

SCIENCE AND MANAGEMENT OF THE INTRODUCED SEAGRASS *ZOSTERA JAPONICA* IN NORTH AMERICA

Deborah Shafer, Jim Kaldy, Jeffery Gaeckle

Healthy seagrass is considered a prime indicator of estuarine ecosystem function. On the Pacific coast of North America, at least two congeners of *Zostera* occur: native *Zostera marina*, and introduced, *Z. japonica*. *Z. japonica* is considered “invasive” and therefore, ecologically and economically harmful by some, while others consider it benign or perhaps beneficial. *Z. japonica* does not appear on the Federal or the Oregon invasive species or noxious weed lists. However, the State of California lists it as both an invasive and noxious weed; Washington State recently listed it as a noxious weed. We describe the management dynamics in North America with respect to these congener species and highlight the science and policies behind these decisions. In recent years, management strategies at the state level have ranged from historical protection of *Z. japonica* as a priority habitat in Washington to eradication in California. In 2011, Washington State reversed its long standing policy to protect *Z. japonica* and is developing permits for chemical control of this plant. This fractured management approach contradicts efforts to conserve and protect seagrass in other regions of the US and around the world. Science must play a critical role in the assessment of *Z. japonica* ecology and the immediate and long-term effects of management actions. The information and recommendations provided here can serve as a basis for providing scientific data in order to develop better informed management decisions and aide in defining a uniform management strategy for *Z. japonica*.