

Invasive Plant *Arundo donax*: Mapping and Prioritizing Its Eradication in the Sacramento-San Joaquin Delta Region of Northern California

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It is generally accepted by the invasive plant control community that there is not enough funding to eradicate all problem weeds, and the work of invasive species control must be strategically focused. For many years Team Arundo del Norte and the Sonoma Ecology Center have been working on the control of riparian invader *Arundo donax* (giant reed). With funding from the Sacramento-San Joaquin Delta Conservancy, the Sonoma Ecology Center has mapped the distribution of *Arundo* within the boundary of the Legal Delta and developed eradication priorities based on the value of the threatened habitat. To determine eradication priorities, habitat suitability data for a suite of representative riparian species were assigned threat indices to derive a multi-species conservation value index. At a given location, this index suggests the eradication priority for known occurrences of *Arundo*. The resulting *Arundo* eradication priority map will be used by the Delta Conservancy to guide eradication efforts and the riparian habitat valuation map could be used with occurrence data for other riparian weed species.

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Keywords: *Arundo*, eradication priorities, riparian

Poster Cluster: Mapping the Invasive Plant *Arundo donax* and Prioritizing It for Eradication in the Legal Delta

Index-Based Multispecies Conservation Value (IMCV) Model for Prioritizing Invasive Weed Eradication

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The IMCV metric is a measure of habitat value and can suggest a priority for eradicating invasive species threats to that habitat. It is derived from habitat suitability rankings for a suite of selected species. These rankings are weighted by threatened or endangered listing status to give greater weight to listed species. For this project, the weighting is derived by merging federal and state listings. Species were chosen to represent the range of biota and habitat important for protection. Delta specific as well as threatened and endangered species were selected with the help of biologists at CDFW, CDWR, Delta Conservancy and Sonoma Ecology Center. 23 species from 7 taxa were considered for the IMCV. This poster shows the combined species input layers for 7 taxa and the final combined IMCV habitat ranking map for the Sacramento – San Joaquin Delta region.

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