



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: TX3181

Title: Plankton succession: Investigations regarding new approaches to management

Focus Categories: Wetlands, Ecology

Keywords: management schemes, pulsed nutrient flow, plankton succession

Start Date: 03/01/2001

End Date: 02/28/2002

Federal Funds: \$3,613

Non-Federal Matching Funds: \$115,374

Congressional District: 32

Principal Investigator:

Yesim Buyukates

Student, The Texas AM University

Abstract

The overall emphasis of this study is to examine how the potential release of nutrient-rich treated wastewater by the City of Corpus Christi into the Rincon Delta wetland ecosystem may affect the growth of phytoplankton (small, free-floating aquatic plants). The study will look into how releasing effluents intermittently, in pulses, may affect the growth of edible and nuisance forms of phytoplankton. It will also examine how the community structure of phytoplankton and zooplankton as well as plankton succession may be affected by these releases. In laboratory studies, waters from the Rincon Delta will be supplemented with nutrients to mimic the characteristics of treated wastewater that may be applied when effluents are discharged. The effects of these effluent releases on phytoplankton will be examined in the lab.