Ecosystem Based Water Resources Management to Minimize Environmental Impacts from Agriculture Using State of the Art Modeling Tools in Strymonas Basin

LIFE03 ENV/GR/000217

Task 2. Monitoring Crop Pattern, Water quality and Hydrological Regime

Crop pattern identification in Strymonas basin using satellite image analysis
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CHAPTER 1

INTRODUCTION

The aim of this work was to estimate the vegetation patterns and areas of the total study area. To achieve this task we used photo interpretation techniques for remote sensing data.

The Life Strymon project overall objective is to promote the sustainable management of surface waters and groundwater in Strymonas River Basin, assisting the implementation of the Water Frame Directive. (Chalkidis, at al. 2004. Water Quality and Hydrological Regime monitoring network.)

The identification and spatial distribution of crops in the Strymonas River Basin in early summer, is indispensable information for wise water usage during the months of July and August. During these months, we have the maximum demand for irrigation water. A detailed water distribution plan must be designed based on the crops water demand and the available water resources.

Remote sensing offers some relative fast and cost effective methods for crop identification using satellite image data. So it covers two major demands of the project: To have the spatial distribution of crops and to have them early in summer so that we can effectively design a water distribution plan.

Note: The whole publication is available at EKBY’s library.