SPECIAL SECRETARIAT FOR WATER

MINISTRY OF ENVIRONMENT & ENERGY

1st Update of River Basin Management Plans

River Basin District of

Western Peloponnese (EL01)

Summary

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HELLENIC REPUBLIC
MINISTRY OF ENVIRONMENT & ENERGY
SPECIAL SECRETARIAT FOR WATER

DEVELOPMENT OF 1st UPDATE OF RIVER BASIN MANAGEMENT PLANS FOR THE 14 WATER DISTRICTS OF GREECE, IN ACCORDANCE WITH THE DIRECTIVE 2000/60/EC, THE LAW 3199/2003 AND THE P.D. 51/2007 - STUDY M1 "RIVER BASIN DISTRICT OF WESTERN PELOPONNESE (EL01), NORTHERN PELOPONNESE (EL02) AND EASTERN PELOPONNESE (EL03)"

JOINT VENTURE OF PELOPONNESE WATERBODIES:

- "HYDROEXIGIANTIKI LIMITED PARTNERSHIP" L.S. LAZARIDIS & PARTNERS LIMITED PARTNERSHIP
- LAZARIDIS & ASSOCIATES ATEM
- TEM (DESIGN CONSULTANCY) S.A.
- HPC-PASECO, SURVEYS AND STUDIES FOR THE PROTECTION, MANAGEMENT OF THE ENVIRONMENT & ENERGY SINGLE MEMBER LIMITED LIABILITY COMPANY
- DRAKOPOULOU EFSTATHIA daughter of LEONIDAS
- LIONIS MICHALIS son of HARALAMBOS
- VAKAKIS & PARTNERS RURAL DEVELOPMENT CONSULTANTS S.A.
- ALEXANDROS KOTZABOPOULOS son of GEORGE

RIVER BASIN DISTRICT OF WESTERN PELOPONNESE (EL01)

Summary of 1st Update of River Basin Management Plans – English (Deliverable 22b Study M1)

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1st UPDATE OF RIVER BASIN MANAGEMENT PLANS
RIVER BASIN DISTRICT OF WESTERN PELOPONNESE (EL01)

Summary

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AR	At Risk
AWB	Artificial Water Body/bodies
EQR	Ecological Quality Ratio
GD	Guidance Document
GIG	Geographical Intercalibration Group (
GOLR	General Organization of Land Reclamation
GWB	Groundwater Body/bodies
HMWB	Heavily Modified Water Body/ bodies
LOLR	Local Organization of Land Reclamation
MEWSS	Municipal Enterprise for Water Supply and Sewerage
NR	Not at Risk
NWMN	National Water Monitoring Network
PAR	Probably At Risk
PNR	Probably Not at Risk
RB	River Basin
RBD	River Basin District
RBMP	River Basin Management Plan
SCI	Site of Community Importance
SPA	Special Protection Area
SWB	Surface Water Body/bodies
WB	Water body/bodies
WFD	Water Framework Directive
WISE	Water Information System of Europe

1 INTRODUCTION – 1st UPDATE OF RIVER BASIN MANAGEMENT PLANS

1.1 INTRODUCTION

By decision 391 / 08.04.2013 (Government Gazette B' 1004) of the National Water Committee the 1st River Basin Management Plan of the River Basin District examined was approved.

The 1st Update has major changes and improvements from the 1st Management Plan:

- It is based on the use of data from the National Water Monitoring Network (NWMN), for the 2012-2015 period
- It is being drawn up at the same time as the Flood Risk Management Plans pursuant to Directive 2007/60 /EC and synergy of actions and a program of measures has being accomplished
- It is also being drawn up at the same time as the programs of measures for the achievement of the good environmental status of the marine waters of the country in accordance with the Directive 2008/56/EC and has achieved synergy of actions and of program of measures
- It takes into account the National Strategy for Adaptation to Climate Change and incorporates into the program of measures sub-actions of the National Strategy for Adaptation to Climate Change
- It takes into account the results of actions that have been implemented so far in the context of increasing knowledge of water status and the pressures they receive, as well as the actions implemented to fill in the gaps identified in the 1st Management Plan
- It takes into account the new requirements arising from the EU Directive 2000/60/EC Guidance Documents.
- It takes into account the results of the European Commission's Special Report on the Evaluation of Management Plans which was implemented as part of the European Parliament's briefing on the implementation of the Directive and is available on the EU's website.

The 1st Update is being carried out simultaneously for the 14 River Basin Districts of the country and homogeneity has been achieved in the individual methodologies but also in the proposed programs of measures (basic and supplementary).

1.2 CONSULTATION PROCESS

The consultation process on the 1st Update of River Basin Management Plans lasted from November 2015 to December 2017 and included the following:

• **1st Phase**: In November 2015, the content of the foreseen activities for the 1stUpdate of the RBMP was posted on the website of the Ministry of Environment and Energy timetable tender documents for the site of the RBMP (www.ypeka.gr) as well as the detailed timetable of the consultation process.

• **2nd Phase**: In June 2016, data on the important issues of water resources management in each RBD were posted on the same website, containing briefly the results of the National Water Monitoring Network for the RBD, the main pressures, the identification of the competent authorities and stakeholders involved in the consultation. Also, in December 2016, the basic common methodologies for the designation and classification of water bodies status, assessment of pressures and impacts including hydromorphological pressures, the definition of Highly Modified Water Bodies and the identification of the exemptions of Article 4 of Directive 2000/60 / EC, were posted on the same website.

• **3rd Phase**: In June 2017 a draft of the 1st Update of RBMP was posted on a special website of the Special Secretariat (http://wfdver.ypeka.gr), as well as a questionnaire. This phase included the publication of the Strategic Environmental Impact Study. **The consultation was completed in December 2017.**

2 DIFFERENTIATIONS IN COMPARISON WITH THE 1st RBMP

2.1 NEW ANALYTICAL METHODOLOGIES FOR CRITICAL ASPECTS OF THE IMPLEMENTATION OF DIRECTIVE 2000/60/EC

For the 1st Update of RBMP of the country, new analytical methodologies were developed for critical aspects of the implementation of Directive 2000/60/EC. All the analytical methodologies are available on the website of the Special Secretariat for Water http://wfdver.ypeka.gr/:

- Analysis of anthropogenic pressures and their impacts on surface and underground water systems
- Determination and criteria for assessment of hydromorphological alterations
- Determination of Heavily modified (HMWB) and Artificial (AWB) Water Bodies
- Determination of the "exceptions" to the achievement of the environmental objectives of Directive 2000/60/EC:
    - Identification of the "exceptions" of paragraphs 4 to 6 of Article 4 of Directive 2000/60 / EC (4.4 - 4.6)
    - Identification of the "exceptions" of paragraph 7 of Article 4 of Directive 2000/60 / EC (4.7) on new modifications
- Assessment (designation classification) of surface water bodies status:
    - Assessment of the ecological and chemical status of river water bodies
    - Assessment of ecological and chemical status of lake water bodies
    - Assessment of the ecological and chemical status of coastal and transitional water bodies
- Assessment methodologies for individual BQEs for each surface water category that has been approved by the EU in the context of the intercalibration exercise at European level. These methodologies concern the following:
    - Analytical methodologies for the assessment of biological quality elements in rivers.
    - Analytical methodologies for the assessment of biological quality elements in lakes.
    - Analytical methodologies for assessing the biological quality elements in coastal and transitional waters.

2.2 MAIN DIFFERENTIATIONS IN COMPARISON WITH THE 1ST RBMP

Main differentiations in comparison with the 1st RBMP

Content of 1st Update of RBMP/ Activity	Differentiation in comparison with the 1st RBMP
COMPETENT AUTHORITIES	The competent authorities are not differentiated in comparison with the 1st RBMP. In the Update, the inventory of the competent authorities and stakeholders involved in the Water Management, as it derives from the existing institutional framework, is rationalized and it is presented in accordance with the requirements of the new EU Guidance Document (GD Reporting 2016).
DESIGNATION OF SURFACE WATER BODIES - TYPOLOGY	In the Update, new typology was developed for river and lake WB. Furthermore, the reservoirs are reported as River Heavily Modified WB but their assessment is done with elements and tools designated for lakes, as lakes is the category of natural WB they resemble the most. In accordance with the above the number of WB is revised. It is noted that during the Update, the prefix of the WB codes were reformulated from GR to EL, in order to be compatible with the EE databases.
DESIGNATION OF GROUNDWATER BODIES	The number of GWB is revised based of the results of the NWMN or/and special studies completed from the publication of the 1st RBMP till today. It is noted that during the Update, the prefix of the WB codes were reformulated from GR to EL, in order to be compatible with the EE databases.
HEAVILY MODIFIED WATER BODIES (HMWB) AND ARTIFICIAL WATER BODIES (AWB)	The HMWB that were defined under the 1st RBMP are re-examined based on the new methodology and the data from the NWMN.
PROTECTED AREAS	The Registry of Protected Areas of the 1st RBMP is revised based on: The new Natura 2000 areas proposed by the Ministry of Environment and Energy according with the provisions of the Bird (2009/147/EC) and Habitat (92/43/EEC) Directives. The monitoring results from the Bathing Waters and the provisions of the Bathing Waters Directive (2006/7/EC) Other directives on water protection with more strict objectives as the Drinking Water Directive (80/778/EEC, as revised by the Directive 98/83/EC)), the ShellfishDirective (2006/113/EC), freshwater fish Directive (2006/44/EK), Nitrates Directive (91/676/EOK), Urban Waste Water Treatment Directive (91/271/EOK) etc New data that came up after the publication of the 1st RBMP and the relevant EE Guidance Documents. Furthermore it is noted that in the framework of the Update the CORINE protected areas and Landscapes of Special Natural Beauty were not included in the Registry of Protected Areas.
PRESSURES AND IMPACTS	The analysis of pressures and impacts in the Update is done according to the new national methodology and data produced after the approval of the 1st RBMP. The main differentiation is the new analytical method of assessment of hydromorphological pressures.

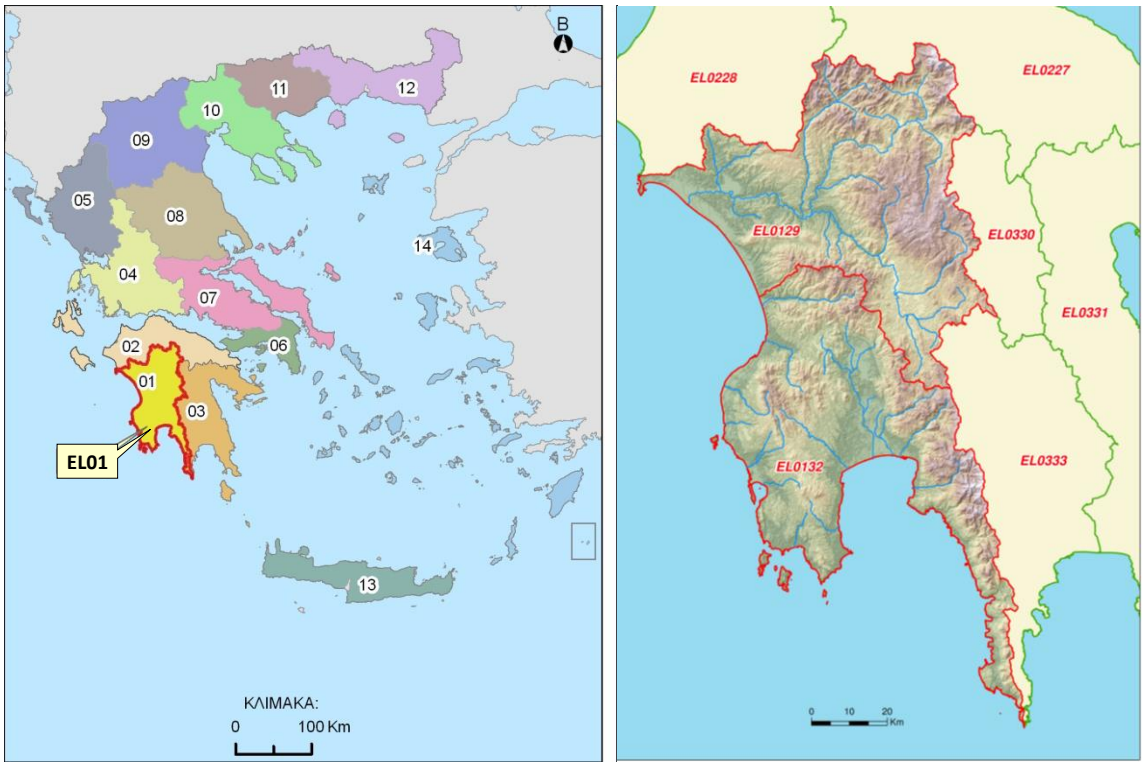
Content of 1st Update of RBMP/ Activity	Differentiation in comparison with the 1st RBMP
CLASSIFICATION OF THE STATUS OF SURFACE WATER BODIES	In the framework of the Update the classification of status of SWB in done according to the new national methodologies approved by the EU and based on the results of the NWMN. For the WB where no monitoring data is available, the classification of status was done by grouping based on their type and the analysis of pressures.
CLASSIFICATION OF THE STATUS OF GROUNDWATER BODIES	The classification of status of the GWB is not different from the 1st RBMP. The classification is based on the new data from the NWMN.
NATIONAL WATER MONITORING NETWORK	The Update takes in consideration the results of the NWMN of the status of the national WB with important number of sampling for the period 2112-2015 for BQE, Physicochemical and chemical indicators and hydromorphological quality elements. It also includes monitoring of the chemical and quantitative status of the GWB.
ECONOMIC ANALYSIS OF WATER USE	For the economical analysis of water uses, the provisions of the new Joint Ministerial Decision οικ. 135275/22.05.17 on water pricing are taken in consideration.
ENVIRONMENTAL OBJECTIVES – EXEMPTIONS	In the framework of the Update, the environmental objectives and exemptions are set according to the new national methodologies, developed according the EU guidance.
PROGRAMME OF MEASURES	The PoM of the 1st Update is differentiated from the 1st RBMP, following the new methodologies: Continuation/improvement of 1st RBMP measures New measures for the achievement of the environmental objectives set Correlation of measures with significant pressures Correlation of measures with Basic Measure Types and implementation indicators set by the EU Synergies of PoM with the National Strategy on Climate Change Adaptation.

3 DESCRIPTION OF RIVER BASIN DISTRICTS – COMPETENT AUTHORITIES

3.1 RIVER BASINS

The **River Basin District of Western Peloponnese (EL01)** is one of the fourteen River Basin Districts in which the Greek area was divided by Law 1739/1987 (Government Gazette 201 / A / 20-11-1987).

Figure 3-1. River Basin District of Western Peloponnese (EL01)



According to Government Gazette No 706/2010 (Government Gazette 1383 / B / 2- 9-10) Decision of the National Water Committee, the River Basins of Alfie's (EL0129) and of Pamisos – Nedontas – Neda (EL0132) constitute the Western Peloponnese River Basin District (EL01).

Table 3-1. River Basins of the Western Peloponnese River Basin District (EL01)

River Basin	Code	Surface (km^2)
Alfios	EL0129	3.810
Pamisos – Nedontas – Neda	EL0132	3.425

3.2 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.

Designated competent authorities at national level:

- The **National Water Committee**
- The **National Water Council**
- The **Special Secretariat for Water**

Table 3-2. National competent authority ID

Official Name	**Special Secretariat for Water**
Acronym	S.S.W.
Contact Information	
Address	Amaliados17
Postal Code	11523
City	Athens
Country	Greece
Web-page	http://www.ypeka.gr/ http://wfdver.ypeka.gr/
Contact	tel: 210 6475102, 213 1515410-1 e-mail: info.egy@prv.ypeka.gr

Designated competent authorities at Decentralised Administration level:

- **Decentralised Administration Water Council**
- **Water Directorates of the Decentralised Administration**

Table 3-3. Decentralised Administration competent authority ID

Official Name	**Decentralised Administration of Peloponnese, Western Greece and Ionian Islands /Water Directorate of Peloponnese**
Acronym	W.D.PEL.
Contact Information	
Address	Mainalou& Sekeri 17
Postal Code	22100
City	Tripolis
Country	Greece
Web-page	www.apd-depin.gov.gr
Contact	tel: 2710 234458 FAX: 2710 234492 e-mail: dydaton@4821.syzefxis.gov.gr

The following table gives a snapshot of the role played by each competent authority on every water management and protection thematic.

Table 3-4. Main competences for every water protection and management thematic

Competent Authority	**Role**												
	Pressure and impact analysis	**Economic analysis**	**Monitoring of surface water**	**Monitoring of groundwater**	**Assessment of status of surface water**	**Assessment of status of groundwater**	**Preparation of RBMP**	**Preparation of PoM**	**Implementation of measures**	**Public participation**	**Enforcement of regulations**	**Co-ordination of implementation**	**Reporting to the European Commission**
Special Secretariat for Water of the Hellenic Ministry of Environment & Energy	M	M	M	M	M	M	M	M	M	M	M	M	M
Water Directorate of the Decentralised Administration	O	O	-	-	-	-	O	O	M	M	M	M	-
Hellenic Ministry of Foreign Affairs	-	-	-	-	-	-	-	-	O	-	M	-	-
Hellenic Ministry of Rural Development and Food	-	-	-	-	-	-	-	-	M	-	O	-	-
Hellenic Ministry of Infrastructure and Transport	-	-	-	-	-	-	-	-	M	-	O	-	-
Hellenic Ministry of Economy and Development	-	-	-	-	-	-	-	-	M	-	O	-	-
Hellenic Ministry of Health	-	-	-	-	-	-	-	-	M	-	O	-	-
Hellenic Ministry of Shipping and Island Policy	-	-	-	-	-	-	-	-	M	-	O	-	-
Hellenic Ministry of Interior	-	-	-	-	-	-	-	-	M	-	O	-	-
Municipalities	-	-	-	-	-	-	-	-	M	O	-	-	-
Regions	-	-	-	-	-	-	-	-	M	O	O	-	-
M: Main role, O: Other role, -: No role													

4 DESIGNATION AND CLASSIFICATION OF WATER BODIES

4.1 SURFACE WATER BODIES (SWB)

According to the 1st Update of RBMP, **126 surface water bodies,** are identified.

Table 4-1. Number of surface water bodies for each RB

Type of WB	RB EL0129	RB EL0132	TotalRBD
River WB	60	52	112
Lake WB	0	0	0
Transitional WB	2	1	3
Coastal WB	2	9	11
TOTAL WB	**64**	**62**	**126**

All the surface water bodies are presented in the following tables.

Table 4-2. River WB and the new typology, according to the European Decision 2013/480/EC and the MED GIG per RB

No	WB Name	WB Code	HMWB/ AWB	Length (km)	Immediate Catchment Area (km²)	Upstream Catchment area (km²)	Mean Annual Flow (hm³)	WB Type
Alfios RB (EL0129)								
1	ALFIOS R._1	EL0129R000201001N	NAT	12,2	41,1	3.456,0	2.155,5	R-M3
2	LESTENITSAS STREAM_1	EL0129R000202002N	NAT	2,5	2,6	171,4	103,6	R-M2
3	LESTENITSAS STREAM_2	EL0129R000202003N	NAT	4,2	8,4	163,0	102,1	R-M2
4	LESTENITSAS STREAM_3	EL0129R000202104N	NAT	17,4	77,2	0,0	46,0	R-M1
5	ALISIO STREAM_1	EL0129R000202005N	NAT	5,0	22,8	63,0	51,1	R-M1
6	ALISIO STREAM_2	EL0129R000202006N	NAT	9,3	63,0	0,0	37,5	R-M1
7	ALFIOS R._2	EL0129R000203007N	NAT	6,2	58,2	3.223,9	2.027,4	R-M3
8	SELINOUS R._1	EL0129R000204008N	NAT	2,5	14,7	53,6	40,7	R-M1
9	SELINOUS R._2	EL0129R000204009N	NAT	10,5	53,6	0,0	31,9	R-M1
10	ALFIOS R._3	EL0129R000205010N	NAT	25,2	226,8	2.928,8	1.952,1	R-M3
11	ERIMANTHOS R._1	EL0129R000206011N	NAT	39,8	152,3	207,2	288,2	R-M2
12	SIREO STREAM_1	EL0129R000206112N	NAT	2,5	7,6	43,0	40,5	R-M1
13	SIREO STREAM_2	EL0129R000206113N	NAT	5,0	36,8	6,2	34,4	R-M4
14	SIREO STREAM_3	EL0129R000206114N	NAT	2,9	6,2	0,0	4,9	R-M4
15	ERIMANTHOS R._2	EL0129R000206015N	NAT	0,2	0,0	156,7	125,6	R-M2
16	AROANIOS R._1	EL0129R000206216N	NAT	10,0	76,2	20,5	77,5	R-M1
17	AROANIOS R._2	EL0129R000206217N	NAT	3,2	20,5	0,0	16,4	R-M1
18	ERIMANTHOS R._3	EL0129R000206018N	NAT	7,5	35,9	24,1	48,1	R-M1
19	ERIMANTHOS R._4	EL0129R000206019N	NAT	4,3	24,1	0,0	19,3	R-M1
20	ALFIOS R._4	EL0129R000207020N	NAT	3,0	76,5	2.492,8	1.528,8	R-M3
21	LADON R._1	EL0129R000208021N	NAT	5,0	23,9	1.113,3	675,6	R-M3
22	LADON R._2	EL0129R000208022N	NAT	4,3	24,1	1.089,2	661,4	R-M3
23	LAGADIANO STREAM_1	EL0129R000208123N	NAT	17,5	104,0	18,0	72,4	R-M2
24	LAGADIANO STREAM_2	EL0129R000208124N	NAT	4,7	18,0	0,0	10,7	R-M1
25	LADON R._3	EL0129R000208025H	HMWB	23,3	200,6	766,7	574,6	R-M2
26	LADON R._4	EL0129R000208026N	NAT	6,7	45,3	664,6	421,7	R-M2
27	PAOS R.	EL0129R000208227N	NAT	13,3	60,2	0,0	35,7	R-M4
28	LADON R._5	EL0129R000208028N	NAT	5,5	93,5	511,0	359,1	R-M2

No	WB Name	WB Code	HMWB/ AWB	Length (km)	Immediate Catchment Area (km²)	Upstream Catchment area (km²)	Mean Annual Flow (hm³)	WB Type
29	TRAGOS STREAM_1	EL0129R000208329N	NAT	7,0	16,7	230,4	146,7	R-M2
30	TRAGOS STREAM_2	EL0129R000208330N	NAT	15,5	137,2	93,2	136,8	R-M2
31	TRAGOS STREAM_3	EL0129R000208331N	NAT	11,3	93,2	0,0	55,4	R-M1
32	AROANIOS R._3	EL0129R000208032N	NAT	10,3	82,1	181,9	156,8	R-M2
33	AROANIOS R._4	EL0129R000208433N	NAT	6,1	120,7	0,0	71,7	R-M4
34	XEROREMA STREAM_1	EL0129R000208034N	NAT	7,5	47,5	13,8	36,4	R-M1
35	XEROREMA STREAM_2	EL0129R000208035N	NAT	3,0	13,8	0,0	8,2	R-M1
36	ALFIOS R._5	EL0129R000209036N	NAT	6,9	54,8	1.300,9	807,6	R-M3
37	ROGOZITIKO STREAM	EL0129R000210037N	NAT	13,9	35,3	0,0	21,1	R-M1
38	ALFIOS R._6	EL0129R000211038N	NAT	7,5	48,5	1.217,0	753,9	R-M3
39	DIPOTAMO STREAM	EL0129R000212039N	NAT	10,7	58,7	0,0	35,0	R-M1
40	ALFIOS R._7	EL0129R000213040N	NAT	13,6	107,9	1.050,4	690,0	R-M3
41	LOUSIOS R._1	EL0129R000214041N	NAT	10,0	62,8	103,0	98,7	R-M4
42	LOUSIOS R._2	EL0129R000214042N	NAT	14,4	103,0	0,0	61,4	R-M4
43	ALFIOS R._8	EL0129R000215043N	NAT	5,0	10,8	873,8	527,0	R-M2
44	ALFIOS R._9	EL0129R000215044H	HMWB	12,5	229,7	644,1	520,6	R-M2
45	ELISSON R._1	EL0129R000216045N	NAT	3,3	3,3	219,2	132,6	R-M2
46	ELISSON R._2	EL0129R000216046N	NAT	16,7	81,0	138,2	130,6	R-M2
47	ELISSON R._3	EL0129R000216047N	NAT	5,0	12,7	125,5	82,3	R-M4
48	ELISSON R._4	EL0129R000216048N	NAT	5,0	27,4	98,0	74,7	R-M4
49	ELISSON R._5	EL0129R000216049N	NAT	13,6	98,0	0,0	58,4	R-M4
50	ALFIOS R._10	EL0129R000217050H	HMWB	2,6	4,2	417,4	251,2	R-M2
51	ALFIOS R. DIVERSION_1	EL0129R000217051A	AWB	6,5	74,9	342,5	248,7	R-M2
52	XERILAS STREAM	EL0129R000218052N	NAT	20,7	143,4	0,0	85,4	R-M2
53	ALFIOS R. DIVERSION_2	EL0129R000219053A	AWB	1,0	0,5	198,7	118,6	R-M2
54	ALFIOS R._11	EL0129R000219054N	NAT	3,0	30,4	168,2	118,4	R-M2
55	KOUNTIFARINA STREAM	EL0129R000220055N	NAT	12,7	46,8	0,0	27,9	R-M1
56	ALFIOS R._12	EL0129R000221056N	NAT	10,0	32,6	88,9	72,4	R-M2
57	ALFIOS R._13	EL0129R000221057N	NAT	5,0	35,4	53,4	52,9	R-M1
58	ALFIOS R._14	EL0129R000221058N	NAT	2,5	45,1	8,3	31,8	R-M1
59	ALFIOS R._15	EL0129R000221059N	NAT	4,4	8,3	0,0	5,0	R-M1
Pamisos-Nedontas-Neda RB (EL0132)								
1	VELIKA STREAM_1	EL0132R000300001N	NAT	6,8	60,8	88,5	100,4	R-M2
2	VELIKA STREAM_2	EL0132R000300002N	NAT	25,2	88,5	0,0	59,5	R-M1
3	KLISOUREIKO STREAM	EL0132R000500003N	NAT	15,4	64,9	0,0	22,2	R-M1
4	MINAGIOTIKO STREAM_1	EL0132R000500004N	NAT	8,4	22,9	20,6	14,8	R-M1
5	MINAGIOTIKO STREAM_2	EL0132R000500005N	NAT	4,7	20,6	0,0	7,0	R-M1
6	GIANNOUZAGAS STREAM_1	EL0132R000700006N	NAT	0,9	0,8	47,5	16,3	R-M1
7	GIANNOUZAGAS	EL0132R000700007N	NAT	12,9	47,5	0,0	16,0	R-M1

No	WB Name	WB Code	HMWB/ AWB	Length (km)	Immediate Catchment Area (km²)	Upstream Catchment area (km²)	Mean Annual Flow (hm³)	WB Type
	STREAM_2							
8	SELAS STREAM	EL0132R000901008N	NAT	5,0	8,9	87,0	36,9	R-M1
9	ALAFINOREMA STREAM	EL0132R000902009N	NAT	10,3	31,7	0,0	12,2	R-M1
10	KAMPIROVA STREAM	EL0132R000903010N	NAT	18,9	55,3	0,0	21,2	R-M1
11	LAGOUVARDOS STREAM	EL0132R000900011N	NAT	8,3	48,1	0,0	23,5	R-M4
12	FILIATRINO STREAM_1	EL0132R000900012N	NAT	6,9	26,0	36,9	30,7	R-M1
13	FILIATRINO STREAM_2	EL0132R000900013H	HMWB	4,9	9,6	27,3	18,0	R-M1
14	FILIATRINO STREAM_3	EL0132R000900014N	NAT	6,2	12,6	10,2	11,1	R-M1
15	FILIATRINO STREAM_4	EL0132R000900015N	NAT	6,4	10,2	0,0	5,0	R-M1
16	KALO NERO STREAM_1	EL0132R001100016N	NAT	0,7	2,7	180,6	122,6	R-M2
17	KALO NERO STREAM_2	EL0132R001100017N	NAT	3,3	11,2	169,4	120,7	R-M2
18	KALO NERO STREAM_3	EL0132R001100018N	NAT	4,6	81,6	87,8	113,3	R-M2
19	KALO NERO STREAM_4	EL0132R001100019N	NAT	16,1	87,8	0,0	58,7	R-M1
20	NEDA R._1	EL0132R001500020N	NAT	2,8	30,6	247,9	163,0	R-M4
21	NEDA R._2	EL0132R001500021N	NAT	8,2	114,0	133,9	145,1	R-M4
22	NEDA R._3	EL0132R001500022N	NAT	20,3	133,9	0,0	78,4	R-M4
23	PAMISOS R._1	EL0132R000201023H	HMWB	4,0	14,7	552,9	258,3	R-M2
24	PAMISOS R._2	EL0132R000201024H	HMWB	4,8	18,4	534,5	251,6	R-M2
25	PAMISOS R._3	EL0132R000201025N	NAT	5,1	47,2	487,4	243,2	R-M2
26	AGIOS FLOROS STREAM_1	EL0132R000202026H	HMWB	2,5	3,7	31,3	15,9	R-M1
27	AGIOS FLOROS STREAM_2	EL0132R000202027H	HMWB	4,1	31,3	0,0	14,2	R-M1
28	MAVROZOUMENA STREAM_1	EL0132R000203028N	NAT	3,7	13,8	438,7	205,9	R-M2
29	MAVROZOUMENA STREAM_2	EL0132R000203029N	NAT	9,6	40,9	397,8	199,6	R-M2
30	MEGALO POTAMI STREAM_1	EL0132R000204030H	HMWB	1,2	1,2	264,5	120,9	R-M2
31	TZAMIS STREAM_1	EL0132R000204131H	HMWB	6,4	116,4	54,3	77,7	R-M2
32	TZAMIS STREAM_2	EL0132R000204132N	NAT	4,5	54,3	0,0	24,7	R-M1
33	MEGALO POTAMI STREAM_2	EL0132R000204033H	HMWB	8,2	55,6	38,2	42,7	R-M1
34	MEGALO POTAMI STREAM_3	EL0132R000204034N	NAT	6,3	38,2	0,0	17,4	R-M4
35	HOUHLOTOS STREAM	EL0132R000205035N	NAT	10,8	28,7	103,4	60,1	R-M2
36	MALTHIS STREAM	EL0132R000206036N	NAT	8,5	37,0	0,0	16,8	R-M1
37	KLISOUREIKO 2 STREAM	EL0132R000207037N	NAT	5,6	66,4	0,0	30,2	R-M4

No	WB Name	WB Code	HMWB/ AWB	Length (km)	Immediate Catchment Area (km²)	Upstream Catchment area (km²)	Mean Annual Flow (hm³)	WB Type
38	ARIS R._1	EL0132R000201038H	HMWB	5,4	25,9	177,1	92,4	R-M4
39	TZIROREMA STREAM_1	EL0132R000202039H	HMWB	2,8	5,9	108,2	51,9	R-M4
40	TZIROREMA STREAM_2	EL0132R000202040N	NAT	18,7	81,1	27,1	49,2	R-M4
41	TZIROREMA STREAM_3	EL0132R000202041N	NAT	4,1	27,1	0,0	12,4	R-M1
42	ARIS R._2	EL0132R000203042H	HMWB	2,5	1,6	61,4	28,7	R-M4
43	ARIS R._3	EL0132R000203043H	HMWB	4,8	13,4	47,9	27,9	R-M4
44	ARIS R._4	EL0132R000203044N	NAT	2,7	47,9	0,0	21,8	R-M4
45	NEDON R._1	EL0132R001700045H	HMWB	3,3	23,6	122,5	109,4	R-M5
46	NEDON R._2	EL0132R001700046N	NAT	11,8	69,9	52,6	91,7	R-M2
47	NEDON R._3	EL0132R001700047N	NAT	4,7	45,6	7,0	39,3	R-M1
48	NEDON R._4	EL0132R001700048N	NAT	2,6	7,0	0,0	5,2	R-M1
49	MILOI STREAM_1	EL0132R002100049N	NAT	4,8	14,1	120,7	107,6	R-M4
50	MILOI STREAM_2	EL0132R002100050N	NAT	10,4	64,5	56,3	96,4	R-M4
51	MILOI STREAM_3	EL0132R002100051N	NAT	4,2	56,3	0,0	44,9	R-M1
***NAT**: NaturalWB,**HMWB**:Heavily Modified WB,**AWB**: Artificial WB*								

Table 4-3. Reservoirs WB according to the new methodology per RB

No	WB Name	WB Code	HMWB/ AWB	Surface (km²)	Perimeter(km)	WB Type
Alfios RB (EL0129)						
1	LADON ARTIF.LAKE	EL0129RL00208001H	HMWB	3,0	26,7	L-M8
Pamisos - Nedontas - Neda RB (EL0132)						
1	FILIATRINO ARTIF.LAKE	EL0132RL00900001H	HMWB	0,5	7,8	L-M8
***NAT**: Natural WB, **HMWB**:Heavily Modified WB, **AWB**: Artificial WB*						

Table 4-4. Transitional WB per RB

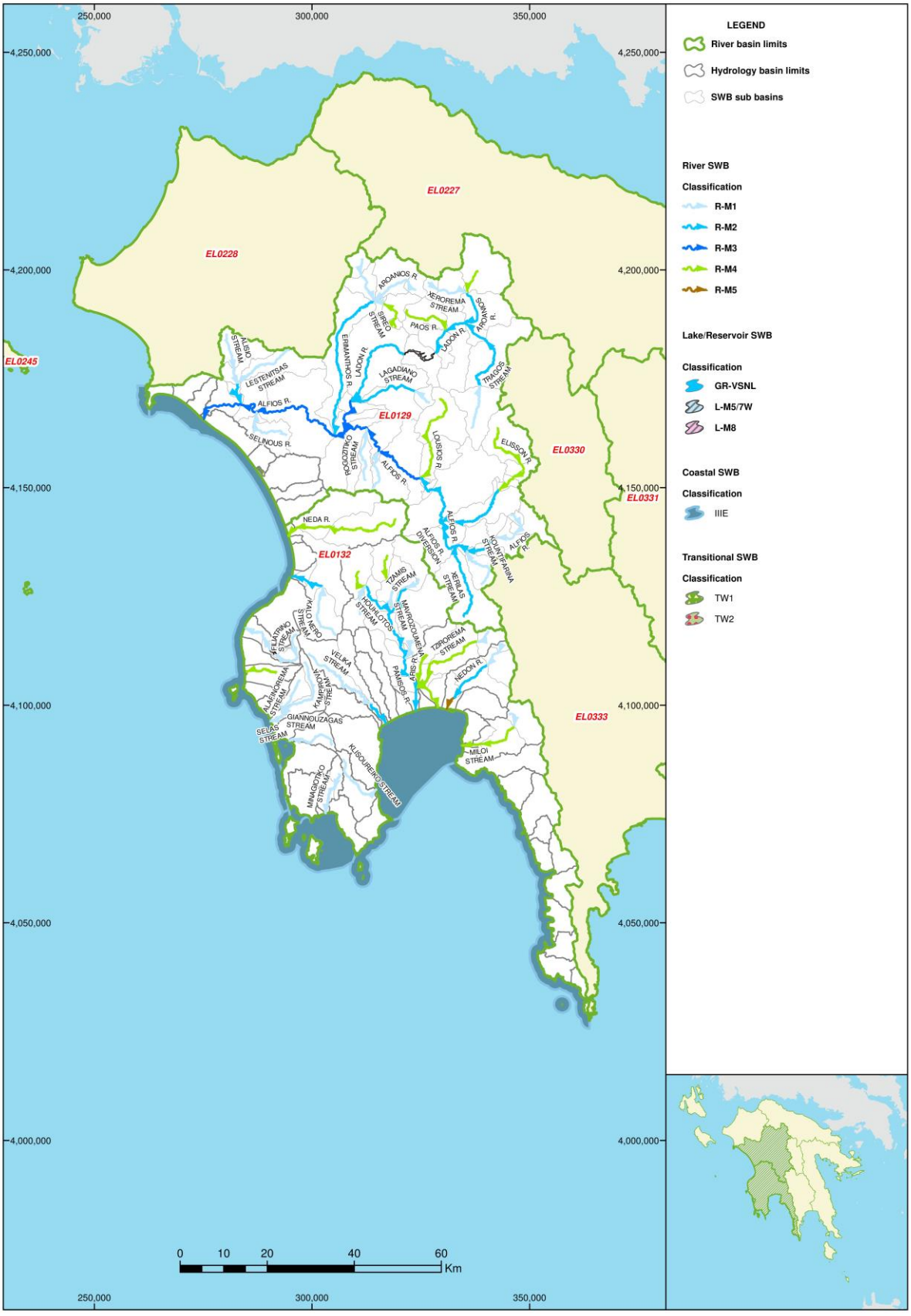
No	WB Name	WB Code	HMWB/ AWB	Surface (km²)	Perimeter (km)	WB Type
Alfios RB (EL0129)						
1	ALFIOS R. ESTUARIES	EL0129T0001N	NAT	0,03	1,5	TW2
2	KAIAFAS LAGOON	EL0129T0002N	NAT	1,51	9,9	TW1
Pamisos - Nedontas - Neda RB (EL0132)						
1	YALOVA LAGOON	EL0132T0003N	NAT	1,43	5,6	TW1
***NAT**: Natural WB, **HMWB**:Heavily Modified WB, **AWB**: Artificial WB*						

Table 4-5. Coastal WB per RB

No	WB Name	WB Code	HMWB/ AWB	Surface (km²)	Coastal Length (km)	WB Type
Alfios RB (EL0129)						
1	KATAKOLO CAPE	EL0129C0001N	NAT	14,6	11,9	IIIE
2	KIPARISSIAKOS GULF	EL0129C0002N	NAT	139,2	69,8	IIIE
Pamisos - Nedontas - Neda RB (EL0132)						
1	GREEK COASTS OF MESSINIA IN THE IONIAN SEA	EL0132C0003N	NAT	129,4	91,7	IIIE
2	NAVARINO BAY (PILOS)	EL0132C0004N	NAT	17,8	24,3	IIIE
3	METHONI CHANNEL	EL0132C0005N	NAT	8,5	13,8	IIIE

No	WB Name	WB Code	HMWB/ AWB	Surface (km^2)	Coastal Length (km)	WB Type
4	METHONI BAY	EL0132C0006N	NAT	152,1	84,5	IIIE
5	AKRITAS CAPE	EL0132C0007N	NAT	51,5	26,1	IIIE
6	KALAMATA GULF	EL0132C0008N	NAT	345,2	76,5	IIIE
7	TAINARO - MESSINIAKOS	EL0132C0009N	NAT	171,2	163,3	IIIE
8	METHONI WEST COAST	EL0132C0010N	NAT	1,1	6,8	IIIE
9	TAINAROS ISLET	EL0132C0011N	NAT	11,1	0,2	IIIE
NAT: ***Natural WB,*** *HMWB*: ***Heavily Modified WB,*** *AWB*: ***Artificial WB***						

Map 1. Classification of SWB of RBD of Western Peloponnese (EL01), according to the new typology of the 1st Update of RBMP



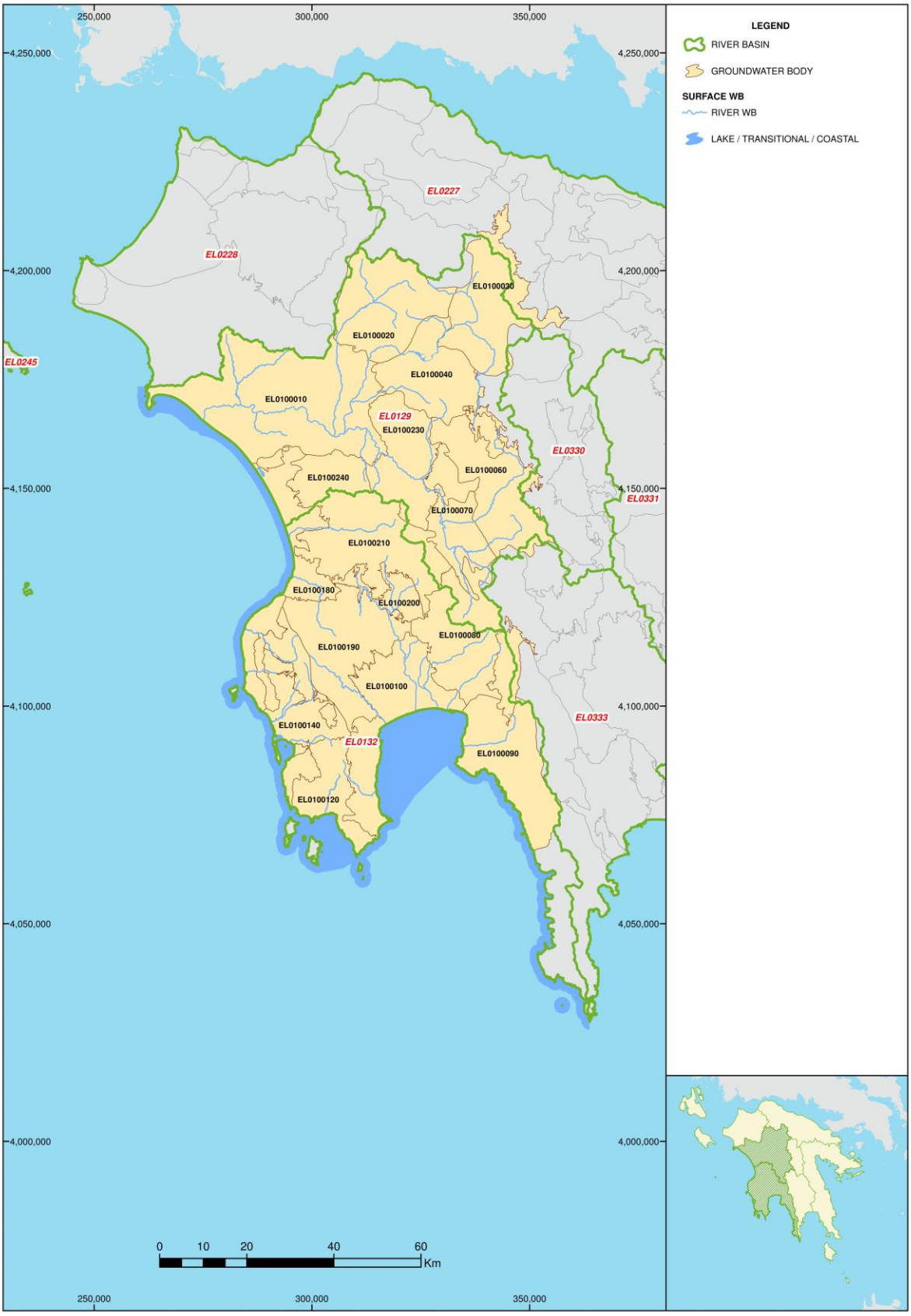
4.2 GROUNDWATER BODIES

Under the 1st Update of RBMP the initially delimited GWB were re-examined.

Table 4-6. The GWB of the RBD

NO	GWB Name	GWB Code	Surface (km²)
Alfios RB (EL0129)			
1	Systima Alfeiou	EL0100010	981,41
2	Systima Notiou Erymanthou	EL0100020	456,99
3	Systima Ladona	EL0100030	450,62
4	Systima Lagkadion	EL0100040	342,34
5	Systima Methydriou - Pianas	EL0100050	47,51
6	Systima Elissona	EL0100060	425,56
7	Systima Megalopolis	EL0100070	189,37
8	Systima Karytenas - Stemnitsas	EL0100220	76,30
9	Systima Lousiou - Paloumpas	EL0100230	339,39
10	Systima Minthis	EL0100240	161,11
11	Systima Zacharos	EL0100250	97,70
12	Systima Kaiafa	EL0100260	17,85
Pamisos - Nedontas - Neda RB (EL0132)			
1	Systima Agiou Florou - Pidimatos	EL0100080	424,01
2	Systima Taygetou	EL0100090	430,08
3	Systima Pamisou	EL0100100	283,21
4	Systima Koronis	EL0100110	175,82
5	Systima Methonis	EL0100120	224,31
6	Systima Kynigou	EL0100130	52,64
7	Systima Romanou - Choras	EL0100140	194,62
8	Systima Gargalianon	EL0100150	38,26
9	Systima Choras	EL0100160	117,64
10	Systima Filiatron - Kyparissias	EL0100170	107,50
11	Systima Kalou Nerou- Nedas	EL0100180	130,71
12	Systima Kyparissias - Ithomis	EL0100190	470,66
13	Systima Ano Messinias	EL0100200	109,40
14	Systima Diavolitsiou - Neas Figaleias	EL0100210	514,84
15	Systima Alagonias	EL0100270	101,78

Map 2. Position and delimitation of the GWB of Western Peloponnese RBD (EL01)



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

Table 4-7. Total number and surface of HMWB and AWB in the RBD

Type of WB	HMWB		AWB	
	Number of WB	Surface - length (%)	Number of WB	Surface - length (%)
Lake WB	0	0%	0	0%
Longitudinal River WB	16	10,52%	2	0,84%
River WB (Reservoirs)	2	100%	0	0%
Transitional WB	0	0%	0	0%
Coastal WB	0	0%	0	0%

The following table presents the WB that were identified as HMWB and AWB per RB.

Table 4-8. River HMWB in the RBD

HMWB Code	Name	Type	Length (km)	Upstream Catchment area (km^2)	Designated Water Use
Alfios RB (EL0129)					
EL0129R000208025H	LADON R._3	R-M2	23,3	766,7	Hydropower, Irrigation
EL0129R000215044H	ALFIOS R._9	R-M2	12,5	644,1	Coal Mining
EL0129R000217050H	ALFIOS R._10	R-M2	2,6	417,4	Coal Mining
Pamisos - Nedontas - Neda RB (EL0132)					
EL0132R000900013H	FILIATRINO STREAM_2	R-M1	4,9	27,3	Irrigation
EL0132R000201023H	PAMISOS R._1	R-M2	4,0	552,9	Irrigation, Flood Protection
EL0132R000201024H	PAMISOS R._2	R-M2	4,8	534,5	Irrigation, Flood Protection
EL0132R000202026H	AGIOS FLOROS STREAM_1	R-M1	2,5	31,3	Irrigation, Flood Protection
EL0132R000202027H	AGIOS FLOROS STREAM_2	R-M1	4,1	0,0	Irrigation, Flood Protection
EL0132R000204030H	MEGALO POTAMI STREAM_1	R-M2	1,2	264,5	Flood Protection
EL0132R000204131H	TZAMIS STREAM_1	R-M2	6,4	54,3	Flood Protection
EL0132R000204033H	MEGALO POTAMI STREAM_2	R-M1	8,2	38,2	Flood Protection
EL0132R000201038H	ARIS R._1	R-M4	5,4	177,1	Irrigation, Flood Protection
EL0132R000202039H	TZIROREMA STREAM_1	R-M4	2,8	108,2	Irrigation, Flood Protection
EL0132R000203042H	ARIS R._2	R-M4	2,5	61,4	Irrigation, Flood Protection
EL0132R000203043H	ARIS R._3	R-M4	4,8	47,9	Irrigation, Flood Protection
EL0132R001700045H	NEDON R._1	R-M5	3,3	122,5	Flood Protection

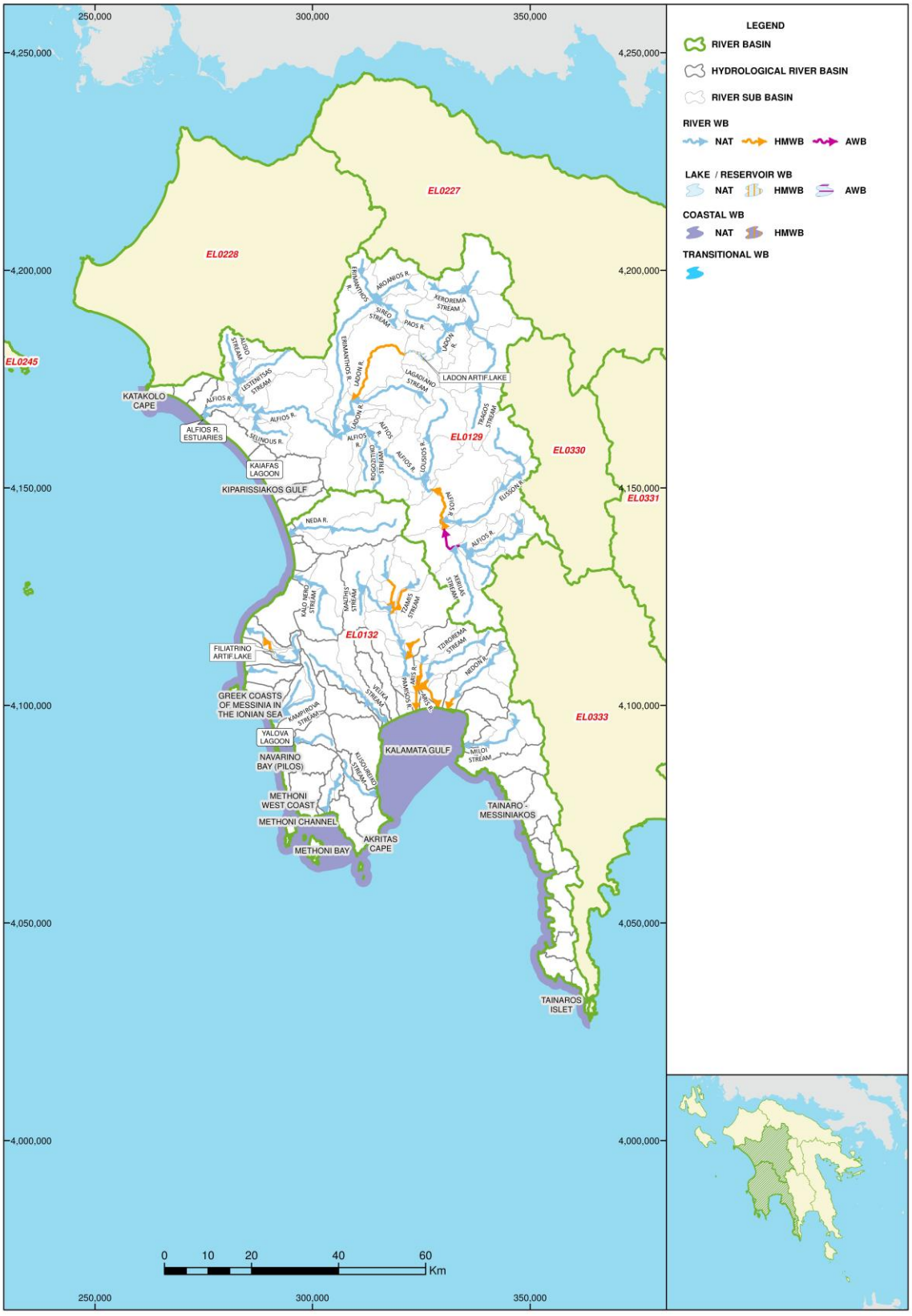
Table 4-9. Artificial WB in the RBD

AWB Code	Name	Type	Length (km)	Upstream Catchment area (km^2)	Designated Water Use
Alfios RB (EL0129)					
EL0129R000217051A	ALFIOS R. DIVERSION_1	R-M2	6,5	342,5	Coal Mining
EL0129R000219053A	ALFIOS R. DIVERSION_2	R-M2	1,0	198,7	Coal Mining

Table 4-10. Reservoirs (River HMWB) in the RBD

HMWB Code	Name	Type	Surface (km^2)	Designated Water Use
Alfios RB (EL0129)				
EL0129RL00208001H	LADON ARTIF. LAKE	L-M8	3,03	Hydropower, Irrigation
Pamisos - Nedontas - Neda RB (EL0132)				
EL0132RL00900001H	FILIATRINO ARTIF. LAKE	L-M8	0,50	Irrigation

Map 3. HMWB and AWB in the RBD of Western Peloponnese (EL01)



4.4 PROTECTED AREAS

In accordance with Directive 2000/60/EC, the member states shall ensure the establishment of a registry of all areas lying within each river basin district which have been designated as requiring special protection under specific Community legislation for the protection of their surface water and groundwater or for the conservation of habitats and species directly depending on water.

This registry is called Registry of Protected Areas (RPA) and according to the Appendix V of the Presidential Decree 51/2007, it includes the following type or areas:

- **Water bodies designated for Drinking Water Abstraction**:

Table 4-11. Areas of Abstraction of Drinking water

NO	WB Name	WB Code	Area Code
Alfios RB (EL0129)			
1	Systima Methydriou - Pianas	EL0100050	EL0100050A7
Pamisos - Nedontas - Neda RB (EL0132)			
2	Systima Agiou Florou - Pidimatos	EL0100080	EL0100080A7
3	Systima Gargalianon	EL0100150	EL0100150A7
4	Systima Choras	EL0100160	EL0100160A7
5	ERIMANTHOS R._1	EL0129R000206011N	EL0129R000206011NA7

- **Water Bodies designated as Recreational waters including areas designated as Bathing Waters:**
  According to the list of Bathing Water Profiles of Greece (SSW, 2016), in Western Peloponnese RBD, in 2016, 51 Bathing Water Sites have been designated in coastal WB.
  Furthermore, they exist not designated Recreational WB that are used for alternative tourism (like rafting and kayak). These are ERIMANTHOS R._1 and LOUSIOS R._1, in Alfios RB.In Pamisos - Nedontas - Neda RB, the WB of Neda R._3, is used for trekking.

- **Urban Waste Water Treatment Directive Sensitive Areas and Nitrates Directive Nitrate Vulnerable Zones (NVZ)**:

Table 4-12. Nitrate Vulnerable Zones

NVZ Name	WB			
	WB Code	WB Name	WB Category	RB
Pamisou – Messini Zone EL0132NI02	EL0100100	Systima Pamisou	GWB	EL0132
Filiatra – Kyparissias Zone EL0132NI01	EL0100170	Systima Filiatron - Kyparissias	GWB	EL0132

Under the 1st Update of the RBMP, the necessity of designating new Nitrate Vulnerable Zones was examined and no such necessity exists.
According to the national legal framework, in the Western Peloponnese RBD (EL01), no Urban Waste Water Treatment Directive Sensitive Areas exist.

- **Areas designated for Birds and Habitats protection including the Natura 2000 protected sites**:
  The designation of natural protected areas is adaptable to the national specific conditions. The following map depicts these areas.

- **Areas designated for the protection of economically significant aquatic species**:
  There are six aquatic farms inWestern Peloponnese RBD (EL01): four freshwater fish farms and 2 coastal/transitional waters aquacultures. It should be noted that special environmental requirements are set on these areas according to the Directive 2006/113/EC on the quality of shellfish waters.

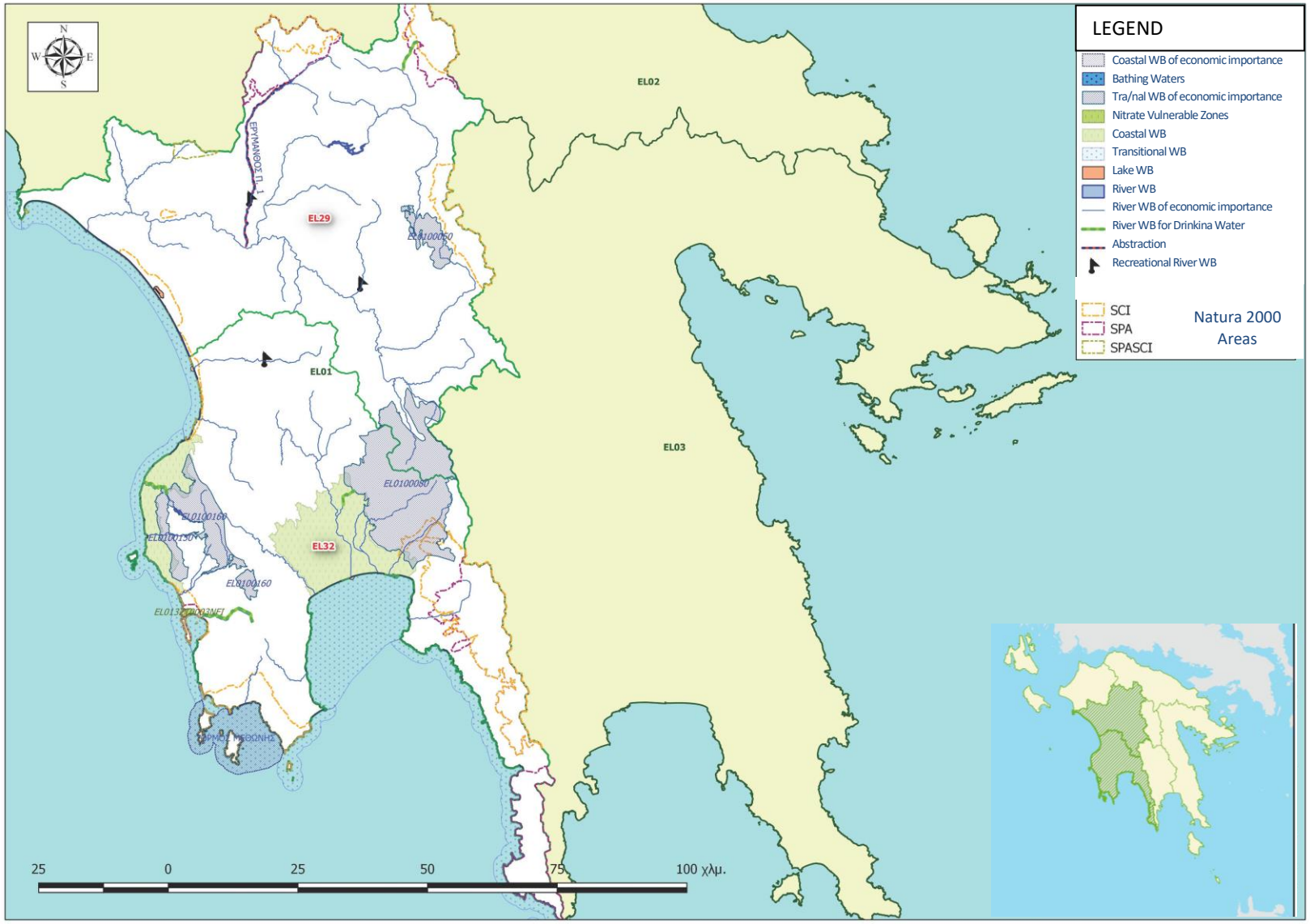
Table 4-13. Proposed protection areas according to Directive 2006/113/EC

No	Protected Area Code	WB Code	WB name	WB category
1	EL0132C0006NFI	EL0132C0006N	METHONI BAY	Coastal
2	EL0132T0003NFI	EL0132T0003N	YALOVA LAGOON	Transitional

Table 4-14. Proposed protection areas according to Directive 2006/44/EC

No	Protected Area Code	WB Code	WB name	WB category
1	EL0129R000208433NFI	EL0129R000208433N	AROANIOS R._4	River
2	EL0132R000202027HFI	EL0132R000202027H	AGIOS FLOROS STREAM_2	River
3	EL0132R000700007NFI	EL0132R000700007N	GIANNOUZAGAS STREAM_2	River
4	EL0132R000900012NFI	EL0132R000900012N	FILIATRINO STREAM_1	River

Map 4. Protected Areas in Western Peloponnese RBD(EL01)



5 PRESSURES AND IMPACTS

Anthropogenic pressures on the bodies of water include all human activities that influence or may influence the water bodies of the area where they are developed. These pressures are characterized as significant as long as they form the cause for the WBs to be in danger of non-achieving their environmental objectives, according to EC No 03 Guidance Document.

5.1 POINT SOURCES OF POLLUTION

Point sources of pollution include all sources of nutrients (BOD, N, P). The list of these pressures includes:

- Waste Water Treatment Plants (WWTP)
- Discharges not connected to WWTP
- Hotels
- Industrial sites
- Livestock Farming
- Aquaculture – Fish farming
- Waste disposal sites
- Runoff from mining activities

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

Figure 5-1. Total annual load of BOD, N and P that are produced in the RB (EL0129) and (EL0132) from point sources

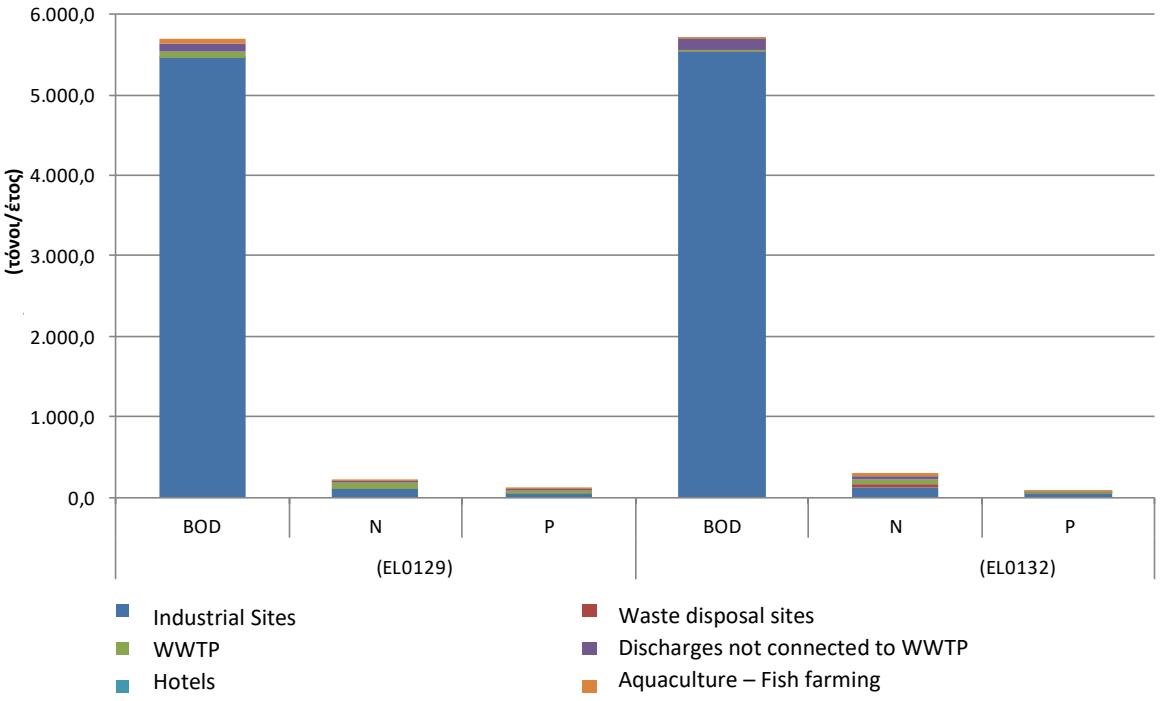


Table 5-1. Total annual load of BOD, N and P that are produced in Alfios RB (EL0129) from point sources

POINT SOURCES OF POLLUTION	BOD (t/y)	N (t/y)	P (t/y)
Industrial Sites	5.467,3	103,1	50,0
Waste disposal sites	0,0	1,8	0,0
Waste Water Treatment Plants (WWTP)	66,5	70,2	38,9
Discharges not connected to WWTP	105,6	21,1	4,4
Hotels	0,0	0,0	0,0
Aquaculture – Fish farming	66,6	13,4	2,3
TOTAL	**5.706,1**	**209,6**	**95,6**

Table 5-2. Total annual load of BOD, N and P that are produced in Pamisos - Nedontas - Neda RB (EL0132) from point sources

POINT SOURCES OF POLLUTION	BOD (t/y)	N (t/y)	P (t/y)
Industrial Sites	5.535,6	119,3	49,8
Waste disposal sites	0,6	38,4	0,2
Waste Water Treatment Plants (WWTP)	24,0	66,7	10,6
Discharges not connected to WWTP	131,5	26,3	5,5
Hotels	2,2	3,0	0,6
Aquaculture – Fish farming	7,7	55,1	7,6
TOTAL	**5.701,6**	**308,7**	**74,2**

5.2 DIFFUSE 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
- Other diffuse sources

From the above diffuse sources of pollution derives the annual load of BOD, N και P produced.

Figure 5-2. Total annual load of BOD, N and P that are produced in the RB (EL0129) and (EL0132) from diffuse sources

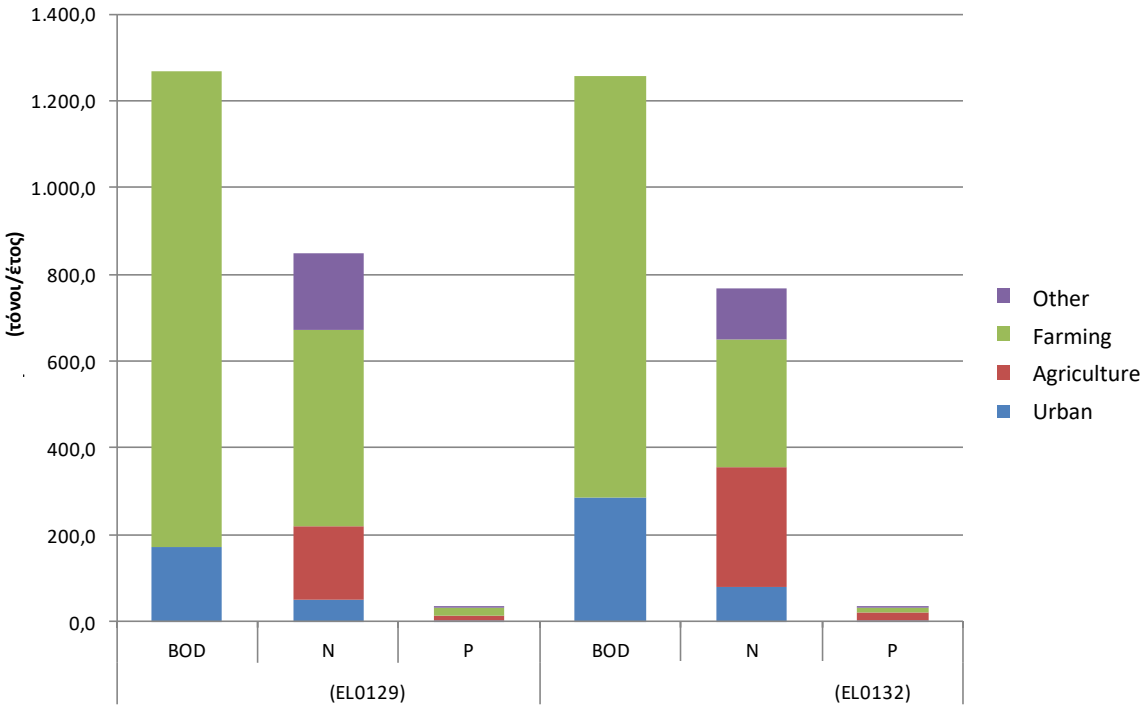


Table 5-3. Total annual load of BOD, N and P that are produced in Alfios RB (EL0129) from diffuse sources

LAND USE	BOD (t/y)	N (t/y)	P (t/y)
URBAN	171,8	49,1	1,5
AGRICULTURE	0,0	169,0	11,4
FARMING	1.095,9	453,8	18,3
OTHER SOURCES	0,0	178,1	2,1
TOTAL	**1.267,7**	**850,0**	**33,3**

Table 5-4. Total annual load of BOD, N and P that are produced in Pamisos - Nedontas - Neda RB (EL0132) from diffuse sources

LAND USE	BOD (t/y)	N (t/y)	P (t/y)
URBAN	285,5	81,6	2,4
AGRICULTURE	0,0	275,7	17,1
FARMING	972,9	291,6	10,9
OTHER SOURCES	0,0	117,6	1,6
TOTAL	**1.258,3**	**766,5**	**32,0**

5.3 HYDROMORPHOLOGICAL PRESSURES

5.3.1 Pressures related to hydromorphology

The hydromorphological alterations, that led to the designation of HMWB and AWB are presented In paragraph 4.3.

5.3.2 Sand Extraction

Sand extraction from WB can alter the geometry of river beds and cause hydromorphological alterations.

In Alfios RB (EL0129), sand extraction has been carried out in Alfios, Erimanthos, Aroanios rivers and in Lestenitsa stream. In Pamisos - Nedontas - Neda RB (EL0132), large quantities of sand have been extracted from time to time along the downstream section of Neda river and in the middle and down flow of Kalo Nero stream (Arkadikos). In addition, during the period 1986 – 87, after the earthquake in Kalamata, significant quantities of sand have been extracted from Miloi stream.

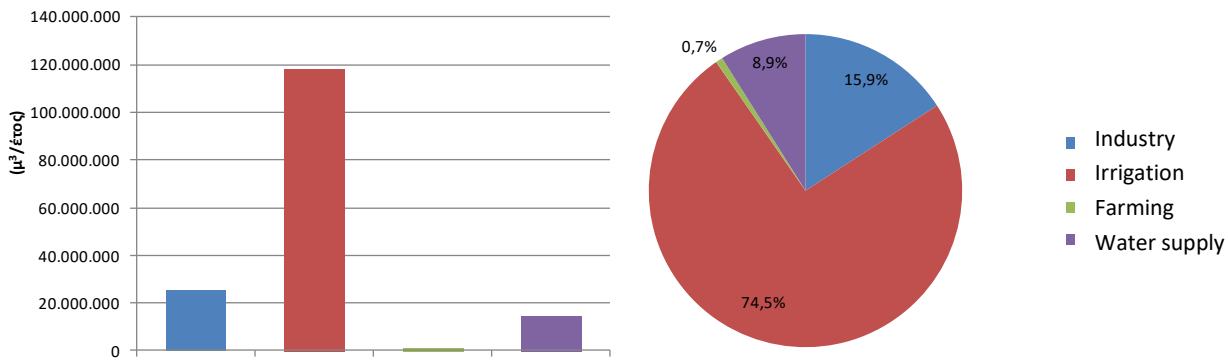
5.4 WATER ABSTRACTION

This paragraph includes information on the total annual water abstraction for all activities and uses:

- Public Water Supply
- Irrigation
- Farming
- Industry
- Other abstraction and uses

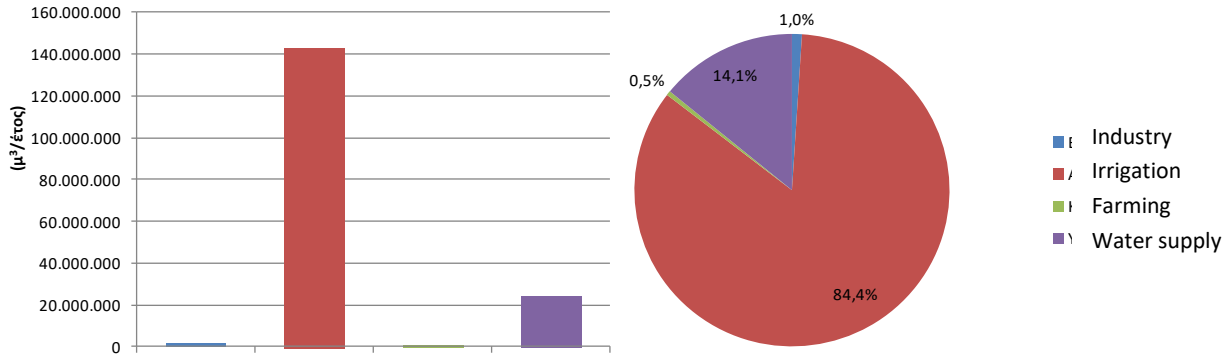
Total water abstraction in Alfios RB (EL0129) is ~158,3 hm^3 for all uses and activities. Abstraction for irrigation represents ~74,5% (~117,9 hm^3), industry ~15,9% (~25,1 hm^3), public water supply ~8,9% (~14,1 hm^3) and farming ~0,7% (~1,2 hm^3).

Figure 5-3. Total water abstraction inAlfios RB (EL0129)



Total water abstraction in Pamisos - Nedontas - Neda RB (EL0132) is ~169,2hm^3 for all uses and activities. Abstraction for irrigation represents ~84,4% (~142,8 hm^3), industry ~1,0% (~1,7 hm^3), public water supply ~14,1% (~23,9 hm^3) and farming ~0,5% (~0,8 hm^3).

Figure 5-4. Total water abstraction in Pamisos - Nedontas - Neda RB (EL0132)



5.5 OTHER PRESSURES

Other pressures include:

- Runoff from mining and quarries
- Desalination plants
- Ports – Marinas - Navigation
- Groundwater Artificial Recharge
- Groundwater Alteration of water level or volume because of underground activity

Runoff from mining and quarries

In the WesternPeloponnese RBD, there are 13 mines and 1 quarry in Alfios RB (EL0129) and 8 mines and 5 quarries in Pamisos - Nedontas - Neda RB (EL0132). Of which, one also expands into RB EL0228 of RBD EL02

Desalination plants

In the WesternPeloponnese RBD, there is 1 desalination plant in Alfios RB (EL0129) and no desalination plants in Pamisos - Nedontas - Neda RB (EL0132).

Ports- Marinas-Navigation

In the WesternPeloponnese RBD, there is 1 port in Alfios RB (EL0129) and 1 port and 15 marinas in Pamisos - Nedontas - Neda RB (EL0132).

Groundwater artificial recharge

In the WesternPeloponnese RBD, there is no artificial recharge project.

The following overexploited GWB, could benefit from artificial recharge projects: Romanou-Choras (coastal zone) (EL0100140) and Filiatra – Kyparissias (EL0100170).

Groundwater Alteration of water level or volume because of underground works

The lignite Centre of Megalopoli, owned by the Public Power Corporation, is located on the borders of Western Peloponnese RBD (EL01). Today the mines of Choremi, Marathousa and Kyparissia are in service. Significant water pumping from the Karitaina-Stemnitsa GWB make possible the service of these mines. According to information from the Public Power Corporation, the impacts from the water pumping are temporary and reversible.

5.6 TOTAL NUTRIENT LOADS

Figure 5-5. Total nutrient surface loads (BOD, N and P) produced by point, diffuse and other pollution sources in RB (EL0129) and (EL0132)

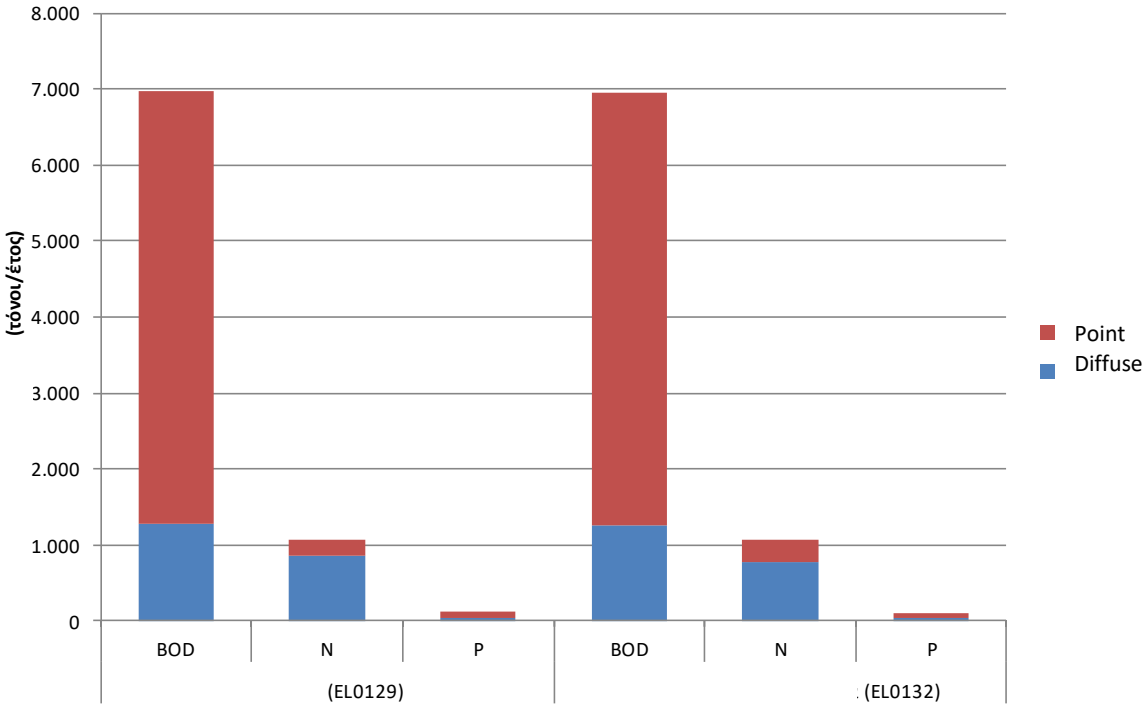


Table 5-5. Total annual nutrient surface loads (BOD, N and P) produced by all sources of pollution in Alfios RB (EL0129)

POLLUTION SOURCE	BOD (t/y)	N (t/y)	P (t/y)
POINT	5.706,1	209,6	95,6
DIFFUSE	1.267,7	850,0	33,3
TOTAL	**6.973,8**	**1.059,7**	**128,8**

Table 5-6. Total annual nutrient surface loads (BOD, N and P) produced by all sources of pollution inPamisos - Nedontas - Neda RB (EL0132)

POLLUTION SOURCE	BOD (t/y)	N (t/y)	P (t/y)
POINT	5.701,6	308,7	74,2
DIFFUSE	1.258,3	766,5	32,0
TOTAL	**6.959,9**	**1.075,2**	**106,1**

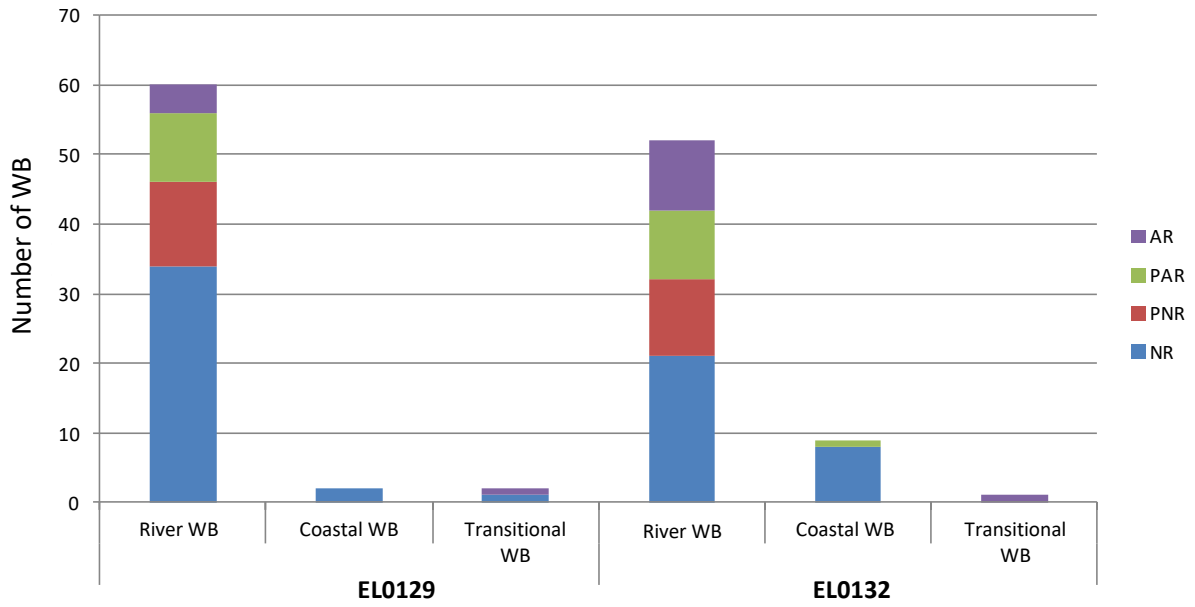
5.7 IMPACTS ASSESSMENT

5.7.1 Impacts assessment on SWB

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

Figure 5-6. Risk assessment of SWB failing to meet the WFD objectives in RBD EL01, RB EL0129 and EL0132



Alfios RB (EL0129)

Table 5-7. Risk assessment of SWB failing to meet the WFD objectives in RB Alfios RB (EL0129)– Number of WB

	Risk Assessment Categories*								
	NR – Not at Risk		PNR - Probably not at Risk		PAR –Probably At Risk		AR- At Risk		Total
WB Type	**Number of WB**	**Percentage of WB (%)**	**Number of WB**	**Percentage of WB (%)**	**Number of WB**	**Percentage of WB (%)**	**Number of WB**	**Percentage of WB (%)**	**Number of WB**
River WB	34	56,7%	12	20,0%	10	16,7%	4	6,7%	60
Lake WB	-	-	-	-	-	-	-	-	0
Transitional WB	1	50,0%	0	0,0%	0	0,0%	1	50,0%	2
Coastal WB	2	100,0%	0	0,0%	0	0,0%	0	0,0%	2
Total	**37**	**57,8%**	**12**	**18,8%**	**10**	**15,6%**	**5**	**7,8%**	**64**

Pamisos - Nedontas - Neda RB (EL0132)

Table 5-8. Risk assessment of SWB failing to meet the WFD objectives in RB Alfios RB (EL0129) – Number of WB

	Risk Assessment Categories*								
	NR – Not at Risk		PNR - Probably not at Risk		PAR –Probably At Risk		AR- At Risk		Total
WB Type	**Number of WB**	**Percentage of WB (%)**	**Number of WB**	**Percentage of WB (%)**	**Number of WB**	**WB Type**	**Number of WB**	**Percentage of WB (%)**	**Number of WB**
River WB	21	40,4%	11	21,2%	10	19,2%	10	19,2%	52
Lake WB	-	-	-	-	-	-	-	-	0
Transitional WB	0	0,0%	0	0,0%	0	0,0%	1	100,0%	1
Coastal WB	8	88,9%	0	0,0%	1	11,1%	0	0,0%	9
Total	**29**	**46,8%**	**11**	**17,7%**	**11**	**17,7%**	**11**	**17,7%**	**62**

5.7.2 Impacts assessment on GWB

Alfios RB (EL0129)

In Alfios RB (EL0129) there are 12 GWB which are in good Quantitative and Chemical status.

Table 5-9. Quantitative and Chemical status of GWB in Alfios RB (EL0129)

NO	Code	Name	Quantitative status	Decline water levels Trend	Chemical status	Quality Issues	Pollutant Trend
1	EL0100010	Systima Alfeiou	Good	No	Good	Locally	-
2	EL0100020	Systima Notiou Erymanthou	Good	No	Good	No	No
3	EL0100030	Systima Ladona	Good	No	Good	No	No
4	EL0100040	Systima Lagkadion	Good	No	Good	No	No
5	EL0100050	Systima Methydriou - Pianas	Good	No	Good	No	No
6	EL0100060	Systima Elissona	Good	No	Good	No	No
7	EL0100070	Systima Megalopolis	Good	No	Good	No	No
8	EL0100220	Systima Karytenas - Stemnitsas	Good	No	Good	No	No
9	EL0100230	Systima Lousiou - Paloumpas	Good	No	Good	No	No
10	EL0100240	Systima Minthis	Good	No	Good	No	No
11	EL0100250	Systima Zacharos	Good	No	Good	Locally	-
12	EL0100260	Systima Kaiafa	Good	No	Good	Background Levels	No

Pamisos - Nedontas - Neda RB (EL0132)

In Pamisos - Nedontas - Neda RB (EL0132) there are 15 GWB: 13 are in Good Chemical status and 2 are in poor Chemical status because of over abstraction.

Table 5-10. Quantitative and Chemical status of GWB in Pamisos - Nedontas - Neda RB (EL0132)

NO	Code	Name	Quantitative status	Decline water levels Trend	Chemical status	Quality Issues	Pollutant Trend
1	EL0100080	Systima Agiou Florou - Pidimatos	Good	No	Good	No	No
2	EL0100090	Systima Taygetou	Good	-	Good	Locally	-
3	EL0100100	Systima Pamisou	Poor	Yes	Poor	Locally	Locally
4	EL0100110	Systima Koronis	Good	No	Good	No	No

NO	Code	Name	Quantitative status	Decline water levels Trend	Chemical status	Quality Issues	Pollutant Trend
5	EL0100120	Systima Methonis	Good	No	Good	Locally	No
6	EL0100130	Systima Kynigou	Good	-	Good	Locally	No
7	EL0100140	Systima Romanou - Choras	Good	Yes	Good	Locally	Locally
8	EL0100150	Systima Gargalianon	Good	No	Good	Background Levels	No
9	EL0100160	Systima Choras	Good	No	Good	Locally	No
10	EL0100170	Systima Filiatron - Kyparissias	Good	Yes	Poor	Yes	-
11	EL0100180	Systima Kalou Nerou- Nedas	Good	No	Good	Locally	No
12	EL0100190	Systima Kyparissias - Ithomis	Good	No	Good	No	No
13	EL0100200	Systima Ano Messinias	Good	No	Good	Locally	No
14	EL0100210	Systima Diavolitsiou - Neas Figaleias	Good	No	Good	No	No
15	EL0100270	Systima Alagonias	Good	No	Good	No	No

6 STATUS OF WATER BODIES

6.1 SWB STATUS

Table 6-1. Status of River WB and evolution from the 1st RBMP

WB Code	WB Name	Ecological Status or Potential		Chemical Status	
		1st RBMP	1st Update of RBMP	1st RBMP	1st Update of RBMP
EL0129R000201001N	ALFIOS R._1	Moderate	Moderate	Poor	Good
EL0129R000202002N	LESTENITSAS STREAM_1	Unknown	Good	Unknown	Good
EL0129R000202003N	LESTENITSAS STREAM_2	Unknown	Good	Unknown	Good
EL0129R000202104N	LESTENITSAS STREAM_3	Good	Good	Unknown	Good
EL0129R000202005N	ALISIO STREAM_1	Good	Moderate	Unknown	Good
EL0129R000202006N	ALISIO STREAM_2	Good	Moderate	Unknown	Good
EL0129R000203007N	ALFIOS R._2	Moderate	Good	Unknown	Good
EL0129R000204008N	SELINOUS R._1	Unknown	Good	Unknown	Good
EL0129R000204009N	SELINOUS R._2	Unknown	Moderate	Unknown	Good
EL0129R000205010N	ALFIOS R._3	Moderate	Moderate	Unknown	Good
EL0129R000206011N	ERIMANTHOS R._1	Good	Good	Unknown	Poor
EL0129R000206112N	SIREO STREAM_1	Good	Good	Unknown	Good
EL0129R000206113N	SIREO STREAM_2	Good	Good	Unknown	Good
EL0129R000206114N	SIREO STREAM_3	Good	Good	Unknown	Good
EL0129R000206015N	ERIMANTHOS R._2	Good	Good	Unknown	Good
EL0129R000206216N	AROANIOS R._1	Good	Good	Unknown	Good
EL0129R000206217N	AROANIOS R._2	Good	Good	Unknown	Good
EL0129R000206018N	ERIMANTHOS R._3	Good	Good	Unknown	Good
EL0129R000206019N	ERIMANTHOS R._4	Good	Good	Unknown	Good
EL0129R000207020N	ALFIOS R._4	Unknown	Moderate	Poor	Unknown
EL0129R000208021N	LADON R._1	Good	Good	Unknown	Good
EL0129R000208022N	LADON R._2	Good	Good	Unknown	Good
EL0129R000208123N	LAGADIANO STREAM_1	Good	Good	Unknown	Good
EL0129R000208124N	LAGADIANO STREAM_2	Good	Good	Unknown	Good
EL0129R000208025H	LADON R._3	Good	Poor	Unknown	Poor
EL0129R000208026N	LADON R._4	High	Good	Unknown	Good
EL0129R000208227N	PAOS R.	Good	Good	Unknown	Good
EL0129R000208028N	LADON R._5	Moderate	Good	Unknown	Good
EL0129R000208329N	TRAGOS STREAM_1	Good	Good	Unknown	Poor
EL0129R000208330N	TRAGOS STREAM_2	Good	Good	Unknown	Unknown
EL0129R000208331N	TRAGOS STREAM_3	Good	Good	Poor	Good
EL0129R000208032N	AROANIOS R._3	Good	Good	Unknown	Good
EL0129R000208433N	AROANIOS R._4	Good	Good	Good	Unknown
EL0129R000208034N	XEROREMA STREAM_1	Good	Good	Unknown	Good
EL0129R000208035N	XEROREMA STREAM_2	Good	Good	Unknown	Good
EL0129R000209036N	ALFIOS R._5	Unknown	Good	Unknown	Good
EL0129R000210037N	ROGOZITIKO STREAM	Good	Good	Unknown	Good
EL0129R000211038N	ALFIOS R._6	Good	Good	Unknown	Good
EL0129R000212039N	DIPOTAMO STREAM	Good	Good	Unknown	Good
EL0129R000213040N	ALFIOS R._7	Good	Moderate	Unknown	Good
EL0129R000214041N	LOUSIOS R._1	Good	Good	Unknown	Unknown

WB Code	WB Name	Ecological Status or Potential		Chemical Status	
		1st RBMP	1st Update of RBMP	1st RBMP	1st Update of RBMP
EL0129R000214042N	LOUSIOS R._2	Good	Good	Unknown	Good
EL0129R000215043N	ALFIOS R._8	Unknown	Moderate	Unknown	Unknown
EL0129R000215044H	ALFIOS R._9	Unknown	Moderate	Unknown	Good
EL0129R000216045N	ELISSON R._1	Unknown	Bad	Poor	Unknown
EL0129R000216046N	ELISSON R._2	Good	Bad	Unknown	Good
EL0129R000216047N	ELISSON R._3	Good	Good	Unknown	Good
EL0129R000216048N	ELISSON R._4	Good	Good	Unknown	Good
EL0129R000216049N	ELISSON R._5	Unknown	Good	Unknown	Unknown
EL0129R000217050H	ALFIOS R._10	Unknown	Unknown	Unknown	Unknown
EL0129R000217051A	ALFIOS R. DIVERSION_1	Unknown	Bad	Unknown	Good
EL0129R000218052N	XERILAS STREAM	Unknown	Good	Unknown	Unknown
EL0129R000219053A	ALFIOS R. DIVERSION_2	Unknown	Unknown	Unknown	Unknown
EL0129R000219054N	ALFIOS R._11	Moderate	Poor	Unknown	Good
EL0129R000220055N	KOUNTIFARINA STREAM	Good	Good	Unknown	Good
EL0129R000221056N	ALFIOS R._12	Unknown	Good	Unknown	Good
EL0129R000221057N	ALFIOS R._13	Good	Good	Unknown	Good
EL0129R000221058N	ALFIOS R._14	Good	Good	Unknown	Good
EL0129R000221059N	ALFIOS R._15	Good	Good	Unknown	Good
EL0132R000300001N	VELIKA STREAM_1	Poor	Good	Good	Good
EL0132R000300002N	VELIKA STREAM_2	Unknown	Good	Unknown	Good
EL0132R000500003N	KLISOUREIKO STREAM	Poor	Good	Good	Good
EL0132R000500004N	MINAGIOTIKO STREAM_1	Unknown	Good	Unknown	Good
EL0132R000500005N	MINAGIOTIKO STREAM_2	Unknown	Good	Unknown	Good
EL0132R000700006N	GIANNOUZAGAS STREAM_1	Unknown	Good	Unknown	Good
EL0132R000700007N	GIANNOUZAGAS STREAM_2	Unknown	Moderate	Unknown	Good
EL0132R000901008N	SELAS STREAM	Unknown	Moderate	Unknown	Good
EL0132R000902009N	ALAFINOREMA STREAM	Unknown	Moderate	Unknown	Good
EL0132R000903010N	KAMPIROVA STREAM	Unknown	Good	Unknown	Good
EL0132R000900011N	LAGOUVARDOS STREAM	Unknown	Moderate	Unknown	Good
EL0132R000900012N	FILIATRINO STREAM_1	Unknown	Good	Unknown	Good
EL0132R000900013H	FILIATRINO STREAM_2	Unknown	Unknown	Unknown	Good
EL0132R000900014N	FILIATRINO STREAM_3	Unknown	Good	Unknown	Good
EL0132R000900015N	FILIATRINO STREAM_4	Unknown	Good	Unknown	Good
EL0132R001100017N	KALO NERO STREAM_2	Poor	Moderate	Good	Unknown
EL0132R001100018N	KALO NERO STREAM_3	Unknown	Moderate	Unknown	Unknown
EL0132R001100019N	KALO NERO STREAM_4	Moderate	Good	Good	Good
EL0132R001500020N	NEDA R._1	Moderate	Poor	Poor	Good
EL0132R001500021N	NEDA R._2	Unknown	Moderate	Unknown	Good
EL0132R001500022N	NEDA R._3	Unknown	Good	Unknown	Good

WB Code	WB Name	Ecological Status or Potential		Chemical Status	
		1st RBMP	1st Update of RBMP	1st RBMP	1st Update of RBMP
EL0132R000201023H	PAMISOS R._1	Poor	Moderate	Poor	Good
EL0132R000201024H	PAMISOS R._2	Poor	Unknown	Good	Unknown
EL0132R000201025N	PAMISOS R._3	Unknown	Moderate	Unknown	Unknown
EL0132R000202026H	AGIOS FLOROS STREAM_1	Unknown	Unknown	Unknown	Good
EL0132R000202027H	AGIOS FLOROS STREAM_2	Good	Bad	Good	Good
EL0132R000203028N	MAVROZOUMENA STREAM_1	Unknown	Good	Unknown	Good
EL0132R000203029N	MAVROZOUMENA STREAM_2	Unknown	Moderate	Unknown	Good
EL0132R000204030H	MEGALO POTAMI STREAM_1	Moderate	Unknown	Good	Good
EL0132R000204131H	TZAMIS STREAM_1	Poor	Unknown	Poor	Unknown
EL0132R000204132N	TZAMIS STREAM_2	Unknown	Good	Unknown	Good
EL0132R000204033H	MEGALO POTAMI STREAM_2	Unknown	Unknown	Unknown	Good
EL0132R000204034N	MEGALO POTAMI STREAM_3	Unknown	Good	Unknown	Good
EL0132R000205035N	HOUHLOTOS STREAM	Good	Good	Unknown	Good
EL0132R000206036N	MALTHIS STREAM	Good	Good	Unknown	Good
EL0132R000207037N	KLISOUREIKO 2 STREAM	Unknown	Good	Unknown	Good
EL0132R000201038H	ARIS R._1	Unknown	Good	Unknown	Good
EL0132R000202039H	TZIROREMA STREAM_1	Unknown	Unknown	Unknown	Good
EL0132R000202040N	TZIROREMA STREAM_2	Unknown	Moderate	Unknown	Unknown
EL0132R000202041N	TZIROREMA STREAM_3	Unknown	Good	Unknown	Good
EL0132R000203042H	ARIS R._2	Moderate	Unknown	Good	Good
EL0132R000203043H	ARIS R._3	Unknown	Moderate	Unknown	Good
EL0132R000203044N	ARIS R._4	Moderate	Good	Good	Good
EL0132R001700045H	NEDON R._1	Unknown	Moderate	Unknown	Good
EL0132R001700046N	NEDON R._2	Unknown	Good	Unknown	Good
EL0132R001700047N	NEDON R._3	Unknown	Good	Unknown	Good
EL0132R001700048N	NEDON R._4	Good	Good	Unknown	Good
EL0132R002100049N	MILOI STREAM_1	Unknown	Good	Unknown	Good
EL0132R002100050N	MILOI STREAM_2	Unknown	Good	Unknown	Good
EL0132R002100051N	MILOI STREAM_3	Good	Good	Unknown	Good

Table 6-2. Status of Reservoirs WB and evolution from the 1st RBMP

WB Code	WB Name	Ecological Status or Potential		Chemical Status	
		1st RBMP	1st Update of RBMP	1st RBMP	1st Update of RBMP
EL0129RL00208001H	LADON ARTIF.LAKE	Unknown	Good	Unknown	Good
EL0132RL00900001H	FILIATRINO ARTIF.LAKE	Unknown	Unknown	Unknown	Unknown

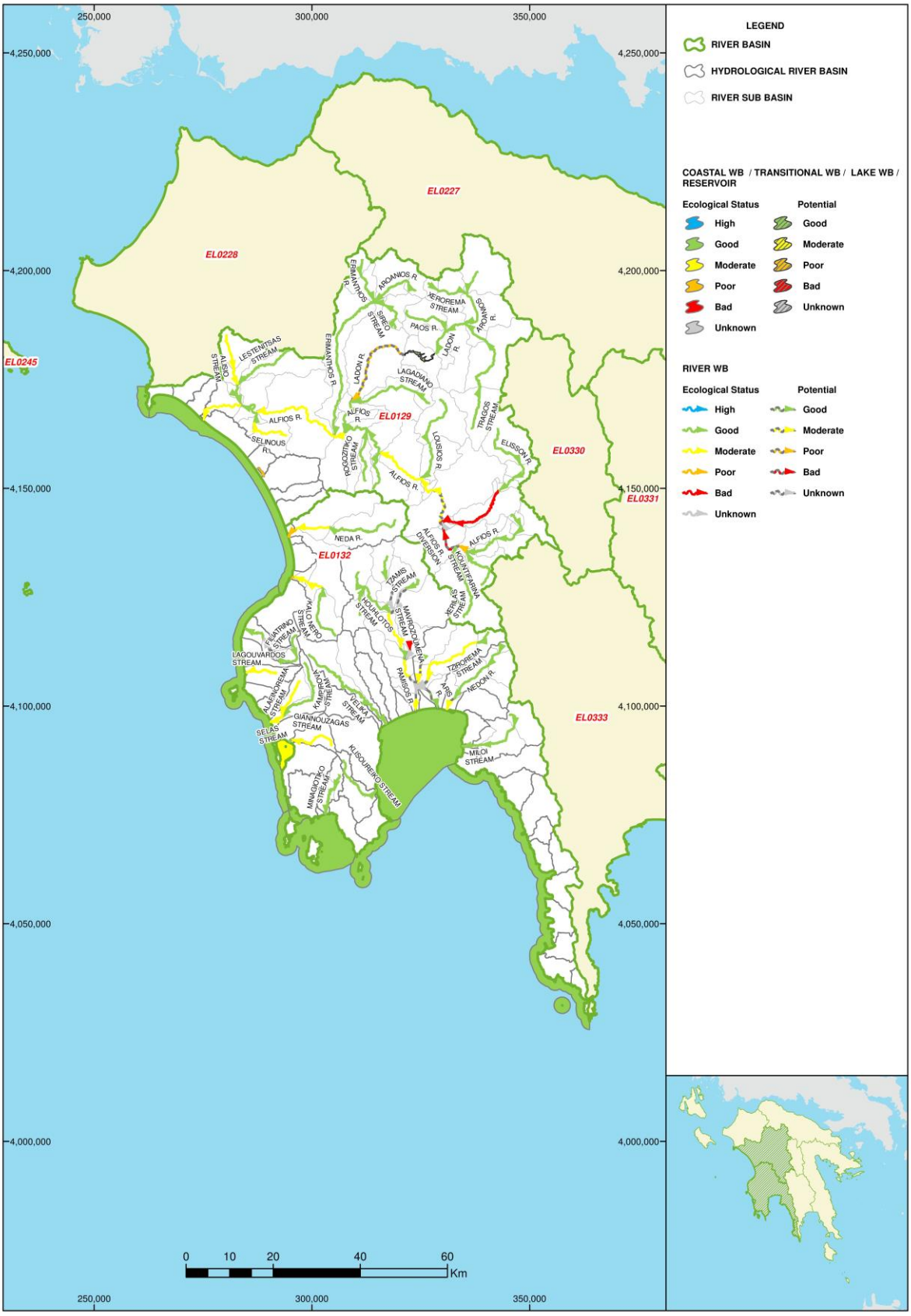
Table 6-3. Status of Transitional WB and evolution from the 1st RBMP

WB Code	WB Name	Ecological Status or Potential		Chemical Status	
		1st RBMP	**1st Update of RBMP**	**1st RBMP**	**1st Update of RBMP**
EL0129T0001N	ALFIOS R. ESTUARIES	Unknown	Unknown	Unknown	Unknown
EL0129T0002N	KAIAFAS LAGOON	Good	Poor	Unknown	Good
EL0132T0003N	YALOVA LAGOON	Moderate	Poor	Unknown	Good

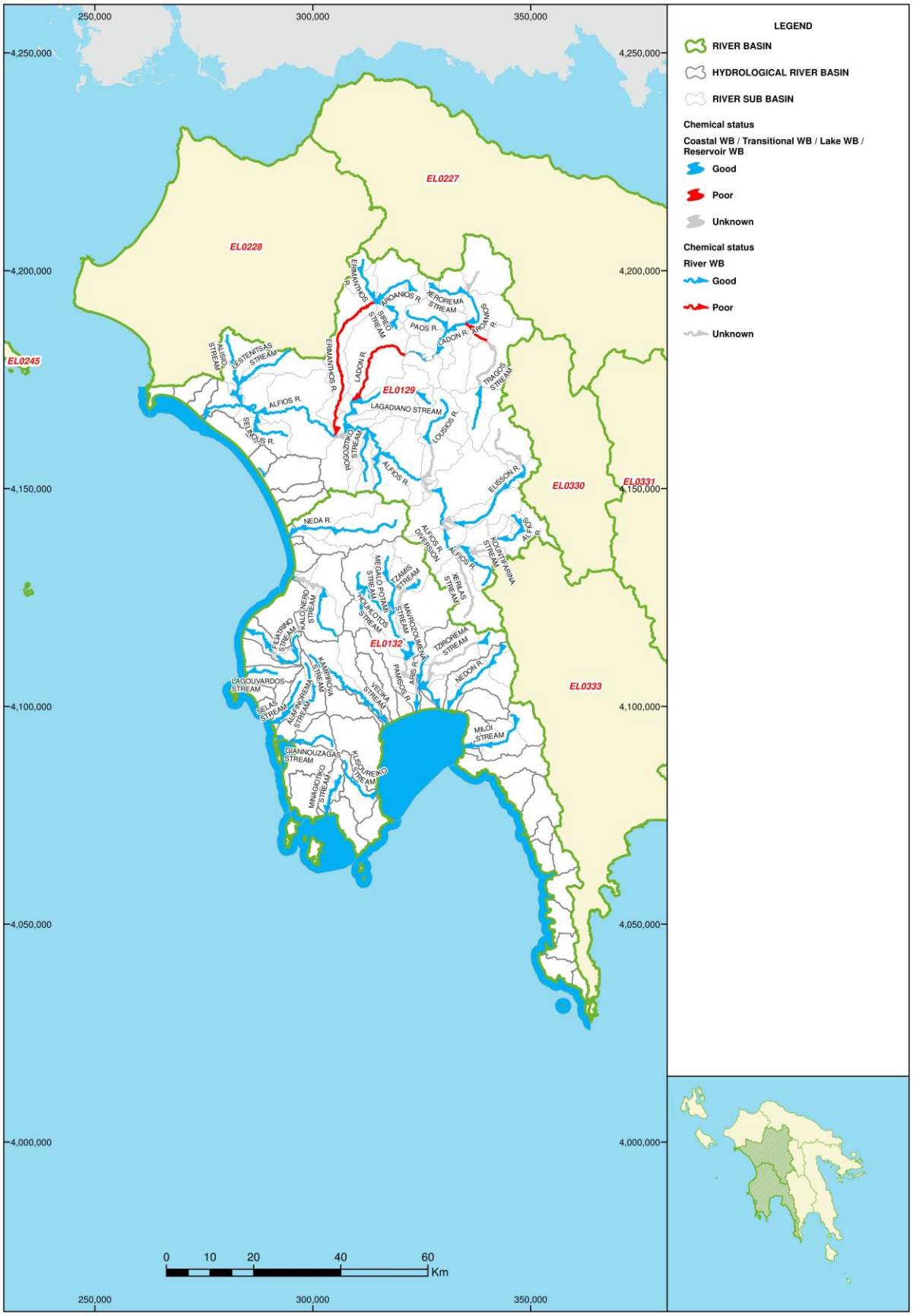
Table 6-4. Status of Coastal WB and evolution from the 1st RBMP

WB Code	WB Name	Ecological Status or Potential		Chemical Status	
		1st RBMP	**1st Update of RBMP**	**1st RBMP**	**1st Update of RBMP**
EL0129C0001N	KATAKOLO CAPE	High	Good	Unknown	Good
EL0129C0002N	KIPARISSIAKOS GULF	Good	Good	Unknown	Good
EL0132C0003N	GREEK COASTS OF MESSINIA IN THE IONIAN SEA	High	Good	Unknown	Good
EL0132C0004N	NAVARINO BAY (PILOS)	Good	Moderate	Unknown	Good
EL0132C0005N	METHONI CHANNEL	High	Good	Unknown	Good
EL0132C0006N	METHONI BAY	High	Good	Unknown	Good
EL0132C0007N	AKRITAS CAPE	High	Good	Unknown	Good
EL0132C0008N	KALAMATA GULF	Good	Good	Unknown	Good
EL0132C0009N	TAINARO - MESSINIAKOS	High	Good	Unknown	Good
EL0132C0010N	METHONI WEST COAST	High	Good	Unknown	Good
EL0132C0011N	TAINAROS ISLET	High	Good	Unknown	Good

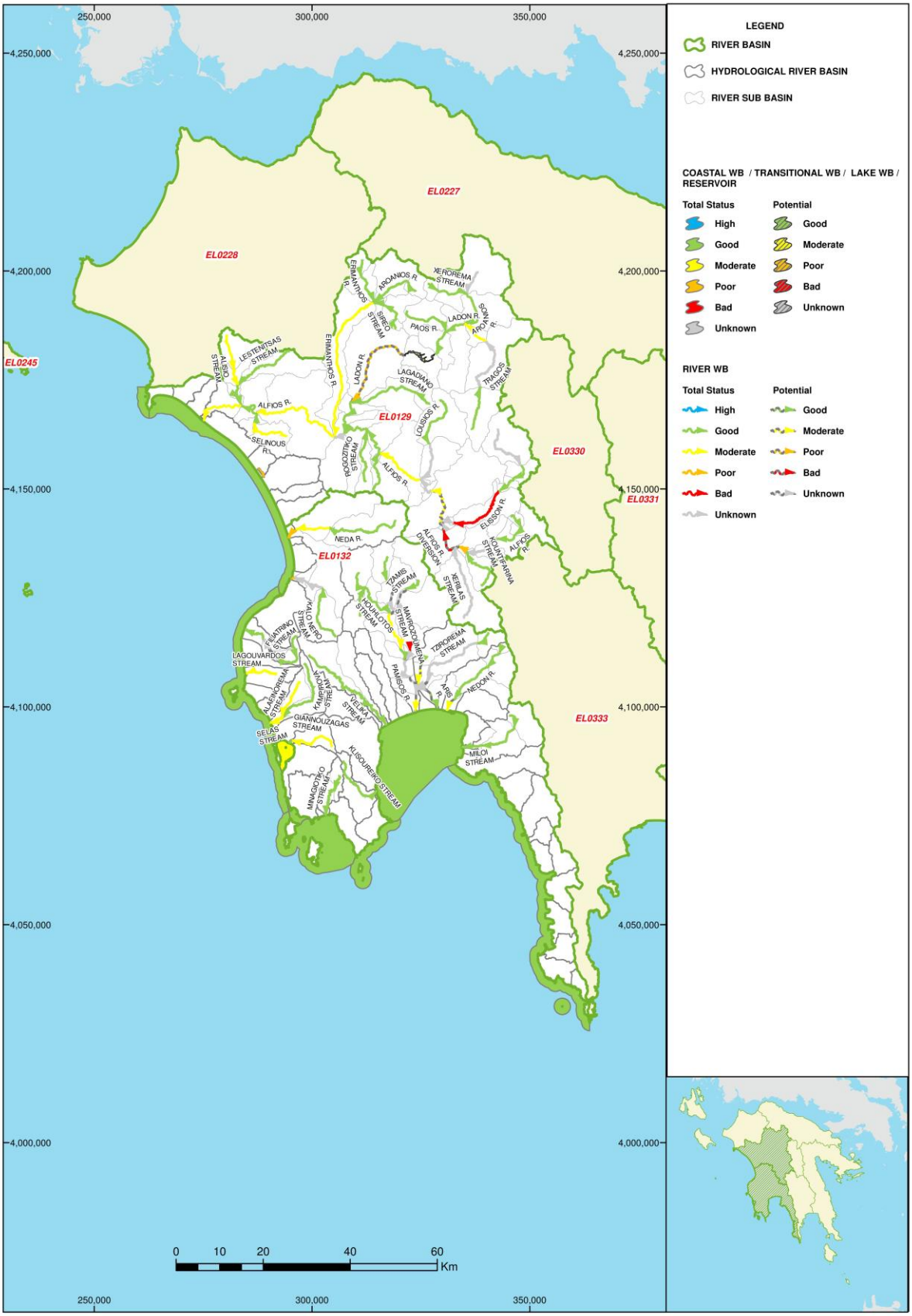
Map 5. Ecological status of SWB in RBD EL01



Map 6. Chemical status of SWB in RBD EL01



Map 7. Total status of SWB in RBD EL01



6.2 GWB STATUS

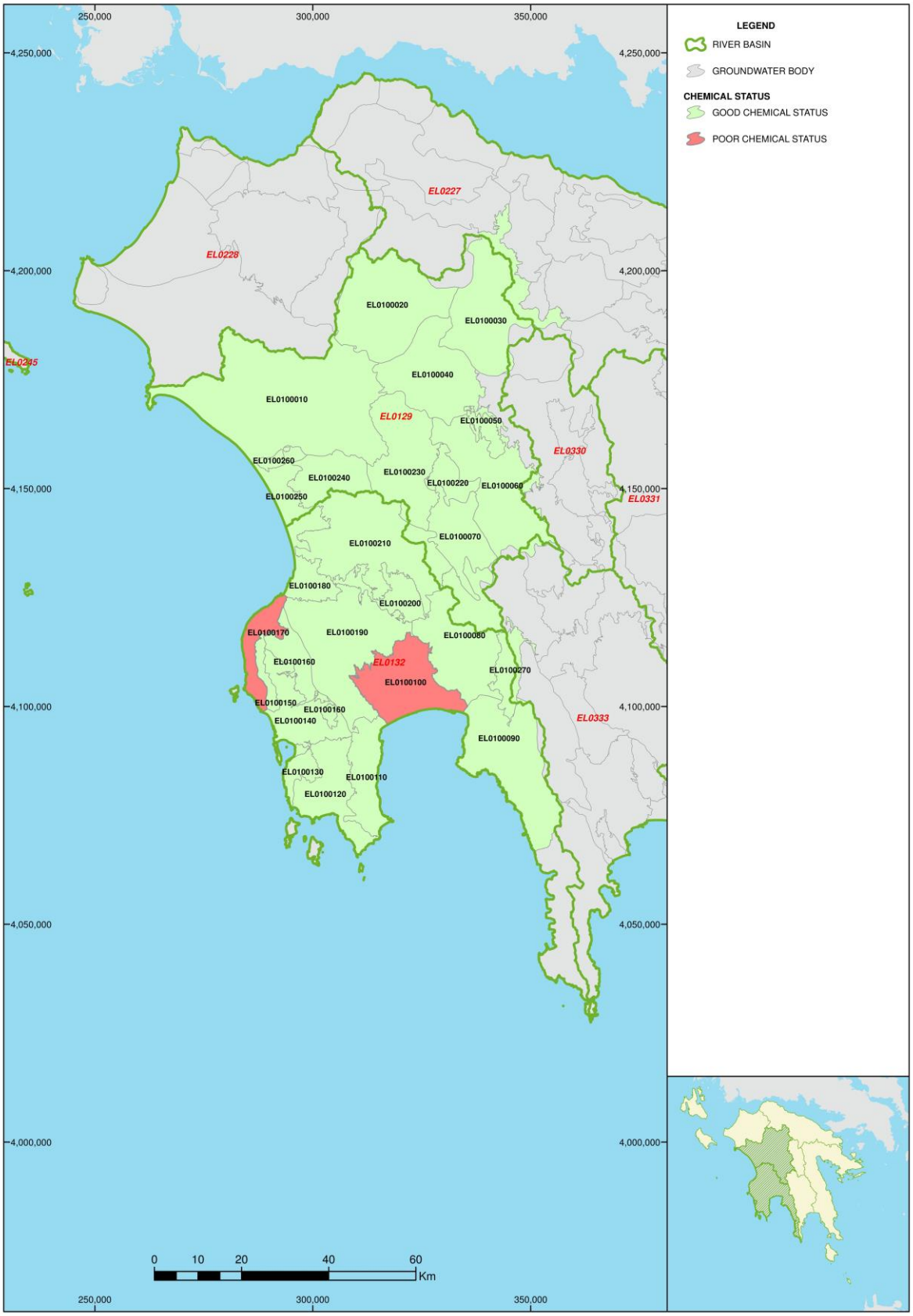
Table 6-5. Status of GWB and evolution from the 1st RBMP in Alfios RB (EL0129)

		1st RBMP		1st Update of RBMP	
GWB Code	**GWB Name**	**Chemical status**	**Quantitative status**	**Chemical status**	**Quantitative status**
EL0100010	Systima Alfeiou	Good	Good	Good	Good
EL0100020	Systima Notiou Erymanthou	Good	Good	Good	Good
EL0100030	Systima Ladona	Good	Good	Good	Good
EL0100040	Systima Lagkadion	Good	Good	Good	Good
EL0100050	Systima Methydriou - Pianas	Good	Good	Good	Good
EL0100060	Systima Elissona	Good	Good	Good	Good
EL0100070	Systima Megalopolis	Good	Good	Good	Good
EL0100220	Systima Karytenas - Stemnitsas	Good	Good	Good	Good
EL0100230	Systima Lousiou - Paloumpas	Good	Good	Good	Good
EL0100240	Systima Minthis	Good	Good	Good	Good
EL0100250	Systima Zacharos	Good	Good	Good	Good
EL0100260	Systima Kaiafa	Good	Good	Good	Good

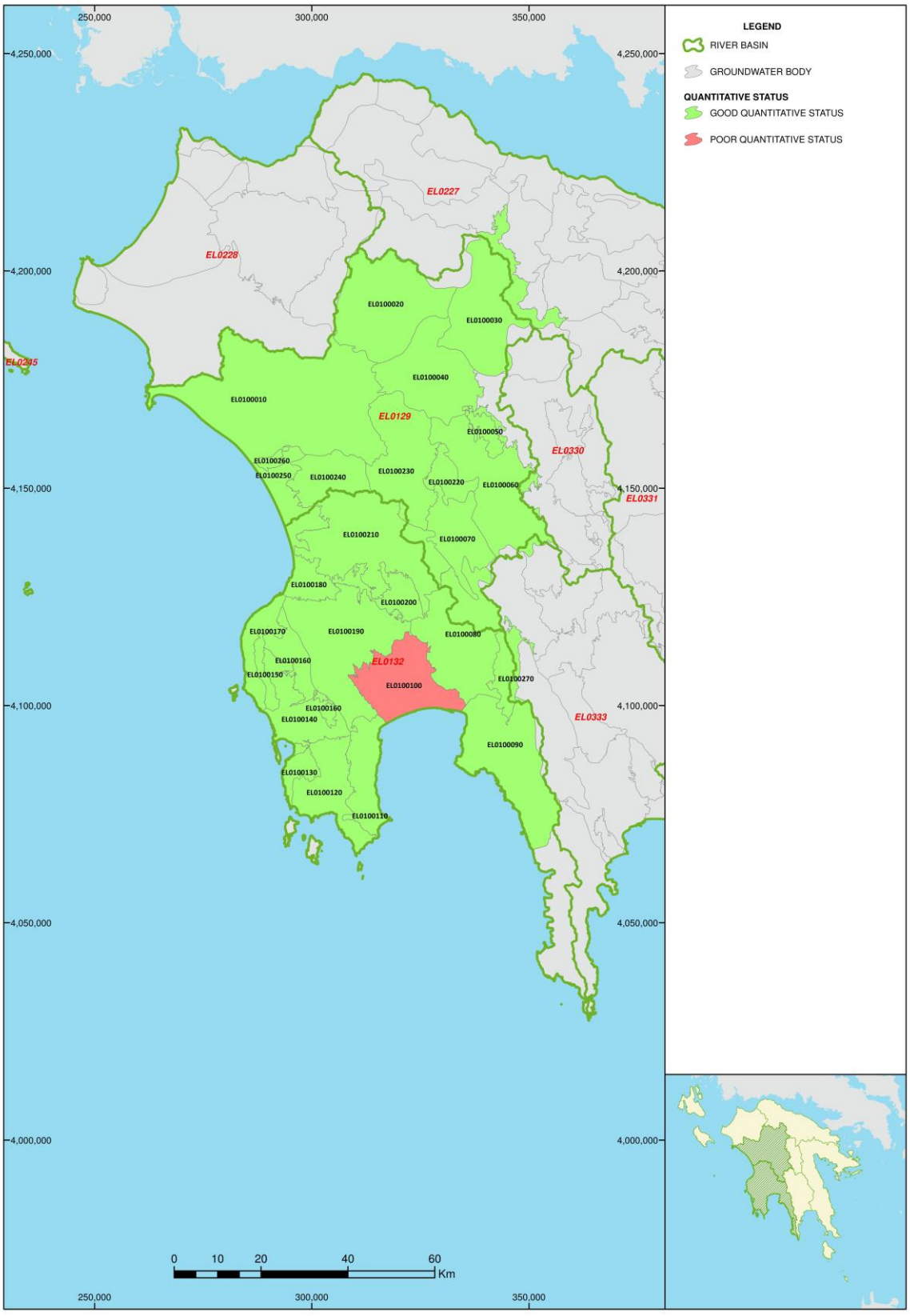
Table 6-6. Status of GWB and evolution from the 1st RBMP in Pamisos - Nedontas - Neda RB (EL0132)

		1st RBMP		1st Update of RBMP	
GWB Code	**GWB Name**	**Chemical status**	**Quantitative status**	**Chemical status**	**Quantitative status**
EL0100080	Systima Agiou Florou - Pidimatos	Good	Good	Good	Good
EL0100090	Systima Taygetou	Good	Good	Good	Good
EL0100100	Systima Pamisou	Poor	Poor	Poor	Poor
EL0100110	Systima Koronis	Good	Good	Good	Good
EL0100120	Systima Methonis	Good	Good	Good	Good
EL0100130	Systima Kynigou	Good	Good	Good	Good
EL0100140	Systima Romanou - Choras	Good	Good	Good	Good
EL0100150	Systima Gargalianon	Good	Good	Good	Good
EL0100160	Systima Choras	Good	Good	Good	Good
EL0100170	Systima Filiatron - Kyparissias	Poor	Poor	Poor	Good
EL0100180	Systima Kalou Nerou- Nedas	Good	Good	Good	Good
EL0100190	Systima Kyparissias - Ithomis	Good	Good	Good	Good
EL0100200	Systima Ano Messinias	Good	Good	Good	Good
EL0100210	Systima Diavolitsiou - Neas Figaleias	Good	Good	Good	Good

Map 8. Chemical status of GWB in RBD EL01



Map 9. Quantitative status of GWB in RBD EL01



7 ECONOMIC ANALYSIS

7.1 WATER SERVICES FINANCIAL COST

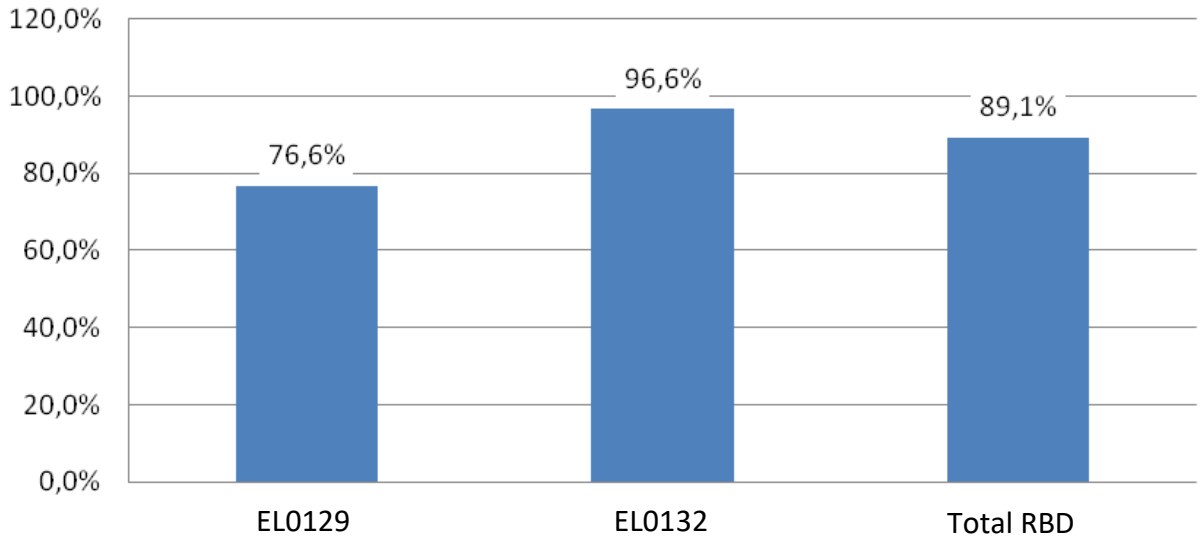
7.1.1 Drinking water supply, sewage collection and wastewater treatment

The total financial cost of drinkingwater supply, sewage collection and wastewater treatment in Western Peloponnese RBD(EL01) is 15.948.146 €. Cost recovery is 89,1% (revenues 14,22 M € - 15,94 M € expenses).

Table 7-1. Financial Cost Recovery for Water Supply

RB	Total Financial Cost (€)	Average Financial Cost (€/m³)	Total Revenues (€)	Average Revenues (€/m³)	Financial Cost Recovery
Alfios RB (EL0129)	5.960.353	0,626	4.567.992	0,480	76,6%
Pamisos - Nedontas - Neda RB (EL0132)	9.987.793	0,653	9.649.218	0,631	96,6%
Total RBD EL01	**15.948.146**	**0,643**	**14.217.210**	**0,573**	**89,1%**

Figure 7-1. Financial Cost Recovery for Water Supply



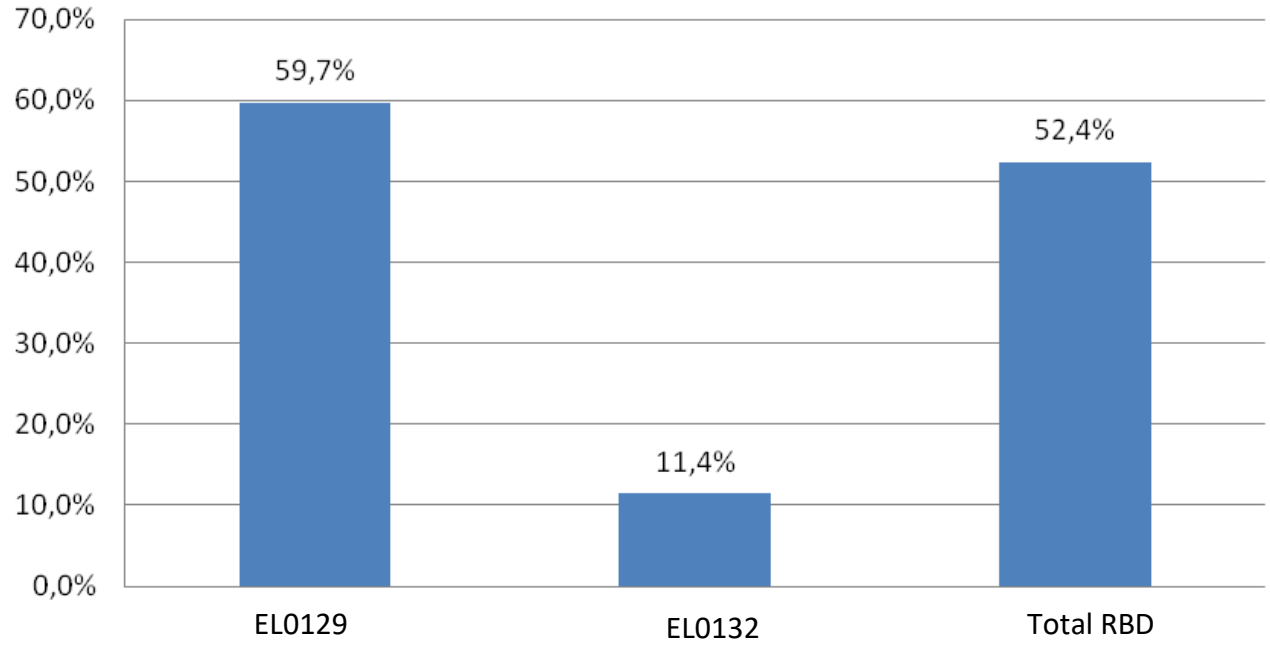
7.1.2 Irrigation

The total financial cost for Irrigation services in Western Peloponnese RBD (EL01) is 5.939.176 €. Cost recovery is 52,4 % (revenues 3,11 M € - 5,94 M € expenses).

Table 7-2. Financial Cost Recovery for Irrigation services

RB	Total Financial Cost (€)	Average Financial Cost (€/m³)	Total Revenues (€)	Average Revenues (€/m³)	Financial Cost Recovery
Alfios RB (EL0129)	5.039.835	0,140	3.010.409	0,084	59,7%
Pamisos - Nedontas - Neda RB (EL0132)	899.341	0,051	102.524	0,006	11,4%
Total RBD EL01	**5.939.176**	**0,111**	**3.112.933**	**0,058**	**52,4%**

Figure 7-2. Financial Cost Recovery for Irrigation services



7.2 ENVIRONMENTAL COST AND RESOURCE COST

7.2.1 Environmental Cost

The annual Environmental Cost in the RBD is 150.000 €. 50% in Alfios RB (EL0129) and 50% in Pamisos - Nedontas - Neda RB (EL0132). The Average Environmental Cost in the RBD is 0,0005 €/m^3.

Table 7-3. Annual Environmental Cost

RB	Annual Environmental Cost (€)	Average EnvironmentalCost (€/m^3)
Alfios RB (EL0129)	75.000	0,0006
Pamisos - Nedontas - Neda RB (EL0132)	75.000	0,0004
Total RBD EL01	**150.000**	**0,0005**

It is noted that in this RBD there is no Environmental Cost generated fromthe Industrial Water Use /Services.

Table 7-4. Distribution of the Environmental cost per Service

Environmental Cost	Water Supply	Irrigation	Total
Alfios RB (EL0129)			
Total cost for all years of PoM implementation (€) (2018-2021, 4 years)	0	300.000	300.000
Annual cost per service (€)	0	75.000	75.000
Percentage (%)	0,0%	100,0%	100,0%
Average Annual Cost (€/m^3)	0	0,00064	0,00057
Pamisos - Nedontas - Neda RB (EL0132)			
Total cost for all years of PoM implementation (€) (2018-2021, 4 years)	0	300.000	300.000
Annual cost per service (€)	0	75.000	75.000
Percentage (%)	0,0%	100,0%	100,0%
Average Annual Cost (€/m^3)	0	0,00053	0,00045

In Alfios RB (EL0129) and in Pamisos - Nedontas - Neda RB (EL0132) 100% of the total annual Environmental Cost is due to the Irrigation Service.

7.2.2 Resource cost

The annual Resource Cost in the RBD is 12.500 €. 100% in Pamisos - Nedontas - Neda RB (EL0132). The Average Resource Cost in the RBD is 0,04 €/ 1000 m^3.

Table 7-5. Annual Resource Cost

RB	Annual Resource Cost (€)	Average Resource Cost (€/1000 m^3)
Alfios RB (EL0129)	0	0
Pamisos - Nedontas - Neda RB (EL0132)	12.500	0,0750
Total RBD EL01	**37.500**	**0,0418**

It is noted that in this RBD, no Resource Cost is generated from the Industrial Water Use /Service.

Table 7-6. Distribution of the Resource Cost per Service

Resource Cost	Water Service	Irrigation	Total
Alfios RB (EL0129)			
Total cost for all years of PoM implementation (€) (2018-2021, 4 years)	0	0	0
Annual cost per service (€)	0	0	0
Percentage (%)	0,0%	0,0%	0,0%
Average Annual Cost (€/m^3)	0	0	0
Pamisos - Nedontas - Neda RB (EL0132)			
Total cost for all years of PoM implementation (€) (2018-2021, 4 years)	0	50.000	50.000
Annual cost per service (€)	0	12.500	12.500
Percentage (%)	0,0%	100,0%	100,0%
Average Annual Cost (€/m^3)	0	0,00026	0,00022

100% of the total annual Resource Cost is due to the IrrigationService in Pamisos - Nedontas - Neda RB (EL0132). No Resource Cost is generated from other uses/services.

8 ENVIRONMENTAL OBJECTIVES -EXEMPTIONS

The environmental objectives set for the 126 SWB of the RBD by 2021 are presented in the following table:

Table 8-1. SWB Environmental objectives by 2021

Environmental Objective	Number of SWB
Maintain good / high ecological status/potential	81
Maintain good chemical status	104
Achieve good ecological status	8
Achieve good chemical status	3
Identify ecological status/potential	12
Determine the chemical status	19
Exemption Article 4.4 (Deadline extension)	45
Exemption Article 4.5 (Less strict environmental objectives)	0
Exemption Article 4.6 (Temporary deterioration)	0
Exemption Article 4.7 (New modifications)	0

The environmental objectives set for the 27 GWB of the RBD by 2021 are presented in the following table:

Table 8-2. GWB Environmental objectives by 2021

Environmental Objective	Number of GWB
Maintain good quantitative status	26
Maintain good chemical status	25
Achieve good quantitative status	0
Achieve good chemical status	0
Exemption Article 4.4 (Deadline extension)	2
Exemption Article 4.5 (Less strict environmental objectives)	0
Exemption Article 4.6 (Temporary deterioration)	0
Exemption Article 4.7 (New modifications)	0

8.1 DEADLINE EXTENSION (ARTICLE 4.4 DIRECTIVE 2000/60/EC)

Table 8-3. WB exemptions 2021

	EXEMPTIONS		Number of WB
	CATEGORY	SUB-CATEGORY	
SWB Ecological status	Article 4.4 (Deadline extension)	It takes longer to fix the problem than there is time available	20
SWB Ecological status	Article 4.4 (Deadline extension)	There is no information on the cause of the problem so the solution cannot be identified	25
GWB Quantitative Status	Article 4.4 (Deadline extension)	It takes longer to fix the problem than there is time available	1
GWB Chemical Status	Article 4.4 (Deadline extension)	It takes longer to fix the problem than there is time available	2

8.2 LESS STRICT ENVIRONMENTAL OBJECTIVES (ARTICLE 4.5 DIRECTIVE 2000/60/EC)

In the present Update of RBMP, no less strict environmental objectives are set for any GWB or SWB. This exemption category will be reviewed in the next Update of RBMP, taking into consideration the new monitoring data and after evaluating technically feasible measures.

8.3 TEMPORARY DETERIORATION (ARTICLE 4.6 DIRECTIVE 2000/60/EC)

In the present Update of RBMP, no temporary deterioration is foreseeing for any GWB or SWB. This exemption category will be reviewed in the next Update of RBMP, taking into consideration the new monitoring data and after evaluating technically feasible measures.

8.4 NEW MODIFICATIONS (ARTICLE 4.7 DIRECTIVE 2000/60/EC)

The 1st Update of RBMP defines the procedure for considering the potential inclusion in Article 4.7 of Directive 2000/60 / EC of water bodies affected by programmed projects.

For this purpose, a specific analytical methodology has been developed, which is available on the relevant website of the Special Secretariat of Water http://wfdver.ypeka.gr/. The implementation procedure of Article 4.7 is set out in detail, is in force since the adoption of this Management Plan and concerns planned projects for which no environmental permit dossier has been filed or in cases where according to the existing legislation there is no requirement for approval of environmental terms, a request for authorization to build, install or operate has not been filed by the competent body, as appropriate.

9 PROGRAMME OF MEASURES

The Programme of Measures is part of the Management Plan and is the "mechanism" for achieving the environmental objectives set. Especially the implementation of the Programme 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 water bodies, the prevention of their pollution and the deterioration of their water status in order to balance between abstraction and renewal.
- 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 Directive are the minimum requirements to be met and include:

• Measures for the implementation of EU and national legislation on water protection (**Group I**).

• Other Basic Key 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.

9.1 PROGRESS OF IMPLEMENTATION OF THE 1ST RBMP POM

The PoM of the 1st RBMP included 51 Basic Measures (13 Group I and 38 Group II).

Table 9-1. Number of Basic Measures of 1st RBMP per category of Actions

Actions concerning measures	Number of measures
Administrative acts	6+10=16
Constructions	2+3=5
Studies	0+6=6
Measures relating to administrative acts but requiring specific studies or surveys	2+17=19
Measures relating to Services / advisory actions	3+2=5
Total	**13+38=51**

Table 9-2. Progress of the implementation of the Basic Measures of the Program of Measures of the 1st RBMP

Category of Measures	Total number of measures	Number of measures already implemented	Number of measures in progress / under construction	Number of measures not started
EU Directive measures	13	7	6	
Measures deemed appropriate for the purposes of Article 9 (cost recovery)	1	1		
Measures to promote an efficient and sustainable water use in order to avoid compromising the achievement of the objectives specified in Article 4	6	2	4	0

Category of Measures	Total number of measures	Number of measures already implemented	Number of measures in progress / under construction	Number of measures not started
Measures to meet the requirements of Article 7 (drinking water)	6		6	
Measures for thecontrols over the abstraction of surface water and groundwater	6	4	2	
Measures for thecontrols of artificial recharge of GWB	3	0	3	
Measures for point source discharges	9	3	5	1
Measures for diffuse sources liable to cause pollution	3	1	2	
Measures for any other significant adverse impacts on the status of water	2		2	
Special Measures for the priority substances and other substances				
Measures for the prevention of accidental pollution incidents / extreme whether events	2	2		
Total	**13+38=51**	**7+13=20**	**6+24=30**	**0+1=1**

In addition to the above basic measures, the program of measures of the 1st RBMP included 86 supplementary measures, of which 11 are horizontal supplementary, covering 12 categories of measures of Directive 2000/60/EC.

Table 9-3. Progress of the implementation of the Supplementary Measures of the Program of Measures of the 1st RBMP

Category of Measures	Total number of measures	Number of measures already implemented	Number of measures in progress / under construction	Number of measures not started
Legislative instruments	9	0	4	5
Administrative instruments	3	0	3	0
Negotiated environmental agreements	1	0	0	1
Emission controls	4	0	4	0
Recreation and restoration of wetlands areas	5	0	0	5
Abstraction controls	22	1	18	3
Demand management measures	15	0	15	0
Construction projects	7	0	2	5
Infrastructure rehabilitation projects	5	0	3	2
Artificial recharge of aquifers	0	0	0	0
Research, development and demonstration projects	3	0	0	3
Other relevant measures	1	0	0	1
Horizontal Supplementary measures concerning SWB	4	1	3	0
Horizontal Supplementary measures concerning GWB	7	1	6	0
Total	**86**	**3**	**58**	**25**

9.2 PRORGAMME OF BASIC AND SUPPLEMENTARY MEASURES

Implementation timetable

The measures are divided into the following implementation timetable categories:

- Shortterm: Immediate implementation is possible
- Medium term: Implementation within 2 years
- Longterm: Their implementation requires more than 2 years

Implementing bodies

For each measure, the implementing bodies are presented. The national legislation details the jurisdictions of each implementing body. Each measure can be implemented from additional implementing bodies, not mentioned below, if this derives from the legal framework.

New projects and activities

In the present Programme of Basic and Supplementary measures specific restrictions or requirements and set for "new" projects and activities. These restrictions or requirements do not apply on projects and activities that are already operational or under construction or have already secured funding or have at least one administrative act approved.

9.2.1 Actions implementing EU Directives (Group I Basic Measures)

The planned actions for the implementation of EU Directives and National legislation for the protection of WB are presented in the following table.

Table 9-4. Actions for the implementation of EU Directives

DIRECTIVE	PLANNED ACTIONS	IMPLEMENTING BODIES
Bathing water Directive (2006/7/ EC)	• Continue to monitor the quality of bathing water in accordance with Directive 2006/7 / EC.	Special Secretariat for Water, Directorate of Water of the Decentralized Administration
	• Updating the Greek Bathing Water Profiles Registry	
Habitats Directive (92/43/EEC) Birds Directive (2009/147/ EC)	• 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
	• Monitoring/Assessment of the conservation status of habitats and species directly depending on water in Natura 2000 areas.	
Drinking water (Directives 98/83/ EC, 2015/1787/ EC)	• Monitoring of the implementation of the Directive	Ministry of Health

DIRECTIVE	PLANNED ACTIONS	IMPLEMENTING BODIES
Environmental Impact Assessment Directives (2011/92/EC, 2014/52/EC)	Amendment of the Ministerial Decision 170225/2014 – (Specifications for the contents of environmental permitting dossiers for projects and activities of category A) so that for certain categories of projects, which should be first specified, to make the following mandatory: • Emissions of pollutants by category, • Calculation of pollution impacts in WB defined in the Management Plans and • Comparing these concentrations with the Environmental Quality Standards. • Establishment of a monitoring program and notification of results to the relevant Water Directorate.	Ministry of Environment and Energy
Industrial Emissions Directive IED, (2010/75/EC)	• Keeping registration and records of installations that are in line with the provisions of the Directive	Decentralized administration
Nitrates Directive (91/676/ EC)	• Implementation of New Action Plans. The drafting of New Action Plans in all the vulnerable zones of the country has been entrusted by the Ministry of Rural Development and Food to the Agricultural University of Athens and is under preparation.	Ministry of Rural Development and Food
	• Systematic monitoring of nitrate levels in WBs that are or may be subject to nitrate pollution.	Special Secretariat for Water, Ministry of Rural Development and Food
Plant Protection Products (Directive 2009/128/EK, Regulation (EU) No. 1107/2009, Regulation (EU) No. 652/2014)	• Rational use of plant protection products	Ministry of Rural Development and Food
Major Accidents (Seveso) Directive (2012/18/EC)	• Keeping registration and records of installations that are in line with the provisions of the Directive	Decentralized administration
Sewage sludge Directive (86/278/EEC)	• 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)	• Completion of sewerage and waste water treatment projects of the settlements that concerns the provisions of the Directive (covering all agglomerations with a population greater than 2,000 p.e.).	Region, MEWSS, Municipalities
	• Strengthening actions to control the effective operation of existing wastewater treatment and drainage projects.	Region

9.2.2 Basic Measures of other categories (Group II Basic Measures)

Table 9-5. Basic measures of other categories

CODE - NAME OF MEASURE	CATEGORY	1st RBMP	IMPLEMENTING BODIES
M01B0201 Upgrading of the organizational function of organizations of land reclamation for the compliance with the financial and other data in order to meet the requirements of the Joint Ministerial Decision 132275/19.05.2017 (Government Gazette 1751 B'/22.05.2017) of the National Water Committee, which deals with pricing and costing rules for water supply services	Measures to implement the cost recovery principle (Art. 9)	YES	Organization of Land reclamation (Local, General) / Region / Ministry of Environment & Energy (Special Secretariat for Water) /Ministry of Rural Development & Food
M01B0202 Upgrade of the organizational function of MEWSS for the compliance with the financial and other data in order to meet the requirements of the Joint Ministerial Decision 132275/19.05.2017 (Government Gazette 1751 B'/22.05.2017) of the National Water Committee, which deals with pricing and costing rules for water supply services.	Measures to implement the cost recovery principle (Art. 9)	YES	MEWSS / Ministry of Environment & Energy (Special Secretariat for Water) / Ministry of Interior
M01B0203 Upgrading of the organizational function of the Local Government Organizations for the compliance with the financial and other data in order to meet the requirements of the Joint Ministerial Decision 132275/19.05.2017 (Government Gazette 1751 B'/22.05.2017) of the National Water Committee, which deals with pricing and costing rules for water supply services.	Measures to implement the cost recovery principle (Art. 9)	YES	Local Government Organizations / Ministry of Environment & Energy (Special Secretariat for Water) / Ministry of Interior
M01B0204 Training and expertise of all the stakeholders (Decentralized Administrations, Regions, MEWSS, LOLR, Local Government Organizations of the Joint Ministerial Decision 132275/19.05.2017 (Government Gazette 1751 B'/22.05.2017) of the National Water Committee, which deals with pricing and costing rules for water supply services.	Measures to implement the cost recovery principle (Art. 9)	YES	Ministry of Environment & Energy (Special Secretariat for Water)
M01B0301 Preparation / Update of the Water Supply Masterplan	Measures to promote an efficient and sustainable water use (Art. 4)	YES	MEWSS / Municipalities /Water suppliers/ Decentralized Administration (Water Directorate)
M01B0302 Actions for the reinforcement, rehabilitation, modernization of water supply networks and leakage control	Measures to promote an efficient and sustainable water use (Art. 4)	YES	Municipalities / MEWSS / Drinking water providers / Region / Decentralized Administration (Water Directorate)
M01B0303 Increase the efficiency of water use in land reclamation infrastructures	Measures to promote an efficient and sustainable water use (Art. 4)	YES	Ministry of Rural Development and Food, Regions

CODE - NAME OF MEASURE	CATEGORY	1st RBMP	IMPLEMENTING BODIES
M01B0304 Investments for saving water in agriculture	Measures to promote an efficient and sustainable water use (Art. 4)	YES	Individuals / Irrigation water providers / Ministry of Rural Development and Food / Regions
M01B0305 Determination of maximum irrigation requirements for crops for private water abstractions	Measures to promote an efficient and sustainable water use (Art. 4)	YES	Decentralized Administration (Water Directorate), Regional directorate of Rural Economy and Veterinary Medicine
M01B0306 Strengthening loss reduction actions on collective irrigation networks	Measures to promote an efficient and sustainable water use (Art. 4)	YES	GOLR/LOLR/Collective Irrigation Networks, Region
M01B0307 Preparation of manual of technical specifications for application of water reuse methods	Measures to promote an efficient and sustainable water use (Art. 4)	YES	Ministry of Environment & Energy (Special Secretariat for Water)
M01B0308 Update of the existing Strategic Plan to Address Water Scarcity and Drought	Measures to promote an efficient and sustainable water use (Art. 4)	YES	Decentralized Administration (Water Directorate), Ministry of Environment & Energy (Special Secretariat for Water)
M01B0401 Definition and delimitation of zones and / or measures for the protection of water abstraction points, intended for human consumption from groundwater bodies	Measures to meet the requirements of Article 7 (drinking water)	YES	Decentralized Administration (Water Directorate) and Drinking water providers (MEWSS, Municipalities etc.)
M01B0402 Protection of GWBs included in the registry of protected areas for human consumption and establishment of an institutional framework of protection	Measures to meet the requirements of Article 7 (drinking water)	YES	Decentralized Administration (Water Directorate)
M01B0403 Surface water projects for water supply protection	Measures to meet the requirements of Article 7 (drinking water)	YES	Municipalities / MEWSS / Water providers / Decentralized Administration (Water Directorate)
M01B0404 Implementation of Water Safety Plans	Measures to meet the requirements of Article 7 (drinking water)	YES	MEWSS, Municipalities, Drinking water providers, Decentralized Administration (Water Directorate)

CODE - NAME OF MEASURE	CATEGORY	1st RBMP	IMPLEMENTING BODIES
M01B0501 Restrictions, terms and conditions for the construction of groundwater abstraction projects (drilling, wells, etc.) for new uses, as well as extension of existing water use permits to: (a) area of GWBs in Poor quantitative status (b) the protection zone II of the abstractions serving the water supply networks that operated by Municipalities, Municipal Syndicates, MEWSS, Inter-MEWSS and drinking water companies , 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	YES	Decentralized Administration (Water Directorate)
M01B0502 Annual online registration of surface and groundwater abstractions	Measures to control surface and groundwater abstractions	YES	Ministry of Environment & Energy (Special Secretariat for Water), Decentralized Administration (Water Directorate), Regions
M01B0601 Investigation of the conditions for application of artificial underground aquifer enrichment as a mean of quantitative enhancement and quality protection of GWBs, with a priority for GWBs with poor condition and/or salinization issues.	Measures to control the artificial recharge of groundwater aquifers	YES	Region, Municipalities, Decentralized Administration (Water Directorate), Region
M01B0602 Establishment of a National Register of Waste Disposal Sites (Joint Ministerial Decision 145116/2011 (Government Gazette 354B)	Measures to control the artificial recharge of groundwater aquifers	YES	Ministry of Environment & Energy (Special Secretariat for Water), Decentralized Administration (Water Directorate)
M01B0701 Strengthening environmental inspections and controls	Measures for point source pollution	NEW MEASURE	Region
M01B0702 Modernization of national legislation on waste and industrial waste management	Measures for point source pollution	YES	Ministry of Environment & Energy (Special Secretariat for Water), Ministry of health
M01B0703 Program of exploratory monitoring of the quality of groundwater bodies and surface water bodies in the areas of existing Landfills	Measures for point source pollution	YES	Landfill Operators, National Monitoring Network coordinated by the Water Directorate
M01B0704 Conditions for the licensing of new / extension of existing aquaculture units	Measures for point source pollution	YES	Ministry of Environment & Energy,Decentralized Administration,Region
M01B0705 Preparation of rules for sinkholes protection	Measures for point and diffuse source of pollution	YES	Decentralized Administration (Water Directorate)
M01B0801 Biological agriculture	Measures for diffuse source pollution	YES	Ministry of Rural Development and Food (Directorate of Quality Systems, Organic Production and Geographical Indications)

CODE - NAME OF MEASURE	CATEGORY	1st RBMP	IMPLEMENTING BODIES
M01B0802 Modernization of the institutional framework for sludge management by municipal waste water treatment plants with emphasis on widening the scope and updating the quality characteristics of the applicable sludge	Measures for diffuse source pollution	YES	Ministry of Environment & Energy (Environmental Certification Directorate), Ministry of Rural Development and Food
M01B0803 Reduce diffuse pollution from agriculture in the Nitrate Vulnerable Zones of the Directive 91/676/EEC	Measures for diffuse source pollution	NEW MEASURE	Ministry of Rural Development and Food, Regions
M01B0901 Establishment of an institutional framework for the definition of the conditions for the protection of recreational inland waters of Article 6 Directive 2000/60/EK -Temporary regulation for new projects in inland water bodies which are included as recreational waters in the Register of Protected Areas under Article 6 of Directive 2000/60/EC	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	YES	Ministry of Environment & Energy (Special Secretariat for Water), Decentralized Administration (Water Directorate)
M01B0902 Determination of minimum natural lakes waterlevel, determination of maximum waterlevel fluctuation of reservoirs	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	NEW MEASURE	Managing Authority, Region, Protected Areas Management Bodies, Decentralized Administration (Water Directorate)
M01B0903 Development of national methodology and specifications for the determination of ecological flows of river water bodies	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	YES	Ministry of Environment & Energy (Special Secretariat for Water)

CODE - NAME OF MEASURE	CATEGORY	1st RBMP	IMPLEMENTING BODIES
M01B0904 Special Measures to Achieve Good Ecological Potential in Heavily Modified Water Bodies (HMWB)	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	NEW MEASURE	Ministry of Environment & Energy (Special Secretariat for Water), Decentralized Administration (Water Directorate), Region
M01B0905 Determination of 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	YES	Region, Decentralized Administration (Water Directorate), Municipalities
M01B0906 Monitoring, recording and rehabilitation of coastal erosion	Measures for any other significant adverse impacts on the status of water, in particular concerning hydromorphological alterations of SWB	NEW MEASURE	Ministry of Infrastructure, and Transport, Decentralized Administration (Water Directorate),
M01B1101 Compilation of pollution sources register (emissions, discharges and leaks)	Measures for Priority Substances and other pollutants.	YES	Ministry of Environment & Energy (Special Secretariat for Water)
M01B1102 Establishment / setting of emission limits in RBs for priority substances and other pollutants of the Joint Ministerial Decision 51354/2641 / E103 / 2010 as in force, as well as for Physico Chemical parameters in relation to the quality objectives set out in the Management Plans	Measures for Priority Substances and other pollutants.	YES	Decentralized Administration (Water Directorate), Ministry of Environment & Energy (Special Secretariat for Water)

9.2.3 Supplementary measures

9.2.3.1 Horizontal supplementary measures

Horizontal supplementary measures concern/ affect all WB of the RBD.

Table 9-6. Horizontal supplementary measures

CODE & NAME OF MEASURE	CATEGORY	1st RBMP	AFFECTED WB	IMPLEMENTING BODIES	COST (€)
M01Σ0201 Development of a Monitoring Programme for the implementation of the Programme of Measures of the RBMP in the RBD and provision of supporting services for the implementation of the PoM.	Administrative measures	NEW MEASURE	Horizontal	Decentralized Administration (Water Directorate)	650.000
M01Σ0202 Control and management of artesian wells	Abstraction Controls	YES	Horizontal	Owner of the well, Decentralized Administration (Water Directorate)	0
M01Σ0501 Emission controls at the outlets of stormwater culverts and other point sources of pollution that result in surface water bodies	Emission controls	NEW MEASURE	Horizontal	Municipalities / MEWSS / Region/ Decentralized Administration (Water Directorate), Ministry of Environment & Energy (Special Secretariat for Water	100.000
M01Σ0502 Implementation of investments in agriculture and livestock holdings, aiming at improving environmental performance.	Emission controls	NEW MEASURE	Horizontal	Ministry of Rural Development and Food/ Regions	287.500
M01Σ1501 Professional training of agro-farmers for the protection of WB	Educational measures	YES	Horizontal	Special Management Service of the Rural Development Program of Ministry of Rural Development and Food, Region	146.625
M01Σ1502 Informing and raising public awareness on water issues	Educational measures	YES	Horizontal	Ministry of Environment & Energy (Special Secretariat for Water), Regions, Municipalities, MEWSS, Decentralized Administration (Water Directorate)	100.000

CODE & NAME OF MEASURE	CATEGORY	1st RBMP	AFFECTED WB	IMPLEMENTING BODIES	COST (€)
M01Σ1503 Strengthening environmental program actions in Primary Education and Secondary Education	Educational measures	YES	Horizontal	Ministry of Education, Research and Religious Affairs and Ministry of Environment & Energy (Special Secretariat for Water), Regions, Municipalities, MEWSS, Decentralized Administration (Water Directorate)	100.000
M01Σ1601 Pilot measures to apply precision agriculture to reduce water consumption	Research, development & demonstration projects	NEW MEASURE	Horizontal	Special Management Service of the Rural Development Program of Ministry of Rural Development and Food, Regions	253.000
M01Σ1602 Consultancy services for agriculture exploitation management	Research, development & demonstration projects	NEW MEASURE	Horizontal	Decentralized Administrations of the Ministry of Rural Development and Food	391.000
M01Σ1603 Design and Implementation of a Special Exploratory Monitoring Program for the purpose of collecting data on the primary designation of WB Downstream Dams as HMWB	Research, development & demonstration projects	NEW MEASURE	Horizontal	Ministry of Environment & Energy (Special Secretariat for Water), Decentralized Administration (Water Directorate)	250.000

9.2.3.2 Supplementary measures

Table 9-7. Supplementary measures in Alfios RB (EL0129)

CODE & NAME OF MEASURE	CATEGORY	1st RBMP	AFFECTED WB		IMPLEMENTING BODIES	COST (€)
M01Σ0203 Prohibition of river sediment deposits removal, except for flood protection until the necessary studies have been carried out to identify selected sites for the needs of engineering projects	Administrative measures	2.05	EL0129R000201001N	ALFIOS R._1	Decentralized Administration, Region	0 €
			EL0129R000205010N	ALFIOS R._3		
M01Σ0503 Inspections for compliance with the limits of disposal from industrial, processing and livestock-poultry units within the catchment area of the SWB, at least twice a year	Emission controls	5.04	EL0129R000202005N	ALISIO STREAM_1	Region, Decentralized Administration	0 €
			EL0129R000202006N	ALISIO STREAM_2		
			EL0129R000204009N	SELINOUS R._2		
			EL0129R000206011N	ERIMANTHOS R._1		
			EL0129R000207020N	ALFIOS R._4		
			EL0129R000208330N	TRAGOS STREAM_2		
			EL0129R000215044H	ALFIOS R._9		
			EL0129R000216046N	ELISSON R._2		
			EL0129R000217051A	ALFIOS R. DIVERSION_1		
			EL0129R000219054N	ALFIOS R._11		
M01Σ1604 Design of central processing units for agro-animal waste and processing plants	Research, development & demonstration projects	OM09-1			Ministry of Environment & Energy, Region, Decentralized Administration	300.000 €
			EL0129R000202005N	ALFIOS R._1		
			EL0129R000202006N	ALFIOS R._3		
			EL0129R000204009N	ALISIO STREAM_1		
			EL0129R000206011N	ALISIO STREAM_2		
			EL0129R000207020N	SELINOUS R._2		
			EL0129R000208330N	ERIMANTHOS R._1		
			EL0129R000215044H	ALFIOS R._4		
			EL0129R000216046N	TRAGOS STREAM_2		
			EL0129R000217051A	ALFIOS R._9		
			EL0129R000219054N	ELISSON R._2		

Table9-8. Supplementary measures in Pamisos - Nedontas - Neda RB (EL0132)

CODE & NAME OF MEASURE	CATEGORY	1st RBMP	AFFECTED WB		IMPLEMENTING BODIES	COST (€)
M01Σ0302 Financial sanctions against illegal sandpits	Economic or fiscal instruments	1.11	EL0132R001100016N	KALO NERO STREAM_1	Decentralized Administration, Region	0 €
			EL0132R001100017N	KALO NERO STREAM_2		
			EL0132R001100018N	KALO NERO STREAM_3		
			EL0132R001500021N	NEDA R._2		
M01Σ0503 Inspections for compliance with the limits of disposal from industrial, processing and livestock-poultry units within the catchment area of the SWB, at least twice a year	Emission controls	5.04	EL0132R000700007N	GIANNOUZAGAS STREAM_2	Region, Decentralized Administration	0 €
			EL0132R000901008N	SELAS STREAM		
			EL0132R000902009N	ALAFINOREMA STREAM		
			EL0132R000900011N	LAGOUVARDOS STREAM		
			EL0132R001100016N	KALO NERO STREAM_1		
			EL0132R001100017N	KALO NERO STREAM_2		
			EL0132R001100018N	KALO NERO STREAM_3		
			EL0132R001500020N	NEDA R._1		
			EL0132R000201023H	PAMISOS R._1		
			EL0132R000201024H	PAMISOS R._2		
			EL0132R000201025N	PAMISOS R._3		
			EL0132R000202026H	AGIOS FLOROS STREAM_1		
			EL0132R000202027H	AGIOS FLOROS STREAM_2		
			EL0132R000203029N	MAVROZOUMENA STREAM_2		
			EL0132R000204131H	TZAMIS STREAM_1		
			EL0132R000204033H	MEGALO POTAMI STREAM_2		
			EL0132R000202040N	TZIROREMA STREAM_2		
			EL0132R001700045H	NEDON R._1		
			EL0132T0003N	YALOVA LAGOON		
M01Σ0801 Determination and delimitation of GWB areas which are of poor quality due to salinization or have local salinization problems	Abstraction controls	ΟΣ_ΥΔ01_7	EL0100100	Systima Pamisou	Decentralized Administration	150.000 €
			EL0100140	Systima Romanou - Choras		
			EL0100170	Systima Filiatron - Kyparissias		

CODE & NAME OF MEASURE	CATEGORY	1st RBMP	AFFECTED WB		IMPLEMENTING BODIES	COST (€)
M01Σ0802 Systematic monitoring of quality status of licensed water abstractions in GWB with high natural background (e.g. chlorides)	Abstraction controls	ΟΣ_ΥΔ01_5	EL0100090	Systima Taygetou	Decentralized Administration, Region	0 €
			EL0100130	Systima Kynigou		
M01Σ0803 On-site inspections on licensed abstractions	Abstraction controls	8.02	EL0132R000900013H	FILIATRINO STREAM_2	Decentralized Administration, Region	0 €
			EL0132R000201024H	PAMISOS R._2		
			EL0132R000203043H	ARIS R._3		
M01Σ1604 Design of central processing units for agro-animal waste and processing plants	Research, development & demonstration projects	OM09-1			Ministry of Environment & Energy, Region, Decentralized Administration	300.000 €
			EL0132R000700007N	GIANNOUZAGAS STREAM_2		
			EL0132R000901008N	SELAS STREAM		
			EL0132R000902009N	ALAFINOREMA STREAM		
			EL0132R000900011N	LAGOUVARDOS STREAM		
			EL0132R001100016N	KALO NERO STREAM_1		
			EL0132R001100017N	KALO NERO STREAM_2		
			EL0132R001100018N	KALO NERO STREAM_3		
			EL0132R001500020N	NEDA R._1		
			EL0132R000201023H	PAMISOS R._1		
			EL0132R000201024H	PAMISOS R._2		
			EL0132R000201025N	PAMISOS R._3		
			EL0132R000202026H	AGIOS FLOROS STREAM_1		
			EL0132R000202027H	AGIOS FLOROS STREAM_2		
			EL0132R000203029N	MAVROZOUMENA STREAM_2		
			EL0132R000204131H	TZAMIS STREAM_1		
			EL0132R000204033H	MEGALO POTAMI STREAM_2		
			EL0132R000202040N	TZIROREMA STREAM_2		
			EL0132R001700045H	NEDON R._1		
			EL0132T0003N	YALOVA LAGOON		

10 NEXT STEPS

The objective of the 1stUpdate of the River Basin Management Plan is to prevent further deterioration, to protect and improve the status of inland surface, transitional, coastal and groundwater, as well as directly dependent terrestrial ecosystems and wetlands. In order to achieve this goal, the implementation of the Programme of Basic and Supplementary Measures is necessary.

The PoM is designed in such a way that the priority of each intervention is clearly defined according to its cost, its effectiveness, the importance of the WB being implemented and the necessary time of preparation.

All elements of the PoM are important, but some planning and prioritization is needed in order to monitor the progress of implementation of the PoM and identify where corrective interventions are required when deviations from targets are identified.

With the responsibility of the Water Directorate of the Decentralized Administration an **Action Plan for the implementation of the 1stUpdate of the RBMP** of the RBD is being prepared.

To this end, the Regional Working Group for the Implementation of the PoM of the RBMP of the RBD of the Country, which was established during the implementation of the 1st RBMP, is required to prepare the above Action Plan.

WESTERN PELOPONNESE (EL01) RBD STATISTICAL DATA

The following Tables present aggregated statistical data for theWestern Peloponnese RBD (EL01).

Table Σ- 1. Categories of WB per RB in Western Peloponnese RBD (EL01)

WB Categories	RB EL0129	RB EL0132	Total RBD
River WB	60	52	112
Lake WB	0	0	0
Transitional WB	2	1	3
Coastal WB	2	9	11
TOTAL OF SWB	64	62	126
Groundwater WB	12	15	27
TOTAL WB	76	77	153
Heavily modified water bodies (HMWB) and artificial Water bodies (AWB)	6	14	20
WB Connected with protected areas	8	24	32

Table Σ- 2. Typology of SWB per RB in Western Peloponnese RBD(EL01)

TYPOLOGY OF SWB	RB EL0129	RB EL0132	Total RBD
River WB	59	51	110
Type R-M1	20	23	43
Type R-M2	21	13	34
Type R-M3	9	0	9
Type R-M4	9	14	23
Type R-M5	0	1	1
Type R-L2	0	0	0
Reservoirs	1	1	2
Type L-M5/7W	0	0	0
Type L-M8	1	1	2
Type GR-SR	0	0	0
Lake WB	0	0	0
Type GR-DNL	0	0	0
Type GR-SNL	0	0	0
Type GR-VSNL	0	0	0
Τύπος L-M5/7W	0	0	0
Τύπος L-M8	0	0	0
Transitional WB	2	1	3
Type TW1	1	1	2
Type TW2	1	0	1
Coastal WB	2	9	11
Type IIIE	2	9	11

Table Σ- 3. Assessment (classification) results of River WBs status per RB in Western Peloponnese RBD (EL01)

STATUS/ POTENTIAL			RB EL0129				RB EL0132				TOTAL RBD			
			Number	% of Number	Length (km)	% of Length	Number	% of Number	Length (km)	% of Length	Number	% of Number	Length (km)	% of Length
RIVER WB														
TOTAL	ECOLOGICAL	High	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Good	43	72,9%	368,3	70,7%	27	52,9%	226,5	62,0%	70	63,6%	594,8	67,1%
		Moderate	9	15,3%	96,4	18,5%	13	25,5%	98,1	26,8%	22	20,0%	194,5	21,9%
		Poor	2	3,4%	26,4	5,1%	2	3,9%	3,5	1,0%	4	3,6%	29,9	3,4%
		Bad	3	5,1%	26,5	5,1%	1	2,0%	4,1	1,1%	4	3,6%	30,6	3,5%
		Unknown	2	3,4%	3,6	0,7%	8	15,7%	33,2	9,1%	10	9,1%	36,8	4,2%
	CHEMICAL	Good	45	76,3%	360,0	69,1%	45	88,2%	322,6	88,3%	90	81,8%	682,6	77,0%
		Poor	3	5,1%	70,1	13,5%	0	0,0%	0,0	0,0%	3	2,7%	70,1	7,9%
		Unknown	11	18,6%	91,0	17,5%	6	11,8%	42,9	11,7%	17	15,5%	133,8	15,1%

Table Σ- 4. Assessment (classification) results of reservoirs, lakes, transitional, coastal and groundwater WB per RB in Western Peloponnese RBD (EL01)

STATUS/ POTENTIAL			RB EL0129				RB EL0132				TOTAL RBD			
			Number	% of Number	Area (km²)	% of Area	Number	% of Number	Area (km²)	% of Area	Number	% of Number	Area (km²)	% of Area
RESERVOIRS (RIVERHMWB) WB														
TOTAL	ECOLOGICAL	Good	1	100,0%	3,0	100,0%	0	0,0%	0,0	0,0%	1	50,0%	3,0	85,9%
		Moderate	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Poor	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Bad	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Unknown	0	0,0%	0,0	0,0%	1	100,0%	0,5	100,0%	1	50,0%	0,5	14,1%
	CHEMICAL	Good	1	100,0%	3,0	100,0%	0	0,0%	0,0	0,0%	1	50,0%	3,0	85,9%
		Poor	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Unknown	0	0,0%	0,0	0,0%	1	100,0%	0,5	100,0%	1	50,0%	0,5	14,1%
LAKE WB														
TOTAL	ECOLOGICAL	High	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Good	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Moderate	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Poor	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Bad	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Unknown	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
	CHEMICAL	Good	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Poor	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Unknown	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
TRANSITIONAL WB														
TOTAL	ECOLOGICAL	High	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Good	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Moderate	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Poor	1	50,0%	1,5	97,7%	1	100,0%	1,4	100,0%	2	66,7%	2,9	98,8%
		Bad	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Unknown	1	50,0%	0,03	2,3%	0	0,0%	0,0	0,0%	1	33,3%	0,03	1,2%
	CHEMICAL	Good	1	50,0%	1,5	97,7%	1	100,0%	1,4	100,0%	2	66,7%	2,9	98,8%
		Poor	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Unknown	1	50,0%	0,03	2,3%	0	0,0%	0,0	0,0%	1	33,3%	0,03	1,2%

STATUS/ POTENTIAL			RB EL0129				RB EL0132				TOTAL RBD			
			Number	% of Number	Area (km²)	% of Area	Number	% of Number	Area (km²)	% of Area	Number	% of Number	Area (km²)	% of Area
COASTAL WB														
TOTAL	ECOLOGICAL	High	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Good	2	100,0%	153,7	100,0%	8	88,9%	870,1	98,0%	10	90,9%	1.023,9	98,3%
		Moderate	0	0,0%	0,0	0,0%	1	11,1%	17,8	2,0%	1	9,1%	17,8	1,7%
		Poor	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Bad	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Unknown	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
	CHEMICAL	Good	2	100,0%	153,7	100,0%	9	100,0%	888,0	100,0%	11	100,0%	1.041,7	100,0%
		Poor	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
		Unknown	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
GWB														
TOTAL	CHEMICAL	Good	12	100,0%	3.586,2	100,0%	13	86,7%	2.984,8	88,4%	25	92,6%	6.570,9	94,4%
		Poor	0	0,0%	0,0	0,0%	2	13,3%	390,7	11,6%	2	7,4%	390,7	5,6%
		Unknown	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%
	QUANTITATIVE	Good	12	100,0%	3.586,2	100,0%	14	93,3%	3.092,3	91,6%	26	96,3%	6.678,4	95,9%
		Poor	0	0,0%	0,0	0,0%	1	6,7%	283,2	8,4%	1	3,7%	283,2	4,1%
		Unknown	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%	0	0,0%	0,0	0,0%