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EFFECT OF A NEWLY SET UP WASTEWATER-TREATMENT PLANT ON A MARINE PHANEROGAM SEAGRASS BED — A MEDIUM-TERM MONITORING PROGRAM

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ABSTRACT

Although the impact of declining environmental conditions on marine phanerogam seagrass beds has been well documented, the reverse phenomenon, notably the natural recolonization of seagrass beds following an improvement in water quality, has received very little attention. In light of this, and following the establishment, in 1987, of a wastewater-treatment plant in the city of Marseilles (Mediterranean, France), the bottom cover and vitality of a *Posidonia oceanica* seagrass bed was followed closely. The objectives of this study were to understand the development of these plants, which are true indications of water quality, by monitoring a number of parameters (e.g., location of the seagrass bed, density, leaf biometry). The results reveal that there has been an overall improvement in the vitality of the *P. oceanica* seagrass beds since 1987. Thus, natural recolonization phenomena are occurring and would seem to indicate that the seagrass beds are able to respond positively, in the medium term, to reductions in anthropogenic impacts.