MANAGING RICE GRASS (*SPARTINA ANGLICA*) IN TASMANIA’S ESTUARIES AND WATERWAYS

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Rice grass is a northern hemisphere intertidal saltmarsh plant that was deliberately introduced to Tasmania between the 1930s and the 1970s. It has become established in seven regions of the State’s coastal zone and continues to spread at an alarming rate. Currently, rice grass occupies approximately 600 hectares of the State’s intertidal zone, a small percentage of its potential habitat. Its biology is typical of an invasive weed species and includes abundant seed production, vegetative reproduction, extensive rhizome networks and a relatively high productivity. Its dense growth habit and rhizome/root network act as a trap for sediments and debris altering the natural rate, magnitude and location of sediment deposition and erosion. These processes elevate shorelines and river banks to create terraces and marsh islands by promoting deposition and accretion which may have considerable impacts to estuarine ecosystems and hydrodynamics, resident aquaculture, wild fisheries, tourism and recreation.

The Rice Grass Advisory Group (RGAG) was formed in 1996 to address the growing problem. In 1997 the RGAG received funds from Coastcare Australia to produce a Strategy for the Management of Rice Grass in Tasmania. The RGAG also received support from Fishcare Australia to investigate the ecology, impact and control of rice grass in Tasmania. The Department of Primary Industries, Water and Environment recently received funding from the Natural Heritage Trust Fisheries Action Program for a three year management program to implement the Strategy in Tasmania.

The Strategy is based on seven Area-Based Management Plans, one for each of the infested regions. The first year of the program has focused on planning issues and the development of the Area-Based Management Plans. The plans are being developed in consultation with local communities and industries. It is expected that the majority of infestations in Tasmania can be eradicated within 3-5 years. Infestations that are not eradicated (e.g., River Tamar, Rubicon estuary and perhaps the Smithton region) will be contained or reduced.

The Program has been implemented by a full-time mobile team which is specially trained for working in the estuarine environment and incorporates experience in estuarine ecology, rice grass management, integrated pest management and weed mapping. The most effective treatment appears to be the herbicide Fusilade® (active ingredient fluazifop-P). The majority of infestations are therefore likely be managed using Fusilade, particularly in the early stages of the management program. Smothering with black plastic, gas-generated thermal treatment and removal by hand will be used to remove remnant small clumps and single plants. The program also incorporates an environmental monitoring component that will investigate the effects of management activity on benthic macroinvertebrates, sediment dynamics and water quality.