

**Management of Submersed Aquatic Vegetation in Lakes and Ponds.** Joseph D. Vassios. United Phosphorus, Inc., Rocklin, CA, USA. joseph.vassios@uniphos.com

Submersed aquatic plants are a vital part of the aquatic ecosystem, but nuisance and invasive species can drastically effect the economic and ecological value of lakes and ponds. These negative impacts may occur through alteration of habitat, water quality, recreational uses, irrigation, and municipal uses. For this reason, it is important to manage these plants to maintain the usage of these water bodies. There are a number of these species that occur across California, and each of them have distinguishing features that can be used to identify the species and determine the appropriate management approach. There are a number of mechanical, biological, physical, cultural and chemical methods available for control, and each can be appropriate based on the features of an individual water body. One of the most common control methods is the use of herbicides. These herbicides are separated into two groups, contact and systemic herbicides. Contact herbicides generally require shorter exposure times, and will generally act faster than systemic herbicides. Systemic herbicides generally require longer exposure times, and are often used for larger scale or whole-lake treatments. While different conditions present at the time of treatment can effect which product or management method is the best option, implementing a suitable method can provide management of the species at a level that will allow for continued use of the water body, and maintain its ecological and economic function.