Appendix B:

Context Statement for the National Clean Plant Network - Fruit Trees:

The acquisition and distribution of virus-tested plants throughout the U.S. and abroad is achieved through four fruit tree clean plant centers; these centers are directed to the production of virus-tested material that feeds nursery certification programs throughout the U.S. The NCPN coordinates activities to reduce unnecessary duplication and produce a standardized product that will expedite interstate and international movement of virus-tested propagation material. The NCPN-FT helps ensure that requirements of the U.S. ornamental and fruit tree industries to acquire, plant and produce new varieties with improved phytosanitary status are met in the U.S.

The two primary acquisition sites for the importation of material from foreign sources are the United States Department of Agriculture Animal Plant Health Inspections Service Plant Germplasm Quarantine Program (USDA-APHIS-PGQP) located in Beltsville, MD, and the Clean Plant Center Northwest (CPCNW) located in Prosser, WA. The USDA-APHIS-PGQP primarily releases small numbers of accessions after testing; minimal therapy to eliminate pathogens is provided. The CPCNW maintains a departmental permit to accept pome and stone fruit tree budwood from foreign sources, to render it free of known viruses, and to release virus-tested budwood to cooperators in the country. The industry considers the ability to acquire foreign accessions pivotal in its efforts to stay competitive in the global market. The CPCNW provides most of the foundation grade material for the startup of state-monitored certification programs in the country, and for some foreign countries. CPCNW is the only functioning facility in the U.S. that annually provides heat therapy to eliminate virus from large numbers of infected stone and pome fruit cultivars. Furthermore, trees maintained in the CPCNW screenhouses are virus-tested and perceived by foreign quarantine organizations as a hygienic and preferred source for importation. CPCNW therefore plays a central role in the safe and efficient international distribution of new fruit tree varieties.

Material emanating from domestic sources such as public and private breeding programs can be tested at the CPCNW and at Foundation Plant Services (FPS) in University of California, Davis. FPS produces, tests, maintains, and distributes premium disease-tested propagating material for use by nurseries and growers in California, the U.S., and the world. FPS works with researchers and members of the fruit and nut tree industry in developing and introducing new materials originating from breeding programs, domestic and foreign public collections, and private plantings. The Foundation Orchard includes cultivars of almond, apricot, cherry, nectarine, peach, plum, and commonly-used rootstocks, and relies on the CPCNW program for importation and virus therapy. FPS is the state-designated program that houses and maintains the Foundation collections for the California Department of Food and Agriculture's (CDFA) Registration and Certification programs for deciduous fruit and nut trees. Thus, FPS stocks qualify and serve as principal source material for commercial increase, primarily for California industries.
The southeastern U.S. is home to the second largest peach production industry in the U.S. Trees used in this industry are primarily produced by three nurseries located in middle Tennessee. These nurseries also provide many of the fruit trees sold to homeowners through large retail outlet chains and mail-order services. In addition, these three nurseries supply trees to states from Virginia down the east coast to Florida and along the gulf coast to Texas. Accurate figures for production are not available, but 2 to 3 million trees are produced annually. For reasons primarily based on climate and a different business model, these programs operated largely independent of the programs in the western United States. Growers in South Carolina and Georgia and the three nurseries in Tennessee combined interests to establish an informally structured certification program. The program is operated out of Clemson University in South Carolina where expertise for virus testing resides. Orchards of commercially significant peach cultivars are identified by the growers and nurseries, and each tree is tested for Plum pox virus, Prunus necrotic ringspot virus, and Prune dwarf virus. Infected trees within the block are identified and removed. The virus indexing is repeated annually. The program also tests the block of trees used to produce seed of Guardian™ rootstock.

These programs have evolved to fill particular niches. While there is very little duplication, historically there was also little communication between programs. The NCPN-FT created a bridge between these four programs to facilitate the efficient and coordinated movement of material through the programs. This enhanced communication prevents unnecessary duplication, and formal recognition of sites provides additional security to the system for maintaining foundation-level varieties that have unique environmental requirements. These capabilities are critical as the tree fruit industry continues to evolve to meet market demands.

In most states, the increase from the small amount of material generated by foundation-level programs to meet grower needs is accomplished through nurseries operating in compliance with certification programs operated by state departments of agriculture, and funded by the industry using various mechanisms. The NCPN-FT has developed a harmonized national standard for state certification programs to facilitate the interstate movement of this virus-tested propagation material.

Because of the effort of programs across the country, the stone and pome fruit tree and nut industries of the U.S. have enjoyed many years of relative shelter from serious virus issues. Much of this activity has occurred unnoticed by the growers. An aggressive outreach effort is required to promote the continued use of virus-tested material and of the benefits of the standards established by the NCPN-FT.

Research is required to accelerate the passage of propagation material though quarantine (virus testing and elimination), and to improve the efficiency of the larger-scale testing required by state certification programs. Research that is currently performed at the four mentioned sites should be encouraged to address needs directly related to activities of the NCPN-FT.

Many industry needs for clean planting stock are met through fruit tree clean plant center operations. However, other aspects that influence plant movement affect the efficient delivery of important new cultivars to the industry, as do some procedures regarding virus detections. Although these issues are, at times, beyond the realm of the NPCN-FT’s commission, they ultimately affect
NCPN-FT operations and the industry. Since the NCPN-FT Tier 2 includes industry, regulatory, and academic representation, it is an appropriate forum to discuss matters affecting access to virus-tested propagation material and to provide subject matter expertise for such issues as deemed appropriate by the Tier 2 committee.

1. The NCPN-FT will establish and coordinate working relationships with and among appropriate entities that certify plants for planting.
   a. The NCPN-FT will maintain a copy of the State Level Model Regulatory Standard: Virus-tested Certification Program for *Prunus, Malus, Pyrus, Chaenomeles,* and *Cydonia* Nursery Stock Production Systems, make it publicly available, and will review the standard for accuracy and effectiveness on a regular basis.
   b. Maintain a catalogue of existing state certification programs.

2. The NCPN-FT will annually discuss progress in reaching NCPN-FT goals and will deliberate on concerns related to the domestic and international movement of virus-tested stock and budwood. As part of its role in ensuring adequate amounts of clean propagation material to meet industry needs, the NCPN-FT will prioritize and assign responsibilities to evaluate and act, if appropriate, on those concerns by working with fruit tree clean plant centers, government agencies, and industry to make the safe movement of clean plants for planting more efficient.