

“NATIONAL PRIORITIES SECTION”
(New section or addendum to Forest Action Plan)
Actions taken 2010-2015 toward U.S. National Priorities

American Samoa
2015

Background: Development of the American Samoa Statewide Assessment and Resource Strategy (SWARS) was a collaborative and iterative process. The American Samoa Community College Division of Community and Natural Resources (ASCC-CNR) solicited involvement from local stakeholders and experts throughout the process. The 2010 Statewide Assessment and Resource Strategy (SWARS) document describes its key forest issues, priority landscapes, and long-term strategies in the context of the overarching national themes of conserving working forest landscapes, protecting forest from harm, and enhancing public benefits from trees and forests.

- **Conserve and Manage Working Forest Landscapes for Multiple Values and Uses**
- **Protect Forests from Threats**
- **Enhance Public Benefits from Trees and Forests**

ASCC-CNR staff reviewed the SWARS draft on May 13, 2010 and the Forestry Advisory Council on May 20 2010. Numerous smaller meetings were held with individual agencies and stakeholders throughout the course of the SWARS. The American Samoa Forest Action Plan has identified five (5) critical issues and priority landscapes areas which cross-referenced to the national priorities (Page 4 of the SWARS).

1. Conserve and Manage Working Forest Landscapes for Multiple Values and Uses

Issue Addressed: *conservation of Native Flora and Fauna*

Long-term strategy1#: Identify top target invasive plant species for control efforts and map their distributions in American Samoa

Action taken 2015: Conducted from 2011 to 2015

Summer Institute students taking part in Forestry activities, as they show and identify invasive species. Map of the most current survey conducted at Maloata of Castilla elastic, 2013.



Long-term strategy 2#: Complete invasive species strategic plan

Action taken 2015: Conducted from 2011 to 2015

Photos of herbicide application on infested area with *merremia*



agroforestry with native plants. *peltata* and planting of

Long-term strategy 3#: Restore the ASCC medicinal garden and nature trail.

Action taken 2015: Conducted from 2011 to 2015

Medicinal garden has been labeled and restored with more native medicinal plants. Nature trail has changed to its new routing which goes through the Nor Folk Pine plot trees to avoid interfering with honey bee's area.



Long-term strategy 4#: Reforest areas cleared of invasive species with appropriate natives; monitor invasive and natives in targeted areas.

Action taken 2015: Conducted from 2011 to 2015

Reforested area in Taputimu as tree stand improvement site with native trees and eradication of albizia tree (tamaligi tree) at Taputimu site.



2. Protect Forests From Harm

Issue Addressed: Conservation of Wetland

Long-term strategy1#: Work with collaborator to plan and implement wetland socio-economic study.

Action taken 2015: Conducted from 2011 to 2015

Forestry continues to work with local partners to replant and restore mangrove species back into wetland areas.



Issue Addressed: Protection of Coral Reefs

Long-term strategy1#: Work with NRCS, IPIF (S&PF), and other collaborators to identify a set of best management practices and tree and other species suitable for conserving soil and nutrients on steep slopes, riparian areas, and coastal shorelines in American Samoa.

Action taken 2015: Conducted from 2011 to 2015

Forestry continues to work with local partners and advisory council members on erosion and sediment control.



Long-term strateg2#: Collect seeds and grow seedlings of native species for best management practices programs.

Action taken 2015: Conducted from 2011 to 2015

Forestry staffs continue to do seed collections, cuttings, seedlings of native trees and demonstrate the growing of vetiver grass to land owners who live near stream corridor for best management practice for soil conservation.



Issue Addressed: Maintaining Fresh Water Quality

Long-term strategy3#: Identify and promote best management practices to conserve soil and reduce nutrient runoff in agro forestry areas, on steep slopes, and riparian zones.

Action taken 2015: Conducted from 2011 to 2015. Continue to work with villagers and church youths to remove sedimentations out of watershed to improve ecosystem.



3. Enhance Public Benefits from Trees and Forests

Issue Addressed: Sustainability of Urban Forests

Long-term strategy1#: Work with villages, families, government agencies, schools and the college to increase native trees in urban and coastal zones.

Actions taken 2010-2015: Conducted from 2011 to 2015 ASCC Forestry continue to conduct coastal and wetland restoration projects with Tutuila and Manu'a villagers, collaborate with government agencies, public and private schools to increase native trees in urban and coastal zones. This is an ongoing collaboration with all involved.



Long-term strategy2#:

Demonstrate shoreline stabilization using native plants.

Actions taken 2010-2015: Conducted from 2011 to 2015

ASCC Forestry crew continue to work with public and private schools and EPA, NRCS and other government agencies to do tree planting restoration and shoreline stabilization using native plants.



Long-term strategy3#: Promote agroforestry in urban zones to prevent clearing up slope

Action taken 2015: Conducted from 2011 to 2015

Forestry staff continue with community workshops for local farmers and the community to increase awareness and demonstrate alternative techniques in agro forestry systems and advise them the use of nitrogen-fixing hedgerows, soil conservation, improved agricultural crops and planting methods and hence the importance of the agro-forest system in providing food security. Forestry continuously attends the first Friday-Farmers market to assist farmers and the community at large of how to better care for their agro forest. Continue collaboration with the community.



Long-term strategy4#:

Develop and present urban forestry educational programs for schools, the college, villages, government agencies, and church groups.

Action taken 2015: Conducted from 2011 to 2015

Forestry crew and local partners NPS and NRCS continue to do educational awareness to various community youth groups.



Long-term strategy4#: Develop and present fire prevention educational programs for schools, the college, villages' government agencies, and church groups.

Action taken 2015: Conducted from 2011 to 2015

Fire crew and National Park present educational presentations on fire, oxygen, heat, fuel to public and private schools during 2015 Arbor week at Su'iga'ula ole Vasa beach, Utulei.



4. Challenges

Rapid Growth of Population: American Samoa consists of seven islands. Five inhabited high volcanic islands (Tutuila, Aunu'u, Ofu, Olosega and Ta'u), one inhabited atoll (Swains) and one inhabited atoll (Rose) live on Tutuila island. Of the five high volcanic islands, 96% of the population resides on the main island of Tutuila. The population has been increased from 57,291 in 2000 to 83,009 in 2015. Most current residents were not born in the territory. Majority of immigrants are Samoans from independent State of Samoa. There are also many Asians like Koreans, Japanese, Chinese, Filipinos; and neighboring Pacific island countries like Fiji and Tonga. All come to seek employment, educational and economic opportunities for their families, which has increased population and added a threat to the forest as they need places to build their homes, the more harm people are making to our forests.

Invasive species continue to threaten all of American Samoa's forests. The growth and spread of these exotic invasive plants can be seen on many mountain slopes where native trees are being replaced by variety of invasive species. Exotic invasive plants post great threat to native rainforests. Some of the serious threats we face include African tulip, red-bead tree, strawberry guava, cinnamon and false kava.

In addition, climate change is already having a significant impact on our ecosystems and it also threatens the health of the community, as they suffer from the heat. The more people build their homes, the more trees in the forests and urban areas are cut down.

One other challenge is short staff. Most of our staff have been moved to mainland for medical reasons or transfer to other departments or employer.

5. Focus next 5 years

In 2010, the State-Wide Assessment and Strategies for Forest Resources (SWARS) analysis identified the spread of exotic invasive plants as the greatest danger to American Samoa's native rainforest include albizia (*falcataria moluccana*), red-bead tree (*adenanthera pavonina*), Mexican rubber tree (*Castilla elastic*), African tuloip (*Spathodea campanulata*), strawberry guava (*Psidium cattleianum*), and false kava (*Piper auritum*).

In 2012, a pilot mapping was conducted on one selected species, the red-bead tree for this test pilot. This is one of the top priority invasive trees for American Samoa, and it presents

characteristics suitable for mapping via remote sensing-based methods. It was not possible to carry out a complete mapping of all the major invasive species even just for Tutuila Island in a single week. Therefore, it is important to continuously develop a strategy to find a simple, practical, and effective method that could be implemented by the ASCC-CNR Forestry program staff with the resources available locally. Using effective methods such as using GIS and remote sensing technology. It will improve American Samoa Forestry team's performance in identifying and locating where exactly invasive species are.

American Samoa people value their forests as they were to their ancestors thousands of years. To that extent, American Samoa Forestry program would like to continue working on the key issues that were identified in the 2010 SWARS such as Sustainability of Urban Forests, Protection on of Coral Reefs, Conservation of Wetlands, Maintaining Fresh Water Quality and Conservation of Native Flora and Fauna. We need to improve our maps on invasive plants. Forestry team must continue to work closely with landowners, local agencies, community and stakeholders for their support and up keeping our rainforest healthy. Different invasive plants require different techniques to locate and map. Appropriate and effective methods and update technology are needed to continue and complete the work.

American Samoa's Important Forest Resources Areas

Figure 1: Main Island of Tutuila

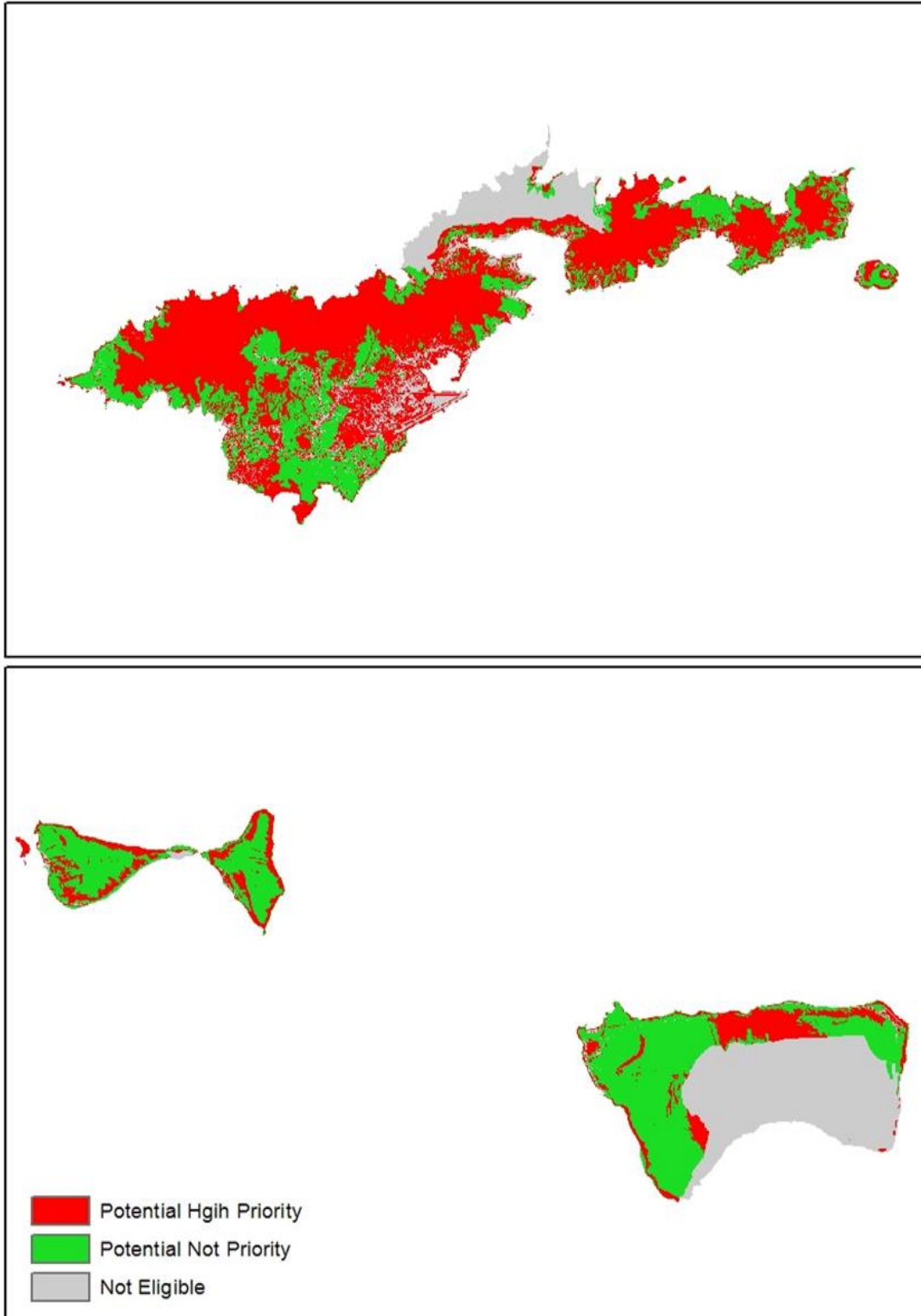


Figure 2: Ofu/Olosega and Ta'ū