



# STAFF REPORT

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**Meeting Type:** Watershed Committee/Board of Directors  
**Title:** Watershed Jubata Grass Control  
**From:** Shaun Horne, Director of Watershed Resources  
**Through:** Ben Horenstein, General Manager  
**Meeting Date:** December 19, 2024

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**TYPE OF ACTION:**                      Action                      X                      Information                      Review and Refer

**RECOMMENDATION:** Receive a staff presentation

**SUMMARY:** Staff will present the efforts to control a patch of invasive jubata grass (*Cortaderia jubata*) that has invaded rare plant habitat on the Watershed and explain how these actions fit into the vegetation management actions (MAs) outlined in the Biodiversity, Fire, and Fuels Integrated Plan (BFFIP), which was adopted in October of 2019.

**DISCUSSION:** In 2019, a half-acre patch of jubata grass was discovered invading a forested seep directly off of the Matt Davis Trail below West Point Inn. This discovery was possible thanks to our One Tam partners who conduct cyclical early detection rapid response (EDRR) surveys on watershed lands as described in MA-22, 'EDRR Expansion.' Jubata grass is listed as a high priority weed under Figures 3-2 through 3-5, which are referenced in MA-24, 'Grassland and Oak Woodland Improvement'.

As directed in MA-22 and MA-24, which describe treatment of newly discovered invasions and populations of high-priority weeds, treatment of the patch started in 2021 by contractors Forster and Kroeger and Hanford ARC. The patch was extremely dense, and required intensive treatment to manually dig out jubata grass individuals and pile the biomass on site. Three years of contractor treatment and a total of 328 hours has resulted in a dramatic decrease in the efforts needed to control this jubata grass patch. Another 15 staff hours were spent in 2024 on treatment and restoration efforts. Treatment has continued at this site yearly and, as directed in MA-22, will be, "revisited and retreated annually until the District records 5 consecutive years with no aboveground plants of the target weed."

The reduction in jubata grass cover at this site revealed the presence of a Mt. Tamalpais thistle (*Cirsium hydrophilum var. vaseyi*) in 2023. Mt. Tamalpais thistle is ranked as fairly threatened in California, on the California Rare Plant Rank as defined by the California Native Plant Society (CNPS) and is included in Appendix D, 'Special-Status Plants,' of the BFFIP. MA-25 specifically calls out Mt.

Tamalpais thistle and states, "existing populations will be augmented and/or habitat will be improved to benefit remaining rare species."

At the time of discovery of the Mt. Tamalpais thistle at the project site, it was also noted that the leftover jubata grass biomass was suppressing native plant recovery throughout the site. To encourage native regeneration of the Mt. Tamalpais thistle population and other desirable natives, three habitat improvements were attempted during 2023 and 2024: (1) direct seeding of native woody species that resulted in no regeneration; (2) caging which was constructed around resprouting native plants that successfully protected them against browse; and (3) invasive biomass manipulation into larger piles on site to minimize the mulching effect it was having on native regeneration.

The next steps in this project are to continue to assess the success of the biomass manipulation and consider other options for decreasing or moving the biomass. Lessons learned from the management of this jubata grass patch will be applied to better control other patches of jubata grass and similar species on the Watershed.

**ENVIRONMENTAL REVIEW:** The Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) adopted in 2019 covers all CEQA compliance for the work referenced in this report.

**FISCAL IMPACT:** None.

**ATTACHMENT(S):**

1. Occurrences of Cortaderia on the Watershed 2020-2024 Map