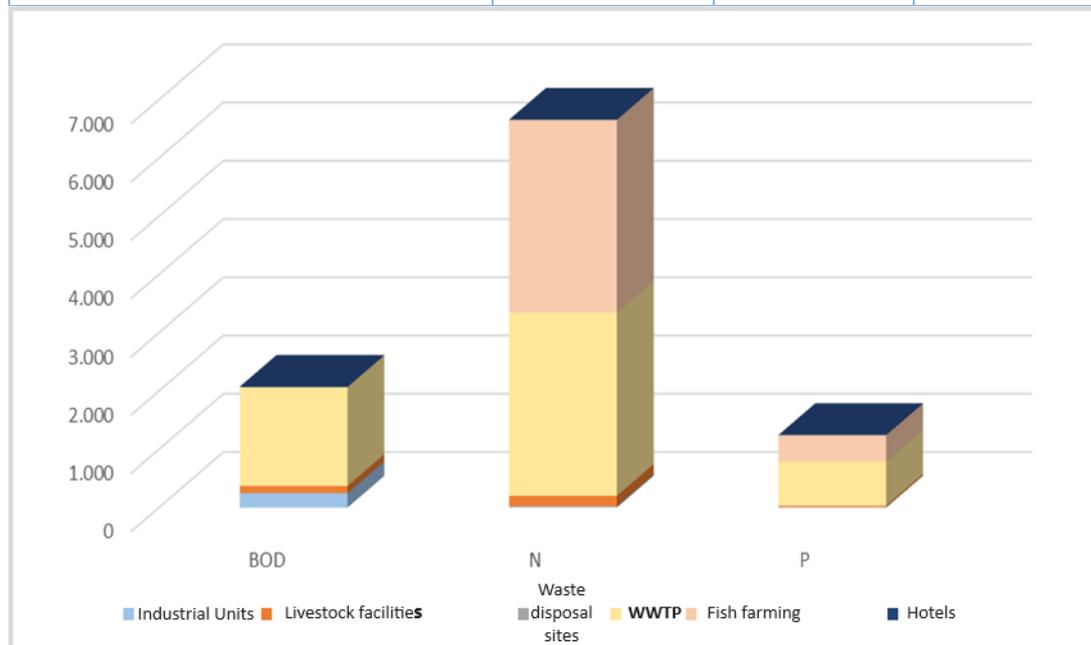


Figure 5-1: Total annual loads of BOD, N and P that are produced from point sources of pollution in the Attica RBD (EL0626)

5.2 DIFFUSED SOURCES OF POLLUTION

Diffuse sources of pollution include all sources of nutrients (BOD, N, P). The list of these pressures includes: Agriculture, Discharges not connected to sewerage network, Farming as well as the abandoned industrial or other facilities and other diffuse sources of pollution due to atmospheric deposits as well as from natural land uses such as pastures and forests, urban areas, roads-water etc.

From the above diffuse sources of pollution derives the annual load of BOD, N and P produced that end up in the water bodies of the study area.

Table 5-2: Total annual loads of BOD, N and P that are produced from Diffuse sources of pollution in the Attica RBD (EL06)

Diffuse sources of pollution	BOD	N	P
	(tn/ year)	(tn/ year)	(tn/ year)
URBAN	3.605,30	1.028,06	214,67
AGRICULTURAL	0,00	169,59	23,19
FARMING	0,88	1,02	0,07
OTHER SOURCES	0,00	8,24	0,15
TOTAL	3.606,18	1.206,91	238,07
Total in surface WB	3.141,02	774,01	199,11
Total in the underground WB	465,16	432,90	38,96

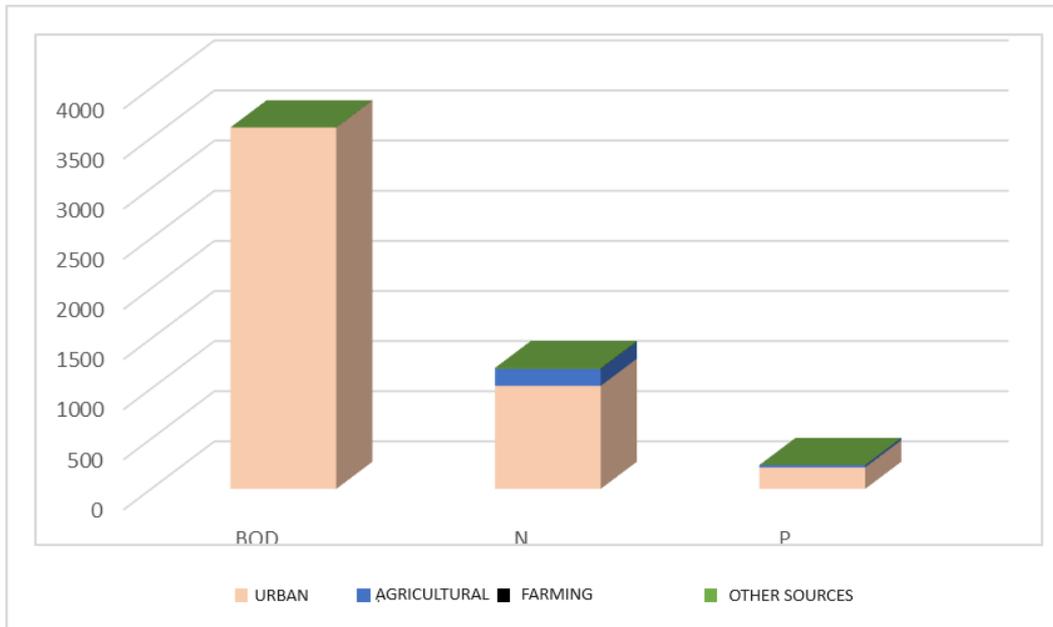


Figure 5-2: Total annual loads of BOD, N and P that are produced from Diffuse sources of pollution in the Attica RBD (EL0626)

5.3 HYDROMORPHOLOGICAL PRESSURES

Below is presented the assessment of the importance of the pressures due to hydromorphological changes that the surface water bodies of the RB of Attica receive (EL06).

Table 5-3: Assessment of pressures on the hydromorphological characteristics of the WB of the RBD of Attica (EL06)

WB Name	WB Code	Type	Significance of Hydromorphological Pressures	Pressure Intensity
R. PALIOMIAOULI	EL0626R000002009N	River	Good	Good
S. LAKA	EL0626R000000008N	River	Unassigned	Good
R. KIFISOS 1	EL0626R000200001H	River	Poor	High
R. KIFISOS 7	EL0626R000210007N	River	Unassigned	Good
R. KIFISOS 5	EL0626R000206005N	River	Unassigned	Good
R. KIFISOS 4	EL0626R000204004N	River	Unassigned	Good
R. KIFISOS 6	EL0626R000208006N	River	Unassigned	Good
S. RAFINA 1	EL0626R000100010N	River	Poor	High
S. RAFINA 3	EL0626R000100011N	River	Good	Good
S. RAFINA 2	EL0626R000100012N	River	Poor	High
S. PIKRODAFNIS	EL0626R000300013N	River	Moderate	Moderate
R. KIFISOS 2	EL0626R000200002N	River	Good	Good
R. KIFISOS	EL0626R000202003N	River	Unassigned	Good
R. ERASINOU	EL0626R000300014N	River	Poor	High
R. KIFISOS 8- S. PYRNAS	EL0626R000212008H	River	Poor	High
ARTIFICIAL MARATHON LAKE	EL0626RL00000001H	Lake	Poor	High
FANEROMENI KOLPOS	EL0626C0009N	Coastal	Good	Good
WESTERN SARONIC KOLPOS	EL0626C0010N	Coastal	Good	Good
SOUTH EVOIKOS- MARKOPOULO	EL0626C0001N	Coastal	Unassigned	Good
COASTS OF KOLPOS PETALION-RAFINA	EL0626C0002N	Coastal	Unassigned	Good
THALASSA OF LAVRIO-MAKRONISSOU	EL0626C0003N	Coastal	Unassigned	Good
ALKYONIDOS KOLPOS	EL0626C0005N	Coastal	Good	Good
WEST KOLPOS OF GREFSINA	EL0626C0006N	Coastal	Moderate	Moderate
ESO (CENTRAL) SARONIKOS	EL0626C0012N	Coastal	Moderate	Moderate
EAST KOLPOS OF GREFSINA	EL0626C0007H	Coastal	Poor	High
NISIDA 1	EL0626C0014N	Coastal	Unassigned	Good
ESO (CENTRAL) SARONIKOS-PSYTALLEIA	EL0626C0011N	Coastal	Moderate	Moderate
EXO KOLPOS SARONIKOS	EL0626C0013N	Coastal	Good	Good

WB Name	WB Code	Type	Significance of Hydromorphological Pressures	Pressure Intensity
PORT OF LAVRIO	EL0626C0004H	Coastal	High	High
COAST OF PERAMA- PIRAIKI	EL0626C0008H	Coastal	High	High

5.4 WATER ABSTRACTIONS

This section includes data on the total annual water abstractions for all activities and uses. The list of categories of activities and uses examined includes: Water supply, Irrigation, farming, Industrial water and Other water needs and abstractions.

In the RB of Attica (EL0626), the total annual abstractions to cover the needs for all activities and uses amount to ~107,313,981 m³, of which 27.74% (29,769,591 m³) concerns the coverage of water needs. Regarding the other water uses in the RB, water abstractions for irrigation are estimated at 65,398,752 m³ (60.94%), for farming at 275,135 m³ (0.3%) and for industrial uses at 11,870,503 m³ (11.06%).

The most important water needs in the RBD of Attica (EL06) correspond to the water supply, which, however, are mainly covered by surface resources of water bodies outside the Water District (EYDAP S.A. / Aqueducts of Evinos, Mornos and Ylikis). The demand for water for irrigation is entirely covered by GWB, given that no organized irrigation network is registered within the boundaries of the Water District. Also, in the Municipalities that are not served exclusively or entirely by EYDAP SA, the demand for water for all uses is covered only by GWB.

The following table presents total water abstractions for all uses and activities.

Table 5-4: Total water abstractions for all uses and activities in the RBD of Attica (EL06)

Code / RBD Name	WB Type	Water supply	Industry	Irrigation	Farming	Total
EL626 / Attica	GWB	10.260.551	10.997.078	65.398.752	227.600	86.883.981
	SWB	19.509.040	873.425	0	47.535	20.430.000
	Total	29.769.591	11.870.503	65.398.752	275.135	107.313.981

5.5 OTHER PRESSURES

Other pressures considered in the context of the 2nd Revision include runoff from mining activities (mines, mines), desalination plants, ports- marinas- shipping, artificial enrichment of groundwater and change in groundwater level and quantity of groundwater due to underground mining or construction of large undergrounds projects.

5.6 IMPACTS ASSESSMENT

5.6.1 Impacts assessment on Surface Water Bodies

Pressures Impact assessment and WB designation is based on the likelihood of failing to meet the WFD environmental objectives, taking in consideration the following information:

- The magnitude of pressure from emissions and abstractions : High (H), Middle (M), Low (L) • Available data and Monitoring program results
- Expert judgement, when no data is available

From the set of criteria, the WB were ranked in relation to whether or not they are likely to achieve the environmental objectives of Directive 2000/60/EC and the summary results are presented in the following table.

Table 5-5: Risk assessment of SWB failing to meet the WFD objectives in RBD of Attica (EL06)

WB Type	Risk Assessment Categories*								Total Number of WB
	NR		PNR		PAR		AR		
	Number of WB	Percentage of WB (%)	Number of WB	Percentage of WB (%)	Number of WB	Percentage of WB (%)	Number of WB	Percentage of WB (%)	
River WB	3	10.00%	1	3.33%	3	10.00%	8	26.67%	15
Lake and Reservoirs WB	0	0.00%	1	3.33%	0	0.00%	0	0.00%	1
Transitional WB									
Coastal WB	4	13.33%	4	13.33%	2	6.67%	4	13.33%	14
Total	7	23.33%	6	20.00%	5	16.67%	12	40.00%	30
* Regarding the assessment of the risk of not achieving the objectives, the following categories are distinguished: at risk (AR), probably at risk (PAR), probably not at risk (PNR), not at risk (NR)									

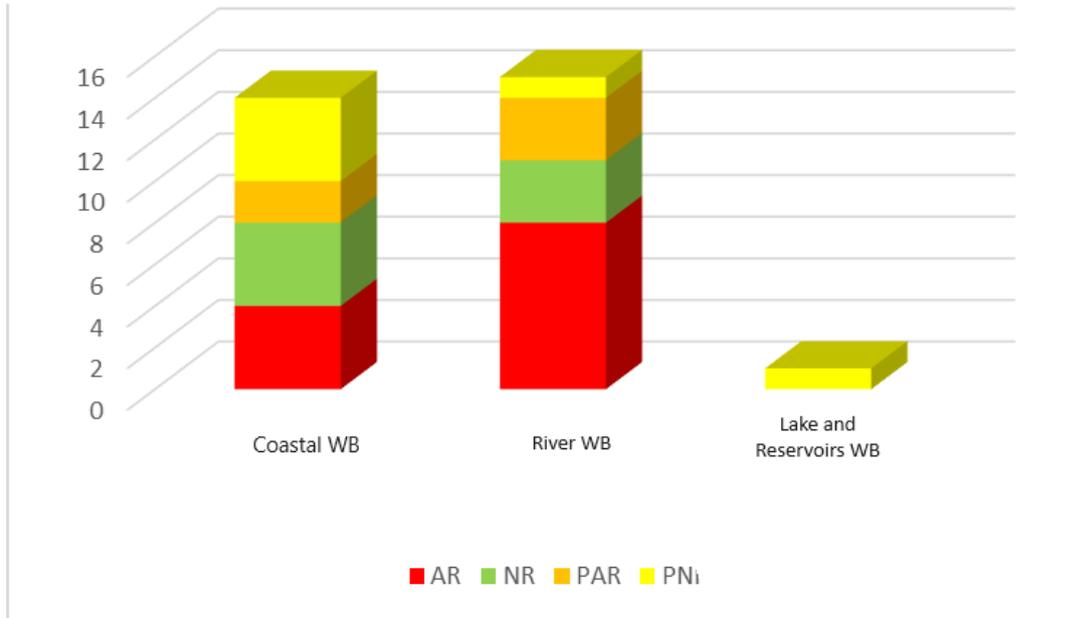


Figure 5-3: Risk assessment of SWB failing to meet the WFD objectives in RBD of Attica (EL06)

5.6.2 Impacts assessment on Groundwater Bodies

Sources of pollution such as agriculture, animal husbandry and municipal waste are potential pressures on groundwater resources. According to the analysis carried out to quantify the pressures exerted on the surface waters, it appears that a part of the pollutant loads produced by the respective activities are inflows with the recipient being the subsoil.

As an element for quantifying the pollution that ends up in the groundwater from the above-mentioned pressures, only the database file of changes in the quality (chemical) state of the groundwater at specific monitoring locations (monitoring network) is available. Main parameters responding to the existing databases are the concentrations of nitrate, ammonia ions, chloride, conductivity and trace elements

Table 5-6: Table of qualitative and quantitative status of underground water bodies of the RBD of Attica (EL06)

No	Code	Name	Quantitative status	Decline water levels Trend	Chemical status	Pollutant Trend	Exceeded quality parameters
1	EL0600010	Loutrakiou	GOOD	-	GOOD	There are no indications of further extension of the eddy zone towards the interior of the system	Cl, NO ₃ , metals
2	EL0600020	Western Geraneia	GOOD	At one point: EL06020602	GOOD	Not specified, in the absence of data	EC, Cl
3	EL0600030	Central Geraneia-Kalamaki	POOR	Not specified, in the absence of data	GOOD	Not specified, in the absence of data	-
4	EL0600040	Eastern Geraneia-Mavrovouni	GOOD	Not specified, in the absence of data	GOOD	Not specified, in the absence of data	EC, Cl, NO ₃ , & metals
5	EL0600051	Megaron-Alepochoriou (a)	POOR	At the water points: EL06050613, EL06030644, EL06030646, EL06050604	POOR	Significant decline in Cl at the point of EL06050602	EC, Cl, NO ₃ , & metals
6	EL0600052	Megaron-Alepochoriou (b)	GOOD	At one point: EL06050607	GOOD	Not recorded	-
7	EL0600060	Patera	GOOD	Not specified, in the absence of data	GOOD	Not specified, in the absence of data	-
8	EL0600070	Oinois	GOOD	NO	GOOD	Not recorded	-
9	EL0600081	Northeast Parnitha (a)	GOOD	NO	GOOD	Not recorded	EC, Cl

No	Code	Name	Quantitative status	Decline water levels Trend	Chemical status	Pollutant Trend	Exceeded quality parameters
10	EL0600082	North-eastern Parnitha (b – Aegaleo)	GOOD	At only one point: EL06080608	GOOD	local pollution at the site of the current Landfill of Fyli	EC, Cl, NO ₃ , & metals
11	EL0600090	Thriassiou Pediou	POOR	At 5 points: EL06080609, EL06090603, EL06090604, EL06040603, EL06040653	POOR	Significant increase in NO ₃ at points EL06080609 and EL06090602. Significant decrease in Cl at points EL06080610 and EL06090604.	EC, Cl, SO ₄
12	EL0600100	Kapandritiou	GOOD	Not specified, in the absence of data	GOOD	Not specified, in the absence of data	NO ₃ , metals
13	EL0600110	Kifisou Pedio (Athens Pedio)	GOOD	Not specified, in the absence of data	POOR	Not recorded	EC, NO ₃ , Cl, SO ₄ & metals
14	EL0600120	Marathona (a)	GOOD	NO	GOOD	Not specified, in the absence of data	EC, NO ₃ , Cl, & SO ₄
15	EL0600130	Marathona (b)	POOR	At 6 out of 11 points	POOR	Significant rise in NO ₃ at point EL06130604. At all other points, a tendency to decrease NO ₃ concentration is observed	EC, NO ₃ , Cl, SO ₄ & metals
16	EL060014	Penteli	GOOD	Not specified, in the absence of data	GOOD	Not recorded	-
17	EL0600151	Mesogaias (a)	POOR	Not specified, in the absence of data	POOR	Not specified, in the absence of data	Not specified, in the absence of data
18	EL0600152	Mesogaias (b)	GOOD	NO	POOR	Significant rise in NO ₃ at point EL06150607	EC, NO ₃ , Cl & metals
19	EL0600160	Hymettou	GOOD	NO	GOOD	It was not calculated because the points with exceedances are located in the peripheral zone of the system, but do not characterize its entirety	EC, NO ₃ , & Cl
20	EL0600170	Lavreotikis	GOOD	Not specified, in the absence of data	GOOD	Not specified, in the absence of data	EC, Cl & metals
21	EL0600180	Anavissou	GOOD	NO	GOOD	Not specified, in the absence of data	NO ₃ , & Cl
22	EL0600190	Salamina	GOOD	At one point: EL06190603	POOR	Not specified, in the absence of data	EC, NO ₃ , Cl, & SO ₄
23	EL0600200	Aegina	POOR	At 8 out of 12 points	POOR	Significant decrease in SO ₄ at points EL06200602 and EL06200606	EC, NO ₃ , Cl, SO ₄ & metals

No	Code	Name	Quantitative status	Decline water levels Trend	Chemical status	Pollutant Trend	Exceeded quality parameters
24	EL0600210	Agistri Island	GOOD	Not specified, in the absence of points	GOOD	Not recorded	Not specified, in the absence of data

6 ECONOMIC ANALYSIS OF WATER USE

The economic analysis of water uses is carried out in accordance with the current legislation and the specific directions of the General Directorate for Water.

6.1 FINANCIAL COST

The total financial cost of water supply / sewerage in the Attica Region (EL06) (not including the cost of private wells) amounts to €337,053,938. The recovery of the financial cost of water supply/sewerage of the providers for all uses, at the RBD level, amounts to 96.76%, the revenues to €326,138,403, as determined in the Analytical Documentation Text - Financial Analysis of water uses", based on the available data and the relevant methodological approach.

The diagram below shows the recovery of the financial costs in the RB EL0626 (and in the Attica RBD (EL06) per year and in total.

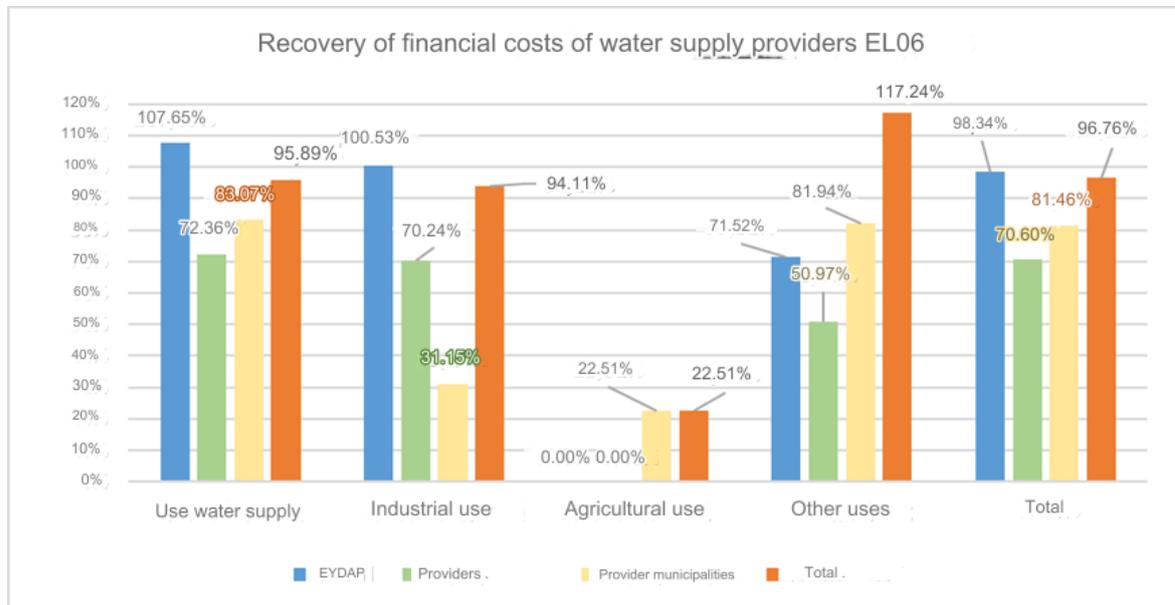


Figure 6-1: Recovery of financial costs of water providers of water supply and sewerage and sewage treatment services (where applicable) in the Attica RBD (EL06)

From the above estimates, it can be concluded that the overall degree of recovery of the financial costs in the Attica RBD (EL06) is high, mainly because the most important provider is EYDAP S.A. Both DEYA and Municipalities show lower recovery rates, mainly due to their pricing policies.

The overall degree of recovery depends mainly on water use, not only because it is the main use in the Water District but also because there is insufficient data to estimate the degree of recovery of other uses.

There are no collective bodies that provide water for agricultural use (GOEB/TOEB) in the Attica RBD (EL06)/ RB EL0626. Small amounts of water are distributed by some OTAs and DEYAs (and

have been included in the calculations for water services), but the largest percentage of water for agricultural use comes from private individual or collective wells. In these cases, the Financial Cost is not calculated, since this cost is assumed by the private individuals who carry out and operate their water intakes, in which case it is fully recovered. Nevertheless, the use of water from private water abstractions may cause environmental costs and/or resource costs.

The degree of recovery of the financial costs (of the providers) for the industrial use is 94.11% for the whole of the RBD and the WB. It is noted that this degree depends mainly on the corresponding size of EYDAP SA. For private boreholes, it is assumed that the financial costs are recovered at a 100% level since these costs are borne by the private individuals themselves who carry out and operate their water abstractions. The weighted average recovery rate for all water (private wells and providers) is 96.83% and is estimated based on relative needs as theoretically calculated

6.2 ENVIRONMENTAL AND RESOURCE COST

The environmental cost, in the context of the 2nd RBMP Revision, is calculated based on the total withdrawals that correspond to the users of Attica RBD, and concerns both the users who procure water either directly or indirectly (through the Municipalities) from EYDAP S.A., as well as users who do not obtain water from EYDAP SA, as well as private individuals who use private wells (industry and irrigation).

According to the 2nd RBMP Revision, it is estimated that in Attica RBD all the conditions exist for the calculation of the environmental cost, given that there are surface WB with an ecological and/or chemical status lower than good or unknown and ground WB with a poor chemical status. The total environmental cost at the level of RB and RBD for the period 2024-2027 is estimated at €948,400.

Table 6-1: Environmental costs in the RB of Attica (EL0626) of the Attica RBD (EL06), 2024-2027

RBD	Annual	Per unit (€/m ³)
RB of Attica (EL0626)	237.100	0,0004837

Table 6-2: Distribution of Environmental Cost per Water Use in the RB of Attica (EL0626) of the Attica RBD (EL06), 2024-2027

RB of Attica (EL0626) and total RBD	Irrigation	Agriculture (livestock breeding)	Industry
Usage participation (%) in the total annual cost	80,66%	13,58%	5,76%
Annual cost per use (€)	191.238	32.199	13.663
Annual unit cost (€/m ³)	0,0004837	0,0004837	0,0004837

The resource cost in the context of the 2nd RBMP Revision is calculated based on the total withdrawals corresponding to the users of RBD of Attica, regardless of the origin of the water. It was estimated that in RBD of Attica all the conditions existed for the calculation of the resource cost, given that there are ground WB with a poor quantitative status. The total cost of resources at the level of RB and RBD for the period 2024-2027 was estimated at €372,000.

Table 6-3: Resource cost in the RB of Attica (EL0626) of the Attica RBD (EL06), 2024-2027

RBD	Annual	Per unit (€/m ³)
RB of Attica (EL0626)	93.000	0,0001897

Table 6-4: Distribution of resource costs per water use in the RBD of Attica (EL0626), 2024-2027

RBD of Attica (EL0626) and total RDC	Irrigation	Agriculture (livestock breeding)	Industry
Usage participation (%) in the total annual cost	15,61%	83,27%	1,12%
Annual cost per use (€)	14.518	77.444	1.037
Annual unit cost (€/m ³)	0,00004	0,00116	0,00004

7 ENVIRONMENTAL OBJECTIVES – EXEMPTIONS

The following tables summarize the state's objectives for surface and ground WB. The objectives set for the WB take into account the assessment of the state of the WB of the RBD, the efficiency of the proposed Program of Measures and the possibility given by the Directive for derogations under specific conditions.

Objectives for Surface WB

The table below summarizes the goals set for the 30 surface WB (SWB) of the RBD of Attica (EL06) until 2027:

- For 11 SWB the goal is to maintain good and superior ecological status.
- For 27 SWB the goal is to maintain good chemical status
- For 19 SWB it is the achievement of good ecological status/potential by 2027 or when natural conditions allow after 2027.
- For 3 SWB it is the achievement of good chemical status when physical conditions permit after 2027.

Table 7-1: SWB status objectives by 2027

Objectives	River WB	Lake WB	Transitional WB	Coastal WB	Total WB	Percentage in relation to total SWB
TOTAL NUMBER OF WB	15	1	0	14	30	
Maintain good / high ecological status/potential	3	1	0	7	11	40,00%
Maintain good chemical status	12	1	0	14	27	90,00%
Achieve good ecological status	12	0	0	7	19	60,00%
Achieve good chemical status	3	0	0	0	3	10,00%
Determine the chemical status	2	0	0	2	4	13,33%
Exemption Article 4.4 Ecological Status	9	0	0	6	15	50,00%
Exemption Article 4.4 Chemical Status	0	0	0	0	0	0,00%
Exemption Article 4.5 Ecological Status	3	0	0	1	4	13,33%
Exemption Article 4.5 Chemical Status	3	0	0	0	3	10,00%
Exemption Article 4.6			-			
Exemption Article 4.7			-			

Objectives for Ground WB

The following Table summarizes the objectives set for the 24 GWB of the Attica RBD (EL06):

- • For 13 GWB and 5 Subsystems the goal is to maintain the good quantitative status.
- • For 4 GWB and 2 Subsystems the goal is to achieve good quantitative status whenever physical conditions allow after 2027.
- • For 12 GWB and 4 Subsystems the goal is to maintain good chemical status.
- • For 5 GWB and 3 Subsystems the goal is to achieve good chemical status whenever physical conditions allow after 2027.

Table 7-2: GWB status targets after 2027

Objective	Number of GWB
Non-degradation of good quantitative status	13 GWB and 5 Subsystems
Non-degradation of good chemical condition	12 GWB and 4 Subsystems
Achieving good quantitative status	4 GWB and 2 Subsystems
Achieving good chemical status	5 GWB and 3 Subsystems
Subject to article 4.4	6 GWB and 3 Subsystems
Subject to Article 4.5	0
Subject to article 4.6	0
Subject to article 4.7	0

Objectives for protected areas

The main objectives for each category of protected area are defined as follows.

Areas intended for abstraction of water for human consumption

The following objectives are set for the areas intended for abstraction of water for human consumption:

- The quality characteristics of the treated water for human consumption comply with the requirements of Directive 98/83/EC regarding the quality of water for human consumption.
- Ensuring adequate protection to avoid degradation of water quality in order to reduce the degree of treatment for the production of drinking water.

Water bodies that have been characterized as recreational waters

The objective for recreational waters identified under the Bathing Water Directive is to protect the environment and public health during bathing, as well as to maintain, protect and improve bathing water quality.

Areas sensitive to the presence of nutrients

For the zones vulnerable to nitrate pollution, the general objectives set concern:

- the reduction of water pollution originating from nitrates of agricultural origin,
- avoiding additional pollution. These goals are achieved through:

- defining Vulnerable Zones,
- the implementation of the action programs applied to those of the implementation of the action programs applied to them
- and the Codes of Good Agricultural Practice (GAP) that give guidelines on nitrate reduction contribute to the achievement of these goals.

For Sensitive Areas, the main objective as defined in Directive 91/271/EEC is to protect the environment from the negative effects of urban waste water discharge and waste water from certain industrial sectors.

Areas designated for the protection of habitats or species

The objectives for the protection areas of the Natura 2000 Network are determined in relation to the conservation and protection objectives of the areas identified under the Habitats Directive (92/43/EC as currently valid). These objectives relate to protection and where necessary to improvement of the state of the aquatic environment to the extent necessary to achieve the conservation objectives of the natural habitats, as well as the wild flora and fauna in the Sites of Community Importance.

The objectives for the areas established in relation to the Wild Birds Directive (2009/147/EC) are to protect, or where necessary improve, the aquatic environment to such an extent that the protection objectives of the Special Protection Areas are achieved.

In cases where a protected area of the Natura 2000 network is part of a WB or when a WB falls within a Natura 2000 area, its objectives for the status of the WBI apply in addition to the requirements for the desired conservation status.

Some WB that fall into protected areas of the Natura 2000 Network have been designated as HMWB. In these cases, the goal of achieving Good Ecological Potential, which is achieved by the implementation of palliative measures to deal with hydromorphological alterations, is applied in addition to the goals for the conservation status of the area.

Areas intended for the protection of aquatic species of economic importance

The objectives set concern:

- maintaining the quality of internal surface waters included in the register of protected areas in terms of the physicochemical parameters as defined in Annexes I and II of Directive 2006/44/EC44 and monitored within the framework of the National Water Status Monitoring Network,
- maintaining the quality of coastal and transitional waters that are included in the register of protected areas in terms of the parameters listed in Annex I of Directive 2006/113/EC and monitored within the framework of the National Water Status Monitoring Network.

8 PROGRAM OF MEASURES

The Program of Measures is part of the Management Plan and it is also the "mechanism" for achieving the environmental objectives set. Especially the implementation of the Program Measure should ensure:

- the prevention of deterioration, the improvement and the remediation of surface water bodies, the achievement of "Good" ecological and chemical status, and the mitigation of the pollution through the discharge and the emission of hazardous substances.
- the protection, the improvement and the remediation of groundwater bodies, the prevention of their pollution and the deterioration of their water status in order to balance between abstraction and discharge.
- the conservation of Protected Areas

The measures are divided into **Basic** and **Supplementary**.

The **Basic Measures**, according to par. 3 of Article 11 of the WFD are the minimum requirements that should be met and include:

- Measures for the implementation of EU and national legislation on water protection (**Group I**).
- Other basic measures (**Group II**). These basic measures are related to the basic principles of EU and national legislation on water management and relate to the horizontal implementation of actions in groups, usually, water bodies, with a view to achieving or maintaining good status in water.

The **Supplementary Measures** are the measures established and implemented in addition to the Basic

Measures, in order to achieve the objectives, set in accordance with Article 4 of Directive 2000/60 / EC. Member States may adopt further supplementary measures with a view to additional protection or improvement of the waters covered by the Directive.

8.1 PROGRESS OF IMPLEMENTATION OF THE 1ST RBMP REVISION POM

The program of measures of the 1st RBMP Revision included 10 Basic Measures of Group I, 32 Basic Measures of Group II and 16 Supplementary Measures.

In the following tables, the number of Basic (Group II) and Supplementary Measures per category of measure, as defined in the context of the 1st RBMP Revision, is given.

Table 8-1: Number of Basic Measures of 1st RBMP Revision per category of Actions

Category of Measures	Measure No
Measures to implement the cost recovery principle of Water Services (Article 9)	3
Measures for diffuse sources of discharges	3
Measures for priority substances and other substances	2
Measures for point & diffuse sources of discharges	1
Measures for point sources of discharges	4
Measures for the control and licensing of the artificial enrichment of natural resources	2
Control measures for surface and groundwater abstraction and surface water storage	2
Measures to promote the efficient and sustainable use of water so as not to jeopardize the achievement of the objectives of the Directive (Article 4)	6
Measures to protect water intended for human consumption (Article 7)	4
Measures to address adverse effects on surface condition water systems especially from hydromorphological alterations	5
Total	32

Table 8-2: Number of Supplementary Measures of 1st RBMP Revision per category of Actions

Category of Measures	Measure No
Administrative Measures	2
Educational measures	3
Withdrawal checks	2
Emission controls	3
Research, development and demonstration (best practice) projects	4
Other related measures	1
Efficiency and reusability measures	1
Total	16

The progress of the implementation of the measures of the 1st RBMP Revision is directly affected by:

- The time available from the approval of the 1st RBMP Revision to today, approximately 5 years, which is relatively short for the full implementation of certain actions that require significant maturation time.
- The particularly unfavorable economic conditions prevailing in the Country, which led to limited rates of allocation of the necessary credits for the implementation of the measures.
- The available resources (human and financial) of the competent bodies for the implementation of the measures.

The following were recorded as the main problems regarding the implementation of the program of Basic and Supplementary measures:

- Financing problems
- Administrative difficulties
- Problems regarding prioritization and prioritization of measures

Table 8-3: Stage of completion of Basic Protection Measures (Group I)

Directive	Planned Actions	Implementation Bodies	Implementation Stage
Bathing Water (Directive 2006/7/EC)	BO11: Continuation of the monitoring of bathing water quality in accordance with Directive 2006/7/EC.	GDW, Decentralized Water Administrations	Implemented
	Revision of the Bathing Water Identity Register		
Protection of wild birds (Directive 2009/147/EC) and habitats (Directive 92/43/EEC)	BO21: Preparation/establishment of Management Plans for protected areas of the Natura 2000 network that are directly dependent on water, with special reference to water management issues.	Ministry of Environment and Energy, Protected Area Management Bodies	To be implemented
	B22: Monitoring/assessment of the conservation status of water-dependent habitats and species in Natura 2000 network areas.		
Drinking Water (Directives 98/83/EC, 2015/1787/EU, Directive (EU) 2020/2184/EC)	BO31: Monitoring the implementation of the Directive	Ministry of Health	Implemented
Environmental Impacts from Projects/Activities (Directives 2011/92/EU, 2014/52/EU)	BO41: Amendment of MD co. 170225/2014 (Specification of the contents of the environmental licensing files for projects and activities of Category A...) so that for specific categories of projects, which should be determined beforehand, the following are made mandatory: Pollutant emissions by category, Calculation of the effects due to pollution in the MD defined in the Management Plans and Comparison of these concentrations with the EPP. Preparation of a monitoring program and notification of results to the relevant General Directorate of Water.	Ministry of Environment and Energy	Implemented
Pollution Prevention - Control (Directive 2010/75/EU)	BO51: Maintaining a file-registry of facilities that are included in the provisions of the Directive	Decentralized administration	Not Implemented

Directive	Planned Actions	Implementation Bodies	Implementation Stage
Protection against nitrate pollution (Directives 91/676/EEC, 98/15/EC)	BO61: Implementation of the New Action Programs. The study for the drafting of Action Programs in all the Vulnerable Zones of the Country has been assigned by the MRDF to the Agricultural University and is under preparation.	Ministry of Rural Development and Food	Implemented
	B62: Systematic monitoring of nitrate levels in water bodies that are or may be subject to nitrate pollution.	GDW, Ministry of Rural Development and Food	Implemented
Plant Protection Products (Directive 2009/128/EC, Regulation (EC) No. 1107/2009, Regulation (EU) No. 652/2014)	BO71: Rational use of plant protection products	Ministry of Rural Development and Food	Implemented
Addressing the risks of major accidents (Directive 2012/18/EE)	BO81: Maintaining a file-registry of facilities that fall under the provisions of the Directive.	Decentralized administration	Not Implemented
Sewage sludge (Directive 86/278/EEC)	BO91: JMD training regarding measures, conditions and procedures for the use of sludge originating from the treatment of domestic and urban sewage as well as certain liquid wastes, in compliance with the provisions of Directive 86/278/EEC and in replacement of JMD 80568/4225 /1991 and promoting actions related to the safe disposal of treated sludge.	Ministry of Environment and Energy	Not Implemented
Urban Wastewater Treatment (Directive 91/271/EEC)	BO101: Completion of the drainage and sewage treatment projects of the settlements that fall under the provisions of the Directive (concerns all settlements with a population of more than 2,000 equivalent inhabitants).	Region, MEWSS,, Municipalities	Implemented
	BO102: Strengthening actions to control the effective operation of existing wastewater treatment and drainage projects.	Region	Implemented

Table 8-4: Summary table of the progress of the completion of Basic and Supplementary Measures programs (1st RBMP Revision) in the RBD of Attica (EL06)

BASIC MEASURES			
Not Implemented	To be Implemented	Implemented	Total
14	7	11	32
SUPPLEMENTARY MEASURES			
Not Implemented	To be Implemented	Implemented	Total
12	1	3	16

Table 8-5: Number of Basic and Supplementary Measures (1st RBMP Revision) that have been completed per category of measure

Category of Measure	EL06
Reconstitution and restoration of wetland areas	
Administrative measures	
Educational measures	
Pumping checks	
Emission controls	2
Withdrawal control	1
Research, development and demonstration projects	
Other Measures	
Efficiency and reusability measures	
Measures to deal with negative effects on the state of surface water systems, especially from hydromorphological alterations	1
Measures to implement the cost recovery principle of Water Services (Article 9)	
Measures to protect water intended for human consumption (Article 7)	1
Measures to promote the efficient and sustainable use of water so as not to jeopardize the achievement of the objectives of the Directive (Article 4)	3
Measures for diffuse sources of discharges	2
Measures for priority substances and other substances	
Measures for point and diffuse sources of discharges	
Measures for point sources of discharges	2
Measures for the control and licensing of the artificial enrichment of natural resources	
Demand management measures	
Control measures for surface and ground water abstraction and surface water storage	2
TOTAL	14

8.2 PRORGAM OF BASIC AND SUPPLEMENTARY MEASURES OF THE 2ND RBMP REVISION

8.2.1 Actions implementing EU Directives (Group I Basic Measures)

The planned actions for the implementation of EU Directives Annex VI of Directive 2000/60/EC (as amended and in force) into National law are presented in the following table.

Table 8-6: Actions for the implementation of EU Directives

DIRECTIVE	INCORPORATION IN NATIONAL LAW
Bathing water Directive (2006/7/ EC)	JMD 8600/416/E103/23.02.2009 (Government Gazette 356/B/2009) regarding the "quality and measures of bathing water management, in compliance with the provisions of Directive 2006/7/EC "regarding the management of the quality of bathing waters and the repeal of Directive 76/160/EEC", as amended by article 18 of Government Decree 145116/8.3.2011 (Government Gazette B' 354/8.3.2011) and in force.
Habitats Directive (92/43/EEC)	JMD MD 37338/1807/E103/1.9.2010 (Government Gazette 1495/B/2010) "Definition of measures and procedures for the conservation of wild poultry

DIRECTIVE	INCORPORATION IN NATIONAL LAW
<p>Birds Directive (2009/147/EC)</p>	<p>and their habitats, in compliance with the provisions of Directive 79/409/EEC "On the conservation of wild birds", of the European Council of April 2, 1979, as codified by the directive 2009/147/EC" and its amendment JMD MD 8353/276/E103/2012 (Government Gazette 415/B/2012).</p> <p>JMD 33318/3028/11.12.1998 (Government Gazette 1289/B/1998) "determination of measures and procedures for the conservation of natural habitats (habitats) as well as wild fauna and flora" and its amendment JMD MD 14849/853/E103/ 2008 (Government Gazette 645/B/2008) in compliance with the provisions of Directive 92/43/EEC "on the conservation of natural habitats as well as wild fauna and flora".</p> <p>Law 3937/2011 (Government Gazette 60/A/2011) "Conservation of Biodiversity and other provisions"</p> <p>JMD 50743/2017 (Government Gazette 4432/B/2017) "Revision of the national list of areas of the European Ecological Network Natura 2000"</p> <p>Law 4685/2020 (Government Gazette 92/A/2020) "Modernization of environmental legislation, incorporation into Greek legislation of Directives 2018/844 and 2019/692 of the European Parliament and of the Council and other provisions"</p>
<p>Drinking water (Directives 98/83/ EC, 2015/1787/ EC)</p>	<p>JMD D1(d)/G.P.ok.27829/15.05.2023 (Government Gazette 3525/B/2023) "Quality of water for human consumption in compliance with the provisions of Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 (L435/1, 23.12.2020)</p>
<p>Environmental Impact Assessment Directives (2011/92/EC, 2014/52/EC)</p>	<p>Law 4014/2011 (Government Gazette 209/A/2011) "Environmental licensing of projects and activities, regulation of arbitrary in connection with the creation of an environmental balance and other provisions of the competence of the Ministry of Environment" as amended and in force.</p> <p>M.D. 5688/2018 (Government Gazette 988/B` 21.3.2018) "Amendment of the annexes of Law 4014/2011 (A' 209), in accordance with Article 36A of this Law, in compliance with Directive 2014/52/EU "amending Directive 2011/92/EU on the assessment of the effects of certain public and private works projects on the environment" of the European Parliament and of the Council of 16 April 2014"</p> <p>Law 4936/2022 (Government Gazette 105/A` 27.5.2022) "National Climate Law - Transition to climate neutrality and adaptation to climate change, urgent provisions to address the energy crisis and protect the environment"</p>
<p>Pollution Prevention - Control (Directives 96/61/EC, 2008/1/EC, 2010/75/EC)</p>	<p>MD 36060/1155/E.103/2013 (Government Gazette 1450/B/2013) "Definition of a framework of rules, measures and procedures for the comprehensive prevention and control of environmental pollution from industrial activities, in compliance with the provisions of Directive 2010/75/EU "on industrial emissions (integrated pollution prevention and control)" of the European Parliament and of the Council of 24 November 2010"</p>

DIRECTIVE	INCORPORATION IN NATIONAL LAW
<p>Nitrates Directive (91/676/ EC)</p>	<p>JMD 16190/1335/19.05.1997 (Government Gazette 519/B/1997) "Measures and conditions for the protection of waters from nitrate pollution of agricultural origin"</p> <p>MD co. 19652/1906/1999 (Government Gazette 1575/B/1999) "Determination of waters subject to nitrate pollution of agricultural origin- List of vulnerable zones, in accordance with paragraphs 1 and 2 respectively of article 4 of No. 16190/1335/ 1997 joint ministerial decision "Measures and conditions for the protection of waters from nitrate pollution of agricultural origin" (B 519). Amendment of articles 3, 4, 5 and 8 of this decision" as amended by MD 20419/2522/2001 (Government Gazette 1212/B/2001), MD 24838/1400/E103/2008 (Government Gazette 1132/B/2008), MD 106253/2010 (Official Gazette 1843/B/2010), MD 190126/2013 (Official Gazette 983/B/2013), MD 147070/2014 (Official Gazette 3224/B/2014) and is valid.</p> <p>JMD MEE/38552/265/2019 (Government Gazette 1496/B/2019) Action Program for areas that have been characterized as vulnerable zones from nitrate pollution of agricultural origin in accordance with article 2 of joint ministerial decision 19652/1906/1999 (B'1575), as in force, in compliance with Directive 91/676/EEC "on the protection of waters against nitrate pollution of agricultural origin" of the Council of December 12, 1991 of the European Communities, as amended and in force.</p> <p>M.D. 1848/278812/2021 (Government Gazette 4855/B` 20.10.2021) "Code of Good Agricultural Practice for the Protection of Waters from Nitrate Pollution of Agricultural Origin (Article 10§1)</p>
<p>Plant Protection Products (Directive 2009/128/EC, Regulation (EU) No. 1107/2009, Regulation (EU) No. 652/2014)</p>	<p>Law 4036/27.01.2012 (Government Gazette 8/A/2012) "Availability of agricultural drugs on the market, their rational use and related provisions" as amended and in force.</p> <p>Law 4625/2019 (Government Gazette A 139- 31.08.2019) "Regulations of the Ministry of Infrastructure and Transport and other urgent provisions" [Article 19 includes the amendment of Annex E of Law 4036/2012 (Government Gazette 8/A/2012), in compliance with Directive (EU) 2019/782 (Articles 1 and 2 of Directive 2019/782/EU)].</p>
<p>Major Accidents (Seveso) Directive (2012/18/EC)</p>	<p>JMD 172058/2016 (Government Gazette 354/B/2016) "Definition of rules, measures and conditions for dealing with the risks of large-scale accidents in facilities or units, due to the existence of dangerous substances, in compliance with the provisions of Directive 2012/18/EU "to deal with the risks of major accidents related to dangerous substances and for the amendment and subsequent repeal of Directive 96/82/EC of the Council" of the European Parliament and the Council of July 4, 2012. Replacement of no. 12044/613/2007 (376/B/2007), as amended (Government Gazette 2259/B/2007)"</p>

DIRECTIVE	INCORPORATION IN NATIONAL LAW
Sewage sludge Directive (86/278/EEC, 2018/853/EU, Regulation, 2019/1010/EU)	M.D. MEE/DDA/41828/630/2023 (Government Gazette B' 2692/21.4.2023) "Measures, conditions and procedures for the use of treated sludge in agriculture and soil restoration- Compliance with the provisions of Council Directive 86/278/EEC of June 12, 1986 "regarding the protection of the environment and especially the soil during use of sewage treatment sludge in agriculture", as amended by Regulation (EU) 2019/1010 of the European Parliament and of the Council of June 5, 2019 and replacement of no. 80568/4225/1991 (B' 641) of joint ministerial decision"
Urban Waste Water Treatment Directive (91/271/EC, 98/15/EC)	JMD 5673/400/05.03.1997 (Government Gazette 192/B/1997) "Measures and conditions for the treatment of municipal wastewater" and its amending decisions MD 19661/1982/2.8.1999 (Government Gazette 1811/B/1999), MD 48392/939/28.3.2002 (Government Gazette 405/B/2002) and MD 136843/2022 (Government Gazette B' 7215/31.12.2022).
Regulation (EU) No. 2020/741 on minimum requirements for water reuse	The Regulation applies when treated urban waste water is reused, in accordance with Article 12(1) of the Urban Waste Water Directive 91/271/EEC, for agricultural irrigation.

The following table presents the planned actions for the implementation of the Union and National Legislation for the protection of water.

Table 8-7: Actions for the implementation of EU Directives

DIRECTIVE	PLANNED ACTIONS	IMPLEMENTING BODIES
Bathing water Directive (2006/7/EC)	<ul style="list-style-type: none"> BO11: Continue to monitor the quality of bathing water in accordance with Directive 2006/7 / EC. 	General Directorate for Water, Directorate of Water of the Decentralized Administration
	<ul style="list-style-type: none"> BO12: Updating the Greek Bathing Water Profiles Registry 	
Habitats Directive (92/43/EEC) Birds Directive (2009/147/EC)	<ul style="list-style-type: none"> BO21: Setting /Approval Management Plans for protected areas of Natura 2000 network relating with water management issues. 	Ministry of Environment and Energy, Protected Areas Management Bodies
	<ul style="list-style-type: none"> BO22: Monitoring/Assessment of the conservation status of habitats and species directly depending on water in Natura 2000 areas. 	
Drinking water (2020/2184/EC)	<ul style="list-style-type: none"> BO31: Monitoring of the implementation of the Directive 	Ministry of Health
Environmental Impact Assessment Directive (2010/75/EC)	<ul style="list-style-type: none"> BO51: Keeping registration and records of installations that are in line with the provisions of the Directive 	Decentralized administration

DIRECTIVE	PLANNED ACTIONS	IMPLEMENTING BODIES
Nitrates Directive (91/676/ EC)	<ul style="list-style-type: none"> BO61: Systematic monitoring of nitrate levels in WBs that are or may be subject to nitrate pollution. 	General Directorate for Water, Ministry of Rural Development and Food
Plant Protection Products (Directive 2009/128/EC, Regulation (EU) No. 1107/2009, Regulation (EU) No. 652/2014)	<ul style="list-style-type: none"> BO71: Rational use of plant protection products 	Ministry of Rural Development and Food
Major Accidents (Seveso) Directive (2012/18/EC)	<ul style="list-style-type: none"> BO81: Keeping registration and records of installations that are in line with the provisions of the Directive. 	Decentralized administration
Sewage sludge Directive (86/278/EEC)	<ul style="list-style-type: none"> BO91: Setting up a Joint Ministerial Decision, on Measures, Conditions and Procedures for the Use of Sludge from Domestic and Urban Wastewater Treatment and Certain Wastewater, in compliance with the provisions of Directive 86/278 / EEC and in replacement of Joint Ministerial Decision 80568/4225 / 1991 and promotion of actions related to the safe disposal of treated sludge. 	Ministry of Environment and Energy
Urban Waste Water Treatment Directive (91/271/ EC, 98/15/ EC)/ Regulation (EU) No. 2020/741 on minimum requirements for water reuse	<ul style="list-style-type: none"> BO101: Completion of sewerage and waste water treatment projects of the settlements that concerns the provisions of the Directive 	Region, MEWSS, Municipalities
	<ul style="list-style-type: none"> BO102: Strengthening actions to control the effective operation of existing wastewater treatment and drainage projects. 	Region

8.2.2 Other Basic Measures (Group II)

The basic measures of Group II as formulated during the 2nd RBMP Revision are listed in the table below.

Table 8-8: Table of Basic measures (Group II) of the 2nd RBMP Revision

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP	IMPLEMENTING BODIES
M06B0204 Training and education of all involved bodies (Decentralized Administrations, Regions and water service providers) on the general rules for costing and invoicing water supply services	Measures to implement the cost recovery principle of Water Services (Article 9)	Continuing Measure (modification of title and description)	Ministry of Environment & Energy (General Directorate for Water)
M06B0301 Compilation / Revision of Water Supply Masterplan	Measures to promote the efficient and sustainable use of water so as not to jeopardize the achievement of the objectives of the Directive (Article 4)	Continuing Measure (modification of title and description)	Water service providers (MEWSS, Municipalities, etc.) / Decentralized Administration (General Directorate for Water)
M06B0302 Actions for the reinforcement, rehabilitation, modernization of water supply networks and leakage control	Measures to promote the efficient and sustainable use of water so as not to jeopardize the achievement of the objectives of the Directive (Article 4)	Continuing Measure (modification of title and description)	Water service providers (MEWSS, Municipalities, etc.) / Decentralized Administration (General Directorate for Water), Ministry of Environment & Energy
M06B0303 Increase the efficiency of water use in land reclamation infrastructures	Measures to promote the efficient and sustainable use of water so as not to jeopardize the achievement of the objectives of the Directive (Article 4)	Continuing Measure (modification of title and description)/ New measure for the Attica RBD (EL06)	Ministry of Rural Development & Food, NRN, PEMP, Region

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP	IMPLEMENTING BODIES
M06B0304 Investments to save water in agriculture	Measures to promote the efficient and sustainable use of water so as not to jeopardize the achievement of the objectives of the Directive (Article 4)	Continuing Measure	Individuals / Ministry of Rural Development and Food / Regions
M06B0305 Determination of maximum irrigation needs for crops for private water abstractions	Measures to promote the efficient and sustainable use of water so as not to jeopardize the achievement of the objectives of the Directive (Article 4)	Continuing Measure (modification of title and description)	Decentralized Administration (Water Directorate), Region (DAOK, etc.)
M06B0308 Revision of the existing Strategic Plan to Address Water Scarcity and Drought	Measures to promote the efficient and sustainable water use so as not to jeopardize the achievement of the objectives of the Directive (Article 4)	CONTINUING MEASURE M06B0308	Decentralized Administration (Water Directorate), Ministry of Environment & Energy (General Directorate for Water)
M06B0401 Protection of water abstraction points/fields of Groundwater Bodies, intended for human consumption	Measures to meet the requirements of Article 7 (drinking water)	Continuing Measure (modification of title and description, including the obligations of Directive 2020/2184/EU)	Water service providers (MEWSS, Municipalities, etc.) / Decentralized Administration (General Directorate for Water), Ministry of Environment & Energy, Region
M06B0402 Protection of GWB included in the register of protected areas for human consumption and definition of an institutional framework for protection	Measures to meet the requirements of Article 7 (drinking water)	Continuing Measure	Decentralized Administration (Water Directorate)
M06B0403 Protection of water supply projects for water intended for human consumption from Surface Water Bodies	Measures to meet the requirements of Article 7 (drinking water)	Continuing Measure (modification of title and description / including	Water service providers (MEWSS, Municipalities, etc.) / Decentralized Administration (General Directorate

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP	IMPLEMENTING BODIES
		the obligations of Directive 2020/2184/EU)	for Water), Ministry of Environment & Energy, Directorate of Public Health of the RE
M06B0501 Restrictions, terms and conditions for the construction of groundwater abstraction projects (drillings, wells, etc.) for new uses, as well as the extension of permits for existing water uses to: a) GWB areas with poor quantitative status b) in protection zone II of water abstraction projects serving water supply networks operated by water supply service providers, c) zones of collective irrigation networks d) coastal GWB with extensive or local salinization problems, regardless of their origin	Measures to control surface and groundwater abstractions	Continuing Measure (modification of title and description)	Decentralized Administration (Water Directorate)
M06B0601 Investigating/Determining the conditions for the application of artificial underground aquifer enrichment as a mean of quantitative enhancement and quality protection of GWBs, with priority for GWBs in poor condition and dealing with salinization.	Measures for the control and licensing of the artificial enrichment of natural resources	Continuing Measure	Region, Municipalities, Decentralized Administration (General Directorate for Water)
M06B0701 Reinforcement of environmental inspections and controls	Measures for point sources of discharges	Continuing Measure	Region
M06B0702 Defining guidelines and developing tools for the effective control of sewage and industrial liquid waste discharges	Measures for point sources of discharges	New measure to replace the M06B0702 & M06B1102	Ministry of Environment & Energy (General Directorate for Water), Region

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP	IMPLEMENTING BODIES
M06B0704 Licensing conditions for new/expansion of existing aquaculture units	Measures for point sources of discharges	Continuing Measure	Ministry of Environment & Energy (General Directorate for Water), Region
M06B0705 Drawing up sinkhole protection rules	Measures for point and diffuse sources of discharges	Continuing Measure	Decentralized Administration (Water Directorate), Region
M06B0801 Organic Farming	Measures for diffuse sources of discharges	Continuing Measure (modification of title and description)	Ministry of Rural Development and Food (Directorate of Quality Systems for Organic Production and Geographical Indications)
M06B0803 Reduction of diffuse pollution from agriculture in the Nitrate Vulnerable Zones of Directive 91/676/EEC	Measures for diffuse sources of discharges	Continuing Measure (modification of title and description)	Ministry of Rural Development and Food /OPEKEPE
M06B0902 Determination of the maximum waterlevel fluctuation of reservoirs	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	Continuing Measure (modification of title and description)	Reservoir Manager, Decentralized Administration (Water Directorate, National Monitoring Network Operating Bodies, Protected Areas Bodies, other scientific bodies)
M06B0905 Determining selected areas for river sediment deposits removal to meet the needs of technical projects	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	Continuing Measure (modification of title and description)	General Directorate of Water/Region / Decentralized Administration (Water Directorate)
M06B0906 Coastal erosion monitoring, recording and rehabilitation	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	Continuing Measure	Ministry of Infrastructure and Transport, Ministry Maritime and Insular Political Region, Decentralized Administration (Water Directorate), Municipalities, TEE

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP	IMPLEMENTING BODIES
M06B0907 Measures to identify and achieve Good Ecological Potential in Highly Modified Water Bodies	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	New measure, following the implemented measure M06B0904 of the 1st Revision	They are defined on a case-by-case basis by the Table of Annex I hereof

The first body is the Implementation body. The rest are supporting bodies for the implementation of the measure

8.2.3 Assessment of the possibility of achieving good status by 2027 after the implementation of the program of basic measures

The program of basic measures is a tool for the protection and restoration of all water bodies. In order to achieve the objectives of the Management Plan, the implementation of the basic measures must be supported by complementary measures.

Methodologically, it was chosen to propose additional measures:

a) To maintain the good condition of surface or underground water systems, as well as to increase knowledge and awareness of special issues for the most rational use of water, targeted users. In this case the additional measures have a horizontal, general application and the affected water bodies are not specified.

b) In the water bodies that are estimated that despite the implementation of the program of basic measures, they will not achieve the goal of good status by 2027, and more specifically:

- in water bodies, which, according to measurements of the qualitative and quantitative parameters or with the new methodological approach to their grouping, are in a condition inferior to good,
- in water bodies, which are in good condition, but there are clear indications, through the analysis of pressures, that they are at risk of not achieving their environmental goals.

The measures of case b) are taken into account for the calculation of the environmental cost and/or the cost of the resource, in accordance with the provisions of the national legislation as applicable.

The following Table lists the water bodies of the RBD for which it is deemed necessary to take relevant targeted additional measures.

Table 8-9: Water bodies in the RBD of Attica (EL06), for which it is deemed necessary to take supplementary measures

RB Code	WB Code	WB Name	Ecological Status 2nd Revision	Chemical Status 2nd Revision	Overall Status of 2nd Revision	Main pressure factors
EL0626	EL0626R000200001H	R. KIFISOS 1	MODERATE	LESS THAN GOOD	MODERATE	Flood protection, Agriculture, Energy- non-hydro, Industry, Transport, Urban development, Other
EL0626	EL0626R000212008H	R. KIFISOS 8- R. PYRNAS	POOR	GOOD	POOR	Flood protection, Agriculture, Energy- non-hydro, Industry, Transport, Urban development, Other
EL0626	EL0626R000000008N	S. LAKAS	MODERATE	GOOD	MODERATE	Agriculture, Energy- non-hydro, Industry, Transport, Urban development, Other
EL0626	EL0626R000210007N	R. KIFISOS 7	MODERATE	GOOD	MODERATE	Unknown reason
EL0626	EL0626R000206005N	R. KIFISOS 5	MODERATE	GOOD	MODERATE	Industry
EL0626	EL0626R000208006N	R. KIFISOS 6	MODERATE	GOOD	MODERATE	Unknown reason
EL0626	EL0626R000100010N	S. RAFINA 1	MODERATE	GOOD	MODERATE	Flood protection, Agriculture, Energy- non-hydro, Industry, Transport, Urban development, Other
EL0626	EL0626R000100011N	S. RAFINA 3	BAD	GOOD	BAD	Agriculture, Energy- non-hydro, Industry, Transport, Urban development, Other
EL0626	EL0626R000100012N	S. RAFINA 2	MODERATE	GOOD	MODERATE	Flood protection, Agriculture, Energy- non-hydro, Industry, Transport, Urban development, Other
EL0626	EL0626R000300014N	R. ERASINOU	MODERATE	LESS THAN GOOD	MODERATE	Industry, Flood Protection
EL0626	EL0626R000200002N	S. RAFINA 2	POOR	LESS THAN GOOD	POOR	Agriculture, Energy- non-hydro, Industry, Transport, Urban development, Other
EL0626	EL0626R000300013N	S. PIKORDAFNIS	MODERATE	GOOD	MODERATE	Flood Protection
EL0626	EL0626C0006N	WEST KOLPOS OF GREFSINA	POOR	GOOD	POOR	Industry, Transport

RB Code	WB Code	WB Name	Ecological Status 2nd Revision	Chemical Status 2nd Revision	Overall Status of 2nd Revision	Main pressure factors
EL0626	EL0626C0011N	ESO (CENTRAL) SARONIKOS- PSYTALLEIA	MODERATE	GOOD	MODERATE	Industry, Transport
EL0626	EL0626C0009N	KOLPOS FANERWMENIS	MODERATE	GOOD	MODERATE	Unknown reason
EL0626	EL0626C0012N	ESO (CENTRAL) SARONIKOS	MODERATE	GOOD	MODERATE	Transport
EL0626	EL0626C0007H	EAST KOLPOS OF GREFSINA	MODERATE	GOOD	MODERATE	Industry, Transport
EL0626	EL0626C0008H	COASTS OF PERAMA – PIRAIKI	MODERATE	GOOD	MODERATE	Industry, Transport
EL0626	EL0626C0010N	WESTERN SARONIKOS KOLPOS	MODERATE	GOOD	MODERATE	Industry

Table 8-10: RBD of Attica (EL06), where supplementary measures are necessary

No	Code	Name	Qualitative status	Quantitative status	Increased element values due to natural background	Local overrides	Main pressures	Marine penetration	Protected areas
1	EL0600030	Central Geraneia- Kalamaki	GOOD	POOR	Magnesium100 mg/L	-	Secondary sector, agriculture, livestock farming, WWTP	NO	NO
2	EL0600051	Megaron- Aleporochoriou (a)	POOR	POOR		EC, Cl, NO ₃ , & metals	Agriculture, livestock farming, WWTP	YES	NO
3	EL0600090	Thriassiou Pediou	POOR	POOR		EC, Cl, SO ₄	Urbanization, agriculture, livestock farming, WWTP	YES	NO

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No	Code	Name	Qualitative status	Quantitative status	Increased element values due to natural background	Local overrides	Main pressures	Marine penetration	Protected areas
4	EL0600110	Kifisou Pedio (Athens Pedio)	POOR	GOOD		EC, NO ₃ , Cl, SO ₄ & metals	Urbanization, agriculture, livestock farming, WWTP	Locally in the coastal zone	NO
5	EL0600120	Marathona (a)	GOOD	GOOD		EC, NO ₃ , Cl, & SO ₄	Agriculture, livestock farming	Locally in the coastal zone (man-made)	NO
6	EL0600130	Marathona (b)	POOR	POOR		EC, NO ₃ , Cl, SO ₄ & metals	Agriculture, livestock farming, WWTP	YES	NO
7	EL0600151	Mesogaias (a)	POOR	POOR			Urbanization, livestock farming	YES	NO
8	EL0600152	Mesogaias (b)	POOR	GOOD	E.C. (4100mS/cm), Cl (880mg/l), SO ₄ (860 mg/l)	EC, NO ₃ , Cl & metals	Urbanization, agriculture, livestock farming, WWTP	YES, locally	NO
9	EL0600190	Salamina	POOR	GOOD		EC, NO ₃ , Cl, & SO ₄	Urbanization, agriculture, livestock farming, WWTP	In the coastal zone (natural) and inland	NO
10	EL0600200	Aegina	POOR	POOR		EC, NO ₃ , Cl, SO ₄ & metals	Urbanization, agriculture, livestock farming	In the coastal zone	NO

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No	Code	Name	Qualitative status	Quantitative status	Increased element values due to natural background	Local overrides	Main pressures	Marine penetration	Protected areas
								(natural) and inland	

8.2.4 Supplementary Measures

The supplementary measures of the 2nd RBMP Revision are listed in the following table.

Table 8-11: Table of Additional measures of the 2nd RBMP Revision

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP REVISION	RELATED WB	IMPLEMENTING BODY	MEASURE COST (€)
M06S0201 Development of a Monitoring Programme for the implementation of the PoM of the RBMP in the RBD and provision of supporting services for the implementation of the PoM..	Administrative Measures	CONTINUATION OF MEASURE M06S0201	WB	Decentralized Administration (Water Directorate), Region	350,000
M06S0202 Control and management of artesian wells	Administrative Measures	CONTINUATION OF MEASURE M06S0202	WB	Owner of the abstraction project, Decentralized Administration (Water Directorate)	0
M06S0501 Emission controls at the outlets of stormwater culverts and other point sources of pollution that end up in Surface Water Bodies	Emission controls	CONTINUATION OF MEASURE M06S0501	WB	Municipals /MEWSS, Region, Decentralized Administration (Water Directorate), Ministry of Environment & Energy (General Directorate for Water)	300,000

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP REVISION	RELATED WB	IMPLEMENTING BODY	MEASURE COST (€)
M06S0801 Determination and delimitation of GWB areas which are of poor quality due to salinization or have local salinization problems	Abstractions Control	CONTINUATION OF MEASURE M06S0801	EL0600010- LOUTRAKIOU EL0600040- EASTERN GERANEIA- MAVROVOUNI EL0600051- MEGARON- ALEPOCHORIOU (A) EL0600090- THRIASSIOU PEDIOU EL0600130- MARATHONA (B) EL0600151- MESOGAIAS (A) EL0600152- MESOGAIAS (B) EL0600190- SALAMINA EL0600200- AEGINA	Decentralized Administration (Water Directorate), Region	450,000
M06S0802 Control of the quality status of licensed water abstractions projects in GWB with high natural background values (e.g. chlorides).	Abstractions Control	CONTINUATION OF MEASURE M06S0802	EL0600010- LOUTRAKIOU EL0600040- WESTERN GERANEIA	Decentralized Administration (Water Directorate), Region	0
M06S0803 Special provisions for the protection and preservation of the quantitative status of the GWB	Abstractions Control	New measure	EL0600010- LOUTRAKIOU EL0600040- WESTERN GERANEIA EL0600040- EASTERN GERANEIA- MAVROVOUNI EL0600051- MEGARON- ALEPOCHORIOU (B) EL0600060- PATERA EL0600070- OINOIS	Decentralized Administration (Water Directorate), Region of Attica	0

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP REVISION	RELATED WB	IMPLEMENTING BODY	MEASURE COST (€)
			ELO600081- NORTH-EASTERN PARNITHA ELO600082- NORTH-WESTERN PARNITHA ELO600100- KAPANDRITIOU ELO600110- KIFISOU PEDIO (ATHENS PEDIO) ELO600120- MARATHONA (A) ELO600140- PENTGRI ELO600152- MESOGAIAS (B) ELO600160- HYMETTOU ELO600170- LAVREOTIKIS ELO600180- ANAVISSOU ELO600190- SALAMINA ELO600210- AGISTRI		
M06S1001 Preparation of studies for the reuse of treated wastewater for all existing tertiary treatment plants that meet the requirements of the relevant legislation	Efficiency and reusability measures	CONTINUATION OF MEASURE M06S1001	ELO600090- THRIASSIOU PEDIO ELO600151- MESOGAIAS (A) ELO600152- MESOGAIAS (B)	Owner of the project, Decentralized Administration (Water Directorate), Region (DAOK, DBEFP, etc.), Local Authorities	300,000
M06S1604 Irrigation water consumption investigation study	Research, development and demonstration	CONTINUATION OF MEASURE M06S1604	ELO600051- MEGARON-ALEPOCHORIOU (A) ELO600052- MEGARON-ALEPOCHORIOU (B)	Region of Attica	200,000

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP REVISION	RELATED WB	IMPLEMENTING BODY	MEASURE COST (€)
	(best practice) projects		EL0600120- MARATHONA (A) EL0600130- MARATHONA (B) EL0600060- PATERA EL0600152- MESOGAIAS (B) EL0600090- THRIASSIOU PEDIOO EL0600170- LAVREOTIKIS EL0600100- KAPANDRITIOU		
M06S1701 Exploratory Monitoring of GWB and SWB	Other related measures	CONTINUATION OF MEASURE M06S1701	SWB EL0626R000212008H- R. KIFISOS 8 – R. PYRNAS EL0626R000000008N- S. LAKA EL0626R000208006N- R. KIFISOS 6 EL0626C0007H- EASTERN KOLPOS OF GREFSINA EL0626C0008H- COASTS OF PERAMA – PIRAIKI EL0600010- LOUTRAKIOU EL0600052- MEGARON- ALEPOCHORIOU (B) EL0600082- NORTH-EASTERN PARNITHA EL0600100- KAPANDRITIOU	Decentralized Administration (Water Directorate), Region, Ministry of Environment & Energy (General Directorate for Water)	450,000

CODE- NAME OF MEASURE	CATEGORY	ASSOCIATION WITH THE 1st RBMP REVISION	RELATED WB	IMPLEMENTING BODY	MEASURE COST (€)
			EL0600110- KIFISOU PEDIO (ATHENS PEDIO) EL0600140- PENTGRI EL0600170- LAVREOTIKIS EL0600200- AEGINA		
M06S1702 Elaboration of a hydrogeological study in the area of Schino - Pision of the Municipality of Loutraki - Perachora for the protection of the groundwater quality.	Measures to protect water intended for human consumption (Article 7)	New measure	GWB WESTERN GERANEIA (EL0600020)	Decentralized Administration (Water Directorate), MEWSS of Loutraki – Ag. Theodorwn, Municipality of Loutraki-Perachora	50,000