



WATER DEVELOPMENT
DEPARTMENT
1047 NICOSIA



REPUBLIC OF CYPRUS
MINISTRY OF AGRICULTURE , RURAL
DEVELOPMENT AND ENVIRONMENT

WASTEWATER TREATMENT AND EFFLUENT REUSE IN CYPRUS

MARGARITA VATYLIOTOU
SANITARY ENGINEER
SEWAGE AND WATER REUSE
DIVISION
WATER DEVELOPMENT
DEPARTMENT

1.Legislative Framework in Cyprus

In Cyprus the use of the discharge of effluent from urban wastewater treatment plants is regulated by:

- The Environmental Impact Assessment Law (No. 127(I)/2018)
- The water Pollution Control Laws (106(I)/2002 to 2013)
- The Water Pollution Control (Discharge of Urban Waste water) Regulations of 2003 (No. 772/2003)
- The Water Pollution Control (Sensitive Areas for Disposal of Urban Waste Water) Ministerial Decree of 2013 (No. 280/2013)
- The Code of Good Agricultural Practice Decree (No. 263/2007)
- The Ministerial Decree for small – scale wastewater treatment plants < 2000 p.e. (No. 379/2015)

2. Effluent from Urban Waste Water Treatment Plants (uwwtps) Reuse in Cyprus

- In Cyprus around **97%** of the treated waste water is reused in accordance with Art. 12 (1) of the UWWTD.
- The effluent is mainly reused directly for irrigation or indirectly via replenishment of aquifers. In 2021 22.6 millions cubic meters of treated effluent were reused in agriculture.
- The cost for the construction, operation and maintenance of tertiary treatment plants carried out by the Urban Sewerage Boards is undertaken by the Government.

2.1 REGULATION (EU) 2020/741 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 May 2020 on minimum requirements for water reuse

The new regulation shall apply from 26 June 2023.

Cyprus informed the EC that it will practice the reuse of treated urban waste water in all areas under the effective control of the Republic of Cyprus.

However the irrigation will not be allowed for foliaceous vegetables, bulbs and condyles that are eaten raw.

3. TREATMENT REQUIREMENTS UWWTPs of Agglomerations ≥ 2.000 p.e.

- In Cyprus, it is our policy and is implemented through the obligation for tertiary treatment, the UWWTPs effluent to be reused in agriculture. More stringent treatment requirements than the proposed ones are already applied.
- Some of the main parameters that are monitored for UWWTPs ≥ 2.000 p.e. are: BOD₅, SS, TN, TP, conductivity, pH, heavy metals, B, Cl, E. Coli, priority substances, pesticides and toxicity.
- Usually, the limit values set for BOD₅, COD, SS, total nitrogen and total phosphorus are 10 mg/l, 70 mg/l, 10 mg/l, 15 mg/l and 10 mg/l respectively.
- Further monitoring obligations are set in the permits when the tertiary effluent is recharged in aquifers or discharged into surface waters (dam or sea) taking into consideration the standards specified to Groundwater Directive 2006/118/EC and Directive 2008/105/EC regarding Environmental Quality Standards respectively.
- Additionally, discharges from urban waste water treatment plants to sensitive areas (water bodies which are eutrophic) meet more stringent requirements related to TN and TP. In such cases the limit values can be TN=10mg/l and TP=1mg/l.

4. REUSE OF TREATED EFFLUENT IN CYPRUS

4.1 IN CYPRUS THE TREATED EFFLUENT FROM THE URBAN WASTEWATER TREATMENT PLANTS IS REUSED FOR THE FOLLOWING PURPOSES :

4.1.1 IRRIGATION

4.1.2 ENRICHMENT OF UNDERGROUND WATER
(PAPHOS WASTEWATER TREATMENT
PLANT)

4.1.3 DRY BED OF RIVERS FOR INFILTRATION

THE IRRIGATION IS DONE UNDER THE CODE OF GOOD AGRICULTURAL PRACTICE.

4.2 OTHER WAYS OF DISPOSAL

- DISCHARGE INTO THE SEA
- DISCHARGE INTO A DAM FOR AGRICULTURE IRRIGATION PURPOSES ONLY

DUE TO SEASONAL DEMAND OF WATER FOR IRRIGATION AND LIMITED STORAGE CAPACITY, CERTAIN AMOUNTS OF TREATED EFFLUENT ARE DISCHARGED TO THE SEA AND POLEMIDIA DAM (NON POTABLE), DURING WINTER MONTHS.

4.3 CONSTRUCTION OF A DAM TO COLLECT TREATED EFFLUENT

5. Benefits of Treated Effluent Reuse

A reliable source of water which enhances the water balance

Domestic Sector Cities	Freshwater can be reserved to satisfy the increasing demand for potable water	Need for fewer desalination plants Lower carbon footprint Less dependence on oil prices
Agricultural Sector Farmers	Constant and reliable source of water Savings in fertilizers Increases crop yield Maintains traditional agriculture	
Environment	Reduces discharge to WBs Reduces abstraction Groundwater Replenishment Control saltwater intrusion to groundwater bodies	Keeps water prices at reasonable levels

6. Reclaimed Water Reuse

The Irrigation is done under the Code of Good Agricultural Practice.

Tertiary treatment is **mandatory irrespective of its use** (irrigation, recharge of aquifers or disposal to the sea, in order to:

- **Eliminate the possibility of any health incident**
- **Reduce the risk of possible eutrophication** when discharging to the eastern Mediterranean Sea, the most oligotrophic sea in the world
- **Reduce farmers skepticism and barriers to reusing**
- **Encourage public acceptance – enhance marketability of crops**

Provided that the land farm has access to a reclaimed water irrigation network, the end user (i.e. the farmer) applies to the Water Authority/Reclaimed Plant Operator for the supply of reclaimed water, stating the type of crop and the required water quantity.

The Water Authority/Reclaimed Plant Operator approves the application and provides the end user with the necessary information regarding the crops allowed to be irrigated as well as the irrigation methods and techniques to be used.

It has to be noted that in Cyprus, **the end users have small agricultural farms and 90% of them are under 0,5 ha.**

In Cyprus the operator's responsibility is to achieve the required effluent quality **at the outlet of the reclamation facilities**. The required effluent quality is set by the Competent Authority responsible for the permitting.

7. Code of Good Agricultural Practice (Regulation No. 263/2007)

Guidelines to make the use of treated effluent safe for irrigation:The goal is the proper use of Reclaimed Water in agriculture in order to protect public health and the environment

Restriction on the type of crops irrigated: Irrigation of all types of plants , seasonal and permanent **except of foliaceous vegetables ,bulbs and condyles that are eaten raw.****Type of plants :**citrus fruits, fodder crops and industrial plants (cow grass and corn), olive trees, lolium and sutax, potatoes, **flowers (e.g. carnations)**, public green areas, football fields, grass production.

Safety precautions for the proper use of water

- The use is prohibited by unauthorized persons
- **Marking pipes with red line**
- Clear signaling to alert the public that the water is undrinkable
- **Hydrants and distribution system should have protection and always be in good operational condition**

Irrigation practices	Methods of irrigation	Recommendations
Irrigation for grass, green areas with limited use, and forage crops	<ul style="list-style-type: none"> • groundwater irrigation, • drippers, low capacity sprinklers, • surface irrigation, • high capacity sprinklers - 300 m buffer zone 	<ul style="list-style-type: none"> ▼ cultivated forage, irrigation stops at least one week before harvest ▼ cultivated forage for grazing, dairy animals are not permitted.
Irrigation conditions for grass, green spaces with free use	<ul style="list-style-type: none"> • subsurface drip irrigation, • low angle Pop-up sprinklers (<15°) • irrigation during night • (no wind) 	
Vineyard	<ul style="list-style-type: none"> • drip irrigation • micro sprinkler 	<ul style="list-style-type: none"> • Where drops comes with contact with fruit, irrigation must stop two weeks before harvest • Collection of fruit from the ground should be avoided
Tree crops	<ul style="list-style-type: none"> • drip irrigation • Micro sprinkler 	<p>The collection of fruit from the ground is prohibited except in cases of nuts.</p> <p>Where irrigation drops comes in contact with fruit , irrigation must stop at least a week before harvest.</p>
Vegetables that are cooked before consumption	<ul style="list-style-type: none"> • sub surface drip irrigation, sprinkler irrigation • drip irrigation 	

8. Original Assessment of the Reclaimed Water Reuse

- **Original Studies: The Ministry Of Agriculture before using the Reclaimed water for irrigation tried in 1996 to demonstrate the benefits in practice:**
 - A **Pilot irrigation** area of 30 ha close to Limassol WWTP was initiated, to demonstrate that recycled water enhances agricultural productivity and is safe to use by the farmers
 - **Sorghum, alfalfa and corn** were used as verified crops irrigated with effluent water for a period of 5 years
 - Agricultural Research Institute was responsible for the collection and analysis of all data and verification of the results
 - **Results: Crop yield increased by 30% on average**

- On Going studies:** After these initial tests, **further plant uptake studies** regarding the effects of water reuse irrigation, although they do not cover all the parameters that could affect the crops, **were conducted** during the last years by the Agriculture Research Institute of the Ministry of Agriculture, Rural Development and Environment. No negative results were demonstrated.

9. Public Acceptance

At the early days of implementing water reuse projects in Cyprus, there was significant reaction and skepticism from farmers, due to ignorance, misconceptions and psychological reasons

Acceptance issues were addressed through:

- **Information / consultation campaigns**
- **Education of the farmers in small groups**
- **Regulating effluent reuse through the Code of Good Agricultural Practice**
- **Making recycled water much cheaper than freshwater**
 - **Rate of Tertiary Treated Effluent for agriculture: 7 cents/ m³ (The price is subsidized in order to encourage and promote the use.)**
 - **Selling Rate of Fresh not filtered water from governmental water works: 17 cents/ m³**

10. Further Research

- ❑ Research is on going by the Agricultural Research Institute of Cyprus and the University of Cyprus
- ❑ Research results, concerning the long-term wastewater irrigation of **forage and citrus** revealed that there are **no impacts** of wastewater reuse **on** both **soil physicochemical properties** and **heavy metal** content, as well as on agricultural produce heavy metal content
- ❑ Research concerning wastewater irrigation of **tomato crops** highlighted that there is **no accumulation of heavy metals** in tomato fruit, whereas examination of the presence of **various pathogens** related to public health revealed that **total coliform** and **fecal coliforms** were **not quantified** in both fruit flesh and fruit peel, while ***E. coli, Salmonella spp* and *Listeria spp.* were not detected** in fruit homogenates

11. IRRIGATION WITH TREATED EFFLUENT- TYPE OF PLANTS

LIMASSOL PLANT	LARNACA PLANT	PARALIMNI AYIA NAPA PLANT	VATHIA GONIA PLANT
CITRUS FRUITS	COWGRASS	CITRUS FRUITS	COWGRASS
FODDER CROPS AND INDUSTRIAL PLANTS (COWGRASS AND CORN)	CORN	OLIVE TREES	CORN
VEGETABLES	LOLIUM AND SUTAX	POTATOES	BARLEY
PUBLIC GREEN AREAS	PUBLIC GREEN AREAS	PUBLIC GREEN AREAS	FODDER CROPS
	FOOTBALL FIELDS	FOOTBALL FIELDS	GRASS PRODUCTION

12. QUALITY CHARACTERISTICS AND CONTROL OF THE TREATED EFFLUENT FOR AGGLOMERATIONS ABOVE 2000P.E. ACCORDING TO THE DISCHARGE PERMITS IN CYPRUS:

According to the Laws of the Water Pollution Control of 2002 until 2013, for the big municipal wastewater treatment plants the Minister Of Agriculture issues a Wastewater Discharge Permit for the same Wastewater treatment Plant to the following competent authorities:

- Sewerage Boards
- Water Development Department

In the Discharge Permit the following are defined:

- quality characteristics.
- number and the type of analyses
- disposal of the treated effluent

For the Discharge Permit of the Water Development Department the following are included:

- Name of Authority : Water Development Department
- Type of Process: Disposal of Treated Effluent
- Type of Discharge: Treated effluent from the wastewater treatment plant.

13. SELLING RATES OF TREATED EFFLUENT FROM TERTIARY TREATMENT PLANTS

The rate of the treated effluent from the big wastewater treatment has been set by a ministerial decree as per the following table. These rates are charged by the government.

		Water Selling Rate	
A/A	USE	Existing Rate of Tertiary Treated Effluent	<i>Suggested Selling Rate of Fresh not filtered water from governmental water works</i>
		EURO Cent/ m3	<i>EURO Cent/ m3</i>
1	a) For Irrigation divisions for agricultural production	5	15
	b) For Persons for agricultural production	7	17
2	For sports	15	34
3	For irrigation of hotels green areas and gardens	15	34
4	For irrigation of Golf Courses	21	34
5	For pumping from an underground aquifer recharged by treated effluent	8	
6	For over consumption for items 1 to 5	increase by 50%	56
7	For municipal parks, green areas etc for rural communities where a plant has been built within its limits and the quantity does not exceed the approved quantity of more than 10 %		

National Legislation

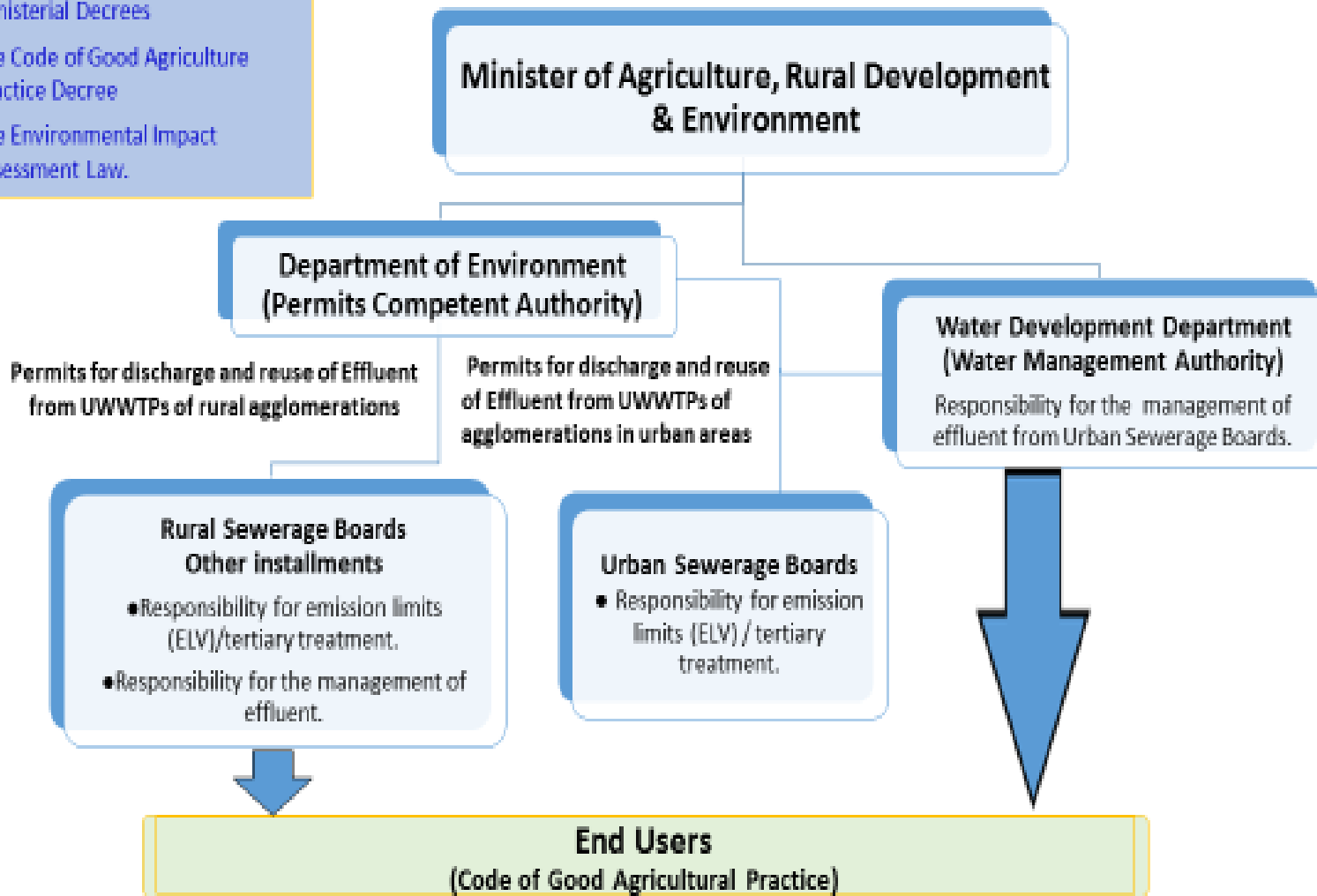
The Water Pollution Control Laws

Ministerial Decrees

The Code of Good Agriculture Practice Decree

The Environmental Impact Assessment Law.

14. Permitting and Management of Reclaimed Water



15. WASTEWATER TREATMENT METHODS APPLIED IN URBAN WASTEWATER TREATMENT PLANTS

	NAME OF WWTP	TYPE OF SECONDARY TREATMENT	TYPE OF TERTIARY TREATMENT
1	ANTHOUPOLI	ACTIVATED SLUDGE MEMBRANE BIOREACTOR , NITRIFICATION - DENITRIFICATION, PHOSPHORUS REMOVAL	MEMBRANE BIOREACTOR
2	VATHIA GONIA (WDD) (designed to receive domestic septage and industrial waste by tankers)	ACTIVATED SLUDGE EXTENDED AERATION -OXIDATION DITCHES	SAND FILTERS
3	VATHIA GONIA (SBN)	ACTIVATED SLUDGE MEMBRANE BIOREACTOR, NITRIFICATION - DENITRIFICATION, PHOSPHORUS REMOVAL	MEMBRANE BIOREACTOR
4	AYIA NAPA - PARALIMNI	ACTIVATED SLUDGE, NITRIFICATION - DENITRIFICATION, PHOSPHORUS REMOVAL	SAND FILTERS
5	PAPHOS	ACTIVATED SLUDGE, NITRIFICATION - DENITRIFICATION, PHOSPHORUS REMOVAL	SAND FILTERS
6	LARNACA	ACTIVATED SLUDGE MEMBRANE BIOREACTOR, NITRIFICATION - DENITRIFICATION, PHOSPHORUS REMOVAL	MEMBRANE BIOREACTOR AND SAND FILTERS (for the collected water during winter in the lagoons)
7	LIMASSOL	ACTIVATED SLUDGE, NITRIFICATION - DENITRIFICATION, PHOSPHORUS REMOVAL	SAND FILTERS
8	MIA MILIA	ACTIVATED SLUDGE MEMBRANE BIOREACTOR, NITRIFICATION - DENITRIFICATION, PHOSPHORUS REMOVAL	MEMBRANE BIOREACTOR

16. METHODS OF DISINFECTION OF URBAN WASTEWATER TREATMENT PLANTS

TYPE OF DISINFECTION		
NAME OF WWTP	TYPE	METHOD
LIMASSOL	CHLORINATION	ONSITE HYPOCHLORITE GENERATION FROM SALT
PARALIMNI	CHLORINATION	LIQUID SODIUM HYPOCHLORITE DOSING
AYIA NAPA	CHLORINATION	LIQUID SODIUM HYPOCHLORITE DOSING
LARNACA	CHLORINATION	ONSITE HYPOCHLORITE GENERATION FROM SALT
PAPHOS	CHLORINATION	LIQUID SODIUM HYPOCHLORITE DOSING
VATHIA GONIA (WDD)	CHLORINATION	LIQUID SODIUM HYPOCHLORITE DOSING
VATHIA GONIA (SBN)	UV DISINFECTION	-
ANTHOUPOLIS	UV DISINFECTION	-
MIA MILIA	UV DISINFECTION	-

17. TREATMENT REQUIREMENTS FOR IRRIGATION UWWTPs serving agglomerations ≤ 2.000p.e.

According to the Ministerial Decree of small – scale wastewater treatment plants ≤ 2.000 p.e (No. 379/2015), the quality requirements for treated waste water used for irrigation are:

Parameters	BOD ₅ mg/l	COD mg/l	SS mg/l	FOG mg/l	E. Coli / 100 ml	pH	Conductivity μS/cm	Cl mg/l	B mg/l	Residual Chlorine mg/l
Frequency	every 1 month	every 1 month	every 1 month	every 1 month	every 1 month	every 1 month	every 1 month	every 1 year	every 1 year	every 1 month
All crops and green areas (a)	10	70	10	5	5	6,5-8,5	2.500	300	1	2
Vegetables eaten cooked (b)	10	70	10	5	50	6,5-8,5	2.500	300	1	2
Products for human consumption and green areas with limited access to the public	25	125	35	5	200	6,5-8,5	2.500	300	1	2
Crops for animal feed	25	125	35	5	200	6,5-8,5	2.500	300	1	2
Industrial plants	25	125	35	5	200	6,5-8,5	2.500	300	1	2

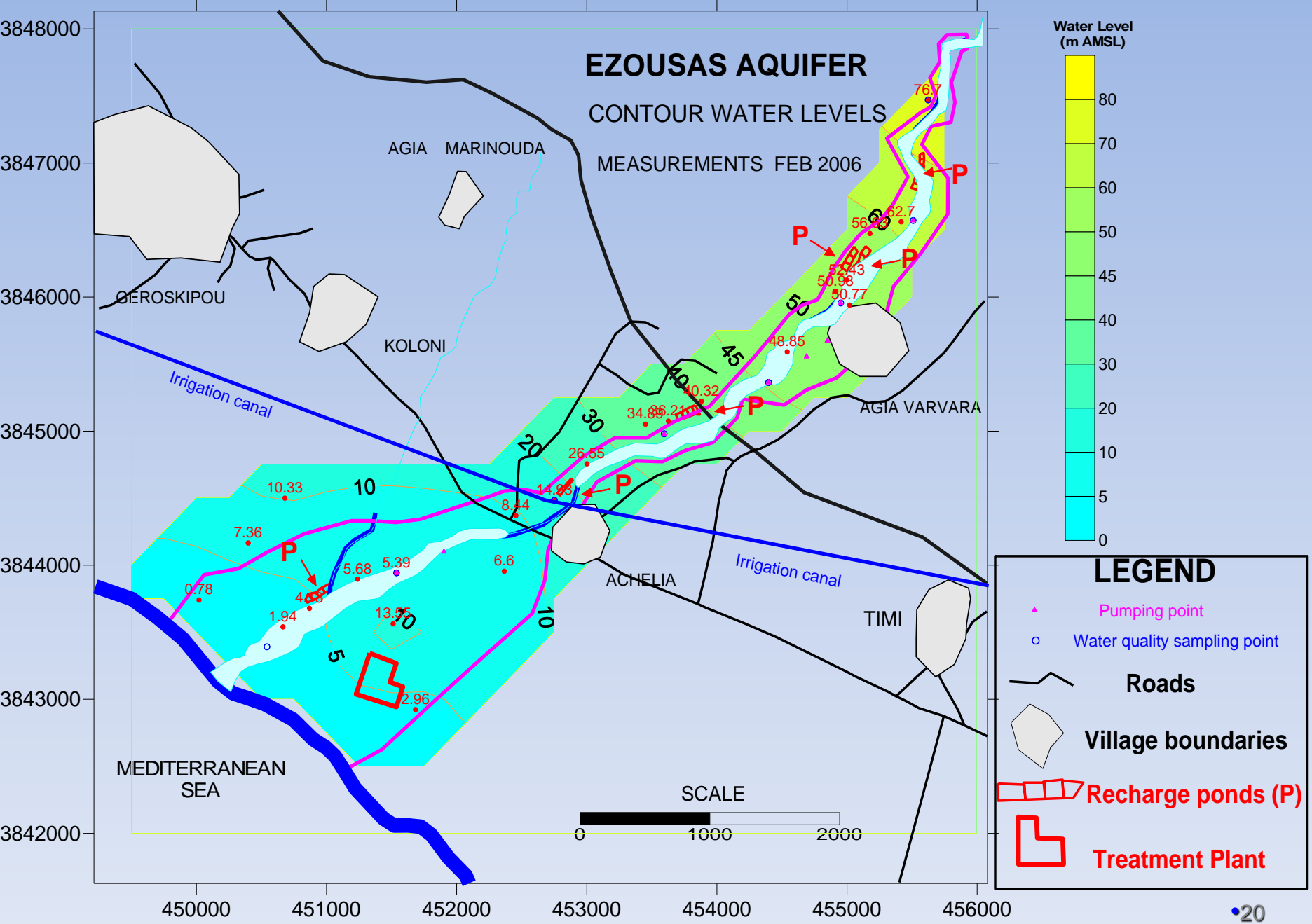
(a) Not for leafy vegetables, bulbs eaten raw and strawberries. (b) Potatos, beetroots etc.

➤ The parameter “Eggs of Intestinal Worms” used to be monitored every year during the summer period, however they have been excluded from the Ministerial Decree No. 379/2015, as they have never been identified.

18. EXAMPLE FOR AQUIFER RESCHARGE - AREA OF PAPHOS

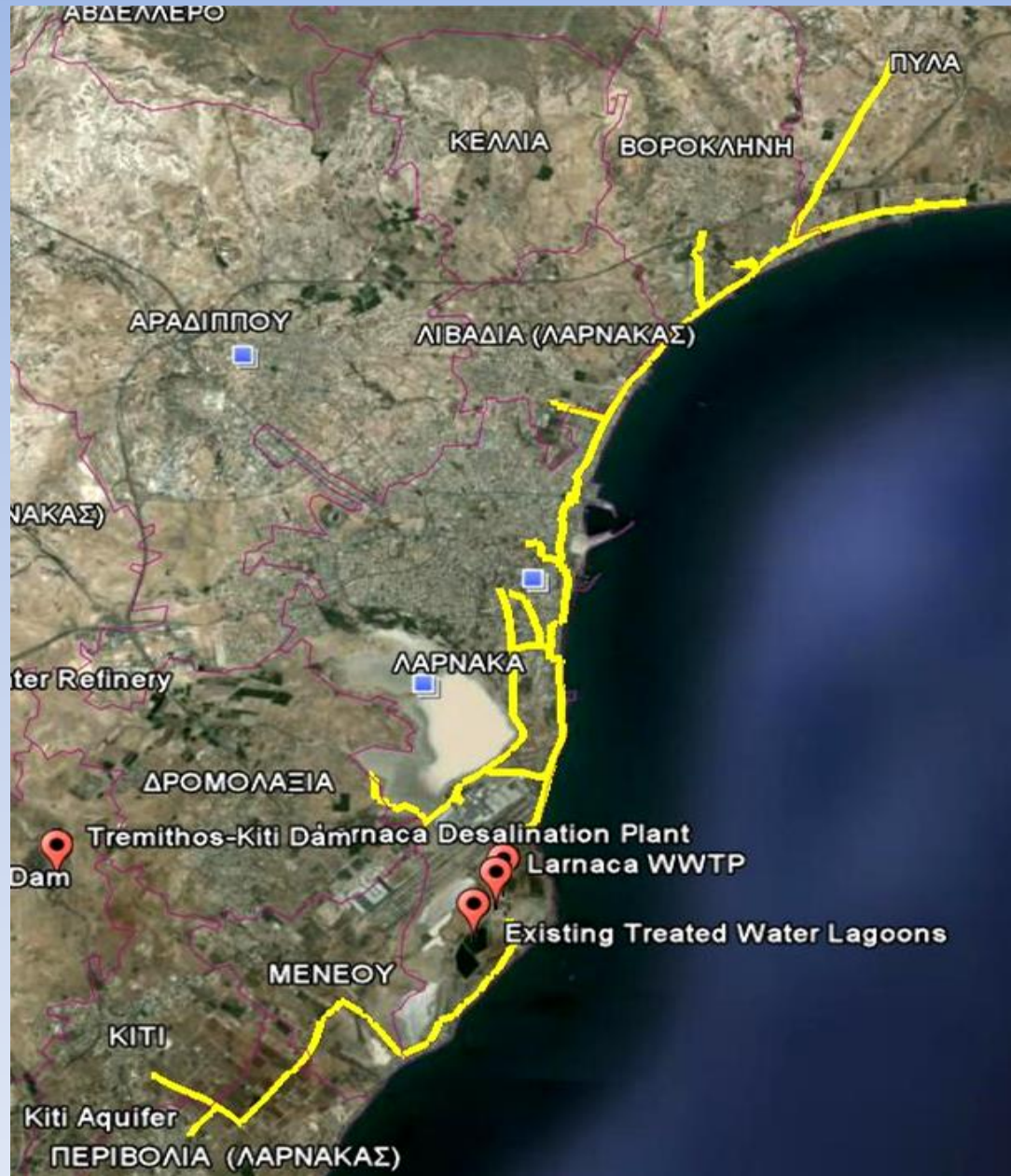
IN THIS AREA THE TREATED EFFLUENT IS USED FOR THE ENRICHMENT OF EZOUSA AQUIFER.

THE MAP OF THE POINTS OF ENRICHMENT OF EZOUSA AQUIFER - PAPHOS

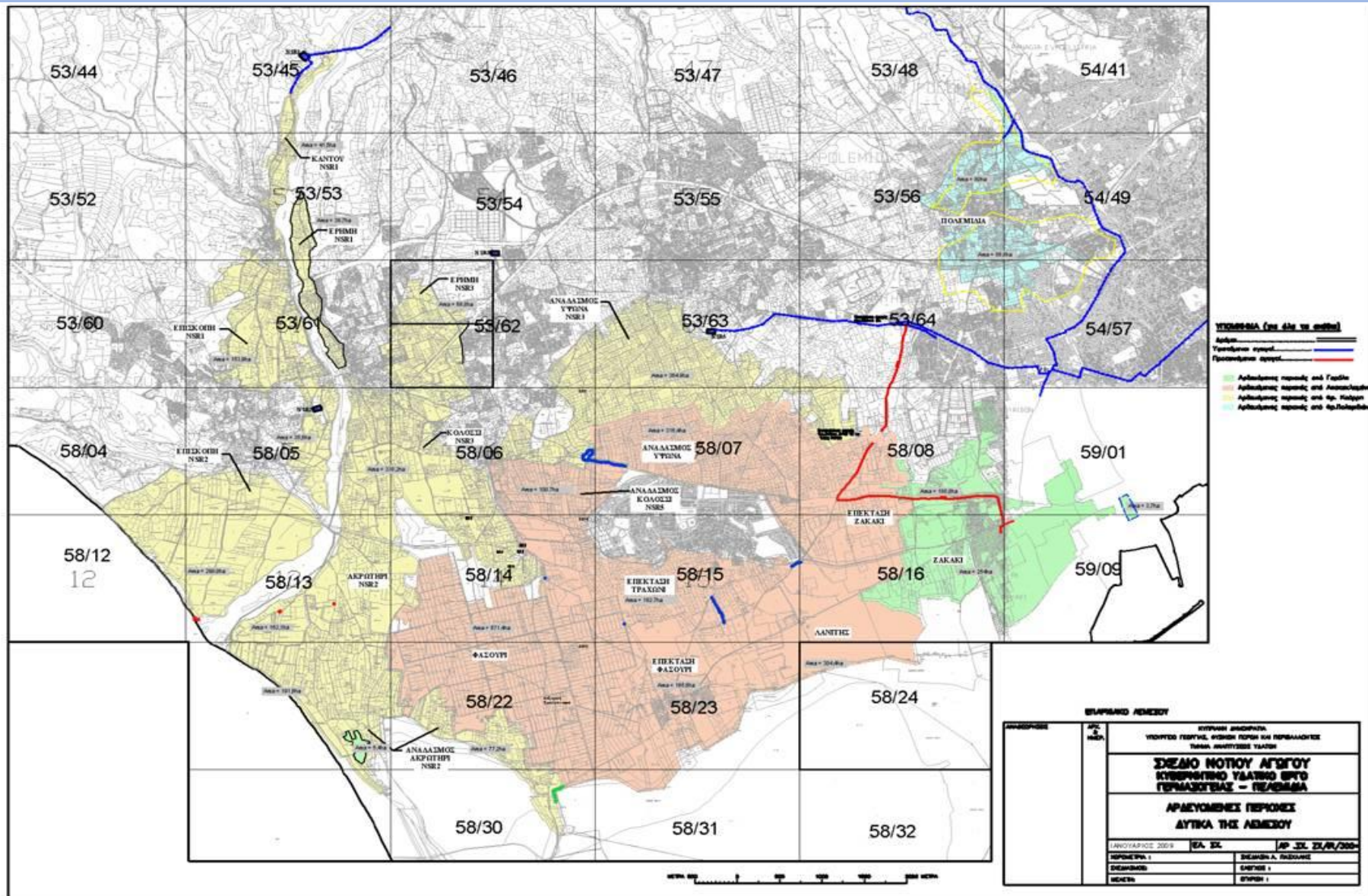


19. TREATED EFFLUENT IRRIGATION NETWORKS

19.1 LARNACA AREA TREATED EFFLUENT IRRIGATION NETWORK

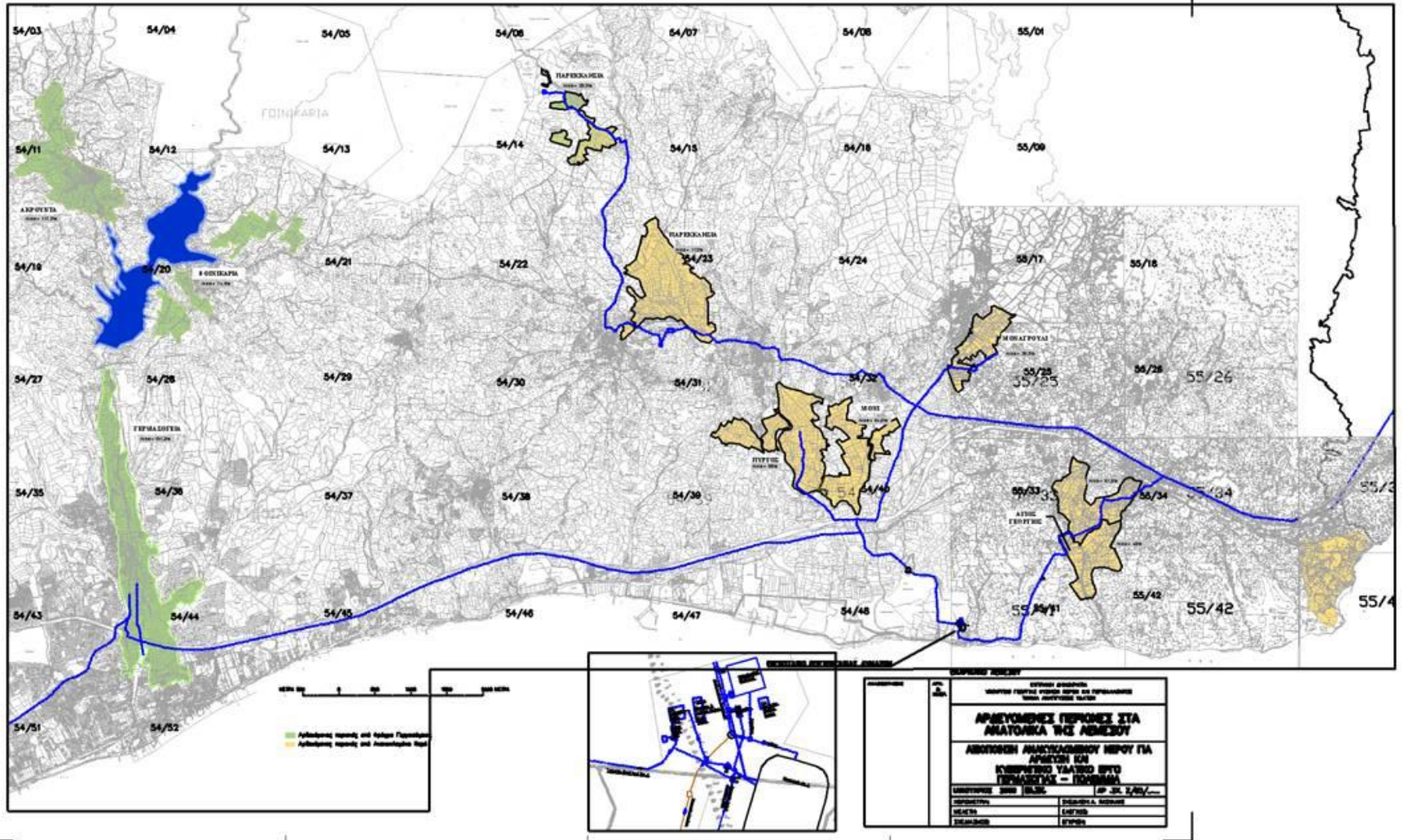


19.2a LIMASSOL AREA TREATED EFFLUENT IRRIGATION NETWORK

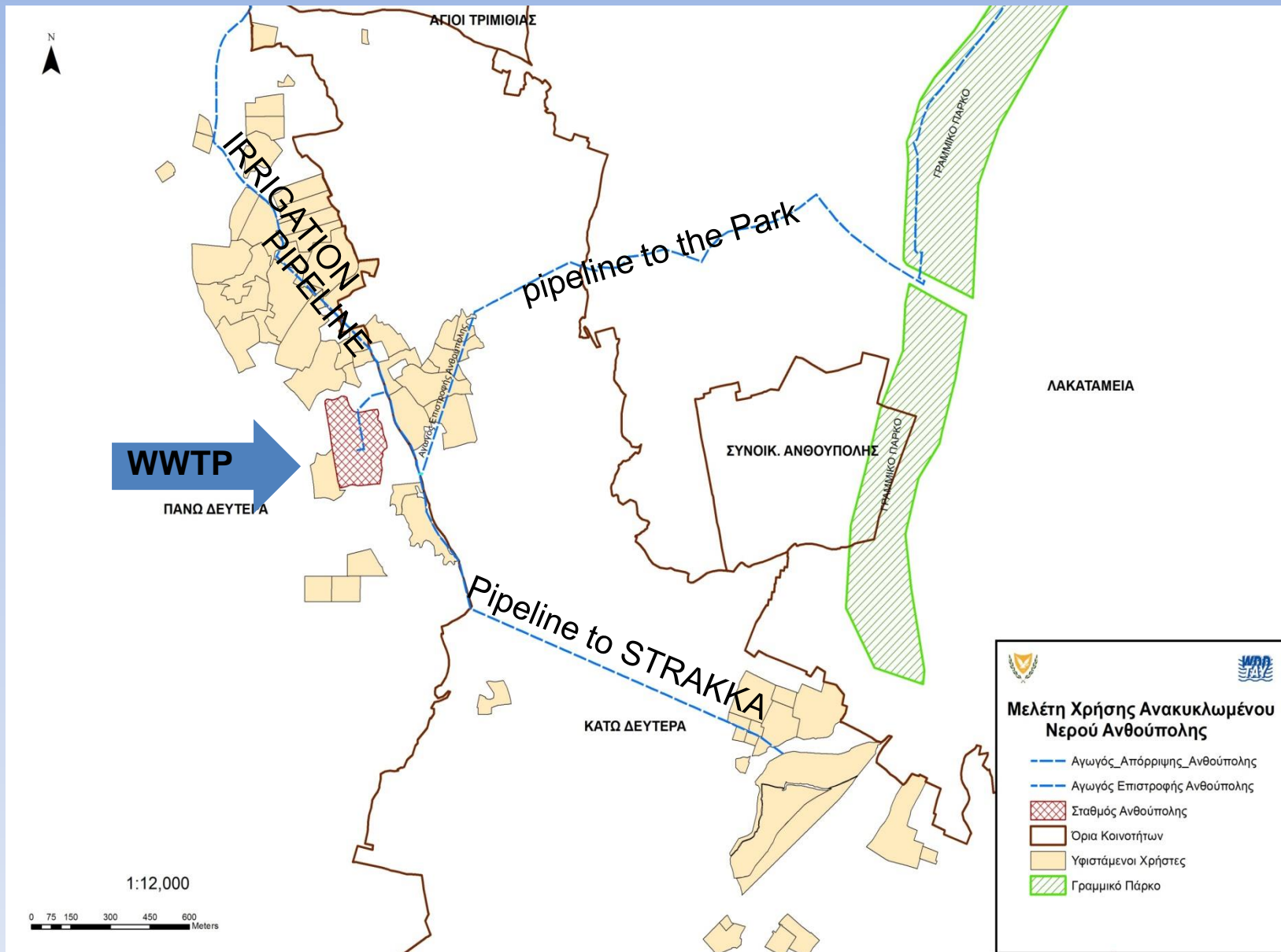


ΣΧΕΔΙΟ	ΣΥΜΒΟΛΟ		
	ΑΡΧΙΤΕΚΤΟΝΙΚΟ	ΜΗΧΑΝΟΛΟΓΙΚΟ	ΕΛΛΗΝΙΚΟ
ΣΧΕΔΙΟ ΝΟΤΙΟΥ ΑΓΓΟΥ			
ΚΥΡΙΑΚΟΤΕΡΟ ΤΑΜΙΟ ΕΡΓΟ			
ΠΡΟΜΕΤΡΗΣΕΩΣ - ΠΕ/Α/Α/Α			
ΑΡΧΕΙΟΜΕΝΕΣ ΠΕΡΙΟΧΕΣ			
ΔΥΤΙΚΑ ΤΗΣ ΑΣΤΕΥΣ			
ΛΗΝΟΓΡΑΦΟΣ 2009	ΚΑ. ΣΑ.	ΑΡ. ΣΧ. 22/Α/2009	
ΣΧΗΜΑΤΑ 1	ΣΧΗΜΑΤΑ 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100		ΣΧΗΜΑΤΑ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
ΣΧΗΜΑΤΑ 1	ΣΧΗΜΑΤΑ 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100		ΣΧΗΜΑΤΑ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
ΣΧΗΜΑΤΑ 1	ΣΧΗΜΑΤΑ 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100		ΣΧΗΜΑΤΑ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

19.2b LIMASSOL AREA TREATED EFFLUENT IRRIGATION NETWORK



19.3 IRRIGATION NETWORK FOR ANTHOUPOLIS WWTP





ΤΜΗΜΑ ΑΝΑΠΤΥΞΕΩΣ ΥΔΑΤΩΝ

ΥΠΟΥΡΓΕΙΟ ΓΕΩΡΓΙΑΣ, ΦΥΣΙΚΩΝ ΠΟΡΩΝ ΚΑΙ ΠΕΡΙΒΑΛΛΟΝΤΟΣ



PHOTOGRAPHS FROM WWTPs



- **LIMASSOL (MONI) WWTP**



ANTHOUPOLIS WASTEWATER TREATMENT PLANT -SBN



VATHIA GONIA WASTEWATER TREATMENT PLANT -SBN



**VATHIA GONIA CENTRAL WASTEWATER (SEPTIC SEWAGE/INDUSTRIAL WASTE)
TREATMENT PLANT -WDD**



LARNACA WASTEWATER TREATMENT PLANT-SBL



PARALIMNI-AYIA NAPA WASTEWATER TREATMENT PLANT

The screenshot displays the official website of the Water Development Department (WDD) of the Ministry of Agriculture, Rural Affairs and Fisheries (MARA) of Cyprus. The browser window shows the URL www.moa.gov.cy/moa/wdd/index_en/index_en. The page header includes the text "Ελληνικά 80002244 ΚΕΝΤΡΟ ΑΝΑΦΟΡΑΣ ΒΛΑΒΩΝ" and a search bar. The main navigation menu lists: "About us", "Water Resources", "Water Development and Management", "European Matters", "Press Room", and "Public Services".

The central content area features a large banner with the text "Εξοικονόμησε το!!" and "κάθε σταγόνα ΜΕΤΡΑΙΙ", accompanied by a logo of a water drop forming a globe. Below this, there are several key sections:

- Water saving measures**: A section with a "More" button.
- History**: A vertical list of topics including "Licensing for the installation of Small Private Desalination Units", "Water saving measures", "Governmental Water Supply Systems", and "Governmental Water Works".
- Reservoir storage**: A section with a "More" button.
- Water Framework Directive (2000/60/EC)**: A section with a "More" button.
- Floods Directive (2007/60/EC)**: A section with a "More" button.
- Waste Water Directive (91/271/EEC)**: A section with a "More" button.

The footer of the browser window shows the Windows taskbar with the search bar and system tray, including the date and time: 1:48 PM 2/24/2023.



WATER DEVELOPMENT
DEPARTMENT
1047 NICOSIA



REPUBLIC OF CYPRUS
MINISTRY OF AGRICULTURE , RURAL
DEVELOPMENT AND ENVIRONMENT

THANK YOU FOR YOUR
TIME

MARGARITA VATYLIOTOU
SANITARY ENGINEER
SEWAGE AND WATER REUSE
DIVISION
WATER DEVELOPMENT
DEPARTMENT
mvatyliotou@wdd.moa.gov.cy