Monitoring *Ludwigia longifolia* at Mambo Wetlands: investigation of a potentially invasive new weed incursion for Port Stephens Council

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**Summary** New invasive weed species are a significant threat to Australia’s biodiversity. In order to successfully manage these incursions, basic species knowledge is required. When adequate literature is unavailable, monitoring must be employed to provide this baseline information. A recent new aquatic weed incursion of *Ludwigia longifolia* (Hara), commonly known as longleaf willow primrose, at Port Stephens, New South Wales, has been monitored to establish some baseline data about this insufficiently recorded species. Transects, quadrats and tagging and mapping were used to gain information about *L. longifolia*. The results showed that this species has a fecundity that can reach production levels up to 5 million seeds m² per annum. Germination was approximately 94% given adequate moisture and seedling mortality varied between 30–97%. *L. longifolia* can reach up to nearly 4 m in height and form dense colonies in slow moving waterways. Dense root mats can result in increased sedimentation of drains and appear to regenerate after applications of herbicide. Many management implications have arisen from the study, mainly concerning the control of transport vectors and disturbance factors. *L. longifolia* exhibits a broad niche and demonstrates the potential to infiltrate irrigation and drainage channels, swamps, and wetlands, covering a large area within a short period of time. The baseline data gathered in this study builds upon the limited published information about *L. longifolia* and hopefully provides insight into management implications for the species.

**Keywords** *Ludwigia longifolia*, fecundity, germination rate, management implications.