Midpeninsula Regional Open Space District

R-12-66
Meeting 12-26
July 25, 2012

AGENDA ITEM 7

AGENDA ITEM

Authorization to Amend an Agreement with Phytosphere Research for an Additional $10,000 to Continue Monitoring of Treatment Methods to Suppress the Spread of Sudden Oak Death

GENERAL MANAGER'S RECOMMENDATION

Authorize an agreement amendment with Phytosphere Research for an additional $10,000 to continue in Calendar Years 2012 and 2013 monitoring of treatment methods to suppress the spread of Sudden Oak Death, for a total contract amount not to exceed $37,500.

SUMMARY

The Board of Directors of Midpeninsula Regional Open Space District (District) approved original agreements with Phytosphere Research on October 22, 2008, and October 28, 2009, to design treatment of oak trees for the suppression of the Sudden Oak Death (SOD) disease and monitor the results (R-08-123 and R-09-97). This amendment would extend the monitoring phase of this research and provide matching funds for a research grant from the U.S. Forest Service.

DISCUSSION

SOD is a plant disease caused by the fungus-like pathogen *Phytophthora ramorum* that has killed millions of oaks and tanoaks in many forests of coastal California. On December 14, 2005, the Board of Directors adopted a ten-year plan for addressing SOD, including mapping of potentially resistant trees, treating a select number of specimen-sized trees with a fungicide, and establishing a collaborative fund for SOD research to guide land management decisions (R-05-122). Consistent with this ten-year plan, the proposed amendment would continue SOD research to guide District staff in detecting outbreaks at new locations and in new tree species, and to determine the effectiveness of fungicide and other treatment methods.

In 2007, Dr. Ted Swiecki and Elizabeth Bernhardt with Phytosphere Research were hired to test treatment methods to suppress the spread of SOD on stands of coast live oak, Shreve oaks and tanoaks in Rancho San Antonio, Monte Bello and El Corte de Madera Open Space Preserves (OSPs). The two treatment methods consist of removing bay trees within 15 feet of oak trees and annual spraying of a fungicide on oak trees. As of the fall 2011 monitoring, no symptoms of SOD were seen in either the control or treated research plots at Rancho San Antonio or El Corte

de Madera OSPs where both bay removal and fungicide treatment were implemented. At Monte Bello OSP, the rate of SOD incidence in the control plot increased from 16 to 23% of monitored trees over two years, while it remained at a steady rate of 14% in the area treated with bay removal. Under this amendment, Phytosphere Research would continue to provide advice and monitor the effectiveness of treatment methods at these three OSPs.

Also in 2007, District staff noticed symptoms on and subsequent death of several large canyon live oaks in Los Trancos OSP adjacent to the San Andreas Fault Trail. Before that time, most experts believed canyon live oak was not susceptible to SOD. District staff hired Phytosphere Research to determine the cause of decline, recommend actions to protect the unusually large and spectacular canyon live oaks adjacent to popular trails in Los Trancos OSP, and monitor the results. By June 2009, Dr. Swiecki concluded that the SOD pathogen was associated with the death of canyon live oaks at Los Trancos OSP. The District subsequently removed bay trees around the large oaks and sprayed the oaks near the Fault Trail with a fungicide under the direction of and with monitoring by Phytosphere Research. As of December 2011, no new SOD infections have been seen in the research plots at Los Trancos OSP.

Phytosphere Research continues to find opportunities for additional funding and collaboration with university experts to expand SOD research on District preserves. Dr. Swiecki is monitoring an area along Ancient Oaks Trail in Russian Ridge where the District has removed bay trees around large oaks. As of December 2011, SOD symptoms and poor health conditions have been detected on one canyon live oak tree within the bay removal area at Russian Ridge OSP. In 2010, Dr. Swiecki initiated another research project to track the subtle development of symptoms on canyon live oaks in Skyline Ridge OSP. Continued SOD research and monitoring at these two additional preserves is included in this amendment.

The observation and guidance provided by Phytosphere Research during treatments have resulted in adjustments of equipment and techniques, which will assist the District and other land management agencies to refine the application of fungicide and removal of bay trees.

FISCAL IMPACT

With this $10,000 amendment added to the current contract of $27,500, the total contract amount will be $37,500. Funds for this amendment are included in the Natural Resources Department budget for FY2012-13.

Over the past seven years (2007 through 2013), Phytosphere Research has received $97,250 in grant funding from the U.S. Forest Service to assist in SOD research on District preserves. The District's total matching contributions have been an important incentive for continued funding by the U.S. Forest Service of SOD research on District preserves.

BOARD COMMITTEE REVIEW

Board Committee review for this item was not needed.

PUBLIC NOTICE

Notice was provided pursuant to the Brown Act, and notices were also sent to persons expressing interest in resource management items.

CEQA COMPLIANCE

The SOD treatment activities conducted as a part of this research were included in the Mitigated Negative Declaration and Mitigation Monitoring Program for the Site-Specific Weed and Pest Management Project approved by the Board on May 9, 2012 (R-12-47).

NEXT STEPS

Upon Board authorization, staff will approve the amendment to the Phytosphere Research agreement to allow continued SOD research on District preserves.

Responsible Department Head:
Kirk Lenington, Natural Resources Manager

Prepared by:
Cindy Roessler, Senior Resource Management Specialist

Contact person:
Same as above