

# Plant Health Information System (PHIS)

## BACKGROUND AND STATUS

In November 2005, the Deputy Administrator and Executive Team for Plant Protection and Quarantine (PPQ), established the Emergency Program Data Management Task Force (Task Force). The charge to the Task Force was to explore the possibility of developing a single data management system designed to maximize our ability to respond to plant health emergencies. The Task Force recommended building the Plant Health Information System (PHIS) as a system to be used in domestic or day-to-day operations to more efficiently facilitate emergency programs.

PHIS supports PPQ and cooperating State Agencies in managing information related to domestic and emergency plant pest programs. PHIS is being designed to provide a complete data management solution for PPQ and cooperating agencies by integrating existing systems focused on core program functions (i.e. Survey, Diagnostic, Regulatory, Control). The PHIS will leverage existing systems to present a single point of entry for data related to any emergency or domestic pest program. PHIS will provide the Agency with a modern, comprehensive, and scalable plant health data management system capable of supporting the mission of safeguarding U.S. agriculture as well as improving coordination with the States.

Currently, the prototype aimed at integrating the first three core program functions together (Survey/Detection, Diagnostics, and Regulatory) has been developed. These program functions are integrated together through standard data definitions, event

management capabilities, and geo-spatial mapping technology.

The Integrated Survey Information System (ISIS) will support Survey/Detection data requirements. The Pest Identification Database (Pest ID), along with a stand-alone PHIS diagnostic module will support Diagnostic data requirements. The Emergency Action Notification database (EAN) will support Regulatory data requirements. The PHIS Compliance Agreement module will facilitate development, management, and inspection of Federal Compliance Agreements.

## DATA ACCESSIBILITY

The PHIS is a role-based system allowing users to only access data they have permission to access. The security is taken a step further by also allowing restrictions on who can view data related to an event, or pest program, that you are managing using the PHIS. Data entered into, or managed with, PHIS will be accessible by the party responsible for it and can be viewed only by other entities for which you grant appropriate permissions. This accessibility includes not only interaction through the PHIS web interface but also through the ability to generate reports and download your data in re-usable formats (i.e. MS Access).

The agency is in the process of publishing a Privacy Act, System of Records Notice (SORN) for PHIS, ISIS, AQAS, and other databases. The SORN will be published in the Federal Register and in doing so will inform the public of our intent to collect specific information pertaining to pest detection, management, and eradication efforts as well as our intent to protect that information. Additionally, it informs the public that USDA-APHIS-PPQ may share that information with other Federal Agencies, States, Tribal Governments, and others, as needed, to fulfill the mission of the Agency in protecting American agriculture. We are also in the process of amending the general memorandum of understanding with the States to include that data provided by the agency to the States

is subject to the confidentiality provision of Section 1619 of the Food, Conservation, and Energy Act of 2008 and the Privacy Act of 1974.

These efforts, both from a technical and system security standpoint and from a legal data privacy standpoint are being conducted to ensure that APHIS-PPQ can share data with cooperators as seamlessly as possible and provide the maximum level of protection on the data.

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## FUNDING AND CONTRACT UPDATE

Currently, PHIS, Pest ID, EAN, and Compliance Agreement functionality are being developed through a single contracted development firm. ISIS is being developed by contracted, in-house employees. A plan has been set in motion to transition the responsibility of developing future ISIS versions to the same contracting firm that is responsible for PHIS and others. The current version of ISIS will be maintained as it has been until new versions become available. Help desk support for ISIS will continue to be provided as it has in the past. Users of ISIS version 4 will experience no disruption of service through this transition period.

Over the past year, ISIS staff have been analyzing the current business needs against what ISIS version 4 currently provides. These new needs have been documented and will be vetted before becoming the final requirements for ISIS version 5. The PHIS Configuration Control Board (CCB) will be responsible for coordinating the vetting of these requirements to ensure all stakeholders have ample opportunity to provide feedback. Stakeholders included and represented on the CCB include the National Plant Board, National CAPS Committee, PPQ Regional and State Management and Coordinators, AQI/Risk, CPHST, and GIS. Once these requirements have been finalized they will be used to develop the next version of ISIS.

Funding decisions have been made to financially support PHIS through 2009. Based on the identified funding level, plans will move forward to support the pilot implementation of PHIS as well as continue with the original transition plan for ISIS. Additionally, time and costs will be analyzed to see what other enhancements or new modules may be developed within the period of performance for 2009. Any excess in time or money will

allow the Executive Steering Committee (ESC) and CCB to select additional development items.

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## TIMELINE

High-level goals for PHIS in 2009 are:

- Train (CCB and Pilot States)
- Provide Tech Support/Help Desk
- Implement Pilot for Program States as well as CCB
- Vet and approve ISIS version 5 requirements
- Identify/Vet/Approve additional PHIS requirements
- Incorporate ISIS v5 requirements and additional PHIS requirements into PHIS version 2

If all goals are successfully completed in 2009 then 2010 will be used to pilot the newly designed survey functionality (ISIS 5) as well as any other enhancements. The objective of the 2010 pilot will be to ensure new functionality, including that of ISIS 5, will work effectively and efficiently in all aspects of PPQ and cooperating agencies' pest programs. This includes national pest programs and emergency programs, as well as cooperative programs. A successful pilot in 2010 will position PHIS for full implementation in 2011. During pilot activities in 2009 and 2010 CERIS and other stakeholders will be engaged to discuss what value-added product can be developed for the future that will complement the PHIS suite of functionality, especially geared toward the public. Throughout 2010, discussions will be finalized, a new product with NAPIS-like functionality will be prototyped and finalized, and initial transition plans will begin. Final transition away from NAPIS will be completed at the beginning of 2011.

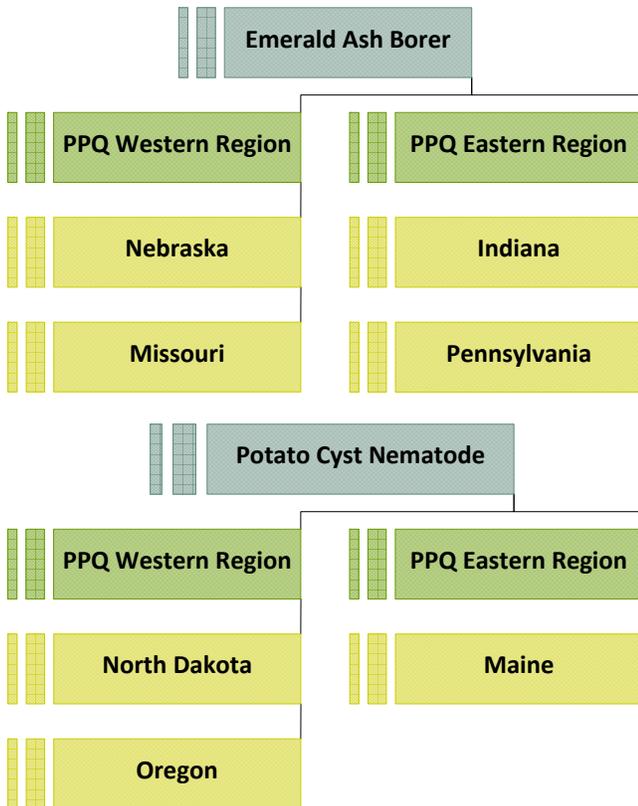
Refer to the appendix at the end of this document for these goals and milestones on a timeline.

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## PILOT DETAILS AND OPPORTUNITIES

The National Potato Cyst Nematode (PCN) and National Emerald Ash Borer (EAB) programs have been selected as pilot programs for the PHIS system. To ensure adequate support as use of the system increases, a limited number

of States from each PPQ Region have been selected to begin piloting. The Program and State combinations are:



National Program Coordinators for these programs will work with the National Data Management Coordinator, Regional Program Coordinators and Regional Data Management staff to help train and implement PHIS into these programs. When training has been conducted, questions and support will be provided through the contact information provided below.

Additionally, the PHIS CCB will be conducting pilot activities to ensure the system functions properly and can be used effectively and efficiently in both domestic and emergency programs. These pilot activities are geared towards increasing awareness of what functionality PHIS contains and how you will interact with the system when the program implementation includes your State or pest program. If you would like to participate in piloting the PHIS system, please contact your representative on the ESC or CCB. If you are not sure who your representative is, please refer to the ESC and CCB links below.

## CONTACT INFORMATION

The PHIS is currently in a pilot environment at the USDA's National Information Technology Center in Kansas City, Missouri. It is the responsibility of the National Data Management Coordinator, Todd Schroeder, to oversee the PHIS project. Please contact Todd regarding any additional comments or questions at [Todd.E.Schroeder@APHIS.USDA.GOV](mailto:Todd.E.Schroeder@APHIS.USDA.GOV) or (301) 734-5700.

## ESC AND CCB

The purpose of the ESC is to provide guidance and direction regarding resources, priority of work to be performed, and schedules for delivery under the PHIS investment. This includes all associated sub-components/systems as they relate to the PHIS project. In addition, the ESC will resolve issues brought forward from the PHIS Configuration Control Board and/or others to ensure the future direction of the PHIS investment is sound and there are adequate resources available to deliver and manage the system. Composition and contact information for the ESC can be found at: [http://webdev.aphis.usda.gov/ppq/edp/phis/downloads/exec\\_steering\\_comm.pdf](http://webdev.aphis.usda.gov/ppq/edp/phis/downloads/exec_steering_comm.pdf).

The PHIS CCB controls the PHIS investment including cost, schedule, and scope, within the parameters set by the ESC. In particular, the CCB will provide oversight for the addition of new functionality, ensure that new capabilities are fully integrated, use standard data structures and lists, and that new functionality meets business needs. This includes not only the PHIS systems itself, but also all associated sub-components/systems. Composition and contact information for the CCB can be found at: [http://webdev.aphis.usda.gov/ppq/edp/phis/downloads/config\\_con\\_board.pdf](http://webdev.aphis.usda.gov/ppq/edp/phis/downloads/config_con_board.pdf).

## FUTURE MEETINGS

The ESC meets on an ad-hoc basis, usually at least once a quarter. If you have questions that you would like to see the PHIS ESC discuss, please contact your representative on this board.

The CCB meets via teleconference on the first Thursday of every month. Additional calls will be held to discuss ad-hoc or time sensitive items.

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## FOR MORE INFORMATION ON THIS

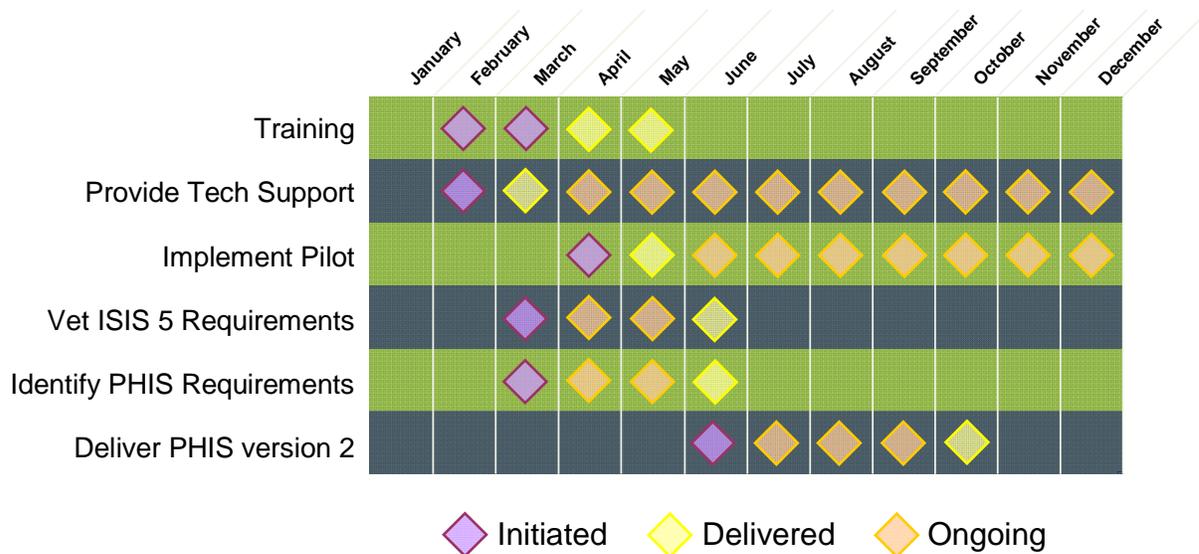
For additional information visit:

[http://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/phis/](http://www.aphis.usda.gov/plant_health/plant_pest_info/phis/).

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# Appendix: 2009 Timeline



# Appendix: NAPIS Transition Timeline

