

WE-ACT: Wetlands in Europe Against Climate Change, we act Today!

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Third meeting, 7 to 11 October 2024

Γενικό Λύκειο Σύρου - General Lykeio Syrou

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MOBILITY TRIP WORKSHEET / PRELIMINARY QUESTIONS

GROUP A - WETLANDS ACTING TOWARDS RESERVING FRESHWATER AND STORING CARBON / MIGRATORY BIRDS

1. What is a carbon sink - carbon storage? How do wetlands help reduce the amount of carbon dioxide in the atmosphere?
2. What role do wetlands play in the carbon cycle and how much carbon is actually stored and how can we increase carbon storage in wetlands? What is the role of Wetlands in climate change?
3. Could you briefly describe a few drivers of wetlands degradation? What actions are taken to prevent the return of carbon to the atmosphere from the degradation of wetlands?

4. What anthropogenic activities threaten wetlands?
5. What role do Cyclades wetlands play in bird migration?
6. Do all wetlands contain freshwater? What is the difference between types of wetlands found in central or northern Europe and the ones located in the southern Mediterranean part of the European continent?
7. Why do islands have a limited amount of surface storage for freshwater?

Group B - DESALINATION PLANT AND WASTEWATER TREATMENT - IMPACT ON THE WATER SUPPLIES AND ON THE SEA ECOSYSTEM

1. How does the Desalination plant work and why is it so important for our island especially in the summer period?
2. What are the advantages and disadvantages of desalination? Is the amount of water produced in the desalination plant of Syros and Paros sufficient to meet the constantly fluctuating water needs at different seasons?
3. Which renewable energy sources can be introduced in order to support the electrical energy needs of desalination plants in Syros?
4. Can we drink the water produced through the desalination process or is it mainly used for agricultural or domestic purposes? Can we have middle size or domestic innovative desalination units for potable water?
5. Since when has the Water and Sewage Company of Syros been conducting wastewater treatment, how does it work and why was such initiative taken?

6. Can we reuse the water after the Municipal Wastewater Treatment Unit? Could you describe some examples which you learned during visiting the Water and Sewage companies?
7. How does the discharge of brine, a byproduct of desalination, affect the aquatic environment and which process does the desalination plant in Syros follow aiming to minimize the consequences?

GROUP C - WATER MANAGEMENT AND CONSUMPTION / OTHER MEANS OF COLLECTING WATER IN THE PAST HELPING IN THE FUTURE

1. Can the use of water from traditional wells be a solution to the problem of water shortage? Could the artificial wetlands – water reservoirs be part of the solution?
2. How has mass tourism impacted the water consumption levels in Cyclades in the past years?
3. To what extent does the need for water on the Greek islands of Syros and Paros increase in summer and how is it dealt with?
4. Where does the name “magganopigado” (old fashioned water well) come from? Which animals took part in drawing the water from the magganopigada, and why were their eyes closed? What cultural significance do the magganopigada hold? Why were they invaluable to island communities?
5. How do the islands of Syros and Paros manage the increased water demand during the tourist season in the summer, and what strategies are employed to ensure water supply meets both local and tourist needs?
6. Try to describe some ideas to reduce the cost of water supplied to the consumers for domestic, drinking and agricultural use in the Cyclades.