

Farm Bill Section 10201 Program

2014 National Program Guidelines

August 20, 2013

INTRODUCTION

The purpose of these guidelines is to provide direction for the Plant Pest and Disease Management and Disaster Prevention Program, otherwise known as the Farm Bill (FB) Section 10201 Program (see 7 U.S.C. 7721). These guidelines are written for State Departments of Agriculture, Plant Protection and Quarantine (PPQ) personnel, Tribal governments, industry groups, universities, and other collaborators. These guidelines provide a general overview of the Section 10201 program implementation process. Specific details concerning annual program activities may be obtained from any of the FB Management Team (FBMT) members representing USDA APHIS PPQ's Core Functional Areas: Policy Management (PM), Field Operations (FO), or Science and Technology (S&T). (See Appendix A)

MISSION IMPORTANCE

APHIS-PPQ is charged with implementing 7 U.S.C. 7721 of the Plant Protection Act (amended by Section 10201 of the 2008 Farm Bill), to prevent the introduction or spread of plant pests and diseases that threaten U.S. agriculture and the environment. Under the FB, APHIS-PPQ provides funding to strengthen the nation's infrastructure for pest detection and surveillance, identification, and threat mitigation, while working to safeguard the nursery production system. Through the process used to submit and prioritize project suggestions, PPQ has funded more than 1,000 projects in 50 States and 2 U.S. territories since 2009. These projects have strengthened PPQ's ability to protect U.S. agriculture and natural resources from foreign plant pest threats in areas such as pest survey, identification, inspection, mitigation, risk analysis, and public education and outreach.

Projects are organized around six goal areas: enhancing plant pest/disease analysis and survey; targeting domestic inspection activities at vulnerable points in the safeguarding continuum; enhancing and strengthening pest identification and pest ID technology; safeguarding nursery production; enhancing mitigation capabilities; and conducting outreach and education about these issues. Details are available on APHIS' Farm Bill web site at:

<http://www.aphis.usda.gov/section10201>

The original goals and strategies put forth by the FB Section 10201 Program, and documented in the Implementation Plan, were revised, and APHIS developed categories under each goal area to help stakeholders identify and develop suggestions that address a critical need or an unexplored opportunity in terms of strengthening prevention, detection, and/or mitigation

efforts. For FY14 these categories were updated to reflect the evolving needs of the FB Section 10201 Program and are outlined in this document.

ROLES AND RESPONSIBILITIES

The success of the FB Section 10201 Program is based on good communication and collaboration between APHIS and its cooperators, as well as clarity about the roles and responsibilities of all parties involved in identifying, prioritizing and implementing cooperative projects. This includes projects conducted by PPQ and state cooperators funded through other line items. While the focus of these guidelines is primarily directed to PPQ state offices and state cooperators, it also extends to other Federal agencies, Tribal governments, industry partners, universities, and other cooperating organizations.

At both the national and state-levels, an organized effort to engage stakeholders in open dialogue early in and throughout the planning process is critical to the success of the FB Section 10201 Program. APHIS believes the commodity/ecosystem approach will provide a more holistic framework for prevention, preparedness, response, and recovery from invasive pests of regulatory significance. APHIS realizes the value of engaging stakeholders throughout this continuum, especially when communicating about pest risks, jointly setting priorities, and leveraging resources across organizational boundaries. It is imperative that FB Section 10201 Program Managers communicate the goals and objectives of the Section 10201 Program, and cooperators clearly communicate the benefits of proposed projects.

The FBMT will provide the strategy for identifying projects of national priority in consultation with the National Plant Board, industry representatives and other concerned parties. The FBMT coordinates review and implementation of project proposals; sets and enforces policy regarding appropriate use of FB funding; annually reviews the policy, strategy, and performance of the FB program; and revises national program guidelines as needed and posts to public website. The roles and responsibilities of the PPQ Farm Bill Management Team (FBMT), Goal Area Team Leads, Goal Team members, PPQ Program Managers, State Plant Health Directors (SPHD), State Plant Regulatory Officials (SPRO), and other positions within the FB Section 10201 Program are detailed in Appendix B.

OVERARCHING CATEGORIES & SPECIFIC IMPLEMENTATION STRATEGIES

As mentioned in the introduction, APHIS has organized the implementation of the Farm Bill Section 10201 Program around 6 major goal areas. In order to provide better focus and direction, the Program developed Overarching Categories under each goal area to help stakeholders identify and develop suggestions that address a critical need or an unexplored opportunity in terms of strengthening prevention, detection, and/or mitigation efforts. Further, Specific Implementation Strategies were developed to add clarity and direction to ensure

suggestions are focused on key implementation activities that support the Overarching Categories within each major goal area.

The Specific Implementation Strategies will be reviewed each year to ensure current and emerging plant pest prevention, detection, and/or mitigation needs are met annually. This strategic approach will allow flexibility within these guidelines to emphasize current year strategies that more accurately reflect the intent of the goal area.

Goal 1: Enhance plant pest/disease analysis

Overarching Categories
Identify risk factors and high-risk pathways by analysis of available data.
Develop risk based models and decisions support tools to reduce the introduction and establishment of exotic species.

Specific Implementation Strategies	
Pathway Analysis/Data Synthesis	Compile, synthesize, or evaluate data to inform risk analysis, survey methodology, or pathway analysis. This includes new and innovative approaches in using data to inform the understanding of exotic plant pest analysis with a focus on the arrival or establishment of such a pest.
Modeling	Better define biotic and abiotic variables, detect patterns, and test hypotheses to improve predictive modeling and surveillance efforts for exotic species. This category includes initiatives that improve the understanding of where an exotic pest may be introduced or able to establish.
Decision Support	Improve decision support functions related to exotic species. This category includes initiatives that contribute to better decision making as related to exotic species and their impacts to plant health and vigor.

Goal 1 Enhance plant pest/disease survey

Overarching Categories	
	Target multiple, high priority pests for survey along national and local high-risk pathways.
	Fund high priority nationally-directed pest surveys in support of specialty crops, trade, and regulatory activities.
	Fund state-specific pest surveys in support of state pest risk and priorities.

Specific Implementation Strategies	
National Surveys	Surveys which are national in scope with broad participation by the states, and target multiple, high priority exotic pests, specialty crop commodities, and high risk pathways for entry of exotic pests into the United States. The supported National Surveys will be determined and communicated by the FB Survey Team in consultation with PPQ program managers and state cooperators.
State-Specific Surveys	Surveys which are more local or regional in scope, and target multiple, high priority pests, specialty crop commodities, and high risk pathways into a state or within a region. Proposed State-specific Surveys should be based on the priorities of a state or region, and be important for that state or region for biological, agricultural, environmental, and/or economic reasons, and have quarantine significance.
Program Directed Surveys	These surveys will be strategic, and aimed at filling gaps in our knowledge about the distribution of a pest, according to the objectives of the specific program. These surveys focus on specific states based upon pest biology, risk, pathways of dissemination, and objectives of the specific pest program.

Goal 2: Target domestic inspection activities at vulnerable points in the safeguarding continuum

Overarching Categories	
Promote and expand inland inspections of containers and mail facilities, where possible.	
Expand the use of canine teams for domestic inspection activities.	
Promote increased levels of inspection for regulated articles for interstate movement.	

Specific Implementation Strategies	
Destination Inspections	Follow-up inspections conducted by cooperating regulatory agencies in states receiving international and interstate regulated cargos that present a risk of moving plant pests. This also includes the development of inspection techniques.
Detector Dogs	Special emphasis on new capacities of agriculture detection dog teams, designing and delivering agriculture detection dog training, and developing and supporting agriculture detection dog programs in support of Destination Inspection for cooperators.

Goal 3: Enhance and strengthen pest identification and technology

Overarching Categories	
Improve all aspects of early detection resources.	
Enhance pest screening expertise and taxonomic capacity.	
Increase the deployment of molecular diagnostic tools.	

Specific Implementation Strategies	
Detection Technologies	Includes developing, testing, comparing and transferring plant pest detection technologies for program implementation; development of novel and improvement of existing survey tools such as traps and lures.
Diagnostic Capacity Building	Includes training, equipment, specimens, diagnostic tools and methods (morphological and molecular), certification, personnel, and enhancements to infrastructure that improve diagnostic capability/throughput (i.e. an increase in the number of taxa that a lab may identify as well as sheer volume of samples it may process of a given taxon).
Taxonomic Support	Includes internal and external resources brought to bear on the operational screening and identification of given plant pest taxa.

Goal 4: Safeguard nursery production

Overarching Categories
Develop science-based best management practices and risk mitigation practices to exclude, contain, and control regulated pests from the nursery production chain.
Develop and harmonize audit-based Nursery Certification Programs.

Specific Implementation Strategies	
Systems Approaches for Nursery Production	Initiatives that explore <i>Phytophthora ramorum</i> in nursery production systems as well as other pests.
Nursery Certification Programs	Initiatives that directly address and inform the process of nursery certification programs; studies on potential improvements on nursery certification programs.
Specialty Crop Pilot Studies	Initiatives supporting specialty crop pilot studies and harmonization.

Goal 5: Conduct outreach and education to increase understanding, acceptance, and support of plant pest and disease eradication and control efforts.

Overarching Categories
Prevent the introduction or spread of high-consequence pests into and around the United States, particularly in high-risk areas.
Develop people to strengthen the safeguarding system.
Increase the number of people actively looking for and reporting high-consequence pests at vulnerable points along high-risk pathways.

Specific Implementation Strategies	
Traveler Outreach	Initiatives designed to inform travelers about pests and diseases and the steps they can take to prevent their introduction or spread.
Consumer Outreach	Initiatives designed to inform consumers about pests and diseases and the steps they can take to prevent their introduction or spread.
Youth Outreach	Initiatives designed to inform youth about invasive pests and the steps we all can take to protect agriculture and natural resources.
Producer/First Detector Training	Workshops, seminars, or training programs for farmers, growers, researchers, field workers, and others who are in a position to detect, identify, and/or respond to pest threats (especially tribal, underserved, minority, and specialty crop producers).
University/College-Level Education	Efforts to develop expertise in areas of plant resource protection and regulatory science to meet future State, Tribal and Federal resource needs.
Distribution Center Employee Outreach	Efforts to encourage people who work in/around warehouse and storage facilities, nursery and garden centers, and other vulnerable points to look for and report signs of a pest or disease.

Goal 6: Enhance mitigation capabilities

Overarching Categories
Improve the mechanism to assess and decide an appropriate short term course of action to a new pest.
Utilize initial response protocols for the overarching goals of containment, control, or eradication at the onset of plant health emergencies.
Prepare the agency and collaborative programs in the use of the Incident Command System (ICS).
Provide technical assistance prior to, during, and immediately following the development of a plant health emergency through the development of New Pest Response Guidelines (Action Plans).

Specific Implementation Strategies	
Applied Mitigation	Efforts that develop or adapt new control technologies, tools, and treatments for use in plant health emergencies, e.g., quarantine treatments and biological control.
Preparation	Efforts that improve the knowledge base, response options and capabilities prior to the onset of a plant health emergency, e.g., development/training of rapid response teams, NPRG, etc.
Rapid Response	Efforts that use existing tools and initial response protocols for the overarching goals of containment, control, or eradication at the onset of plant health emergencies.

GUIDANCE BY GOAL AREA

Guidance for each Goal Area appears below. Suggestors should carefully consult this guidance before submitting a suggestion for Farm Bill funding. Suggestions will be reviewed and rated based on the specific goal area guidance. Suggestions that stray from or do not meet this guidance will not rate high, and have a lower probability of receiving funding.

Goal 1 Analysis Guidance

The primary purpose of Goal 1 Analysis is to enhance plant pest/disease analysis and surveillance. Ideally, projects will support and enhance efforts that identify risk factors and high-risk pathways by analysis of available data, and/or develop risk based models and decisions support tools to reduce the introduction and establishment of exotic species. This includes efforts that focus on compiling, synthesizing, and evaluating quantitative and qualitative data to inform risk analysis, survey methodology, predictive modeling, and

pathway analysis. Furthermore, the analysis should improve survey efforts for exotic species by better defining biotic and abiotic variables, detecting patterns, testing hypotheses, and validating results while highlighting useful information and supporting decision making.

Suggestions should be focused on the above categories and be directed to at least one of these three implementation strategies.

- 1. Pathway Analysis/Data Synthesis:** Compile, synthesize, or evaluate data to inform risk analysis, survey methodology, or pathway analysis. This includes new and innovative approaches in using data to inform the understanding of exotic plant pest analysis, with a focus on the arrival or establishment of such a pest.
- 2. Modeling:** Better define biotic and abiotic variables, detect patterns, and test hypotheses related to improved predictive modeling and surveillance efforts for exotic species. This category includes initiatives that improve the understanding of where an exotic pest may be introduced or able to establish.
- 3. Decision Support:** Improve decision support functions related to exotic species. This category includes initiatives that contribute to better decision making as related to exotic species and their impacts to plant health and vigor.

Goal 1 Survey Guidance

Under the first major goal area, “Goal 1: Enhance plant pest/disease analysis and surveys,” APHIS’ survey strategies include: target high priority pests for survey along national and local high-risk pathways; fund high priority nationally-directed pest surveys in support of specialty crops, trade, and regulatory activities; and fund state-specific pest surveys in support of state pest risk and priorities. For FY14, surveys under Goal 1 will be divided into three specific implementation strategies; 1) National Surveys, 2) State-Specific Surveys, and 3) Program-Directed Surveys. This distinction will facilitate the review process and reporting.

- 1. National Surveys:** National surveys are those surveys that are national in scope with broad participation by the states, and target high priority exotic pests, commodities, and high risk pathways for entry of exotic pests into the United States. The supported National Surveys may be determined and communicated by the Farm Bill Survey Team in consultation with PPQ program managers (see link provided at the end of this document) and state cooperators.

As in FY13, several surveys are deemed to be of national importance because of pathway, risk, or trade considerations. Participation by multiple states in these surveys is desirable, and states are encouraged to consider these surveys when developing proposed work for FY14 funding. States will indicate their willingness to participate in these surveys via the FY14 suggestion process. The following have been designated as National Surveys:

- *Enhanced Port Environs*: Surveys focused on the pathway continuum from the immediate port environment and surrounding areas to inland high risk sites; Strategy 1.2
 - Asian defoliating moths
 - Exotic woodborers and bark beetles
 - Mollusks
 - Khapra Beetle
 - And other demonstrated high risk surveys along a particular pathway.

The Enhanced Port Environs surveys are targeted pathway surveys to be conducted primarily along the pathway continuum from the immediate port environment and surrounding areas to inland locations. The focus should be on high risk areas, such as container yards, rail yards, and warehouses, and be based on known risk factors. Of particular importance are those yards receiving containers from high-risk countries or from areas that are currently under treatment in the U.S. The primary objective of this effort is to monitor high-risk seaports, mills, rail yards, and other hot zones for exotic wood boring insects, Asian defoliators, and other pests that may be introduced into the United States through commerce, particularly in and near port areas receiving cargo shipments from Asia and other inland locations with demonstrated risk factors.

The emphasis is on multi-pest surveys and will follow the general survey guidelines for bundled surveys as specified in the Cooperative Agricultural Pest Survey (CAPS) [2014 National Survey Guidelines](#). The intent of the bundled survey is to give the States the flexibility to design their own surveys, within certain parameters. The survey must concentrate on multiple, high priority pests and efficiency of survey within the taxa listed. Asian defoliator surveys should concentrate on species of *Lymantria* and *Dendrolimus*, and follow the guidance given for the [Asian Defoliator Pathway-based National Survey](#) Reference. Exotic wood boring & bark beetle surveys should follow the guidelines and pest list in the revised [Exotic Wood Borer/Bark Beetle National Survey Guidelines](#). For all surveys, the [CAPS-Approved Methods](#) will be the required survey methodology, if available.

- *Pathway Approach to Survey*: When planning surveys, the States are encouraged to use a pathway approach when deciding on pests and locations to survey. States should plan to survey where the risk is highest. This type of targeted detection survey or risk-based survey enhances the ability to identify and target high risk areas, zones, locations, and sites that have the highest potential for exotic pest introductions, and to successfully provide early detection of these pests. This concept can be combined with any survey using sound analytical tools, known risk sites, past history of pest detections in a State, and other avenues of information. It is understood that risk factors can be examined along a “risk continuum” beginning at offshore sites (points of origin) to points of potential establishment (commodity production areas, natural

lands), and numerous risk points in between (wholesale distribution centers, nurseries, intermodal sites, rail yards, etc.). The identification of risk points and development of targeted surveys will maintain the focus of the survey program on our top commodities at risk and the high priority pests.

Surveys for multiple, high priority pests along known pathways will be rated higher than single pest surveys or surveys where no high priority pests are targeted or no pathway approach is indicated. A blanket approach to survey is not recommended.

- *Commodity-Based Surveys*
 - **Grape** – commodity-based survey for multiple pests, and must include *Lobesia botrana* (European grapevine moth)
 - **Palm** – commodity-based survey for multiple pests
 - **Solanaceous Crops** - commodity-based (tomato and pepper) survey for multiple pests, and must include *Tuta absoluta* (Tomato leaf miner)
 - **Stone Fruit** – commodity-based survey for multiple pests, and must include Plum Pox Virus (PPV)
 - **Orchard** – commodity-based (Apple and Pear) survey for multiple pests
 - And other specialty crop commodity surveys appropriate for Farm Bill funding, such as Fruit Crops, Tree Fruits, Vegetable Crops, and Greenhouse Crops for example.

The [Grape](#), [Palm](#), [Solanaceous Crops](#) (tomato/pepper), [Stone Fruit](#), and Orchard (apple/pear) surveys will follow the general survey guidelines for bundled surveys as specified in the Cooperative Agricultural Pest Survey (CAPS) [2014 National Survey Guidelines](#). The intent of the bundled survey is to give the States the flexibility to design their own surveys, within certain parameters. The survey must concentrate on multiple, high priority pests and efficiency of survey within the commodities listed. The survey must include pests from the CAPS Priority Pest List (Commodity Pests [Appendix G-1] and/or Pests of Economic and Environmental Importance [Appendix G-2]). Pests of importance to a State not on the Priority Pest List, but in common with the other pests, may be included in the bundled survey. **For Farm Bill-funded surveys, *Lobesia botrana*, *Tuta absoluta*, and Plum Pox Virus must be included in the Grape, Solanaceous, and Stone Fruit surveys, respectively.** Multiple-pest surveys will be rated higher than single-pest surveys. The [CAPS Approved Methods](#) will be the required survey methodology. The Pest Detection team will use the information from the Farm Bill bundled surveys to aid in the development of CAPS Commodity-based surveys with accompanying approved methods.

2. **State-Specific Surveys:** State-specific surveys are those surveys that are more local or regional in scope, and target high priority pests, commodities, and high risk pathways into a state or within a region. Proposed State-specific Surveys should be based on the priorities of a state or region, and be important for that state or region for biological,

agricultural, environmental, and/or economic reasons.

Surveys not listed above or are more specific to a particular state or region also will be considered for funding in FY14 if that survey falls under the general guidelines and language of the Farm Bill and the CAPS programs, and a strategy for Goal 1 (e.g., Strategy 1.4). Surveys that target ‘emerging’ pest threats or recently detected pests whose regulatory status has yet to be determined will be rated higher than pests that have been established for many years and/or pests that are not regulated. Justification for this type of survey must be clear. Surveys for multiple pests will be rated higher than single-pest surveys. Surveys for management of established pests or those that are not of national quarantine significance to APHIS will not be considered. States should submit suggestions for State-Specific surveys in addition to Nationally-Directed Surveys, but not both for the same suggestion. Regional surveys are encouraged. For example, nursery surveys that include *Phytophthora ramorum* or forest pest surveys that include walnut twig beetle may be considered. Contact your National or Field Operations Program Managers, or your State Plant Health Director for clarification if you have questions about these types of surveys. Recognize, however, that National surveys focused on core national priorities will rate higher than State-specific surveys.

Survey suggestions should be focused on the above strategies and be directed to either the National or State-Specific Survey category.

- 3. Program-Directed Surveys:** Program-directed surveys are those surveys that may be funded through the Farm Bill, but will not be open for suggestions. These surveys will be strategic, and aimed at filling gaps in our knowledge about the distribution of a pest, according to the objectives of the specific program. These surveys focus on specific states based upon pest biology, risk, pathways of dissemination, and objectives of the specific pest program. Program managers will contact the states that are proposed to participate and they will explain the structure and requirements of the survey. States may decline, but will have an understanding of the potential impacts of doing so. The Program will submit one suggestion that will list the participating states and the budget for each state. These surveys support Strategy 1.2.

For FY14, only the Honey Bee Program will conduct a Program-Directed Survey. Program managers who oversee this program will communicate the structure and requirements of the survey to the states that will be asked to participate based on the national strategic priorities of the Program.

Data Management

Data from all Farm Bill surveys under Goal 1 Survey must be entered into the National Agricultural Pest Information System (NAPIS) unless otherwise directed by specific program managers. Given the diversity of survey programs supported through the FB Section 10201

Program, the FBMT relies on the direction of the various programs' cross functional teams to provide the direction on what data management requirements exist for each program (see Appendix E). Surveys not covered by a specific pest program (e.g., Khapra Beetle) must enter data into NAPIS.

PPQ policy is to eventually transition all PPQ programs, including FB Section 10201, to the Integrated Plant Health Information System (IPHIS). However, IPHIS currently cannot support Farm Bill (and CAPS) surveys due to several factors. Until IPHIS can support Farm Bill (and CAPS) surveys, APHIS will continue to utilize the NAPIS database for reporting presence/absence data. The NAPIS database includes data validation rules ensuring PPQ approved survey methods are adhered to. Additional information on Approved Survey methods can be found on the CAPS Resource and Collaboration website. This data is also captured in the FB Goal 1 Survey Summary Form.

For 2014, all Goal 1 Survey projects must also complete a FB Survey Summary online on the [CAPS Resource & Collaboration site](#) (A CAPS R&C login will be required). The online Survey Summary Form must be completed when the work plans are submitted to the SPHD's office. No work plans will be reviewed or approved without a completed online Survey Summary Form. Once the state submits the completed information, the state PPQ office will be required to acknowledge review before it will be reviewed by the NOM. Do not submit an electronic copy of the Summary Form with the work plans. The State's data will be available to Field Operations online. States will not be able to access other state's information. States are strongly encouraged to list State contributions to the survey effort on the Survey Summary Form.

Negative Data

The documentation of negative data is extremely important and valuable. Negative data from national surveys targeting high priority pests support trade and exports, and benefit American agriculture. Identical to the CAPS program, FB Goal 1 surveys strive to insure that all negative data is valid, and results from active survey efforts. The FB Goal 1 Survey has adopted the guidelines the CAPS program developed to assist in data entry of valid negative data. The [CAPS-Approved Survey Methods](#) can be found here in [Appendix M](#). This matrix enables one to determine the appropriate pests that can be considered negative for a survey effort based on the survey methodology, trap/lure combination, etc. Data entry will be checked and validated against the approved survey method for each pest on the Priority Pest List. **Data not conforming to the approved method will not be accepted into the database.**

Additional guidance for data entry is given in the CAPS National Survey Guidelines [Appendix N](#) for selected target pests (*Xyleborus* and *Xylotrechus*, Mollusks, Nematodes, and Phytoplasmas) at the genus and species level. Because of incomplete taxonomy,

diagnostic difficulty, lack of survey methodology, or other reasons, some target pests are listed only at the genus level. In certain instances only, it may be appropriate to enter negative data at the genus level. Appendix N provides this guidance. All positive records should be at the species level.

Survey Supplies

Survey supplies (traps, lures, and accessories) for National Surveys funded under the Farm Bill will be provided by PPQ through separate Farm Bill funding. The timeframe for ordering these supplies will be communicated at a later date. Survey supplies for State-specific Surveys may not be available. Questions should be directed towards the Survey Supply Procurement Program (SSPP) National Policy Manager.

Accomplishment Report

APHIS encourages cooperators to use the CAPS Survey Accomplishment Report Template when reporting survey accomplishments. This is a requirement for CAPS surveys; therefore, APHIS believes the template is familiar to many cooperators and will provide consistent reports nationwide. The Farm Bill version of the reporting template can be found on the FY14 Farm Bill page of the [CAPS Resource & Collaboration website](#).

Goal 2 Guidance

Under the second major goal area, “Goal 2: Target domestic inspection activities at vulnerable points in the safeguarding continuum,” APHIS’ strategies include: Promote and expand inland inspections of containers and mail facilities; Expand the use of canine teams for domestic inspection activities; and Promote increased levels of inspection for regulated articles for interstate movement. As in previous years, for FY14, suggestions that will be considered under Goal 2 should fall within one of these overarching categories.

- 1. Promote and expand inland inspections of containers and mail facilities:** The goal is to develop cooperative efforts with State agriculture regulatory agencies, promoting inspection activities of regulated articles in international commerce at point after they have been cleared at Ports of Entry. These may be independent activities or conducted in cooperation with PPQ programs, such as Smuggling Interdiction and Trade Support.
- 2. Expand the use of canine teams for domestic inspection activities:** The goal is to promote the use of canine teams for inspection of international and interstate commerce by State agriculture regulatory agencies as well as offices within PPQ. Another activity is to promote the use of canine teams in the detection of particular pests on detection and pest management programs. These programs are supported by the PPQ National Detector Dog Training Center in Newnan, GA.

3. Promote increased levels of inspection for regulated articles for interstate movement:

The goal is to develop cooperative efforts with State agriculture regulatory agencies, promoting inspection activities of regulated articles in interstate commerce to support both Federal and State regulations. These may be independent activities or conducted in cooperation with PPQ programs in the states.

Goal 3 Guidance

Under Goal 3, “Pest Identification and Technology Enhancement” Specific Implementation Strategies include Detection Technologies, Diagnostic Capacity Building, and Taxonomic Support. Suggestions will be considered when they address the following priority needs for PPQ. Examples of areas of emphasis are listed below each strategy.

1. Detection Technologies: Developing, testing, comparing and transferring plant pest detection technologies for program implementation; and developing novel and improving existing survey tools such as traps, lures, and field recognition aids. High priority pests for consideration include those found on the OPIS A list and/or the Cooperative Agriculture Pest Survey (CAPS) Priority Pest List. Examples include but are not limited to:

- **Survey tool improvements:**

- Screening and diagnostic-friendly traps and collection methods that facilitate handling and processing of survey samples, prevent specimen damage, and/or preserve condition of specimens;
- Efficacy comparisons of new hot-melt sticky traps of various manufacturers against traditional sticky traps for various (CAPS) Priority Pests (found at http://caps.ceris.purdue.edu/pest_lists), i.e., trap design experiments which verify efficacy of diagnostic-friendly traps for CAPS targets in the pests’ native range (e.g., *Helicoverpa armigera* and *Tuta absoluta*);
- Research toward the development of automated traps that can record the time and date of capture, report captures remotely, and/or screening of captures to determine target species;
- Traps that can effectively accommodate multiple lures for multiple CAPS target pests; and
- The use of portable USB remote imaging technology for specimen screening from surveys.

- **Develop / optimize attractants and traps for CAPS targets:** The following CAPS national survey targets (and potential targets) currently have only visual survey methods or existing available pheromones need refinement. The goal is to identify the most effective attractant or trap for each target species; therefore, efficacy trials in the target’s native range are essential.

- Research would include:
 - Developing potential attractants and traps and then
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- Testing the potential attractants and traps in the target pests' native range.
 - Targets are listed by family.
 - Buprestidae: *Agrilus biguttatus* and *Agrilus coxalis* or other potential *Agrilus* pest species
 - *Cerambycidae*: *Aeolesthes sarta*, *Anoplophora chinensis*, *Chlorophorus annularis*, *Chlorophorus strobilicola*, *Massicus raddei*, *Monochamus saltuarius*, *Monochamus sutor*, *Monochamus urussovi*, *Trichoferus campestris*, *Xylotrechus altaicus*, *Xylotrechus antilope*, *Xylotrechus arvicola*, *Xylotrechus namanganensis*, *Xylotrechus rusticus*, and other *cerambycids* of quarantine importance
 - Chrysomelidae: *Diabrotica speciosa*
 - Curculionidae: *Dendroctonus micans*, *Scolytus intricatus*, and *Tomicus minor*
 - Lasiocampidae : *Dendrolimus superans*, *D. sibericus*, *D. punctatus*, and *D. pini*
 - Scolytinae: *Euwallacia fornicatus*
 - Siricidae: *Tremex fuscicornis*

- **Detection assays:**

- Affordable biochemical or molecular assays for detecting CAPS insect targets in trap samples comprised of numerous, similar but native pests (e.g., *Helicoverpa armigera* or *Autographa gamma* in pheromone trap samples) where large numbers of U.S. native non-target moths fill up traps, all of which must be dissected for morphological identification. Molecular tool must be valid for the target species against related species detectable from large composite samples and high through-put with demonstrated sensitivity and practical implementation for survey programs.
 - Refine pheromone specificity to eliminate or drastically reduce non-target moths.

- **Field-level diagnostic methods:** Field-level or intermediate screener diagnostic methods for CAPS national survey target pathogens at group or genus level (e.g., ELISA/immunostrip for phytoplasma or virus/viroid detection), and for *Rathayibacter* sp. to screen suspect galls from rye grass imports at ports of entry.

2. Diagnostic Capacity Building: Training, equipment, specimens, diagnostic tools and methods (morphological and molecular), certification, personnel, and enhancements to infrastructure that improve diagnostic capability and throughput. Examples include but are not limited to:

- **Recorded training sessions:** Thorough species level taxonomic training given by recognized experts is needed for taxonomists/identifiers for exotic pests to distinguish

from established and native species. Recorded webinars and/or video-taped training that can be posted and web-accessed is desired for including but not limited to pests in the following groups: Acarina, Coleoptera woodborer adults, Lepidoptera adults and larvae, and Thysanoptera. Nematodes and fungal pathogens of quarantine importance also are of interest.

- **Molecular tools development/validation for CAPS national survey target pests:** These could include, but are not limited to *Chalara fraxinea*, *Harpophora maydis*, *Monilia polystroma*/*Monilinia* spp., bacteria (*Pseudomonas*/*Xanthomonas*) at the pathovar level, phytoplasmas at species/strain level, viruses (specifically torradoviruses) at the genus and species level, viroids, and nematodes.
 - **Molecular tools to support the exclusion of invasive species:** Develop molecular tools that are needed for invasive species such as tephritid fruit flies. This would include but is not limited to information that can help target and restrict pathways of introduction and characterize unresolved species complexes, in support of diagnostic needs for surveys and effective pest management/eradication strategies.
 - **Sequencing data for insect targets:** Develop appropriate and quality sequencing data for insects (and closely related species) on CAPS target list or other federally actionable pests including samples from various known geographic localities for specimens that are expertly identified and confirmed. The taxa in question would be focused on a pest genus or family for a particular study.
 - **Interactive taxonomic keys:** Develop interactive taxonomic keys, using well-illustrated morphological and/or molecular characters (if morphology is inadequate), that are capable of providing credible confirmations of suspect CAPS national survey targets, particularly plant pathogens and insect groups of quarantine importance which will provide tools useful to identifiers.
- 3. Taxonomic Support:** Internal and external resources brought to bear on the operational screening and identification of given plant pest taxa. Examples include but are not limited to:
- The development of screening aids for pest groups on the CAPS target lists. These should be image based documents that can be posted for screeners to distinguish target genera from similar native or widely distributed look-a-like species typically found in survey samples. These aids should include external morphological characteristics of the pest clearly depicted. See examples at http://caps.ceris.purdue.edu/screening_aids. Those insect screening aids most needed which will be given a high level of consideration are: for Lepidoptera adults (i.e., *Adoxophyes orana*, *Archips xylosteanus*, *Cameraria ohridella*, *Chilo suppressalis*, *Dendrolemus pini*, *D. punctatus*, *D. sibiricus*,

D. superans, *Eudocima fullonia*, *Leucoptera malifoliella*, *Panolis flammea*, *Thaumetopoea processionea*), and Coleoptera woodborer adults (i.e., *Massicus raddei*, *Monochamus sutor*, *M. sutor*) and others on the CAPS target list not already covered.

- For plant pathogens this could include biochemical screening methods and confirmatory diagnostics for plant pathogenic nematodes including *Bursaphelenenchus cocophilus*, other pathogens from the CAPS national target list including *Chalara fraxinea*, *Harpophora maydis*, *Monilia polystroma/Monilinia* spp., *Peronosclerospora* spp., *Phytophthora* spp., *Pseudomonas syringae* pvs. *actinidiae* and *aesculi*, *Xanthomonas oryzae* pathovars, as well as phytoplasmas and viruses/viroids on the list.
- Laboratory diagnostic services for universal detection/screening of phytoplasmas to support CAPS surveys for plant pathogenic phytoplasmas.

Goal 4 Guidance

The fourth goal area, “Goal 4: Safeguard Nursery Production,” is organized into two overarching categories that include: developing science-based best management practices and risk mitigation practices to exclude, contain, and control regulated pests from the nursery production chain; and developing and harmonizing audit-based Nursery Certification Programs. For FY14, suggestions under Goal 4 should fall into one of these three specific implementation strategies: 1) System Approaches for Nursery Production; 2) Specialty Crop Pilot Studies; and 3) Nursery Certification Programs.

- 1. System Approaches for Nursery Production:** Those initiatives that specifically explore the role of certain pests within nursery production systems. The goal is to develop science-based best management practices (BMPs) and risk mitigation practices to exclude, contain, and control regulated plant pests from the nursery production system. Some of the FB suggestions funded in FY13 include:
 - National Ornamentals Research Site at Dominican University of California to develop *P. ramorum* management methods
 - Developing Pilots for Management of *Phytophthora ramorum* in Nursery Systems
 - Use of biocontrol, soil treatments, solarization to Remediate *Phytophthora ramorum*-Infested Soil
- 2. Nursery Certification Programs:** Those initiatives that ‘directly’ address and ‘inform’ the process of inspecting, auditing and certifying the production of nursery stock. Enhanced harmonization and integration of nursery certification programs will enhance the cleanliness and health of domestically produced nursery stock, facilitate domestic and international movement of nursery stock, and safeguard the nursery industry from the introduction of exotic pests. Some of the FB suggestions funded in FY13 include;

- Systems Approach to Nursery Certification Programs
- Develop software tools for managing Nursery Certification Programs
- National Voluntary Nursery Audit-based Certification System
- Development of a Domestic Market Focused Nursery Certification Program
- Comparing the Efficacy of Various Schemes for Pest Risk Mitigation in Nursery Stock
- Initiating or Reinstating Select State Nursery Certification programs
- Training Auditors in Methods for Nursery Certification and Nurseries and Growers in the Importance and Value of Using Certified Nursery Stock

3. Specialty Crop Pilot Studies: Efforts directed towards the development and harmonization of certification programs for asexually propagated plant material. The certification programs provide high-quality asexually propagated plant materials free of targeted plant pathogens and pests that cause economic loss and ensure the global competitiveness of specialty crop producers. Some of the FB suggestions funded in FY13 include:

- Harmonizing Model Regulatory Standards among Certain Specialty Crops
- Development of Harmonized Standards for Fruit Trees, Berries, Grapes, Certification Programs
- National Nursery Virus Certification Program Pilots for Fruit Trees and Grapes
- Analyzing Nursery Source Material to Improve Virus Testing in Nursery Certification Programs
- Safeguarding Specialty Crop Nurseries
- Informing growers of the importance and economics of using plants derived from certified sources

Goal 5 Guidance

Goal area 5 is Outreach and Education. The primary goal of outreach and education activities is to increase understanding, acceptance, and support of plant pest and disease exclusion, eradication, and control efforts. Ideally, outreach and education projects would support and enhance efforts to prevent the introduction or spread of high-consequence pests into and around the United States, particularly in susceptible high-risk areas. They would increase the number of people actively looking for and reporting high-consequence pests at vulnerable points along high-risk pathways. In addition, these projects could help develop people to strengthen the safeguarding system by teaching them what they can do to help. To the extent that mobile apps are part of a suggestion, APHIS will consider how that suggestion aligns with its overall IT and outreach goals and strategies that support plant safeguarding operations.

To support these broad goals, suggestions should focus on these specific implementation strategies:

1. **Traveler Outreach:** Initiatives designed to inform travelers about pests and diseases and the steps they can take to prevent their introduction or spread.
2. **Consumer Outreach:** Initiatives designed to inform consumers about pests and diseases and the steps they can take to prevent their introduction or spread.
3. **Youth Outreach:** Initiatives designed to inform youth about invasive pests and the steps we can all take to protect agriculture and natural resources.
4. **Producer/First Detector Training:** Workshops, seminars, or training programs for farmers, growers, researchers, field workers, and others who are in a position to detect, identify, and/or respond to threats (especially tribal, underserved, minority, and specialty crops producers).
5. **University/College-Level Education:** Efforts to develop expertise in areas of plant resource protection and regulatory science to meet future State and Federal resource needs.
6. **Distribution Center Employee Outreach:** Efforts to encourage people who work in or around warehouse and storage facilities, nursery and garden centers, and other vulnerable points to look for and report signs of a pest or disease.

Goal 6 Guidance

The sixth goal area, “Goal 6: Enhance mitigation capabilities”, is organized around the following overarching categories that include: Improving the mechanism to assess and decide an appropriate short term course of action to a new pest; utilizing initial response protocols for the overarching goals of containment, control, or eradication at the onset of plant health emergencies; preparing the agency and collaborative programs in the use of the Incident Command System (ICS); and providing technical assistance prior to, during, and immediately following the development of a plant health emergency through the development of New Pest Response Guidelines (Action Plans).

As in previous years, for FY14, suggestions to be considered under Goal 6 should also align with one of these three specific implementation strategies.

1. **Applied Mitigation:** Develop, promote, and implement applied mitigation research and mitigation capabilities. The goal is to develop, promote, and implement new control technologies, tools, and treatments for use in plant health emergencies and/or established pest programs. Examples for this Goal 6 strategy include quarantine treatments and biological control.
2. **Preparation:** Enhance preparation for a plant pest emergency. The goal is to improve the knowledge base, response options, and capabilities prior to the onset of a plant pest

emergency. Examples for this Goal 6 strategy include development and training of rapid response teams, development of New Pest Response Guidelines, and offshore approaches to developing management options for key invasive pests before they arrive.

- 3. Rapid Response:** Enhance rapid response to plant pest emergencies. The goal is to provide initial or short-term funding to employ existing tools and initial response protocols for the overarching goals of containment, control, or eradication at the onset of plant pest emergencies.

SUGGESTIONS, FUNDING, & WORK PLANS

Overview

PPQ intends to allocate funds to cooperators in a fair and transparent manner. Funds to support the FB Section 10201 Program are generally provided to State Departments of Agriculture and other cooperators through cooperative agreements, which are administered through the offices in Policy Management, Science and Technology (CPHST), and Field Operations. The annual PPQ FB Section 10201 “line item” appropriation is the funding source for projects under the FB Section 10201 Program.

The FB Section 10201 Program’s Spending Plan is determined by a comprehensive review of each suggestion submitted by each goal team. Suggestions are evaluated by the SPHD & SPRO within their states, NOMs, and the goal area review teams. The six goal areas have developed specific goals and strategies, outlined in this document, that are aligned with national priorities. Suggestions are reviewed based on this guidance.

Suggestion Process

Each year cooperators are requested to submit suggestions outlining projects to be considered for funding. USDA APHIS PPQ utilizes Metastorm, a business process web tool, to enable any user to submit a suggestion for consideration. Users can easily set up an account to receive Metastorm credentials that will allow them to access the system and submit a suggestion. eAuthentication users with a Level 2 Access account can access the system through eAuthentication (<https://www.eauth.usda.gov/mainPages/index.aspx>). Further guidance regarding the FY14 suggestion process will be forthcoming in webinars that will be announced via the PPQ Stakeholder Registry and other avenues. More detail regarding Metastorm can be found in Appendix C.

Each suggestion will be reviewed by the respective goal teams, including input from programs. The goal teams will submit a proposed spending plan to the FBMT and will be vetted through PPQ and USDA management for final approval. Upon approval the spending plan will be posted publicly, cooperators will be contacted and provided additional instructions on submitting detailed work and financial plans for cooperative agreements.

Administrative Requirements

All cooperative agreements are administered through PPQ's three (3) Core Functional Areas (CFAs) Policy Management, Science & Technology, and Field Operations, and are the means by which funds are provided to each cooperator. As stated above, cooperators will be contacted by APHIS personnel who will provide additional guidance and coordination on submitting detailed work and financial plans. The use of a standardized templates for both detailed work and financial plans and periodic accomplishment reports for FB funded projects is required for 2014 agreements and can be found posted on the Farm Bill page of the [CAPS Resource and Collaboration](#) site.

Note that a synopsis of all grants and agreements provided to a cooperator by the Federal government, including APHIS, are now posted on the Internet (www.USAspending.gov). This was a requirement of the Federal Funding Accountability and Transparency Act of 2006 (FFATA). Likewise, APHIS is required to report accomplishments via "performance measures" in FB. Cooperators will be provided guidance on the means to adhere to this level of transparency.

The overall annual process involved with implementation is lengthy. It includes publishing annual guidelines; a 4-6 week open period to receive suggestions; a robust review and evaluation process leading to an approved project list/spending plan, establishing cooperative agreements, conducting the proposed activities as outlined in the detailed work plans; analyzing the data collected; writing periodic/annual reports; and evaluating the accomplishments of program objectives.

APPENDICES

Appendix A: FB Section 10201 Program Cross Functional Team

Appendix B: Roles and Responsibilities

Appendix C: Metastorm

Appendix D: Data Management Guidance

Appendix A - FB Section 10201 Program Cross Functional Team

Cross Functional Working Group (FBMT)

APHIS CFA	Name	Phone	e-mail
Policy Management	Valerie DeFeo	301-851-2086	valerie.defeo@aphis.usda.gov
Science & Technology	Ken Bloem	919-855-7407	kenneth.bloem@aphis.usda.gov
Field Operations	Kristian Rondeau	970-494-7563	kristian.c.rondeau@aphis.usda.gov

Goal Area Team Leads

Goal Area	Team Lead	Phone	e-mail
Goal 1 Analysis	Lisa Kennaway	970-490-xxxx	Lisa.F.Kennaway@aphis.usda.gov
Goal 1 Survey	John Bowers	301-851-2087	John.Bowers@aphis.usda.gov
Goal 2 Domestic Inspection	Tim McNary	970-494-7570	Timothy.J.McNary@aphis.usda.gov
Goal 3 Pest ID	Joe Cavey	301-851-xxxx	Joseph.F.Cavey@aphis.usda.gov
Goal 4 Nursery	Erich Rudyj	301-851-xxxx	Erich.J.Rudyj@aphis.usda.gov
Goal 5 Outreach & Education	Lora Katz	301-851-xxxx	Lora.Katz@aphis.usda.gov
Goal 6 Mitigation	Andrea Simao	301-851-xxxx	Andrea.B.Simao@aphis.usda.gov

Appendix B – ROLES and RESPONSIBILITIES

FB-National Policy Manager (NPM) coordinates activities of the FBMT and provides overall direction for the FB Section 10201 Program.

- serves as the principal liaison with the PPQ Deputy Administrator's Office and associated resources management, budget analyst, and public outreach staff
- sets meeting agendas and times and coordinates communications among PPQ Field Operations and Science & Technology Managers and the FB Goal Area Team Leads
- participates in annual discussions of FB budget formulation
- ensures FB is included in the planning and implementation of PPQ national programs, including tracking the performance of the FB Section 10201 Program
- ensures National Policy Managers (NPMs) in other program areas review and comment on FB suggestions to ensure the highest priority suggestions are identified.

FB-National Operations Manager (NOM) is responsible for coordinating the review of State performance, and is accountable for the administration of the FB Section 10201 Program in PPQ Field Operations.

- communicates FB policy and issues to FO-AEDs, who supervise SPHDs
- communicates programmatic issues to the States through the SPHDs, who fiscally and programmatically are accountable for periodic and final accomplishment reports for FB FO projects in their respective states
- ensures NOMs in other program areas review and comment on FB suggestions to ensure the highest priority suggestions are identified

FB-Science and Technology Manager (STM) is responsible for ensuring the Agency's goals and objectives for the science and technology aspects of FB projects are fully integrated into the process and will coordinate the administration of the FB Section 10201 Program in PPQ CPHST.

- communicates FB policy and issues to S&T Management and project ADODRs
- coordinates S&T FB proposal submissions with S&T Management and project ADODRs to ensure work and financial plans are technically sound and address the needs of PPQ National Program and Operations Managers

Goal Area Team Leaders are responsible for coordinating annual reviews of FB project proposal submissions that address particular FB Goal Area needs.

- annually review and update the Specific Implementation Strategies to help ensure Goal Area project submissions address current and emerging plant pest prevention, detection, and/or mitigation needs
- coordinate the development of Decision Lens criteria used to rank FB project proposal submissions
- coordinate Goal Area Team reviews of FB project proposal submissions using established Decision Lens criteria and develop recommended Goal Area spending plans
- provide detailed feedback to suggestors when requested on the strengths and weaknesses of their proposal submissions
- build, review, and renew team membership as necessary to ensure for comprehensive inclusion of interested parties

Goal Area Team Members include PPQ Program Managers, PPQ State Plant Health Directors (SPHDs), State Plant Regulatory Officials (National Plant Board members), Specialty Crop Farm Bill Alliance (SCFBA) and other industry representatives, and representatives from other Federal agencies. Goal Area Team Members are responsible for reviewing and rating FB project proposal submissions in Decision Lens.

- provide input into the development of Decision Lens criteria used to rank FB Section 10201 project proposal submissions
- review FB project proposal submissions and rank them in Decision Lens using established Goal Area criteria

National Policy Managers (NPMs) and **National Operations Managers (NOMs)** in consultation with the FBMT are responsible for reviewing and evaluating FB Section 10201 project proposals related to their program areas to ensure funded projects are aligned with PPQ program needs.

- provide comments on FB Section 10201 proposal submissions related to their program areas during the Metastorm application process to help Goal Area Teams identify the highest priority projects and provide detailed feedback to suggestors on the strengths and weaknesses of their proposal submissions
- responsible for ensuring the detailed work and financial plans are technically sound and aligned with the intent and scope of the original suggestion

State Plant Health Directors (SPHDs) and **State Plant Regulatory Officials (SPROs)**, in consultation with the FBMT, are responsible for reviewing and evaluating FB Section 10201 project proposals important to and submitted from cooperators in their State(s).

- review evaluation criteria to ensure they are aligned with FB Section 10201 Program priorities and that there is consistency in the process
- provide comments on FB Section 10201 proposal submissions related to their states during the Metastorm application process to help Goal Area Teams identify the highest priority projects and provide detailed feedback to suggestors on the strengths and weaknesses of their proposal submissions

Appendix C- Metastorm

In order to submit a Farm Bill suggestion you must be able to access the Metastorm system. Access can be established directly through Metastorm or through linking existing eAuthentication Level 2 accounts to Metastorm.

Instructions for Creating a Metastorm Account

- A Metastorm user account can be created to access Metastorm. Users will be issued a Metastorm user name and password. Instructions to create a Metastorm account can be found here:

<https://bpm7.aphis.usda.gov/MetaStorm/eForm.aspx?Map=APHIS Proc Reg&Client=Externa>

Instructions for creating a new eAuthentication Account

- Go to this link and follow the instructions for creating a new account:

<https://www.eauth.usda.gov/MainPages/index.aspx>

Instructions for Linking Metastorm to your eAuthentication Account

- The following instructions will guide you through linking your Metastorm user name and password to your eAuth user name and password.
This is a one-time action that will enable an eAuth login to all Metastorm applications.
 - 1) Click and log in to BPM using your existing BPM user name/password
 - 2) The following screen will appear. Follow the on screen instructions.

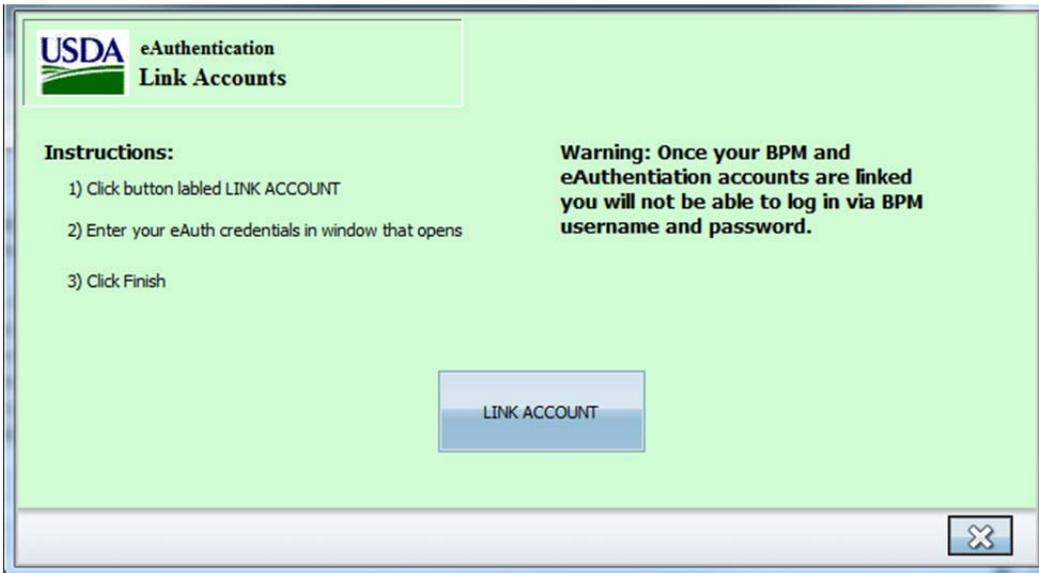


Figure 1

- 1) The following screen will appear.

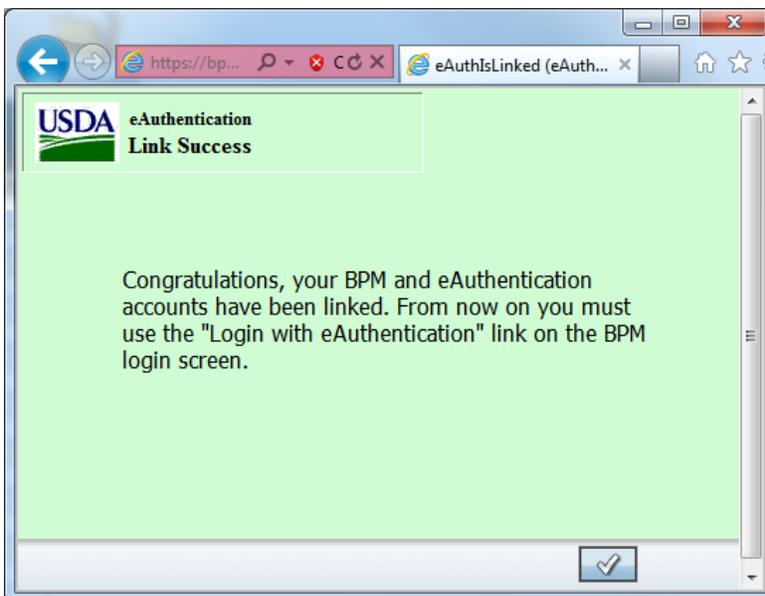


Figure 2

- 2) Read the on screen message and click the check box when finished.
- 3) To try out your new login method: close all browser windows (including these instructions), then visit <https://bpm.aphis.usda.gov/Metastorm/> and click "Login using eAuthentication"

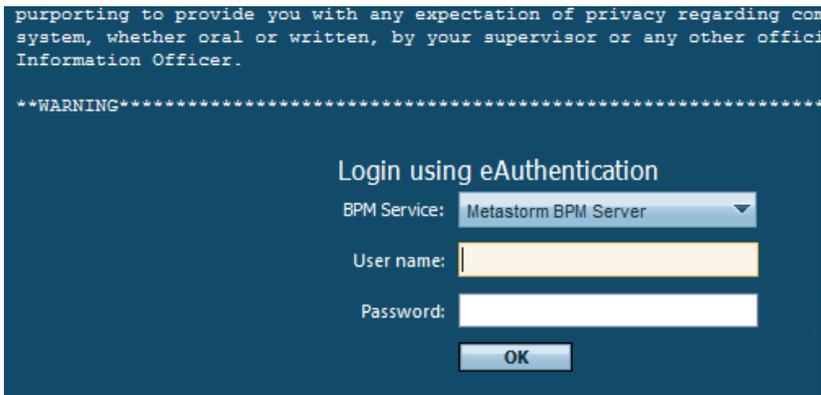


Figure 3

Questions should be directed to the APHIS Technical Assistance Center (ATAC)

Appendix D: Data Management Guidance

This appendix will be updated to reflect data management requirements for survey projects on the approved spending plan. Check back.

