

Regulating Exotic Aquatic Plants in Texas



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Current Status of Exotic Aquatic Plant Regulations

- ◆ **TPWD has regulatory authority over the importation, possession, sale or placement into water of the state of exotic harmful or potentially harmful aquatic plants**
- ◆ **TPWD is also authorized to enact rules and issues permits to regulate these activities**
- ◆ **This authority is granted to TPWD by the Texas Legislature**

Current Status of Exotic Aquatic Plant Regulations

- ◆ **Exotic aquatic plants that have been identified as harmful or potentially harmful are prohibited**
- ◆ **Plants and rules are listed in TPWD administrative code**
- ◆ **Some plants can be possessed with a permit (such as water spinach)**
- ◆ **Permits have conditions to minimize environmental risk**

Disadvantages of Current System

- ◆ Adding new plants to the list is a lengthy process
- ◆ It is difficult to respond to new threats
- ◆ Non-listed species may be introduced
- ◆ These species can become established before being regulated
- ◆ Environmental damage and economic costs may occur before a species can be listed

Development of a New Regulations

- ◆ During the last Legislative session, TPWD was directed to publish a list of exotic aquatic and riparian plants that are approved for use in Texas without a permit
- ◆ TPWD was further directed to make the rules be as permissive as possible without allowing plants that pose environmental, economic, or health problems
- ◆ New rules are to be in place by January 1, 2011

Development of a New Regulations

- ◆ The first step has been to develop list of exotic (non-native) aquatic and riparian plants currently imported into Texas
- ◆ TWPD is currently gathering input from persons and businesses and other entities
- ◆ This input will aid TPWD in adding or deleting plants from the current draft list

Development of New Regulations

- ◆ **All plants on the list will be evaluated for potential risk to aquatic environments using a scientific risk analysis based on Pheloung et al. (1999)**
- ◆ **If risk is low, species will be placed on the approved list**
- ◆ **TPWD will maintain a category for possession of some plants by permit only**

What is an aquatic Plant?

“An aquatic plant is defined as any member of the Kingdom Plantae, any member of the Kingdom Monera within the Phylum Cyanophycota, or any photosynthetic member of the Kingdom Protista, as documented using the most recent posting of the Integrated Taxonomic Information System, and is often found in either aquatic or riparian habitats.”

Why so broad?



Photo: A. Meinesz

***Caulerpa
taxifolia*
(Caulerpa)**

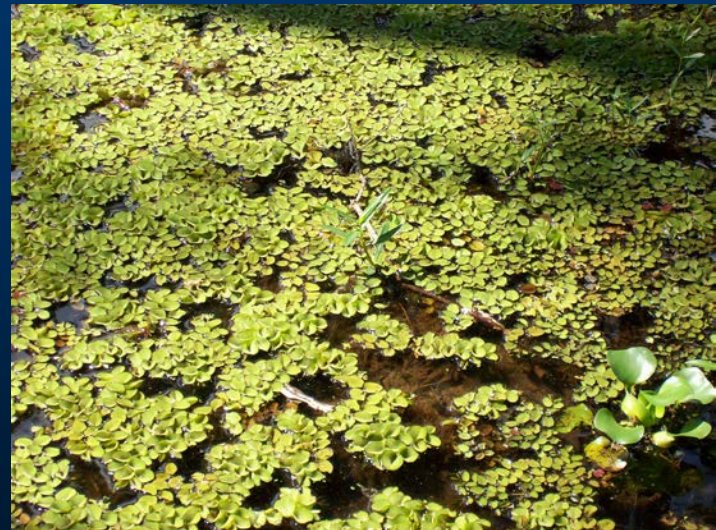


Photo: R. Woodfield

Arundo donax



Giant salvinia



Risk Assessment

- ◆ Conduct a literature review that includes:
- ◆ Native range
- ◆ Native climate
- ◆ History of invasiveness
- ◆ Reproductive requirements, potential, and dispersal
- ◆ Control techniques and efficacy
- ◆ Habitat requirements
- ◆ Economic benefit
- ◆ Environmental impact if established
- ◆ Agricultural impact if established
- ◆ History in Texas

Timeline

- ◆ After risk analysis, a draft approved list will be developed and made available for preliminary public comment in May and June 2010
- ◆ TPWD will modify current rules to establish new procedures for regulating exotic aquatic plants
- ◆ August 25th meeting – present proposed rules
- ◆ November 4th meeting – vote to approve proposed rules
- ◆ New Regulations go into effect
- ◆ The process for adding new plants to the list will incorporate risk analyses and Commission approval

What if a species is not on the list?

Exotic Species Permits may be issued for:

- ◆ Research
- ◆ Public exhibits
- ◆ Aquaculture
- ◆ Vegetation management
- ◆ Wastewater treatment
- ◆ Industrial purposes?

Concerns with Algae

- ◆ **Toxicity**
 - **Humans**
 - **Animals**
 - **Other plants**
- ◆ **Propensity to bloom**
- ◆ **Competition with native species**

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