MEMO

Date: October 18, 2012

To: Laura Saunders and Kathie Lowrey

From: Joan Schwan, Vegetation Ecologist

Subject: Follow-Up Botanical Visit for Doran Regional Park and Westside Regional Park, Boat Launch Improvement Project

As stated in PCI’s September 2012 Biological Resources Site Analysis Report, I tentatively identified a small population of rare plants at the proposed dredge disposal area at Doran’s Cypress Day-use Area. A population of approximately 7 pink sand verbena (Abronia umbellata) plants was present at the western end of the proposed dredge materials disposal area. These appeared to be the rare (CNPS List 1B.1) variety, var. breviflora, for which there is a CNDDB record from 1987 documented in this area (CDFG 2012). I recommended a follow-up visit later in the season to confirm varietal identification once mature fruits were available.

I revisited the site on October 3, 2012. With this inspection, I determined that the plants did not key out clearly to either variety but had traits of both the rare variety (var. breviflora) and the more common variety (var. umbellata). Identification and keying was based on the Jepson eFlora (Baldwin et. al 2012); additional floras consulted were the 1993 Jepson Manual (Hickman 1993) and Flora of North America (Galloway 2004). The plants I examined had the following traits, which match the Jepson eFlora description of var. breviflora:

- 10-14 flowers per inflorescence
- Flower limb 6-7 mm wide
- Flower tube 8-9 mm in length
- Inflorescence relatively sparse
- Small population

The traits that matched the description of var. umbellata were:

- Flower throat surrounded by a white spot, not cream or yellow
- Fruit wings poorly to well-developed (but very variable)

I communicated with Dr. Richard Spellenberg, author of the Nyctaginaceae Family section (which includes Abronia) of the 1993 Jepson Manual to seek his opinion. He noted that intermediates between varieties are not unusual. He advised classifying individuals based on the variety with which they shared a greater number of traits. Dr. Spellenberg also noted that there is no current living expert in Abronia of whom he was
I also tried to contact Andy Murdoch, the author of the Nyctaginaceae section in the second edition of the Jepson Manual (2012) but have not received a response.

Given that the plants found at the proposed dredge disposal site share a greater number of traits with the description of var. *breviflora*, I would consider them to be part of the special-status taxa, *Abronia umbellata* var. *breviflora*. In addition, the California Native Plant Society recommends protection of populations intermediate between rare and common taxa (Sims 2012). Protection and/or mitigation measures for this population should be developed if project activities are still planned at this location.

**References**


California Department of Fish and Game (CDFG). 2012. California Natural Diversity Database, RareFind Version 3.1.1. California Department of Fish and Game, Sacramento, CA.

