

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
 DF-46 (REV 08/15)

Fiscal Year 2016-17	Business Unit 8570	Department Food and Agriculture	Priority No. 5
Budget Request Name 8570-005-BCP-DP-2016-GB		Program 6570 – AGRICULTURAL PLANT AND ANIMAL HEALTH; PEST PREVENTION; FOOD SAFETY SERVICES	Subprogram

Budget Request Description
 Citrus Pest and Disease Prevention Program

Budget Request Summary

The California Department of Food and Agriculture requests an increase of \$1.0 million Department of Agriculture Account, Department of Food and Agriculture Fund in Fiscal Years 2016-17 and 2017-18 respectively to enhance the Asian Citrus Psyllid and Huanglongbing Mitigation Project. The increased authority will allow the California Department of Food and Agriculture to add funds to existing commercial pesticide applicator contracts to initiate suppression and control activities in newly detected areas and initiate new contracts in areas as the program expands.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	
Does this BCP contain information technology (IT) components? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	Department CIO	Date

For IT requests, specify the date a Special Project Report (SPR) or Feasibility Study Report (FSR) was approved by the Department of Technology, or previously by the Department of Finance.

FSR SPR Project No. Date:

If proposal affects another department, does other department concur with proposal? Yes No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Victoria Hornbaker	Date 12/14/2015	Reviewed By Nick Condos	Date 12/14/2015
Department Director <i>Kevin Masuku</i>	Date <i>1-5-16</i>	Agency Secretary <i>Karen Ross</i>	Date <i>1-5-16</i>

Department of Finance Use Only

Additional Review: Capital Outlay ITCU FSCU OSAE CALSTARS Dept. of Technology

BCP Type: Policy Workload Budget per Government Code 13308.05

PPBA <i>[Signature]</i>	Date submitted to the Legislature <i>1/21/16</i>
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Analysis of Problem

A. Budget Request Summary

The California Department of Food and Agriculture (CDFA) requests an increase of \$1.0 million Department of Agriculture Account, Department of Food and Agriculture Fund in Fiscal Years (FY) 2016-17 and 2017-18 to enhance the Asian Citrus Psyllid (ACP) and Huanglongbing (HLB) Mitigation Project. ACP is a non-native insect pest that serves as a vector of the bacterium that causes the HLB disease, which is fatal to citrus trees. HLB transmittal is solely dependent on ACP; it is transmitted to healthy trees by ACP after it feeds on infected plant tissue. Without mitigation measures, ACP will spread to infest all of California's citrus-growing areas, potentially bringing HLB into new regions of California.

CDFA Division of Plant Health and Pest Prevention Services (PHPPS) is currently suppressing infestations of ACP in 16 California counties. In prior years, suppression operations began in Imperial, Los Angeles, Orange, San Bernardino, Riverside, San Diego, Ventura, Tulare, Santa Barbara, and San Benito counties. Suppression operations expanded to Fresno, Kern, Madera, San Joaquin, Santa Clara and San Luis Obispo counties, as ACP was detected in these areas for the first time in FY 2014-15. On July 10, 2015, an HLB infestation was detected in the San Gabriel area of Los Angeles County, which caused further expansion of the ACP and HLB Mitigation Project.

In the counties considered generally infested with ACP, growers are engaging in area wide management activities and the Citrus Pest and Disease Prevention Program is responding with buffer treatments. PHPPS will continue its overall treatment for ACP, enforcement of quarantine regulations, biological control development, laboratory services, and outreach operations. The increased authority will allow CDFA to continue its pesticide contractor activities, which have increased significantly; by adding funds to existing commercial pesticide applicator contracts to initiate suppression and control activities in newly detected areas and initiating new contracts in areas as the program expands. The ultimate goal is to prevent ACP infected with HLB from becoming permanently established in California.

B. Background/History

ACP is typically found in tropical and subtropical Asia, Afghanistan, Saudi Arabia, Reunion, Mauritius, Central America, Mexico, the Caribbean and the United States (Alabama, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, South Carolina, and Texas). The host range for ACP includes all citrus species and many citrus relatives. HLB is established in areas with climates similar to California and is the most devastating of all citrus diseases¹. In March 2012, CDFA detected one HLB-infected citrus tree in the Hacienda Heights area of Los Angeles County. This was the first and only HLB detection in California. On July 10, 2015 a second HLB positive tree was detected in the San Gabriel area of Los Angeles County, about 10 miles to the northwest of the first HLB positive tree. This initiated an extensive survey which has subsequently identified several additional HLB-infected citrus trees near the initial find in Los Angeles County.

Due to the imminent threat that citrus pests and diseases pose to California citrus, the Legislature approved Assembly Bill (AB) 281 (Chapter 426, Statutes of 2009) in October 2009, which added Article 2 (commencing with Section 5911) to Chapter 9, Part 1, Division 4 of the Food and Agricultural Code (FAC), creating the California Citrus Pest and Disease Prevention Committee (CPDPC) within CDFA. AB 281 provides for a monthly assessment established by the CPDPC and remitted to CDFA that shall not exceed nine cents (\$0.09) per carton of citrus, based on the number of 40 pound carton equivalents produced. Funding is deposited into the Citrus Disease Management Subaccount within the Department of Agriculture Account, Department of Food and Agriculture Fund. Annually, California

¹ MaryLou Polek, "Citrus Bacterial Canker Disease and Huanglongbing (Citrus Greening)," University of California, Division of Agriculture and Natural Resources, Publication 8218, p. 4.

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citrus growers produce an average of 185 million cartons of various citrus commodities². The CPDPC has the authority to develop, subject to the approval of the Secretary, a statewide citrus-specific pest and disease work plan that includes programs for surveying, detecting, analyzing, and treating citrus pests and diseases.

In addition, existing law provides that the Secretary of CDFA is obligated to investigate the existence of any pest that is not generally distributed within California and determine the probability of its spread and the feasibility of its control or eradication (FAC, Sections 5321, 5911-5940). FAC Section 5322 provides that the Secretary may establish, maintain and enforce quarantine, eradication and other such regulations as necessary to protect the agricultural industry from the introduction and spread of pests.

In FY 2013-14, a Finance Letter was approved to provide \$2.5 million in FYs 2013-14 and 2014-15, to aid the ACP program and the HLB Mitigation Project. In FY 2013-14, \$1.0 million one-time General Fund was approved by the Legislature to aid the program, as well.

CDFA has been actively engaged in survey, treatment, regulatory, and outreach programs based on recommendations from the Primary State Entomologist, Plant Pathologist, and the California HLB Task Force. Additionally, CDFA and other stakeholders are implementing a biological control program to further suppress the ACP population. These activities are in line with similar programs where CDFA successfully controlled/eradicated other destructive pests. ACP detections increased significantly in FY 2012-13. CPDPC realized the strategy for treatments and surveys were expanding in acreage and cost in the Los Angeles basin, and characterized the area as generally infested. The program scaled back treatment and monitoring activities, developed a new strategy, and shifted its focus from generally infested areas to protecting high risk areas and areas known to be ACP free. As a result, the resource history reflects a reduction in actual expenditures in FY 2013-14 and the workload history reflects fewer treatment and monitoring activities in FYs 2013-14 and 2014-15.

Resource History (Dollars in thousands)

Program Budget	2010-11	2011-12	2012-13	2013-14	2014-15	Projected 2015-16
Agriculture Fund	14,994	15,006	15,500	18,014	18,103	15,618
General Fund	0	0	0	1,000	0	0
Total Authorized Expenditures	14,994	15,006	15,500	19,014	18,103	15,618
Actual Expenditures	8,147	15,006	15,500	10,349	16,570	15,618
Revenues	11,114	14,410	15,302	14,373	16,922	15,424
Authorized Positions	3.0	3.0	3.0	1.0	1.0	1.0
Filled Positions	0.9	1.8	1.0	1.0	1.0	1.0

² CDFA Commodity List: http://www.cdfa.ca.gov/is/docs/Commodity_list.pdf

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Workload History

Workload Measure	2010-11	2011-12	2012-13	2013-14	2014-15
Properties Treated	9,800	33,074	79,622	27,370	23,002
Public Meetings	23	89	188	80	55
Call Center	2,744	6,071	25,575	9,045	7,709
Trap Inspections	5,561	8,096	8,481	12,444	15,501

C. State Level Considerations

CDFA's mission is "to serve the citizens of California by promoting and protecting a safe, healthy food supply, and enhancing local and global agricultural trade, through efficient management innovation, and sound science, with a commitment to environmental stewardship." Pest prevention is uniquely positioned to protect California's urban and natural environments as well as its agriculture. CDFA is committed to protecting the environment, economy and citizenry from invasive pests. The FAC provides CDFA with the authority to protect California from the damage caused by the introduction or spread of harmful pests in FAC Sections 24.5, 403, 407, 5006, 5301, 5322 and 5761.

D. Justification

California's moderate, Mediterranean climate, coupled with its fertile soil and diverse land resources, allows year-round production of citrus commodities. California's citrus industry is the number one citrus producer in the United States, with the total gross value of over \$2.5 billion; the industry employs 10,000 people directly, and another 12,000 indirectly³. Compared to the rest of the world, California citrus is relatively free of diseases. Currently, this status is in jeopardy due to the recent discovery of HLB and the growing population of ACP. The presence of ACP and HLB in California poses a clear danger to agriculture, the urban environment, and California's economy. The permanent establishment of HLB will cause significant economic losses for the citrus production and nursery industries and for California's economy. Homeowners and businesses will also suffer the loss of their landscape trees as they succumb to the disease. This situation occurred in Florida, where ACP was established for several years before HLB was found.

Based on a recent study in Florida regarding the economic impacts with-HLB versus without-HLB, FY 2006-07 through FY 2010-11 on citrus utilized only for juice manufacturing, it was determined that the presence of HLB caused significant adverse effects on Florida's citrus industry. Production costs increased, and Florida realized a significant decrease in overall gross domestic product, income and revenue, and employment within more than fifteen industry sectors. Revenue decreased by \$1.7 billion or 16 percent and the agricultural, forestry, and fisheries industries lost more than 3,900 or 48 percent of the 8,257 total jobs lost. The total devastation caused by the permanent presence of HLB in Florida was actually worse during this time; however this assessment did not consider the economic impacts on the fresh citrus fruit markets and other manufactured citrus products⁴.

According to CDFA's Pest Ratings Policy and Definitions⁵, ACP and HLB are 'A' rated pests⁶ and as such, CDFA is required to take steps to mitigate their spread. Detecting, controlling / eradicating and

³ Citrus/Strong California: <http://citrusstrong.com/strengthening-the-economy/>

⁴ Economic Impacts of Citrus Greening: <http://ufdc.ufl.edu/IR00005615/00001>

⁵ CDFA's Pest Ratings Policy and Definitions: http://www.cdfa.ca.gov/plant/ppd/nematology/nema_ratings.html

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preventing the artificial movement of ACP will prevent the HLB disease from infecting citrus trees. The bacterium that causes the disease, namely *Candidatus Liberibacter asiaticus*, blocks the flow of nutrients within the tree, which leads to yellow shoots with mottling and chlorosis of the leaves, misshapen fruit, fruit that does not fully color, and fruit that has a very bitter taste making it unfit for human consumption. There is no cure for HLB. Infected trees will starve to death from the lack of nutrients and must be removed and destroyed to ensure they do not serve as a reservoir for the bacteria.

Because HLB has been found in multiple locations in Los Angeles, allowing the ACP population to increase and spread is a recipe for disaster, specifically because the port of Los Angeles is the number one port by container volume and cargo value in the United States⁷. California's share of the total United States agricultural exports for 2013 was 14.7 percent⁸. The establishment of ACP and HLB will also result in the imposition of quarantines on both production citrus and ornamental nurseries. Citrus produced in an area that is within quarantine must be treated with pesticides and all stems and leaves must be removed from the fruit before transiting out of the quarantine area. Nursery stock grown in an HLB quarantine area requires inspection and testing for HLB, must be grown within a United States Department of Agriculture (USDA) approved greenhouse, and safeguarded with tarps during transit⁹. These regulations will add significant costs to the production of citrus and impede the sale of nursery stock to citrus growers and homeowners. Due to the additional costs to comply with these regulatory restrictions, many growers will go out of business. Preventing the establishment of HLB protects California's commercial and backyard production of citrus and related plants. It also prevents the potential for a threefold increase of pesticides in the environment, from two ACP treatments annually to a minimum of five to six treatments due to permanent, statewide presence of HLB¹⁰.

In FY 2014-15, ACP was detected in multiple new counties, and in counties where ACP was known to occur there was a three-fold increase in the population. Growers in Riverside, Imperial, Ventura, San Bernardino and San Diego counties are transitioning to area-wide ACP management which requires that CDFA conduct residential buffer treatments around commercial groves that participate in the coordinated area-wide treatment.

Increasing the Department of Agriculture Account, Department of Food and Agriculture Fund authority by \$1.0 million in FYs 2016-17 and 2017-18 will provide CDFA the necessary funds to increase existing commercial pesticide applicator contracts to initiate suppression and control activities in newly ACP and/or HLB detected areas and the ability to initiate new contracts in areas as the program expands. The contractors provide trained/licensed personnel and the most current equipment required to make timely pesticide applications, which allows CDFA the ability to respond expeditiously to new detections in urban and rural areas within California that CDFA would not otherwise have the personnel or resources to respond, and the flexibility to scale back if there are not any finds.

Due to the limited revenues of the Citrus Pest and Disease Prevention Program, CDFA requests a limited-term increase in spending authority for two years. During this time, CDFA will evaluate whether the program can be supported within the existing fee structure or if higher industry fees are necessary to support the increased suppression and control activities on an ongoing basis. Currently, there is a sufficient level of funding in the Department of Agriculture Account, Department of Food and Agriculture Fund to support increased spending in FYs 2016-17 and 2017-18.

⁶ An organism of known economic importance subject to State enforced action involving eradication, quarantine regulation, containment, rejection, or other holding action.

⁷ Port of Los Angeles History: http://www.portoflosangeles.org/idx_history.asp

⁸ CDFA Statistics: <http://www.cdfa.ca.gov/statistics/>

⁹ California Code of Regulations Sections (CCR) 3435(ACP) and 3439(HLB): <http://www.cdfa.ca.gov/regulations.html#ACPQ01>

¹⁰ Area Wide Control of ACP Technical Working Group Report, p.12

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E. Outcomes and Accountability

HLB transmittal is solely dependent on ACP; therefore, future workload will consist of ongoing efforts to initiate suppression/control in newly detected areas throughout the State. Intensive surveys will be maintained throughout the ACP and HLB Mitigation Project areas, urban treatments will occur in areas in proximity to citrus groves, biological control agents will be released in areas with high ACP populations, quarantine regulations will be enforced and all suspect ACP and HLB samples will be submitted to a laboratory that is approved for HLB confirmation by USDA.

Oversight of the project will be a collaborative effort between CDFA-ACP/HLB project staff, the agricultural commissioners in each of the impacted counties, USDA, and CPDPC. Project related expenditures will be monitored and approved by the chiefs of the branches performing the operations. Monthly expenditure reports will be used to capture project related costs and compile data for the project reporting requirements. Monthly expenditures will be reported to CPDPC.

F. Analysis of All Feasible Alternatives

Alternative #1: Increase the Department of Agriculture Account, Department of Food and Agriculture Fund authority by \$1.0 million in FYs 2016-17 and 2017-18 to enhance the ACP and HLB Mitigation Project and provide CDFA the ability to increase existing and initiate new commercial pesticide applicator contracts.

Advantage: No General Fund dollars will be expended. CDFA will be able to continue contracting with trained/licensed commercial pesticide applicators to effectively make pesticide applications, initiate suppression and control activities in newly ACP and HLB detected areas, and initiate new contracts in areas as the program expands. Citrus growers will avoid additional costs of complying with regulatory restrictions of HLB quarantines and continue producing fruit that is relatively free from diseases. This will preserve California's \$2.5 billion citrus industry and protect California's economy. In addition, the number of homeowners suffering a loss of their landscape and the potential adverse effects on California's urban landscape will be minimized. California's agricultural environment is a resource of global significance, therefore mitigating the spread of HLB and the establishment of biological control agents minimizes the possibility of HLB further expanding and becoming permanently established in California.

Disadvantage: Increased Department of Agriculture Account, Food and Agriculture Fund expenditures.

Alternative #2: Do not increase the Department of Agriculture Account, Department of Food and Agriculture Fund authority by \$1.0 million in FYs 2016-17 and 2017-18 to increase pesticide applicator contracts to mitigate the spread of ACP and HLB.

Advantage: No augmentation in funding would be required.

Disadvantage: This alternative would shift the burden of control to homeowners and each individual citrus grower. Due to the lack of uniformity in mitigation operations, such a voluntary program would allow ACP potentially infected with HLB to spread throughout the State, thereby spreading HLB. If HLB becomes permanently established, California would be under a permanent quarantine. The overall impact on California's economy, environment, and agricultural and citrus industries would be devastating. HLB infected fruit has a very bitter taste making it unfit for human consumption and all HLB infected trees must be removed to ensure they do not serve as a reservoir for the bacteria. The resulting decline and death of citrus trees will reduce overall citrus production and negatively impact trade, and have severe adverse consequences to the California's urban landscape.

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Alternative #3: Reduce or slow implementation of other program activities, and/or absorb the increase of pesticide applicator contractor activities within the program's current budget.

Advantage: No augmentation in funding would be required.

Disadvantage: This alternative will not prevent the spread of ACP. With limited mitigation measures, ACP would spread on infested host plants or by natural dispersal to infest all the citrus-growing areas. It will increase the probability that ACP potentially infected with HLB will spread throughout the State, thereby spreading HLB. In the absence of CDFA's ability to contract trained/licensed commercial pesticide applicators to eradicate ACP populations before they spread or as soon as they are detected, commercial and residential citrus producers would attempt their own mitigation operations, which will increase pesticide use, thereby increasing overall pesticides in the environment. Due to the lack of uniformity in mitigation operations, such a voluntary program would allow ACP potentially affected with HLB to spread throughout the State, thereby spreading HLB.

Alternative #4: Only implement biological control operations in the areas infested with ACP.

Advantage: No augmentation in funding would be required.

Disadvantage: Biological control is a component of Integrated Pest Management, and is an approach to controlling pests which implements a system of complementary management actions within a defined area. Without pesticide applications, the ACP population will continue to spread. All of the control/mitigation operations play a critical role in suppressing ACP and preventing HLB from gaining a foothold in California. Therefore, funding only the biological control portion of the program will not be effective. The biological control agents will only be effective if the ACP population is suppressed. Without treatment and regulatory actions, the biological control agents will never be able to reproduce and multiply fast enough to make an impact on the ever-growing ACP population.

G. Implementation Plan

Beginning July 2016, CDFA will do the following:

- Develop and issue the Pesticide Applicator Request for Proposals (RFP)
- Advertise in all counties engaged in ACP and HLB activities
- Evaluate and Rank RFP submittals
- Award and Implement contracts

H. Supplemental Information

\$1.0 million in contracts for commercial pesticide applicators.

I. Recommendation

CDFA recommends approval of Alternative #1, increase the Department of Agriculture Account, Department of Food and Agriculture Fund authority by \$1.0 million in FYs 2016-17 and 2017-18 to enhance the ACP and HLB Mitigation Project. HLB is the most devastating of all citrus diseases. Providing CDFA the ability to increase existing commercial pesticide applicator contracts for trained/licensed personnel to initiate suppression and control activities in newly ACP and HLB detected areas, and initiate new contracts in areas as the program expands will ensure that further economic and environmental damage in California due to the presence of ACP and HLB is mitigated.