PROGRESS REPORT to CA LCC and USFWS

Grant Recipient: California Invasive Plant Council (Cal-IPC)

Project Title: This agreement covers three active projects:

1. Developing an Accessible Tool for Prioritizing Management of Invasive Plant Populations
2. Setting Regional Strategies for Invasive Plant Management Using CalWeedMapper
3. Developing an Online Invasive Species Risk-Mapping Tool: Climate Change Adaptation through Strategic Management of a Top Ecological Stressor

FWS Agreement Number: 80250-B-J122

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Period Covered by Report: October 1 – December 31, 2012

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Project 1 - Developing an Accessible Tool for Prioritizing Management of Invasive Plant Populations

Task 1: *WHIPPET Evaluation: the WHIPPET tool is evaluated and adapted for applicability at a local land manager scale to prioritize invasive plant eradication or control efforts.*

50% complete. We interviewed previous WHIPPET users on their experience and recommendations. We met with FWS to explore needs at the refuge scale. The project team has met to determine ways to strengthen existing WHIPPET calculations and technical considerations for adapting the tool for online use at multiple scales. Additional discussion is needed to determine the best approach for making the tool most useful at the refuge scale.

Task 2: *WHIPPET Development: the WHIPPET tool is adapted for use by local land managers or a new tool is developed.*

15% complete. After consulting with Calflora, GreenInfo Network, and TerraGIS, we developed a technical scope for building WHIPPET online, and are now getting estimates from potential contractors. We have built a database for information in the Cal-IPC Inventory, which will provide data to WHIPPET. We have begun compiling information for the management database that will support WHIPPET.

Task 3: *Test WHIPPET application to US Forest Service and USFWS Refuges.*

0% complete.

Task 4: *Report on WHIPPET applications.*

0% complete.

Task 5: *Complete WHIPPET web interface, beta-test online WHIPPET tool, complete user guide.*

0% complete.

Project 2 - Setting Regional Strategies for Invasive Plant Management Using CalWeedMapper

Task 1: *Design process and materials for developing regional invasive plant management strategies. Coordinate with CDFG Wildlife Action Plan process.*

75% complete. In working with pilot regions, we have developed a standard process and materials for regional prioritization. The process involves two stakeholder meetings to use CalWeedMapper to determine top eradication and surveillance priorities for a region and to scope projects to address those priorities. These collaborative regional priorities are encapsulated in a simple strategic plan document. For eradication, we work with each region to identify funding sources for implementation. For surveillance, we provide materials to train those in the field to identify species selected as early detection targets.

DFW's work on the Wildlife Action Plan has been delayed. We are positioned to partner with them when they begin their regional meetings. We are crosswalking the habitats identified in Cal-IPC's Inventory of invasive species with the statewide vegetation layers to be used by DFW in the SWAP.

Task 2: *Complete strategic plans for 2 regions. Incorporate climate uncertainty measure into regional approach.*

80% complete. We have completed regional strategic priorities and eradication workplans for the Central Sierra (Alpine, Amador, Calaveras, El Dorado, and Tuolumne Counties) and the Central Coast (Monterey, San Benito, and Santa Cruz Counties). We held 2 partner meetings in each of these regions. We helped the Central Sierra secure a National Fish & Wildlife Foundation grant to eradicate three priority species, and we hope to find funding for the Central Coast partners to implement top priority projects there. We are working on species identification materials for the Central Coast surveillance species.

Task 3: *Complete strategic plans for 2 additional regions. Complete "regional strategies" webpage in CalWeedMapper.*

50% complete. The regional strategies webpage has been created in CalWeedMapper (http://calweedmapper.calflora.org/regions) and all regional documents can be found there. We have drafted regional strategic priorities and eradication workplans for the Northwest and North Central regions. The Northwest has drafted a worksheet of potential funders. The Northwest will distribute dearly detection species identification materials for surveillance at their outreach meeting in April. The North Central is in the process of drafting an early detection species guide for distribution within their region. We have held two meetings in each of these regions.

Task 4: *Complete strategic plans for 2 additional regions. Hold statewide meeting or conference call for regional partners. Complete standardized process and materials.*

10% complete. We are in the beginning stages of planning for three regions: South-Central Coast, Bay Area and Northern Sierra. In the Bay Area we are taking on the work of the Bay Area Early Detection Network. In the other two regions we are in contact with key partners.

Project 3 - Developing an Online Invasive Species Risk-Mapping Tool…

Task 1: *Post test version of online tool for NPS ecologist advisory group to test, with statewide distribution data mapped for 100 invasive plant species and suitability mapped for 50. Convene modeling advisory group to guide improved modeling approach.*

100% complete. Maps available at http://calweedmapper.calflora.org. See previous progress reports for details.

Task 2: *Complete adding the first conservation layers to the tool with support from Cal DFG.*

100% complete. The Statewide Biological Richness Overview layer of ACE II (CDFG Areas of Conservation Emphasis) was added to CalWeedMapper. Caltrans' Essential Habitat Connectivity layer was also added.

Task 3: *Increase the number of suitability maps to cover 100 invasive plant species, and add data addressing the level of uncertainty.*

100% complete. We developed models for 140 species. We posted maps for the 79 species for which we had high confidence in the results based on available data and expert review. CalWeedMapper now displays three maps with modeling results: 2010, 2050 and 2010-2050 change. The model parameters for each species are displayed with its future suitability map to help users gauge the relative level of uncertainty of the projection.

December 31, 2012: *Complete online tool and promote it to the state's community of natural resource managers. Complete invasive plant management recommendations using the tool for a set of National Park units in the CA LCC region.*

100% complete. CalWeedMapper is complete. We have promoted it to resource managers through webinars, live demonstrations, email announcements, conference presentations and newsletter articles. Based on discussions with National Park ecologists, we chose Sequoia-Kings Canyon NP and Santa Monica Mountains NRA as pilot sites. We provided them with maps of species recommended as potential eradication and surveillance targets, including maps showing where our climate models indicate expanding suitable range in and near the parks. Both parks plan to integrate this early detection information into the vegetation management plans they are developing. We provided biologists at seven national parks with data on habitats invaded and dispersal vectors for all 200+ species on the Cal-IPC Inventory. We will continue to work with them in 2013.