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Project: Sustainable strategies for the improvement of seriously degraded agricultural areas: The example of Pistachia vera L <u>www.agrostrat.gr</u>

Action A.2 –Soil and water monitoring - Development of soil indicators Deliverable "Environmental risk assessment regarding water bodies in the pilot area"

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Executive Summary

In the present deliverable, the risk for water bodies due to agricultural waste disposal in the study area in the Aegina Island, Greece, has been assessed. Risk assessment was based on the data collected from water sampling carried out in the line of Action A2 of the AGROSTRAT project. A carefully designed monitoring system was implemented to assess the quality of all existing water bodies including seasonal surface streams and groundwater. It is worth noting that there is lack of such data for the targeted area, as well as for other similar areas in Greece and in Mediterranean countries where *Pistachia vera L*. is intensively cultivated and therefore monitoring is considered as a crucial aspect and therefore in-depth analysis of the obtained sampling results has been carried out.

The deliverable "Environmental risk assessment regarding water bodies of the pilot area" focuses on:

- General risk assessment framework
- Characterization of the study area in terms of environmental quality
- Assessment of risk for water bodies due to agricultural waste disposal in the study area (discussion on the results of water sampling in order to evaluate water quality especially for irrigating pistachio trees) as well as estimation of risk due to the presence of heavy metals, salinity and chlorides

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