

# Appendix A-1

## Stakeholder Involvement Process (2016)

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**Introduction**

In 2014, staff members of the Hawai‘i Department of Land and Natural Resources’ (DLNR’s) Division of Forestry and Wildlife (DOFAW) began work on updating the 2010 Hawai‘i Forest Action Plan (FAP); however, because of staff shortages and turnover, they decided to seek additional assistance to complete the project. In 2015, DLNR contracted with H. T. Harvey & Associates to assist with revising content and drafting the update. The FAP team involved in the 2016 update was composed of DOFAW staff members who were directly involved in planning and implementing FAP projects, as well as H. T. Harvey & Associates ecologists who helped to write and edit the document.

Because so much of the 2010 plan remained relevant and a sound foundation on which to build future conservation efforts, the structure and content of that document were retained to the greatest extent possible. The content of the 2010 plan was reviewed and evaluated by the FAP team; program technical experts in DOFAW, on advisory councils, and among conservation partners; management staff members who implement the plan; and staff members who use the plan for grant applications. This group worked together to identify the content and sections to be updated. Particular attention was paid to new information on threats and challenges, new or changing conservation or management strategies, new forest management initiatives, and development of forest products. Information on these topics was solicited from agency and conservation partners, species experts, and management experts through written requests and interviews.

H. T. Harvey & Associates’ team drafted revisions to the plan and provided the revised text to DOFAW for review. Each chapter was reviewed by subject matter experts at DOFAW, who provided written comments on the revised draft. These comments were then addressed to prepare a draft to be used to solicit comments from the public.

Hawai‘i took a comprehensive stakeholder involvement approach to update the 2010 FAP. The process included multiple meetings with key partners and specific subject matter experts engaged to develop assessments and strategies. Experts from DOFAW, as well as from government agencies and nongovernmental organizations, were interviewed to review

and provide input on specific issues, maps, and concepts (Table 1, included at the end of this appendix).

A draft of the revised FAP was posted on DOFAW's website and made available to the public for review from December 2 through December 14, 2016. Comments received during the public review period were used to revise the draft FAP and prepare the final document.

The stakeholder involvement process described below has enabled the FAP review process to remain transparent and has provided stakeholders and the general public the opportunity to review and provide comments.

The following committees and organizations were engaged in the process of updating the FAP.

#### **Hawai'i Forest Stewardship Advisory Committee**

The Hawai'i Forest Stewardship Program (FSP) provides technical advice and financial assistance on a cost-share basis to nonindustrial private landowners to promote the stewardship, enhancement, conservation, and restoration of Hawai'i's forests. The FSP focuses on forest productivity, native ecosystem health and biodiversity, watershed quality, wildlife habitat, and recreation. Special attention is given to landowners in important forest resource areas and those new to, or in the early stages of, managing their land in a way that embodies multiresource stewardship principles. The program provides landowners with the professional planning and technical assistance they need to keep their land in a productive and healthy condition.

The program has a Forest Stewardship Advisory Committee (FSAC) to assist with providing policy advice to DOFAW and DLNR and providing operational and technical advice and expertise to program users. The 13-member advisory committee reviews and makes recommendations for action on all project proposals and management plans considered for funding under the FSP. The planning assistance offered through the FSP also may provide landowners with enhanced access to other U.S. Department of Agriculture conservation programs or forest certification programs. The FSAC is also the Forest Legacy Program Oversight Committee.

FSAC members were provided a copy of the 2010 FAP and asked to review and provide input on items to update and revise. The FAP team met with the FSAC on November 13, 2015, to provide an overview of the FAP update process, identify items being updated in the plan, and solicit input and comments from the committee to incorporate into the update. The following FSAC members participated in the November 13, 2015, committee meeting:

Nicholas Koch, chairperson, forestry consultant/forest products industry; Betsy Gagne, ex-officio member, DLNR-DOFAW Natural Area Reserves Program; Michael Constantinides, member, U.S. Natural Resources Conservation Service; Kip Dunbar, member, forest products industry/private landowner; Alvin Kyono, member, forestry consultant; Greg Hendrickson, member, Kona Soil and Water Conservation District; J. B. Friday, Cooperative Extension Service, University of Hawai‘i; Greg Koob, member, U.S. Fish and Wildlife Service; Laura Brenzinsky, member, private forest landowner; Patrick Conant, member, entomologist, Hawai‘i Department of Agriculture; Rick von Wellsheim, member, forest products industry/private landowner; and Katie Friday, staff support, U.S. Forest Service.

### **State Kaulunani Urban and Community Forestry Committee**

The Kaulunani Urban and Community Forestry (KUCF) Program focuses on improving the health and viability of trees in Hawai‘i communities through educational programs, financial support in the form of cost-share grants, technical training, Arbor Day promotions, and public/private partnerships. The KUCF Program has a council that acts in an advisory capacity to the State Forester and the Friends of Hawai‘i’s Urban Forest DBA Smart Trees Pacific; provides guidance and direction for the KUCF Program; reviews and recommends for approval to DOFAW updates to the Kaulunani strategic plan and FAP; reviews and recommends for approval projects, subgrants, and educational and marketing initiatives for the program; and reviews and consults on the annual federal grant program proposals.

KUCF council members were provided a copy of the 2010 FAP and asked to review and provide input on items to update and revise. The FAP team met with the KUCF council on October 14, 2015, to provide an overview of the FAP update process, identify items being updated in the plan, and solicit input and comments from the council to incorporate into the update. The KUCF council members provided input on content and KUCF strategies for the FAP update, and KUCF’s support staff revised and updated the FAP chapter on urban and community forestry. The updated chapter was recirculated to the council members and endorsed by the council for incorporation into the FAP.

### **State Wildlife Agency**

DOFAW is also the State Wildlife Agency. DOFAW’s wildlife staff was actively engaged in preparing the FAP update. Agency staff members who were interviewed for the update and the issues discussed are identified in Table 1.

### **Applicable Federal Land Management Agencies and Tribes**

Much of the federal agency involvement in the update was provided through federal agency staff participation on the State Forest Stewardship Advisory Committee, Kaulunani Urban

and Community Forestry Council, and individual outreach to federal agency staff members. The lead federal agency is the U.S. Forest Service. The FAP team met and solicited input from Katie Friday, Susan Cordell, Flint Hughes, and Christian Giardina, researchers and state and private forestry program staff members with the U.S. Forest Service, Pacific Southwest Research Station, Institute of Pacific Islands Forestry, Hilo.

This stakeholder involvement process has enabled the FAP review process to remain transparent and has provided stakeholders and the general public the opportunity to review and provide comments.

**Table 1. Individuals Interviewed to Update FAP and Produce the 2016 Version**

<b>Name</b>	<b>Affiliation</b>	<b>Issue Discussed</b>
Nicholas Agorastos	DOFAW	Conservation of biodiversity
Josh Atwood	DOFAW	Forest health and invasive species
Maria Carnevale	Division of Aquatic Resources	Conservation of biodiversity, Papahānaumokuākea Marine National Monument
Jim Cogswell	DOFAW	Hunting and recreation
Susan Cordell	USFS Institute of Pacific Islands Forestry	Forest health and invasive species, forest products
Charmain Dang	DOFAW	Conservation of biodiversity
Shane DeMattos	DOFAW	Hunting and recreation
Lance DeSilva	DOFAW	Forest protection and wildfire program
Fern Duvall	DOFAW	Conservation of biodiversity
Katie Friday	USFS Institute of Pacific Islands Forestry	Forest health and invasive species, urban and community forestry, forest stewardship, forest products, multistate and regional issues
Betsy Gagne	DOFAW	Conservation of biodiversity
Christian Giardina	USFS Institute of Pacific Islands Forestry	Forest health and invasive species, forest products, multistate and regional issues
Rob Hauff	DOFAW	Forest health and invasive species, forest protection and wildfire
Flint Hughes	USFS Institute of Pacific Islands Forestry	Forest health and invasive species, forest products, multistate and regional issues
Jeremy Kimura	Commission on Water Resources Management	Climate change, watershed management
Cynthia King	DOFAW	Conservation of biodiversity
Nicholas Koch	Forest Solutions	Forest products, forest stewardship
Philipp LaHaela-Walter	DOFAW	Forest products program
Aaron Lowe	DOFAW	Trails and recreation

<b>Name</b>	<b>Affiliation</b>	<b>Issue Discussed</b>
Sheri Mann	DOFAW	Forestry program management, watershed management, forest products, urban and community forestry, forest stewardship, multistate and regional issues
Dwight Matsuwaki	DOFAW	Forest products, maps and geographic information systems
Jason Misaki	DOFAW	Hunting and recreation
Christopher Mottley	DOFAW	Conservation of biodiversity
Dietra Myers Tremblay	DOFAW	Forest protection and wildfire program
Jan Pali	DOFAW	Forest products, maps and geographic information systems
Ryan Peralta	DOFAW	Forest protection and wildfire program
Elizabeth Pickett	Hawai'i Wildfire Management Organization	Wildfire
Tanya Rubenstein	DOFAW	Watershed management and conservation of biodiversity
Irene Sprecher	DOFAW	Forest products, watershed management, urban and community forestry, forest stewardship, conservation of biodiversity, hunting and recreation
Maggie Sprock-Koehler	DOFAW	Conservation of biodiversity
Clay Trauernicht	Hawai'i Wildfire Management Organization	Wildfire
Teresa Trueman-Madriaga	Kaulunani	Urban and community forestry
Jolie Wanger	Kaulunani	Urban and community forestry
Martha Yent	Division of State Parks	Parks and recreation program
Emma Yuen	DOFAW	Watershed management and water quality
Marigold Zoll	DOFAW	Conservation of biodiversity

Notes: DOFAW = Hawai'i Department of Land and Natural Resources, Division of Forestry and Wildlife; USFS = U.S. Forest Service.

# Appendix A-2

## Stakeholder Involvement Process (2010)

## Appendix A: Stakeholder Involvement Process Contents

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**State Forest Stewardship Coordinating Committee.** Meetings held for consultation concerning SWARS were held on 9/3/09, 10/20/09, 3/19/10. Details regarding topic and actions can be found in Table A1. The SFSCC is a combination of members that are Federal, Non-Profit, County Agencies, Private Landowners, and others. This Committee meets desired make up of both the State of Hawaii Forest Stewardship Program, as well as the Federal Forest Stewardship Program. Additionally, this Committee is also the Forest Legacy Program oversight Committee. In such a small state, it is not possible to maintain members from all of the recommended National Forest Stewardship Committee members types; nor to the State and Federal committee types exactly overlap. For those reasons, currently there is no Farm Service Agency (FSA) member on the SFSCC. However, seats on this Committee become available annually (staggered rotations every year), and the FSA will be consulted about their interest to become a member on the SFSCC in the future.

**State Wildlife Agency.** The Division of Forestry and Wildlife is also the State Wildlife Agency. DOFAW wildlife staff were actively engaged in the preparation of Hawaii SWARS. Details regarding topic and actions can be found in Table A1

**State Technical Committee.** Meetings held for consultation concerning SWARS were held between the Administrator of the NRCS Regional Office and his staff, and the State Forester and his staff January 31, 2010 in preparation for upcoming STAC meetings and new requirements. Informational Meetings with SWARS staff and the STAC took place on Jan 10, 2009, Oct 28, 2009 and January 27, 2010. A final draft copy of the SWARS will be provided to the STAC via NRCS staff. Details regarding topic and actions can be found in Table A1.

**Applicable Federal Land Management Agencies and Tribes:** DOFAW staff worked with various Federal Land Management Agencies, both on a personal level (for forest birds, for example) and on various committees such as the Ocean Resources Management Plan Working Group. NRCS in particular has been extremely helpful and engaged in SWARS, as has the Board of Health and EPA on water quality issues. We work with the military on a variety of projects, and our Watershed Partnerships have played a key roll in keeping all of their partners engaged. We have benefited greatly by the work of Hawaii Volcanoes National Park in identifying trends in wildfire. The Bureau of Land Management does not have a presence in Hawaii and they do not manage any land in the state. We are very grateful to the staff at the Papahānaikamokuākea Marine National Monument, although there area of jurisdiction is out of the scope of this document. We have coordinated as best we could with the Office of Hawaiian Affairs (OHA), which is a State Agency which officially represents Native Hawaiian interests. Native Hawaiians are not officially recognized by the Federal Government, and so do not



have the legal status of the Native American Indian tribes on the mainland and Alaska. The OHA has been undergoing a fundamental internal reorganization for the past 6 months, and from day to day positions are being eliminated or redescribed, and people are assigned different positions within OHA at a moment's notice. At all stages of the development of SWARS representatives of OHA have been involved to the extent that their other responsibilities permitted.

It should be noted that in Hawaii, individuals and organizations working in the field of forestry and natural resource management are a relatively small but very close-knit community. On a small island, we all wear many hats, and interact professionally and socially on a daily basis. We are colleagues, neighbors and friends. The entire natural resource community has been very engaged in Hawaii SWARS from the beginning by providing data, reports, advice and support. Table B1 provides only a snapshot of the stakeholder involvement process as documented in meeting minutes, presentations and formal consultations. It does not capture the essence of how we work in Hawaii; the countless potluck dinners, lunch meetings, field trips and after-conference informal sessions where SWARS has been a central topic of discussion for two years.

Much of our federal agency involvement has taken place on several committees in addition to the State Forest Stewardship Coordinating Committees, and the State Technical Advisory Committee: one is the Hawaii Conservation Alliance (HCA), another is the Ocean Resources Management Plan (ORMP) Working Group, another is the Kaulunani Urban and Community Forestry Committee. Members' names and affiliations are to be found at the end of this appendix, pages A-51–A-58.

The lead agency for both the Federal Forest Legacy and the Forest Stewardship Programs in Hawaii is DLNR/DOFAW. These are actually the same Committee entitled the State Forest Stewardship Advisory Committee; also known as the State Forest Stewardship Coordinating Committee. See A-52.

There are a wealth of plans that have been prepared by other State, Federal, County Agencies, such as the island Boards of Water Supply and the Watershed Partnerships. It is our intent to complement and support all approved State, Federal, Local and Watershed Partnership Plans; and to support their ongoing activities wherever we have jurisdiction and the resources.

### **General Stakeholder Involvement**

Hawaii approached Stakeholder Involvement using a multi-tiered method. The process included written and internet surveys, a two day Summit; multiple meetings with key partners and specific individuals engaged to develop assessments and strategies. Three questionnaires were prepared and distributed to solicit input on critical issues to be assessed in our SWARS. The three survey instruments and analyses can be found in Appendix A Pages A-12 – A-50.

The process began by examining the Oklahoma process[i] and survey[ii] (A-3), which provided a roadmap what eventually became a Hawaii specific issues survey. On August 14, 2009 by engaging attendees at the Hawaii Conservation

Conference (A-12). On September 3, 2009, the Forest Stewardship Committee provided their comments (A-27), and general DOFAW staff and other members of the public contributed this survey via the internet (A-36).

Other tiers in Hawaii's stakeholder involvement process were worked on simultaneously. One was the development of an Urban and Community Forestry Summit held in November of 2009 (A-55 – A-57). We cast a very broad net to identify potential participants. As such, we united many partners that work on the fringes of the urban and community forest, but not necessarily together. For example, professionals and representatives from watershed partnerships, planners, invasive species, forest health, the nature conservancy, coastal zone management, botanical gardens, arborists, wildfire, NGO's and education specialists. While the intention of the summit was to inform Urban & Community Forestry issues and professionals, the ramifications were much broader and this summit linked partners for other critical issues in Hawaii; such as the coastal zone and watershed groups. At the same time lead Ron Cannarella and other SWARS team members engaged the participation of organizations and individuals and presented the SWARS project at events and meetings (TABLE A1). In addition, we invited experts internally from the DOFAW staff, as well as externally from government and non-government organizations to contribute to, review and critique draft chapters, maps & concepts. Many of these individuals are also listed in A3 and in the Acknowledgements at the beginning of this document.

Finally, the draft Hawaii SWARS was submitted to the State Board of the Department of Land & Natural Resources on May 13, 2010 for approval in concept. A draft was sent to the US Forest Service Region 5 on June 1, 2010 for a five day review. The Hawaii SWARS project and all of its elements and processes has been posted on our website [www.hawaiistateassessment.info](http://www.hawaiistateassessment.info) since August 2009. This has enabled the entire Hawaii SWARS development process to remain transparent and has provided stakeholders and the general public the opportunity to comment at anytime in the process. Additionally, a plethora of supporting documentation that was used to inform and educate SWARS staff and readers, can be found on this website.

[i] Dept. of Agriculture, Oklahoma Forestry Services. Management Protection, "Oklahoma Forest Assessment/Resource Strategy Planning Process"  
[http://www.forestry.ok.gov/Websites/forestry/Images/Assessment%20and%20Strategy, %20Planning%20Process.pdf](http://www.forestry.ok.gov/Websites/forestry/Images/Assessment%20and%20Strategy,%20Planning%20Process.pdf) (accessed June 2009).

[ii] Dept. of Agriculture, Food and Forestry Oklahoma Forestry Services, Management Protection,, "Forest Resource Assessment and Strategy Plan, Survey for Public Input"  
<http://www.forestry.ok.gov/Websites/forestry/Images/Survey.pdf>.

Table 1 Stakeholder Participation: Local & Pacific Region Stakeholder and Partner involvement in H SWARS

DATE	Stakeholder, Agency, Organization or Committee	Event	Action
May 4, 2007	Partner/Stakeholder	US Tropical Island collaboration	A White Paper was developed that outlined the important US Tropical Island issues that are important to incorporate into the S&PF Redesign. The purpose of this paper was to highlight the critical issues that islands need funding for but that often are not defined as eligible due to narrow mainland descriptions.
January 31, 2008	STAC	State Forester Meets with Director of Natural Resources Conservation Service	Scope SWARS, How to Involve STAC
April 9, 2008	ORMP	Ocean Resources Management Plan Working Group	Watershed Issues and Coordination
April 9, 2008	Partner/Stakeholder	Ocean Resources Management Planning Policy Group meeting	Consultant revealed their priority watersheds project as required by the EPA Non-Point Source Pollution Program.
August 1, 2008	Stakeholder	Hawaii Conservation Conference	Introducing Requirement, Deadline and Scope for SWARS. Requested January 6, 2009 participation and data.
August 28, 2008	Students/University of Hawaii	Engaged UH College of Natural Resources and hired Kelly Hartman as student intern for GIS	Kelly Hartmen did a significant amount of the early GIS work that defined the Urban Forestry realm in Hawaii.
January 10, 2009	STAC	Meeting & Video Conference Call	Discussed what SWARS is, how it will affect all US related islands and shared technical support on how to go about developing this document.
March 18, 2009	Partner/Stakeholder	Kaulunani Urban & Community Forestry Council Meeting	Introduced the SWARS concept and requested involvement/Sub-committee establishment.
April 22, 2009	Urban & Community Forestry Advisory Committee & State of Hawaii staff	UCF Council Meeting	Discussed where the Urban Forestry realm is located and how we want to map it.
April 28, 2009	Partner/Stakeholder	Pre-Urban Summit Meeting	Discussed logistical issue related to the Summit, including narrowing of UCF SWARS topics.

Table 1 Stakeholder Participation: Local & Pacific Region Stakeholder and Partner involvement in HI SWARS

DATE	Stakeholder, Agency, Organization or Committee	Event	Action
May 4, 2009	Pacific Island Committee	Sheri Mann, Michelle Jones and Ronald Cannarella attended this meeting on behalf of State of Hawaii	Engaged all Region 5 Program managers, our island partners. NRCS adm TNC and the Micronesian challenge and Regional Forester. SWARS was the dominant topic at this meeting
May 14, 2009	Students/University	Professor Jim Henry and students	Interviewed DOFAW staff about history of forestry in Hawaii
June 6, 2009	Public Service	Hawaiistateassessment.info	This website was created to facilitate info exchange and serve as document repository for all HI SWARS documents. It was also used as a permanent free web location that the public could access.
July 10, 2009	Urban & Community Forestry Advisory Committee & State of Hawaii staff	UCF Council Meeting	Further discussion of SWARS Urban Realm mapping and definition.
July 28, 2009	Partner/Stakeholder throughout the State	Hawaii Conservation Conference	Seminar on Hawaii SWARS. Distributed Critical Issue Identification Survey.
August 13, 2009	ORMP	Ocean Resources Management Plan Working Group	Watershed Issues and Coordination
August 13, 2009	Various professional agencies	ORMP Working Group	Offered input on overall SWARS Issue topics and offered professional assistance in the development of the document.
August 26, 2009	Partner/Stakeholder	Pacific Island Network: Global Climate Change Workshop	This 2 day meeting discussed scientific based climate change issues in the Pacific. This was a strong addition to the SWARS Climate Change Chapter.
September 3, 2009	Forest Stewardship/Legacy Committee	Quarterly Meeting	Develop Critical Issue Identification Survey and Validation of Issues.
October 1, 2009	Partner/Stakeholder	Landscape Industry Council of Hawaii	Journal Article on Hawaii SWARS with UCF focus
October 20, 2009	Forest Stewardship/Legacy Committee	Quarterly Meeting	Discussed how to prioritize areas for conservation of biodiversity

Table 1 Stakeholder Participation: Local & Pacific Region Stakeholder and Partner involvement in HI SWARS

DATE	Stakeholder, Agency, Organization or Committee	Event	Action
October 22, 2009	Partner/Stakeholder	The Nature Conservancy	Provided Data and Technical Assistance in mapping biodiversity
October 28, 2009	STAC	State Technical Committee Meeting & Video Conference Call	Multi-jurisdictional committee with members across the Pacific discussing landowner assistance Farm Bill programs, SWARS, and ways to collaborate more affectively. Ron Cannarella gave a presentation on HI SWARS.
November 4, 2009	Partner/Stakeholder	Urban & Community Forest Summit	Included Pacific Islands and representatives from around Hawaii to discuss all Urban Forestry issues. Included much discussion regarding the primary SWARS UCF topics.
November 16, 2009	Partner/Stakeholder	Pacific Island Climate Change Cooperative Meeting	Steering Committee formation meeting. Discussed the various members we wanted involved, funding options, and targeted goals.
November 17, 2009	Conference	National SWARS Meeting	Ron Cannarella, Colleen Carroll & Miranda Smith attended this National SWARS meeting to learn all about SWARS.
December 3, 2009	ORMP	Ocean Resources Management Plan Working Group	Watershed Issues and Coordination
January 7, 2010	ORMP	Ocean Resources Management Plan Working Group	Climate Change Issues
January 11, 2010		SWARS Webinar	Received input on how to organize SWARS engage the entities necessary for inclusion.
January 22, 2010	Partner/Stakeholder	Hawaii Land Trusts Collaboration Meeting	Hawaii Land Trusts Collaboration Meeting
January 23, 2010	Partner/Stakeholder	State-wide Land Trust Meeting	Discussed details about the State-wide Land Trust merger. Many questions were asked about how SWARS will be organized and access to future funding tied to SWARS.
January 27, 2010	STAC	STAC-Pacific-Wide Meeting organized by NRCS using PeaceSat technology at UH	All islands were represented with the exception of American Samoa and Yap.

Table 1 Stakeholder Participation: Local & Pacific Region Stakeholder and Partner involvement in HAWAIIAN SWARS

DATE	Stakeholder, Agency, Organization or Committee	Event	Action
February 2, 2010	Partner/Stakeholder	Urban & Community Forestry GIS Mapping Session	Detailed effort to consolidate and finalize all Urban related data defining Urban Forestry realm.
February 2, 2010	Consultation with Forest Service	Multi-State Chapter	Discussed this chapter with Katie Friday (IPIF) and Sandy Macias (Region 5)
February 3, 2010	ORMP	Ocean Resources Management Plan Working Group	Climate Change Issues
February 1, 2010	US Fish & Wildlife Refuge System	Meeting with Heads of Agencies	A meeting among various DOFAW and USF&WS Refuge System took place outlining the overall importance of SWARS and how it could impact future funding in the state. McCandless Ranch was also discussed as a possible collaborative acquisition.
February 8, 2010	Partner/Stakeholder	Met with Hector Valenzuela and Maxine Burkett	Set Work Plan for Climate Change Chapter Development
February 16, 2010	Partner/Stakeholder	Urban Realm Mapping Meeting	SWARS Urban Realm mapping discussions.
February 17, 2010	State Agency	Hawaii Tourism Authority	Scoped Recreation and Tourism Issue
February 17, 2010	Partner/Stakeholder	Draft Forest Products & Carbon Sequestration Chapter	E-mailed the draft Forest Products & Carbon Sequestration Chapter to targeted foresters in Hawaii and Region 5.
February 18, 2010	Stakeholder/Forest Stewardship Committee Members	Bill Cowren, Kip Dunbar & Margarita Hopkins review of SWARS Chapters	These Committee members provided various input on many SWARS Chapters that were posted to the HI SWARS website.
February 19, 2010	Partner/Stakeholder	Pacific Island Climate Change Cooperative Meeting	Further refined the scope and location of 7 new positions in Hawaii related to Climate Change mitigation and policy development. Discussed how SWARS planning process can impact where these positions are located and what they focus on.
March 8, 2010	Partner/Stakeholder	Pacific Island Committee Meeting	Present current status of SWARS and collaborate on multiregional issues, gain input from R5 staff.

Table 1 Stakeholder Participation: Local & Pacific Region Stakeholder and Partner involvement in Hawaii SWARS

DATE	Stakeholder, Agency, Organization or Committee	Event	Action
March 9, 2010	Forest Stewardship/Legacy Sub-Committee for SWARS Review	SWARS Forest Products & Carbon Sequestration	Reviewed an early version of this Chapter
March 10, 2010	Partner/Stakeholder	Began Working with Maxine Burkett and Chip Fletcher on Climate Change/Sea Level Rise	Collaboration with Hawaii Conservation Alliance and ORMP Working Group for Climate Change
March 11, 2010	Consultation with Forest Service	Discussed the SWARS progress and technical issues with Laurie Tippin and Jim Pena (Region 5).	Clarification of Requirements for final SWARS
March 19, 2010	Forest Stewardship/Legacy Committee	Quarterly Meeting	Presentation on current status of SWARS and solicit input. Provided individual chapters for review. Gave the Committee the FSP SWARS Survey.
March 25, 2010	January 25, 1900	ORMP Working Group began working with Zena Grecni on Climate Change	Integration of all available information on climate change into Assessment and development of Strategies
March 25, 2010	Partner/Stakeholder	Ocean Resources Management Plan Working Group	Meeting of ORMP Climate Change subcommittee to refine Climate Change Assessment and Strategy
April 1, 2010	Partner/Stakeholder	ORMP Working Group Finalized working session on Climate Change	Hawaii Conservation Alliance Director and US Fish & Wildlife Service PICCC Presentation on Climate Change Initiative in the Pacific Region
April 13, 2010	Partner/Stakeholder	California, Nevada, Hawaii CNF Annual Fire Conference	Stakeholder input from Foresters State-wide and one on one time with LANDFIRE developers that delivered a tremendous amount of new GIS data for SWARS. Attended by Ron Cannarella, Colleen Carroll and Wayne Ching.
May 6, 2010	Partner/Stakeholder	ORMP Working Group focus on climate change legal instruments	Finalization of Climate Change Strategies
May 13, 2010	State Natural Resources Agency	Board of the Department of Land & Natural Resources	Approval in concept of the Hawaii SWARS & general approval of the draft to date.

Table 1 Stakeholder Participation: Local & Pacific Region Stakeholder and Partner involvement in HAWAIIAN SWARS

DATE	Stakeholder, Agency, Organization or Committee	Event	Action
May 13, 2010	Stakeholder/Public	Hawaii Department of Land and Natural Resources Board Meeting	Briefed the BLNR on the SWARS concept and received their official support of the detailed subjects and methodologies. Authorized Paul Conroy to be the final authority approval.
September 4, 2009	Department of Defence - Army, Office of Hawaiian Affairs, US Fish & Wildlife Refuge Service, TNC, TPL and most Land Trusts in the State	Land Acquisition Video Conference Call	Discussions about strategic priority areas among Land Trusts, County, State, DOD, OHA, Refuges and other agencies. Discuss the possibility of all Land Trusts in Hawaii merging. Discussed how we can get strategic land area acquisitions mapped and into SWARS. Ask for review of draft located on the SWARS website
September 23, 2009	Partner/Stakeholder	Hawaii CPO/HIGIC Conference	Presented SWARS and, discussed with county planning officials and other GIS specialists. Received latest GIS data and all CWPP's.
December 10, 2009	TNC, DOFAW, USGS, UH	Biodiversity Mapping Team, Sam Gon, TNC; Ron Cannarella, DOFAW; & Jim Jacobi, UH;	Biodiversity Chapter Priority Landscape Map development.
January 23, 2010	All Land Trusts in the State, Office of Hawaiian Affairs & State of Hawaii DOFAW	Strategic Planning for Land Acquisition for Conservation Purposes Meeting	All Land Trusts & Non-Profits in the State that do land acquisition for conservation, as well as some agency funders, were present to discuss the possibility of merging all land trusts. Also discussed were ideas on how to target strategic areas for land acquisitions. SWARS strategic planning concepts were discussed.
February 8, 2010	Partner/Stakeholder	Jeff Burgett US Fish & Wildlife	Introduced USFWS Climate Change Initiative to DOFAW staff



Table 1 Stakeholder Participation: Local & Pacific Region Stakeholder and Partner involvement in HI SWARS

DATE	Stakeholder, Agency, Organization or Committee	Event	Action
April 19, 2010	Farm Services Agency & NRCS	Conservation Reserve Enhancement Program Training (CREP)	& Collaborative discussion on available programs and how to integrate them better in the future. SWARS was discussed at length with FSA and NRCS and each were invited to visit the HI Website to review any and all of the latest SWARS and provide comment.
April 10, 2010	Pat Conant, Hawaii Department of Agriculture	SWARS Forest Health Chapter	Reviewer for Forest Health Chapter.
April 10, 2010	Lloyd Lloope, United States Geologic Survey - Biological Resources Committee	SWARS Forest Health Chapter	Reviewer for Forest Health Chapter.
April 10, 2010	Teya Penniman, Maui Invasive Species Committee	SWARS Forest Health Chapter	Reviewer for Forest Health Chapter.
April 10, 2010	Mary Steiner, Executive Director The Honolulu Outdoor Circle	SWARS UCF Chapter	Reviewer for Urban & Community Forests Chapter.
May 13, 2010	Zena Grecni, law intern under supervision of Maxine Burkett, Director of the Institute for Climate Change Adaptation and , Professor of Law	SWARS Climate Change Chapter	Compiled All Stakeholder Input and Finalized Climate Change Chapter and Strategy
May 21, 2010	Same as above including: US FWS & Landfire	Final consultation with DOFAW wildlife staff, USGS BRD and TNC on Conservation of Biodiversity Priority Areas	Completed Biodiversity Layer based on LANDFIRE Data for Hawaii

Table 1 Stakeholder Participation: Local & Pacific Region Stakeholder and Partner involvement in H SWARS

DATE	Stakeholder, Agency, Organization or Committee	Event	Action
May 25, 2010	US Fish & Wildlife Refuge System, NRCS, Watershed Partnerships, private landowners	McCanless Ranch Field trip	Spent the day on the McCandless Ranch discussing the various landowner assistance programs that are available and how SWARS priority areas are important for future agency-wide conservation efforts in Hawaii.

**Kaulunani Urban and Community Forestry Program**

# Urban Forestry Critical Issues

Survey Results  
Hawai`i Conservation Conference  
*Statewide Assessment and  
Resource Strategy Symposium*

Colleen Carroll, Ed.D.  
Teresa Trueman-Madriaga

August 14, 2009

## Hawaii Urban Forestry Questionnaire

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## Hawaii Urban Forestry Questionnaire - Hawaii Conservation Conference Statewide Assessment & Resource Strategy Symposium July 29, 2009

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### OVERVIEW

An integral component of the Statewide Assessment & Resource Strategy, SWARS, is to solicit public input on the critical issues in our forests. The Urban and Community Forestry Team created a simple six question form for distribution to participants at the Hawaii Conservation Conference - SWARS session on July 29, 2009. Our goals were two-fold (1) to gain input and validation on the critical issues in the urban forest of Hawaii and (2) to trial the survey format and questions. The survey is being modified and will be available via the web for public input.

The SWARS session was well attended with nearly 175 people from the conservation community. Sixty-two surveys were handed out and 37 were completed. While the data set is small the surveys yielded rich information and are representative of the professional conservation community in Hawai`i.

### Background

Regarding background we wanted to know where participants live as well as their affiliation. Knowing where respondents live is of great importance in the Hawaiian Islands as the geography, rainfall, economic and other conditions vary widely across the state. We found that the majority of the participants live on Oahu, most in Honolulu and Kaneohe with a small representation from the Big Island. The majority of the respondents are forestry professionals or representatives from the conservation sector. This is a professional group with in-depth knowledge of the Hawaii Conservation issues.

### Next steps

The survey has been modified slightly and revised for the internet. It will be available at the Kaulunani site [www.kaulunani.org/survey](http://www.kaulunani.org/survey) as well as [www.hawaiiassessment.info](http://www.hawaiiassessment.info).

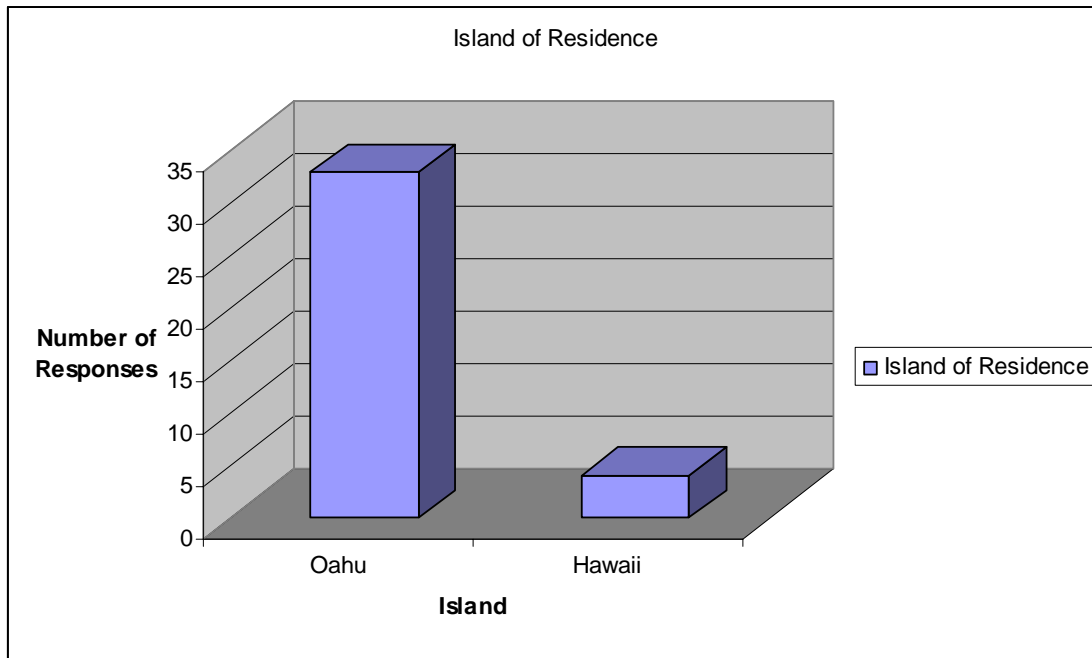
# Hawaii Urban Forestry Questionnaire - Hawaii Conservation Conference Statewide Assessment & Resource Strategy Symposium July 29, 2009

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## SURVEY RESULTS

### QUESTION ONE:

Please tell us your city and island of residence.



The majority, 33 of the participants live on Oahu. Most in Honolulu (11) and Kaneohe (7). The Hawaii island residents were primarily from Hilo (3 of 4).

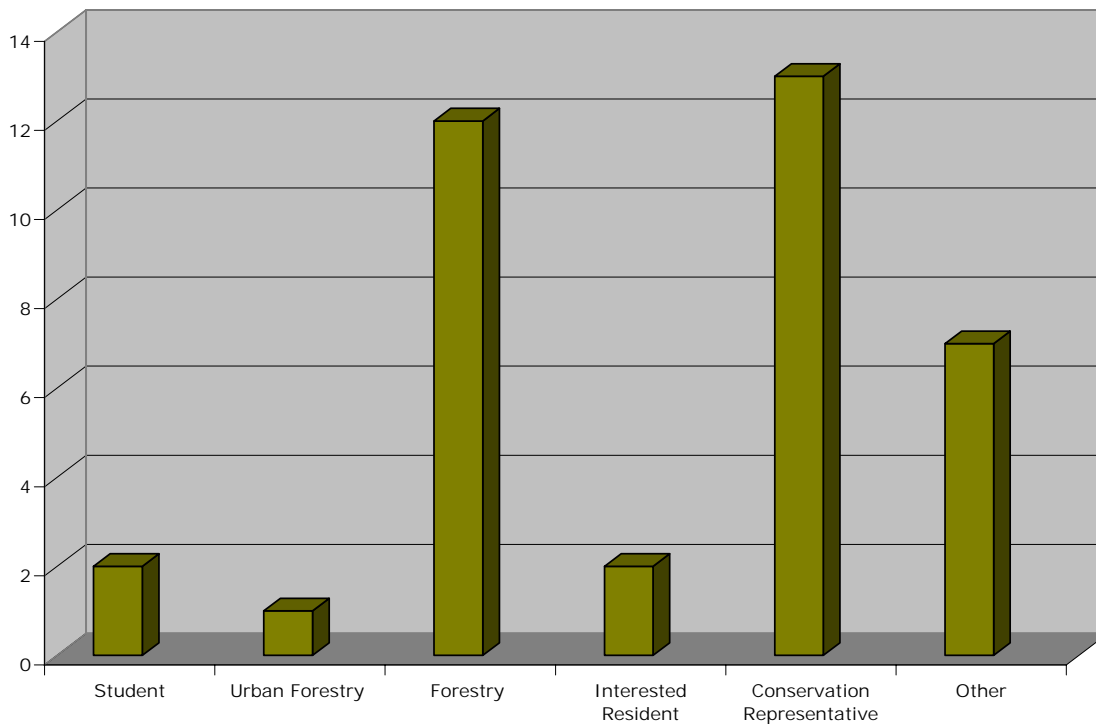
Hawaii Urban Forestry Questionnaire - Hawaii Conservation Conference  
 Statewide Assessment & Resource Strategy Symposium July 29, 2009

QUESTION TWO:

Circle the title that best describes you.

- |                             |                             |
|-----------------------------|-----------------------------|
| Student                     | Interested Resident         |
| Urban forestry Professional | Conservation Representative |
| Forestry Professional       | Other_____                  |

**Professional Affiliation**

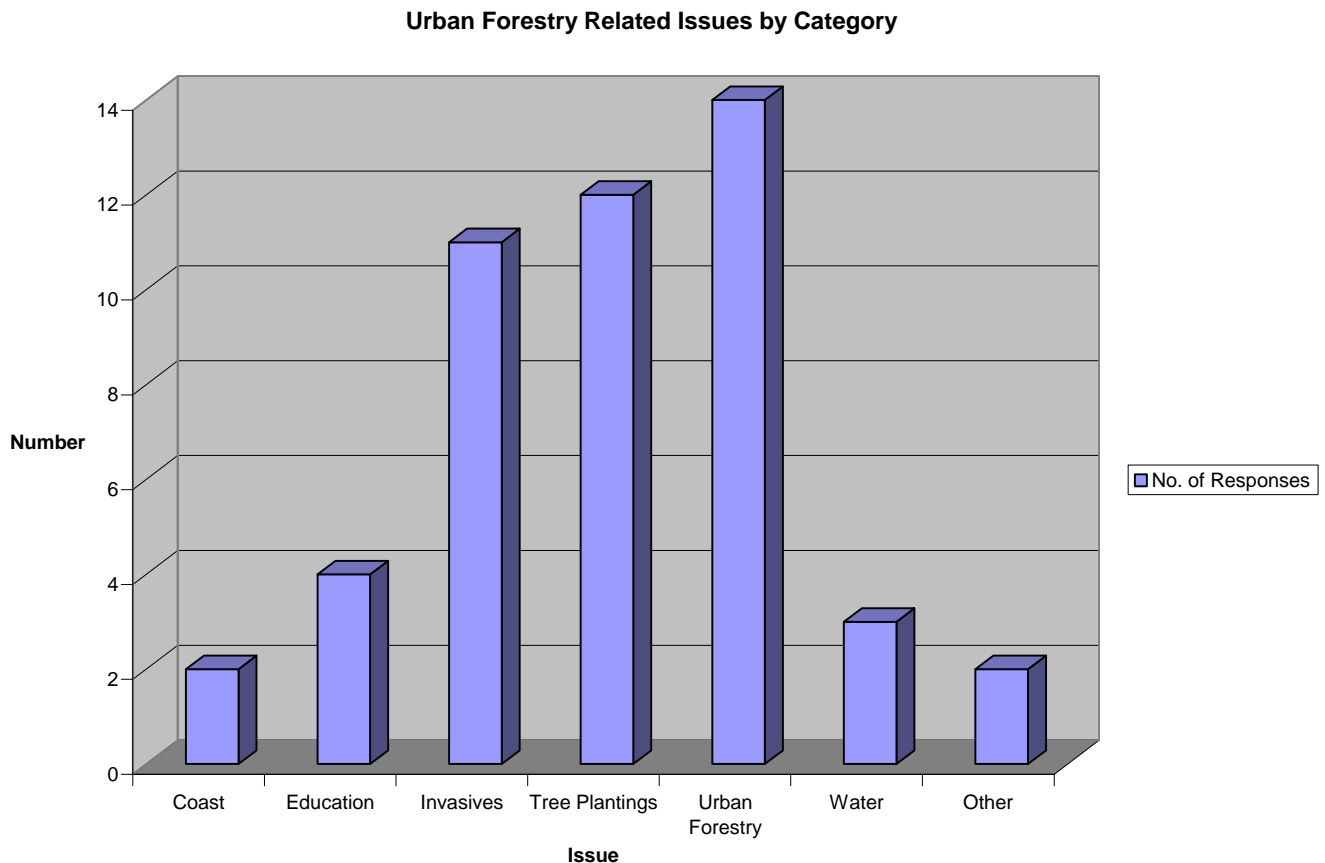


The majority of participants were either forestry professionals (12) or conservation representatives (13). Several additional titles were added: Professor, educator, botanist, nonprofit, watershed planner, wildlife biologist, landscape architect, and environmental consultant.

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**QUESTION THREE:**

Thinking in terms of where you live, what is the most important urban forestry-related issue that needs to be addressed? (This question was modeled after the Oklahoma Survey.)



**RESPONSES:**

**A. COASTAL & NEAR SHORE RESOURCES**

- Coastal & lowland forest impacts due to population pressure.
- Urban affects on near shore resources.

**B. EDUCATION**

- Education of inhabitants on value of conservation practices.
- In my neighborhood the urban forest in the back valley is ...- mainly ornamentals - increasing home owner education on urban forests would help.
- Education.
- Educating the general public about the use of native plants in the landscape.



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### C. INVASIVES

- Release (or potential release) of invasive species into upland forests.
- Invasives
- Weed spread of landscape plants
- Wildland/Urban interface and threats
- Forest Interface - threats of invasive tree species
- Invasive Species
- Invasive trees
- Selection replacement of tree plantings with known invasive characters.
- Replacing invasive trees with natives - almost NO NATIVE urban trees in Kaneohe!
- Prevention of invasive species/pathogens
- Invasive species

### D. TREE PLANTINGS - (FOCUS ON NATIVE SPECIES)

- I'd love to see more native trees represented in our urban forest - most people don't know what native trees even look like.
- Plant more trees & more appropriate trees (e.g. natives and not invasives).
- Plant more resilient natives.
- Native species
- Planting
- In Kaneohe there are very few trees planted in urban area!
- Need more native plants in our urban area!
- Educating the general public about the use of native plants in the landscape.
- Replacing invasive trees with natives - almost NO NATIVE urban trees in Kaneohe!
- Large tree replacement planning.
- More natives & endangered plants need to be planted in urban areas.
- Would love to see more native/Polynesian-introduced trees in public areas. It would also be great to plant fruit trees too!

### E. URBAN FOREST MANAGEMENT

- Appropriate street trees
- Very few urban forestry plantings in Kahaluu, & ones that are in Kahaluu are not always well maintained. Lots of room to work on Ahupua`a scale, especially in Waihele.
- Biodiversity of urban forestry
- Urban Tree Health & large tree replacement planning.
- Green Space Management
- Maintenance & care of existing urban trees.
- More desired plantings. Less weeds and uncared for plots of land.
- Keeping trees well maintained (pruned).
- Vegetation management in expanding suburbs - bulldozing Albizia in Puna, urbanization in Hamakua.
- Manoa Falls trail system - management & clean-up
- Ag lands

Hawaii Urban Forestry Questionnaire - Hawaii Conservation Conference  
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- Benefits & costs of forest conservation projects
- Shade
- Erosion control.

**F. WATER**

- Water shed Management
- Landscape retrofit to maximize water retention, filtration & infiltration.
- Stream quality, watershed, mauka forestry

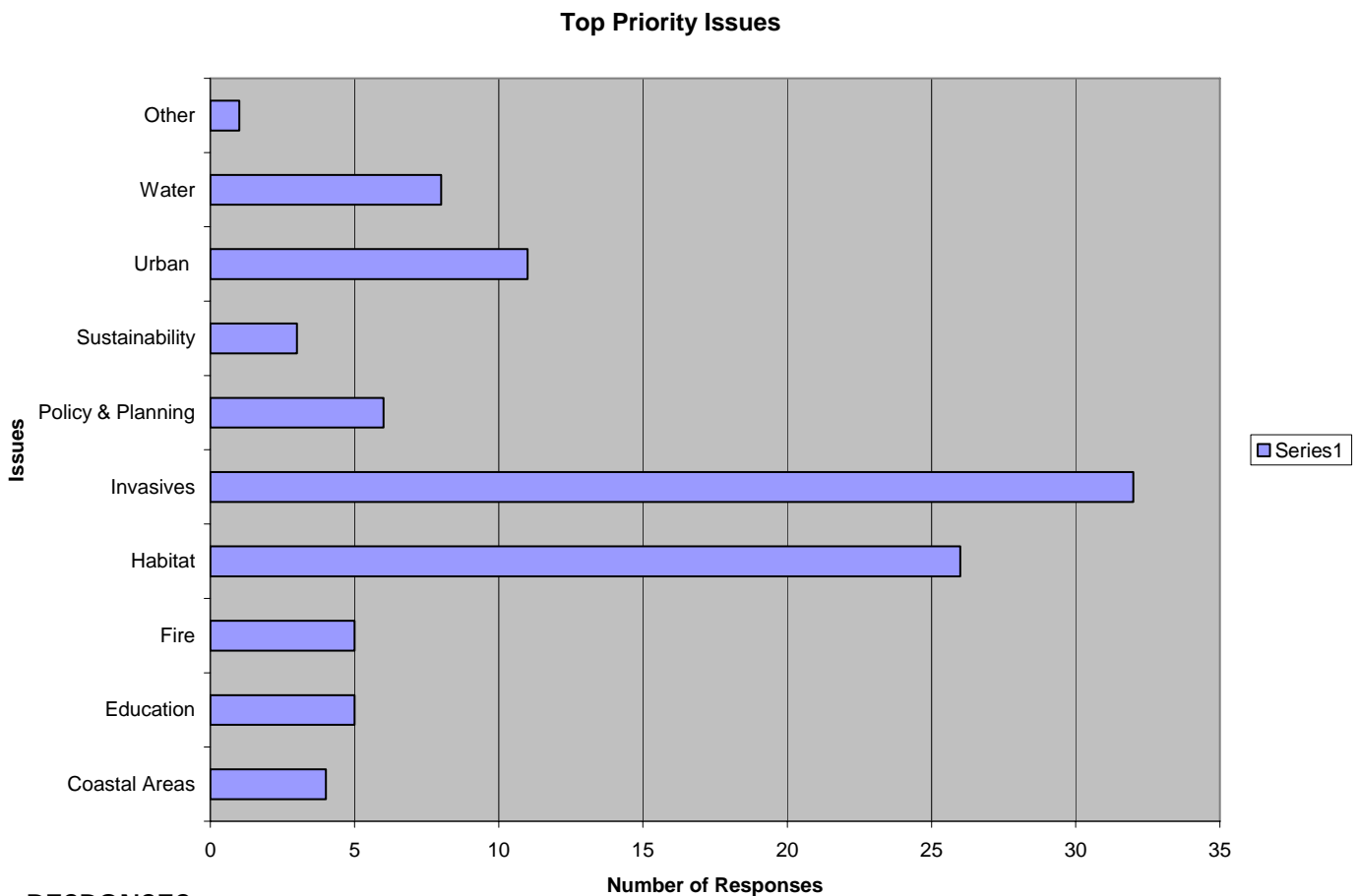
**G. OTHER**

- Increased fire severity resulting from fire fuels.
- Studies to distinguish conservation that increase welfare from those that waste resources.

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**QUESTION FOUR:**

Thinking of Hawai`i as a whole, what are the top three forestry issues that need to be addressed? (This question was modeled after the Oklahoma Survey.)



**RESPONSES:**

**COASTAL**

- Affects on near shore resources
- Coastal & lowland forest impacts due to population pressure
- Increased sediment discharge to nearshore reef resulting from slumping/slides
- Near shore management

**EDUCATION**

- Perception of value by people
- I think the community sees a forest & doesn't understand the problems- if it is green & pretty so all is ok
- Education of public
- Public support for work in invasive species & habitat loss
- Public awareness of native species their value

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**FIRE**

- Fire potential
- Fire
- Fire suppression
- Fire minimization at urban/forest boundary
- Fire prevention/management

**HABITAT**

- Habitat Alteration/ loss
- Habitat modifying species in native forest
- Restoration & protection
- Native Forest (mesic)
- Forestry understory sustainment
- Protection of rare species
- Ecosystem management
- Maintaining native forest
- Habitat for native trees/TES flora & fauna
- Restoration of native ecosystems
- Beauty of native forest & trails (recreation)
- Conservation of existing forest resources
- Restoration of degraded forest resources
- Sustainable production & management of forest resources
- Loss of native species
- Native plant restoration
- Field work
- Habitat loss
- Protection of endemic species
- Balancing rare forest management & hunting program
- Restoration & protection
- Maintaining natural species forests
- Native species protection
- Diversity of forests
- Biodiversity
- Habitat loss

**INVASIVE**

- Invasive species
- Invasive species
- Invasive fauna
- Release or potential release of invasive spp. into upland forests
- Invasives
- Ungulate elimination
- Invasive species

## Hawaii Urban Forestry Questionnaire - Hawaii Conservation Conference Statewide Assessment & Resource Strategy Symposium July 29, 2009

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- Incipient weed control
- Habitat modifying species in native forest
- Invasive species control
- Invasive species encroachment diminishing water recharge capacity
- Potential for invasive invertebrates attack/killing forest sp.
- Addressing invasives
- Invasive species
- Containment/control of invasive species
- Increase in alien weeds
- Increase in alien game animals
- Invasive species removal
- Stopping introduction & spread of invasives
- Invasive flora & fauna
- Invasives removal
- Invasive species
- Invasives
- Invasive species
- Removal of feral ungulates & invasive species
- Stop invasive imports
- Native vs. invasive plants
- Invasive species
- Invasive species prevention/mitigation
- Invasive species
- Invasive species
- Invasive species

### **POLICY & PLANNING**

- Land use zoning to protect upland forests
- More transparency regarding how limited funds get spent managing natural areas
- Sufficient funding for conservation \$\$
- Creating effective & efficient management tactics
- Sustainability science
- Promotion of natives & endangered plants in city planning

### **SUSTAINABILITY**

- Forest management for carbon sequestration & biofuel production
- Sustainable building materials grown in Hawaii cuts carbon footprint
- Development of a forest industry

### **URBAN**

- Urban/forest interface problems
- Development
- Addressing green in urban areas - reduce cars, protect, etc.
- Requiring/including planting space in new developments

## Hawaii Urban Forestry Questionnaire - Hawaii Conservation Conference Statewide Assessment & Resource Strategy Symposium July 29, 2009

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- Recreation/exercise parks/pathways for urban forestry in Hawaii
- Expanding development
- Negative human impact
- Stopping north shore development "turtle bay"
- Fire minimization at urban/forest boundary
- More natives need to be planted in urban areas
- Promotion of natives & endangered plants in city planning

### WATER

- Water
- Water quality
- Watershed
- Invasive species encroachment diminishing water recharge capacity
- Management of upland forest to preserve watershed values
- Watershed & aquifer
- Watershed
- Water

### OTHER

- Erosion control

Hawaii Urban Forestry Questionnaire - Hawaii Conservation Conference  
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**QUESTION FIVE:**

Please rank these issues according to priority 1-5. (1 being the highest). Add any other issues you think are important.

Watershed	For example: clean water, stream repair
Coastal Areas	For example: erosion, tourism, climate change
Urban Forestry	For example: role of trees in healthy urban environment
Cultural Issues	For example: ethnobotany, native plant conservation
Sustainability	For example: food security, open lands, growth

**Priorities Identified in the Survey:**

Priority One	Watershed
Priority Two	Sustainability
Priority Three	Coastal
Priority Four	Cultural
Priority Five	Urban Forestry

**Additional Comments:**

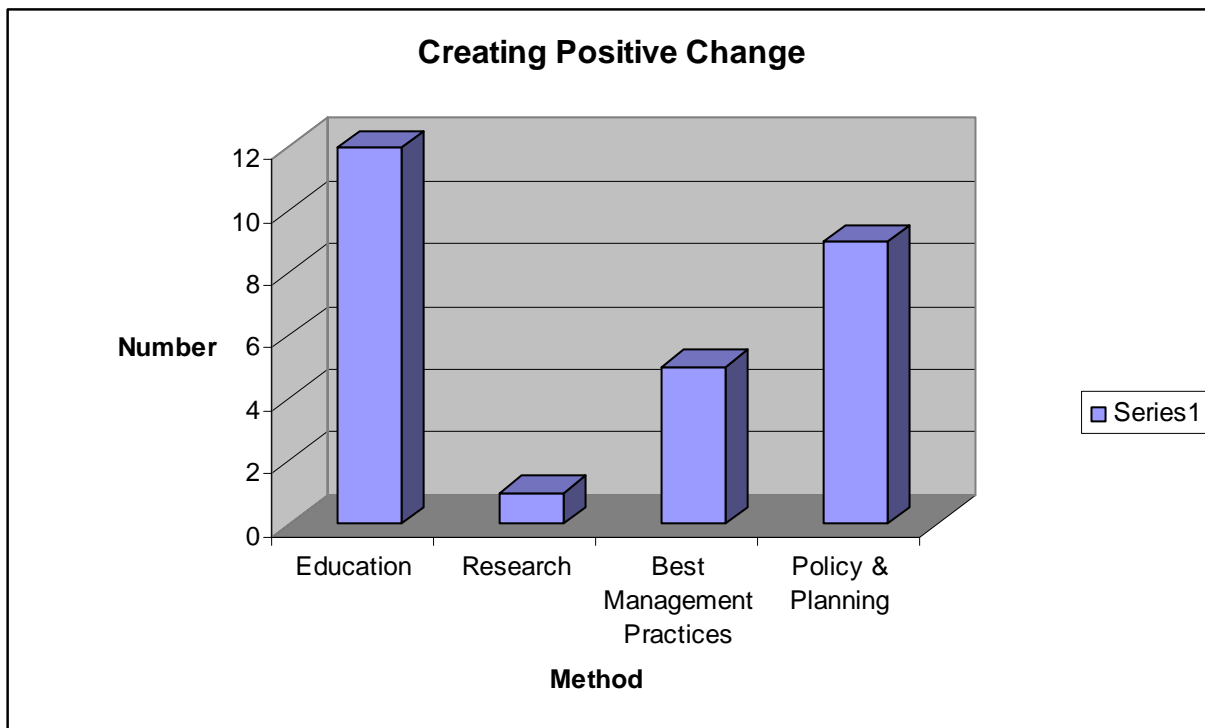
- Natural resource conservation issues
- Near shore reefs
- Conservation
- Production ecology
- All are important - hard to rank
- The first four will help resolve sustainability

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**QUESTION SIX:**

What method do you think offers the best strategy for creating positive change?  
 Education, Research, Best Management Practices, Policy and Planning.

Strategy	Number of Responses
Education	12
Research	1
Best Management Practices	5
Policy & Planning	9





## Hawai`i Urban Forestry Questionnaire - Critical Issues

Please take a few moments to share your ideas about the most important issues in Hawaii's forests.

1. Please tell us a little about yourself. Where do you live?

City/Town and Island \_\_\_\_\_

2. Circle the title that best describes you.

Student

Interested resident

Urban forestry professional

Conservation representative

Forestry professional

Other \_\_\_\_\_

3. Thinking in terms of where you live, what is the most important urban forestry-related issue that needs to be addressed?

4. Thinking of Hawai`i as a whole, what are the top three forestry issues that need to be addressed?

5. Please rank these issues according to priority 1-5. (1 being the highest) Add any other issues you think are important.

___ Watershed	(ex. Clean water, stream repair)
___ Coastal areas	(ex. Erosion, tourism, climate change)
___ Urban Forestry	(ex. role of trees in healthy urban environment)
___ Cultural Issues	(ex. Ethnobotany, native plant conservation)
___ Sustainability	(ex. Food security, open lands, growth)
<b>Other</b>	

6. What method do you think offers the best strategy for creating positive change?

___ Education	___ Best Management Practices
___ Research	___ Policy and Planning

Please fill out the contact information below. (Optional)

Name \_\_\_\_\_ Email/Phone \_\_\_\_\_

Thank you for your input!

Forest Stewardship Program Advisory Committee

# Forest Related Critical Issues

Survey Results  
Forest Stewardship Committee  
Meeting September 3, 2009

*Statewide Assessment and  
Forest Resource Strategy  
(SWARS) Development*

Colleen Carroll, Ed.D.  
Sheri S. Mann

## Forest Related Critical Issues Survey Results

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## Overview

**The below responses are from the HI Forest Stewardship Advisory Committee, a 13 person advisory group representing natural resource professionals and/or private landowner involved or interested in natural resource conservation and sustainable forest product management.**

### 1) Where do you live?

City/Town\_\_\_\_\_Island\_\_\_\_\_

Hawaii	3
Oahu	6
Molokai	1

*(10 of 12 responded)*

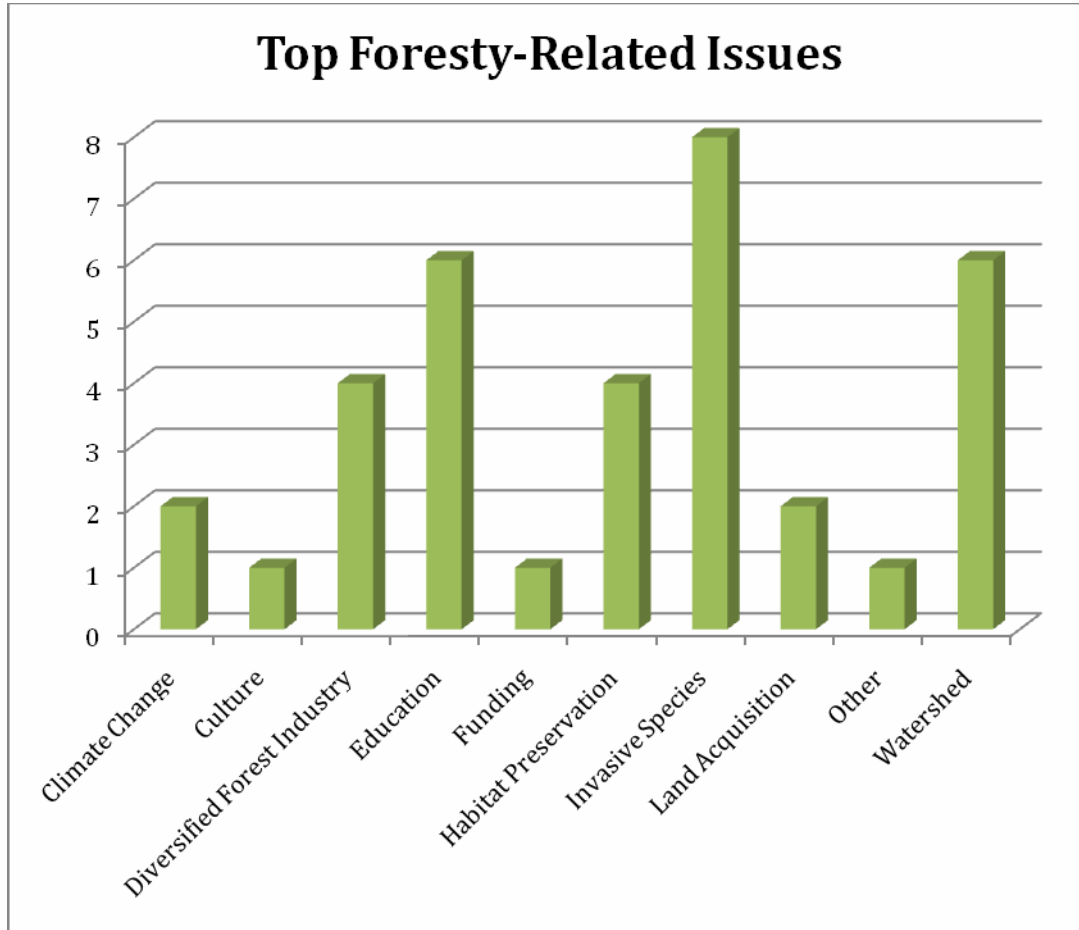
### 2) Write in the title that best describes you:

Director of Conservation, TNC  
 Endangered Species, Executive Secretary, NARS Commission  
 Natural Area Reserves Planner  
 Forestry & Wildlife Manager  
 Government Conservation Program Administrator  
 PIA NRCS Forest Ecologist  
 Economic Development Specialist - Agricultural Economist  
 Forester (2)  
 Practitioner  
 Private Landowner, Conservationist  
*(11 responses out of 12)*

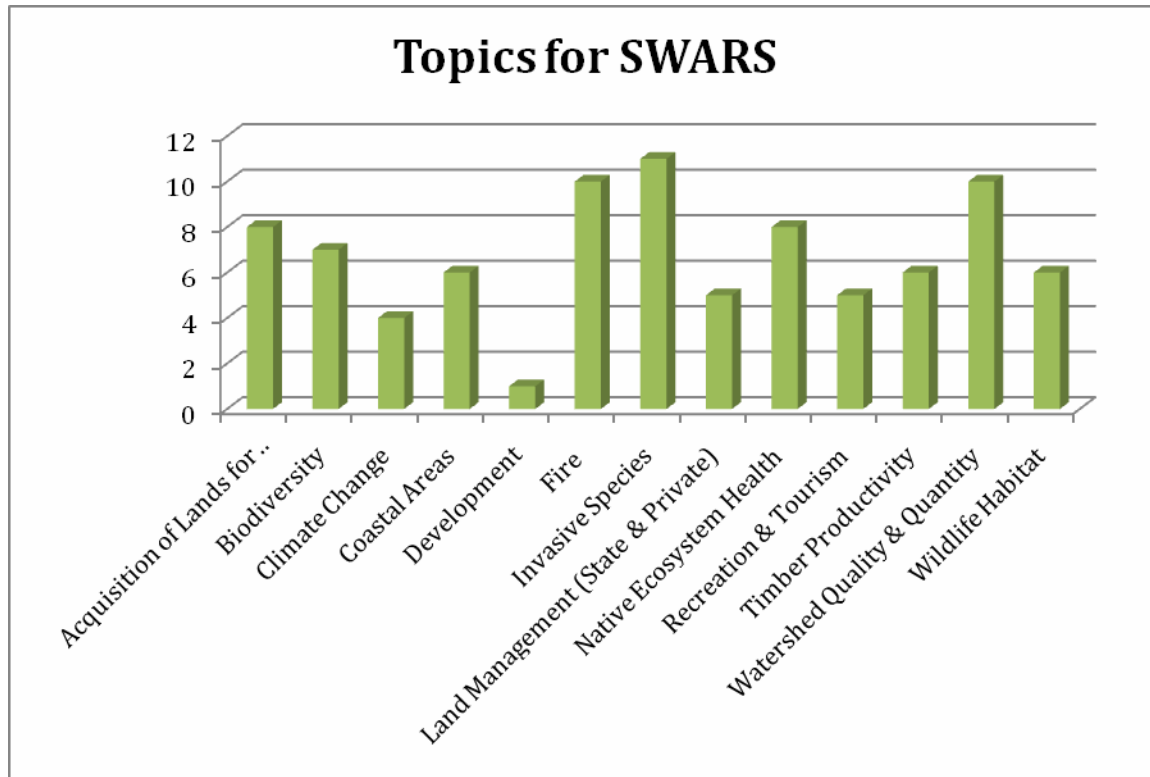
### 3) Do you serve on any special committees or advisory boards? Please list:

Big Island - Resource, Conservation & Development - Ag Committee  
 Burial Council  
 Hawaii Association of Watershed Partnerships  
 Hawaii Community College Forest Team Advisory Council  
 Hawaii Community Forestry Council  
 Molokai General Hospital  
 Queen Emma Land  
 Queens' Health System  
 State Forest Stewardship Committee     **7**  
 Water Commissioner - Selection Committee to Advise the Governor  
 Watershed Grant Review  
 The Wildlife Society - Hawaii Chapter

4) What do you see as the top three forestry-related issues that need to be addressed?



5) Which of the following topics do you think are important enough to include in the Statewide Assessment and Resource Strategy (SWARS)? Please Check up to eight (8).



6) What do you see as the biggest opportunities that the Hawaiian forestry community needs to take advantage of in the next five years?

- ✚ Biofuels
- ✚ Developing a Diversified Forest Products Industry
- ✚ Education
- ✚ Funding
- ✚ Habitat Preservation
- ✚ Invasive Species
- ✚ Land Acquisition
- ✚ Watershed

**7) Please take a careful look at the following list. These items have been selected as priority issues in our Hawaiian forests.**

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Timber Productivity	Wildlife Habitat
Native Ecosystem Health	Watershed Quality & Quantity
Biodiversity	Recreation & Tourism
Fire	Acquisition of Lands for Conservation Purposes
Invasive Species	Land Management (State & Private)
Climate Change	Development
Coastal Areas	

---

**7a) Should any of the Issues above be dropped or modified? Please comment:**

**Acquisition of Lands for Conservation Purposes**

- this is a tool not an issue

**Biodiversity**

- merge with wildlife habitat

**Coastal Areas**

- What is the issue? Access? Poor water quality? Reef Health?

- merge with climate change

**Development**

- Ag development? Urban Development?

-Where what how does this fit in? What does this mean?

- Merge with acquisition

**Fire**

-pre-suppression planning links to native species suppression

**Land Management**

- Explain

- overly broad - do you mean funding for?

**Native ecosystem health**

-goes hand in hand with land management

**Timber Productivity**

- change to forest products

**Wildlife Habitat**

- define a separate category for native animals vs. game animals

- needs to be a separate category for non-native habitat (game management)

- merge with biodiversity\*

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**7b) Are we missing any Issue Themes or Sub-Issues? Please list other issues here:**

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Agriculture

Aquaculture

Cultural Practices

Cultural – native Hawaiian and others

Development of Healthy Forest Industry in Hawaii

Development of Bioenergy industry using forest products in Hawaii

Education – related issues

Education

Forest Industry Development

Land Access (access to forest land)

Historical Uses

Hunting

Sustainable & economically viable forestry industry

Technical Support

-(one stop shop) – many times implementation is impeded by Federal & State & County regs that [exclude] all but the wealthy.

Urban & Community Forestry

Urban Forestry



## Forest Related Critical Issues in Hawaii Survey

Thank you for taking the time to complete this questionnaire. We would like your input on critical issues in the Hawaiian Forests.

**1) On what Island do you live?**

City/Town\_\_\_\_\_Island\_\_\_\_\_

**2) Circle one (1) title that best describes you:**

Director, Non profit  
Forestry Practitioner  
Educator  
Interested Resident  
Student

Conservation Specialist  
Forestry Administration  
Private Landowner  
Other:

**3) Do you serve on any Committees or Boards?**

**4) What do you see as the top three forestry-related issues that need to be addressed?**

**5) Which of the following topics do you think are important enough to include in the Statewide Assessment and Resource Strategy (SWARS)? Please Check up to eight (8).**

Native Ecosystem Health  
Watershed  
Historic uses  
Fire  
Culture  
Habitat

Coastal Zone  
Invasive Species  
Land Acquisition for Conservation  
Purposes

Biodiversity & Native Wildlife  
Development & Urbanization  
Sustainability  
Climate Change  
Recreation & Tourism  
Education  
Diversified Forest Products  
Industry  
Other

**6) What do you see as the biggest opportunities that the Hawaiian forestry community needs to take advantage of in the next five years?**

**7) Take a look at the following list. These items have been selected as priority issues in Hawaii.**

Native Ecosystem Health	Invasive Species
Watershed Quality & Quantity	Wildlife Habitat
Climate Change	Biodiversity
Coastal Areas Development	Recreation & Tourism
Fire	Lands Acquisition for Conservation Purposes

**7a) Should any of these issues be dropped or modified?**

**7b) Are we missing any issues or sub-themes? If so, please list those.**

**Thank you for participating! Please provide any comments or suggestions and return your survey to Sheri S. Mann - [sheri.s.mann@hawaii.gov](mailto:sheri.s.mann@hawaii.gov) or fax: 808-587-0160.**

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Hawai`i Urban and Community Forestry Summit

November 4-5, 2009

# Critical Issues in the Urban Forest

Internet Survey Results  
*Statewide Assessment and  
Resource Strategy (SWARS)*

Colleen Carroll, Ed.D.  
Teresa Trueman-Madriaga

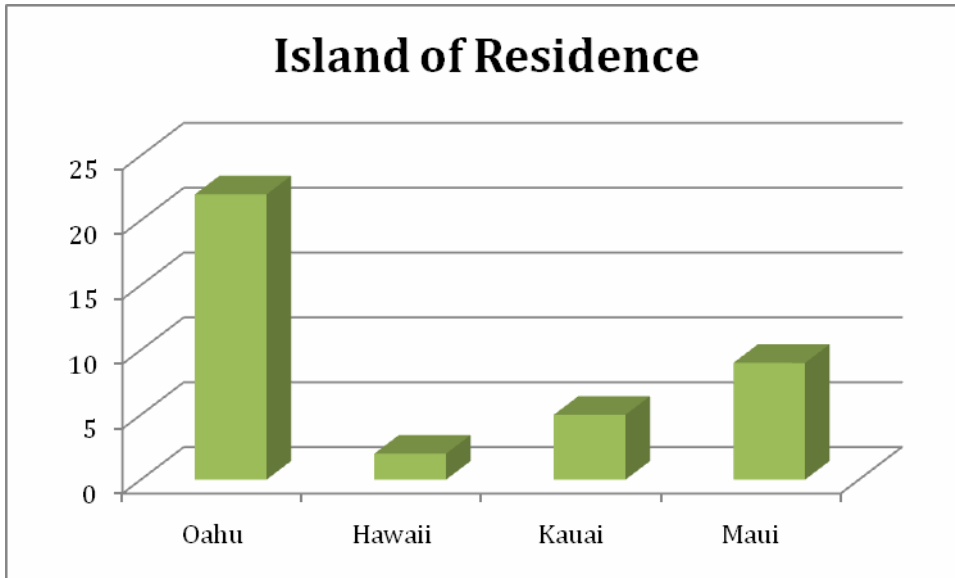
## Critical Issues in the Urban Forest

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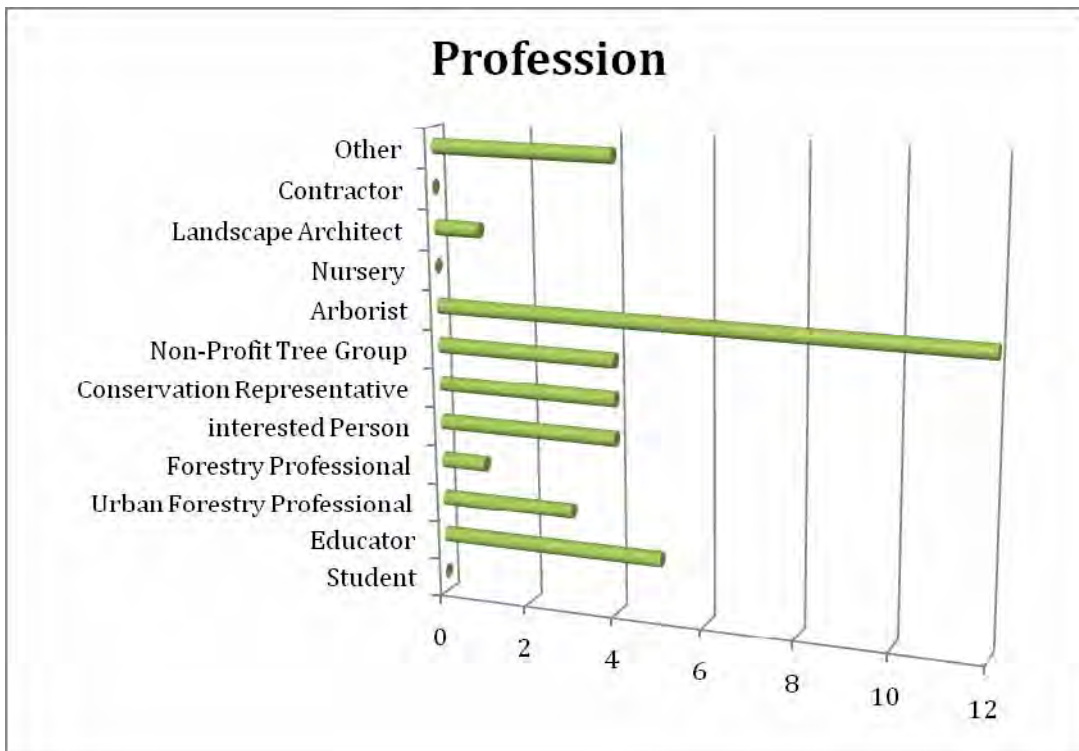
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Question One	1
Question Two	1
Question Three	2
Question Four	5
Question Five	10
Question Six	10
Question Seven	13

**Q1. All respondents are Hawaii residents; the majority (22 of 38) are from Oahu.**

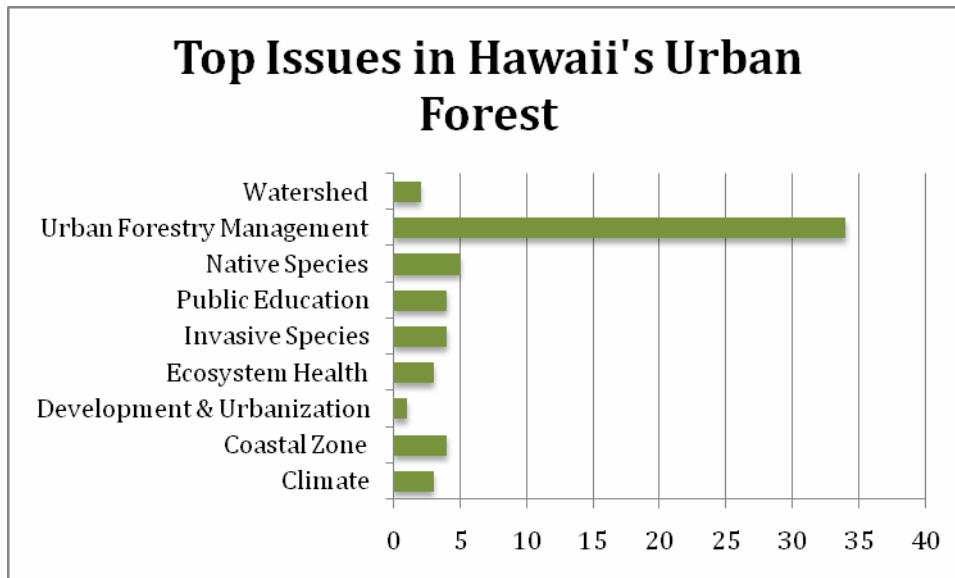


**2. Professional Affiliation. Of thirty-eight respondents nearly one-third (12) are arborists. Other professions represented include non-profit tree groups, education, conservation specialists, foresters and landscape architects.**



### Q3. Thinking in terms of where you live what is the most important urban forestry issue that needs to be addressed?

Native plants, research, food, climate, coastal zone, invasives and sustainability are mentioned in some of the responses. Overall, participants selected Urban Forestry Management as the top priority issue. Comment about the urban forest range from tree care, professional training and education to policy, planting for shade, heat reduction, and planning for establishment of larger and healthier urban trees.



### Q3. ALL RESPONSES

#### Climate

- 1) Impact on climate.
- 2) Reduction in permeable, heat absorbing surfaces and an increase in urban forest canopy.
- 3) Promoting the value of planting (non-invasive) trees for energy savings, improved air quality, minimize heat retention, etc.

#### Coastal Zone

- 1) Water retention on land (sediment/pollution-laden runoff reduction).
- 2) Impermeable surfaces and storm water run off into streams and oceans.
- 3) Install more trees along the beachfronts.
- 4) Protection of shoreline trees from erosion and beach hazards.

**Development & Urbanization**

- 1) Too much development causing the state to be more urbanized. If this keeps happening, we'll lose the natural beauty that makes Hawai'i what it is.

**Ecosystem Health**

- 1) Fragile eco-system.
- 2) Loss of native habitat.
- 3) Conservation.

**Invasive Species**

- 1) Propagation and maintenance of our diverse forest with respect to thoughtful elimination of invasive species and an eye on sustainable practices regarding food production.
- 2) Invasive species.
- 3) Promoting the value of planting (non-invasive) trees for energy savings, improved air quality, minimize heat retention, etc.
- 4) We need to inform the public regarding the importance of growing native trees and other plants that are not invasive.

**Public Education**

- 1) Public awareness of the value and care of trees, like dumping charcoal at the trunk
- 2) Understanding the value and importance of our native forest as so many people are moving here and just bulldozing down our forests.
- 3) Information about native Hawaiian plants and trees.
- 4) We need to inform the public regarding the importance of growing native trees and other plants that are not invasive.

**Native Species**

- 1) Loss of native habitat.
- 2) Lack of native species. Non natives have displaced native species and most people can't recognize a native species tree, plant or shrub.
- 3) Information about native Hawaiian plants and trees.
- 4) Use of native plants in communities.
- 5) Using native plants in urban settings.

**Urban Forestry Management**

- 1) Larger tree planting spaces to accommodate the growing of larger trees. We need more soil volume for tree roots to grow without impacting with hardscapes and utility lines.
- 2) Development policies that will permit street trees to be planted. The higher the densities and tighter the front yard frontage the less the chance to plant any street trees.
- 3) Reduction in permeable, heat absorbing surfaces and an increase in urban forest canopy.
- 4) Decreasing tree density in urban environment.

- 5) Proper care of existing trees through training of public and private workers.
- 6) Tree Care, mortality of trees due to string trimmers is incredibly high! This causes the most mortality to newly planted trees that I have noticed over the years.
- 7) Tree care according to BMPs.
- 8) Need to assess the urban tree canopy - what there is and what is needed.
- 9) Growing the urban forest to increase infiltration and help restore the hydrologic cycle in general.
- 10) Development and clear cutting of trees without concern for erosion, shade, cultural, historical or other values.
- 11) Improper care and maintenance of trees.
- 12) Parks in dire need of trees and beautification.
- 13) Incorporating trees and shade into the hardscape.
- 14) More tree plantings, and better care of existing trees.
- 15) Proper long-term maintenance of our street trees.
- 16) Maui County: Lack of urban forests. Improper tree care.
- 17) Green space and cost effective landscaping.
- 18) Tree mutilation (topping, liontailing, other methods of growth suppression).
- 19) Town of Wailuku: Serious lack of street trees/urban forests.
- 20) General lack trees in public places.
- 21) I have been working on the coconut Heart Rot for the 10 past years:  
www.coconutprotectors.com so for me it is the most important issue.
- 22) Planting more trees.
- 23) Correct pruning of Trees
- 24) Public awareness of the value and care of trees, like dumping charcoal at the trunk.
- 25) Proper maintenance and absolute replanting.
- 26) How to get more low maintenance street trees in our neighborhoods within adequate planting spaces.
- 27) Right tree in the right place.
- 28) Urban forestry management.
- 29) Care and maintenance of public city trees.
- 30) Design parameters in existence for public parking lots and street trees do not support the establishment of healthy trees, and are general unenforced so that many trees die in the first few years and are not replaced.
- 31) The urban forest has not been established or supported.
- 32) Public Education--on the value and importance of trees, and what it takes to take of them.
- 33) Promoting the value of planting (non-invasive) trees for energy savings, improved air quality, minimize heat retention, etc.
- 34) Preservation and expansion of population of mature trees; protection of shoreline trees from erosion and beach hazards

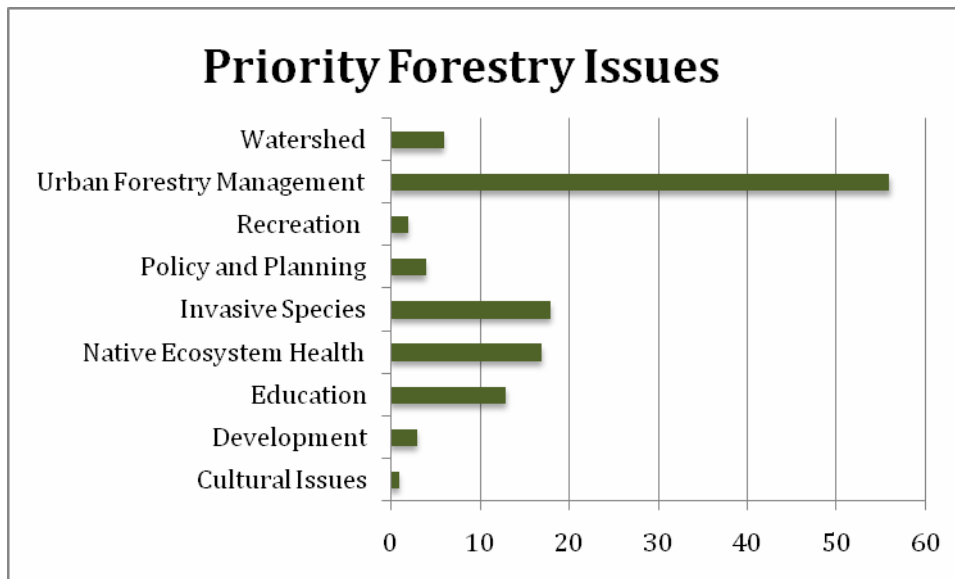
### **Watershed**

- 1) Growing the urban forest to increase infiltration and help restore the hydrologic cycle in general.
- 2) Water retention on land (sediment/pollution-laden runoff reduction).



#### Q4. Thinking of Hawaii as a whole, what are the top three forestry issues that need to be addressed?

Urban forestry management remains the top issue. Invasive species, Native Ecosystem Health, and Education are ranked secondary in importance.



#### Q4. ALL RESPONSES

##### Cultural Issues

- 1) Cultural issues.

##### Development

- 1) Impact of development.
- 2) Overdevelopment causing less & less forestry.
- 3) How to reclaim degraded lands.

##### Education

- 1) Understand how urban relates to other forestry issues.
- 2) Educating the public on the value and benefits of trees to them personally and as a community.
- 3) Educating the public on benefits of trees.
- 4) Professional and homeowner education about trees and tree care.
- 5) Education on the benefits of trees maintenance.
- 6) Education.

- 7) Creating a program to get Arborists into classrooms to teach young people about the importance of trees in their environment and how to chose and care for those trees.
- 8) Education of the value of our forest.
- 9) Education for the public on tree care.
- 10) More education on proper maintenance and best practices by the industry.
- 11) Public education.
- 12) Train those people who actually take care of the urban forest on best mgmt practices.
- 13) Create awareness of planting native plants in Urban Environment.

### **Native Ecosystem Health**

- 1) Loss of habitat and forest diversity.
- 2) Loss of native habitat.
- 3) Preserving native forests.
- 4) Re-forestation as needed.
- 5) Reforestation and replanting of native species throughout the entire ahupuaa - summit to sea.
- 6) Restore ecosystems to promote soil retention.
- 7) Restore ecosystems to attract native insects and birds.
- 8) Importance of our native forests.
- 9) Reforestation.
- 10) Conservation of native forests.
- 11) Degraded forest restoration.
- 12) Native plants and animals declining.
- 13) Enhancement and protection of native species
- 14) Extinction of endemic species.
- 15) Forest conservation.
- 16) Saving native forests.
- 17) Using native, drought tolerant species in landscaping.

### **Invasive Species**

- 1) Invasive Species.
- 2) Invasive species (particularly pests for which our urban forest has no defense).
- 3) Removing invasive species.
- 4) Preventing introduction of invasive species.
- 5) Invasive species growing in the under-stories of the rain forest.
- 6) Some invasive species are worse than others - Schinus is my enemy.
- 7) Reducing reliance on invasive species and imported planting stock which may harbor pests.
- 8) Invasive species.
- 9) Maintenance of healthy watersheds by removing invasive species.
- 10) Invasive species control.
- 11) Invasive Species - over the past few years there have been some significant mortality due to newly introduced invasive species that have turned out to

- be pests that cause mortality, e.g. Erythrina gall wasp, Ohia Rust on Rose apples, banana bunchy top, etc.
- 12) Better awareness of invasiveness of current and future forestry plantings (urban or plantation); agreement to use non-invasive alternatives.
  - 13) Need to implement the best available biosecurity protection measures to keep out new invasive insects and diseases that could decimate urban and natural forests.
  - 14) Restrict the entry of known invasive plants that are proven invasive elsewhere.
  - 15) If you are asking about forestry (and not urban forestry) prevention and curtailment of invasives.
  - 16) Invasive species.
  - 17) Removing Invasive species.
  - 18) How to encourage native plant growing and discourage the use of invasive species.

### **Policy and Planning**

- 1) Policy and Planning related to the urban forest.
- 2) Development policies of both the City and State governments regarding urbanization and Urban Forest issues.
- 3) Getting the State to recognize that the Landscape Industry (including the Urban Forest) is a part of and in fact the larger part of the Agricultural industry in the state.
- 4) Consistency in statewide regulation and priorities.

### **Recreation**

- 1) Keeping the hiking trails open. Trees fall over the trails, and stay for years.
- 2) Lack of hunting access for residents.

### **Urban Forestry Management**

- 1) Preserving existing large trees.
- 2) Inventory of trees
- 3) Assessment of the canopy.
- 4) Tree care according to BMPs.
- 5) Increase tree canopy cover as appropriate through selection of right tree for the site and proper structured and cultivated trees from nursery.
- 6) Policy and Planning related to the urban forest.
- 7) Proper pruning and tree care.
- 8) More Tree planting.
- 9) Better tree care of existing trees.
- 10) Professional and homeowner education about trees and tree care.
- 11) Education on the benefits of trees maintenance.
- 12) Right tree/right place.
- 13) Proper pruning.
- 14) Cost effective tree choices.
- 15) Tree removal for construction purpose.

- 16) Monocultures (too many trees planted from a limited plant palette - monkey pods, rainbow showers, etc.)
- 17) Improper pruning.
- 18) Dangerous tree conditions.
- 19) Coconut heart rot.
- 20) Ohia Rust.
- 21) Risk assessment.
- 22) More street trees.
- 23) More trees planted replacing removed trees.
- 24) Strict standards for maintenance by State, County, HECO
- 25) Low maintenance street trees.
- 26) Creating street tree planting spaces with adequate root space for long-term growth.
- 27) Creating a program to get Arborists into classrooms to teach young people about the importance of trees in their environment and how to choose and care for those trees.
- 28) Reforestation and replanting of native species throughout the entire ahupuaa - summit to sea.
- 29) Increasing canopy cover, esp. in low-income areas.
- 30) Diversifying species-use.
- 31) More and larger street trees.
- 32) Larger planting spaces will be required either as an easement or outright grant to the city/county.
- 33) More parking lot tree shade - percent of shade produced and maintained as opposed to number of trees based on number of parking stalls.
- 34) Tree canopies will need to be maintained and not be cut to resemble lollipops.
- 35) Streets and parking lots with a variety of trees to avoid a monoculture.
- 36) Lack of communication from within.
- 37) Care and maintenance of public city trees.
- 38) Education for the public on tree care.
- 39) Having arborists on construction sites while working to protect trees.
- 40) Lack of support for urban forests.
- 41) More education on proper maintenance and best practices by the industry.
- 42) Public education.
- 43) Train those people who actually take care of the urban forest on best mgmt practices.
- 44) Plant/replant more trees--right tree, right place.
- 45) Development policies of both the City and State governments regarding urbanization and Urban Forest issues.
- 46) Managing urban forests.
- 47) Propagation of indigenous trees.
- 48) Getting the State to recognize that the Landscape Industry (including the Urban Forest) is a part of and in fact the larger part of the Agricultural industry in the state.
- 49) Management / maintenance of the existing urban forest.

- 50) Proper Tree Care - string trimmer mortality.
- 51) Topping of trees and bad pruning causes structural defects that impact the longevity of tree life in the future.
- 52) Tree Planting Areas allocated for tree growth - most times there is not adequate planting area for tree roots to grow without damaging the hardscape, sidewalk, curbs, street pavement, parking lot pavement, underground utilities, etc. These trees are unable to reach their mature size and age due to the need to repair the hardscape and causing the tree to be unstable due to severe root pruning and mechanical damage.
- 53) Maintaining and expanding Urban Forest canopy.
- 54) Preservation of Historic Trees.
- 55) Create awareness of planting native plants in Urban Environment.
- 56) How to make it possible for private growers to make a living growing trees.

**Watershed**

- 1) Erosion water quality.
- 2) Protection of watershed and coastal areas.
- 3) Water resource management.
- 4) Water management.
- 5) Misuse, or not using R-1 water, not allowing residential R-1 use for irrigation.
- 6) Maintenance of healthy watersheds by removing invasive species.

**Q5. The Kaulunani Council identified sustainability, Urban Forestry Management, Coastal Zones, Culture and Watershed as critical issues. Summit participants were asked to rank these five issues following according to priority. The following charts illustrate those choices.**

**Top priority remains Urban Forestry Management.**

<b>Ranking</b>	<b>Issue</b>
Top Priority	Urban Forestry Management
Second	Sustainability
Third	Watershed
Fourth	Coastal
Fifth	Culture

**Q6 Please list any other issues you think are important.**

#### **Development & Urbanization**

- Too much development equals less of the land we love. Responsible hunters can assist in managing evasive species, help with planting native fauna, assist with data collection, clean up rubbish & maintain trails & access roads. They will do this for free! Also take a look at deep water fish trapping & surround netting- those two methods of fishing are unmonitored yet have the greatest impact on fish depletion.

#### **Education**

- Education
- Community education (public and private) on the value of trees beyond aesthetics. This is something where the government is in the best position to lead by example, but in many instances, they are the worst offenders.
- public education
- More volunteer projects to be organized.
- Environmental education

- We should be doing all we can to discourage improper tree care such as heading or lion tailing. Public education holds the most promise. Most folks wouldn't pay money if they knew they weren't getting proper practices and economics would drive out the hackers.
- "Education about Native trees that are appropriate for the urban environment.
- Education of the community regarding proper caretaking of existing trees in urban environment.
- Should be an effort to identify more exceptional trees on state land and create a campaign for land owners."
- Ensuring that there is signage on existing Exceptional Trees.

### **Invasive species**

- Invasive species, none of the above will work if we continue to allow invasive species to take over our forests

### **Native Plantings**

- Resort, public and urban areas should be restored to native species landscaping

### **Policy & Planning**

- Development of policy and planning strategies related to the urban forest and sustainability.
- Overbuilding: single family homes are being replaced with larger duplexes or multigenerational homes that take up entire lots without any greenspace (this is probably a zoning issue)
- Maui County includes 3 populated islands. We need more manpower on the county level to cover that ground and maintain our urban forests.

### **Sustainability**

- Education, collaboration and networking are the themes we need to promote that will help ensure a sustainable mindset and provide for a strong environmental future.
- Develop an urban forest foundation that will maintain a quality of life through the inevitable changes the future will bring.
- Options for biofuel production in Hawaii.

### **Urban Forest Management**

- Development and implementation of an urban forest master plan
- Enforcement of BMPs for tree selection, care and maintenance Recognition of the need to remove trees as they age and become structurally weak and the importance of replacement of trees according to Right Tree/Right Place standards
- Pest and disease control

**Internet Survey Results 12**

- The watershed area has federal, state, and county working on. Costal area management has the state and county working on. The cultural issues is low in importance because you cannot plant just native trees. There are too few of them appropriate for the urban forest. Planting them in watersheds is appropriate. Sustainability, what does this mean? Biofuels? The urban forest has county personnel working on but there needs to be larger planting spaces, better tree care, more parking lot shade, and better maintenance. County and State personnel often butcher trees. Tree contractors do not always do a good job either. They need "Standards for Tree Care". The urban forest needs the greatest attention right now.
- Efficient production of appropriate local nursery stock.
- Forestry methods for large scale growing of native and other useful non-invasive plants.



- Q7. What method do you think offers the best strategy for creating positive change?



#### Responses (Other)

- Community Outreach, encouraging political action.
- Education and Training should lead to all the others.
- All of these things are required components
- Community outreach with education/training
- All of the above
- Action plan on specific problems
- Development and strong enforcement of BMP standards and practices

## United States Department of Agriculture



Natural Resources Conservation Service  
 P. O. Box 50004  
 Honolulu, Hawaii 96850  
 (808) 541-2600

## Pacific Islands Area State Technical Committee Meeting

January 27, 2010

1:00 – 3:30 PM (Hawaii), 12:00 – 2:30 PM (American Samoa),

January 28, 2010

8:00 – 10:30 AM (Palau), 9:00 – 11:30 AM (Guam & CNMI), 10:00 AM – 12:30 PM (FSM)

### AGENDA

1:00-1:15	Welcome and Introductions	Lawrence Yamamoto
1:15- 1:20	State Technical Committee Meeting Schedule	Dennis Kimberlin
1:20-1:30	FY 2010 Farm Bill Program Status Update	Dennis Kimberlin
1:30-2:00	PIA Update/Discussion on Assessment of Forest Conditions, Resource Strategies and Multi-State Regional Issues	Bart Lawrence/ Ron Cannarella
2:00-2:15	Procedures for Setting the Geographic Area Rate Caps (GARC) For WRP and GRP	Michael Whitt
2:15-2:30	PIA Program Fund Allocation and Process Review for FY 2010	Dennis Kimberlin
2:30-2:45	New PIA Invasive Species Policy	Tony Ingersoll
2:45-3:00	Land Eligibility and Ranking for WRP Applications	Mike Whitt
3:00-3:20	Program Outreach	Ben Schmidt/ Bart Lawrence
3:20-3:30	Discussion and Closing Remarks	Lawrence Yamamoto

<u>PEACESAT Video Conferencing Sites:</u>	<u>Contact Person</u>	<u>Phone#</u>
American Samoa – LBJ Hospital	Ray Tulafona	(684) 633-4049
CNMI – Marianas High School	Reynaldo Susalin	(670) 237-3039
Guam – University of Guam (UOG)	Bruce Best	(691) 735-2621/2620
Palau – Palau Department of Education or NEMO	Edwel Onrung	(680)488-2570
Pohnpei – College of Micronesia (COM)	Luciano Mathias	(691) 320-2480
Big Island – Kona – Kona Hospital	Jean Kadooka	(808) 322-4429
Big Island – Hilo – UH at Hilo	David Scott	(808) 974-7573
Kauai – Samuel Mahelona Memorial Hospital (SMMH)	Valerie	(808) 823-4112
Maui – Maui Community College (MCC)	Mike Albert	(808) 281-3171
Molokai – Molokai Mental Health Office	Tiffany	(808) 553-3691
Oahu – UH TIPG 2424 Maile Way, Saunders Bldg Rm 713	Kekoa Hayashi	(808) 956-6668

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## Hawaii Forest Stewardship Advisory Committee

April 2009

Michael Tulang CHAIRPERSON Term End: 2010 <i>Big Island</i>	Soil & Water Conservation Districts
Betsy Gagne ex-officio <i>Oahu</i>	DLNR DOFAW NARS Commission
Bill Cowern Term End: 2010 <i>Kauai</i>	Forest products industry
Craig Rowland Term End: 2011 <i>Oahu</i>	U.S. Fish & Wildlife Service*
David Clausnitzer Term End: 2012 <i>Big Island</i>	USDA Natural Resource Conservation Service*
J.B. Friday Term End: 2011 <i>Big Island</i>	Cooperative Extension Service, Extension Forester
John Henshaw Term End: 2012 <i>Oahu</i>	Conservation organization
Katie Friday Term End: 2010 <i>Big Island</i>	USDA Forest Service*
Kip Dunbar Term End: 2012 <i>Molokai</i>	Private forest landowner
Laura Brezinsky Term End: 2011 <i>Big Island</i>	Private forest landowner / Hawaii Community College
Lea Hong Term End: 2010 <i>Oahu</i>	Land-trust organization
Margarita 'DayDay' Hopkins Term End: 2011 <i>Big Island</i>	County Government
Tanya Rubenstein Term End: 2012 <i>Big Island</i>	Watershed Partnerships

Highlighted members are new. Hawaii Forest Stewardship Program Manager, Sheri S. Mann, DLNR DOFAW 1151 Punchbowl St, Rm 325 Honolulu, HI 96813 Ph: 587- 4172 Fax: 587-0160 Cell: 721-6092 [Sheri.S.Mann@hawaii.gov](mailto:Sheri.S.Mann@hawaii.gov). \* Federal members

## Appendix B

**Hawaii Conservation Alliance Partners***2010 Executive Committee***University of Hawaii at Manoa  
Center for Conservation Research and  
Training***Ken Kaneshiro (Executive Chair), Rob Cowie***U.S. Department of Agriculture  
Forest Service***Christian Giardina (2010 Chair), Susan  
Cordell***U.S. Department of Agriculture  
Natural Resources Conservation Service***Greg Koob (2009 Chair), Larry Yamamoto***National Park Service***Frank Hayes, Melia Lane-Kamahele***Department of Land and Natural Resources  
Division of Aquatic Resources***Petra MacGowan***Department of Land and Natural Resources  
Division of Forestry and Wildlife***Paul Conry, Randall Kennedy***Kamehameha Schools***Ulalia Woodside, Namaka Whitehead***National Oceanic and Atmospheric  
Administration  
National Marine Fisheries Service, Pacific  
Islands Regional Office***Michael Tosatto, Gerry Davis***National Oceanic and Atmospheric  
Administration****Office of National Marine Sanctuaries***Allen Tom, 'Aulani Wilhelm***The Nature Conservancy***Sam Gon III, John Henshaw***Office of Hawaiian Affairs***Kevin Chang, Carol Ho'omanawanui***U.S. Army Garrison Hawaii Natural  
Resource Program***Michelle Mansker***U.S. Fish and Wildlife Service  
Ecological Services***Loyal Mehrhoff, Steve Miller***U.S. Fish and Wildlife Service  
National Wildlife Refuge Complex***Barry Stieglitz***U.S. Geological Survey  
Biological Resources Discipline***Gordon Tribble, Jim Jacobi***National Tropical Botanical Garden***Chipper Wichman*

## Hawaii Urban & Community Forestry Advisory Council

Names	6/3/10	
<b>Sheri Mann</b> Division of Forestry and Wildlife		
<b>Jackie Ralya</b> UCF Volunteer Coordinator		
<b>Teresa Trueman-Madriaga</b> UCF Coordinator		
<b>Roxanne Adams</b> University of Hawai'i		
<b>Bail, Lisa</b> Goodsill Anderson Quinn & Stifel		
<b>Bornhorst, Heidi</b> HawaiiScapes		
<b>Eckert, Kevin</b> Arbor Global LLC		
<b>Friday, Katie</b> Institute of Pacific Island Forestry		
<b>Kraus, Michael</b> Tree Works, Inc.		
<b>Andy Kaufman</b> University of Hawai'i		
<b>Joel Kurokawa</b> American Society of Landscape Architects – Hawai'i Chapter		
<b>Nishek, Lelan</b> Kauai Nursery & Landscaping		
<b>Sakoda, David</b> County of Maui		
<b>Steiner, Mary</b> The Outdoor Circle		
<b>Macias, Sandy</b> USDA Forest Service		
<b>Paul Conry</b> <b>Administrator, DOFAW</b>		

A		B		C		D	E	F
<b>Hawaii Urban Forestry Summit Invite List</b>								
1	2	3	4	5	6	7	8	9
Last Name	First Name	Company	RSVP Y/N	Verbal Y/N				
Adams	Roxanne	University of Hawai'i		1				
Aiu	Imai	Kauai Department of Planning						
Bail	Lisa	Kaulunani	1					
Bogle	Bob		1				facilitator	
Bornhorst	Heidi	HawaiiScapes	1					
Benavente	Nerissa	DLNR - CNMI		1				
Cannarella	Ron	Division of Forestry & Wildlife		1				
Carroll	Colleen	NatureTalks	1					
Ching	Patrick	Directorate of Public Works, USAG, HI		1				
Ching	Tony	Dept of Planning & Permitting						
Conry	Paul	Division of Forestry & Wildlife		1				
DeSilva	Kaulani	Hawaiian Electric Company, Inc.	1					
Eckert	Kevin	Arbor Global LLC	1				chocolate	
Elevitch	Craig	Agroforestry Net	1					
Foley	MaryLou	Waikiki Aquarium						
Friday	Katie	Institute of Pacific Island Forestry	1					
Gagne	Betsy	Dofaw		1			will help	
Gon	Sam	The Nature Conservancy	1					
Gonzalez	Edgardo	Forest Service Bureau, DNER Puerto Rico	1					
Guerrero	Victor	DLNR - CNMI		1				
Hart	Jordan	Maui County Arborist Advisory Committee	1					
Hauff	Robert	Division of Forestry & Wildlife		1				
Henshaw	John	The Nature Conservancy						
Hulbert	Dudley	Aloha Arborist Association		1				
Jones	Michelle	Division of Forestry & Wildlife						
Kanahele	Pualani Kanaka'ole	The Kanaka'ole Foundation	0					
Kaufman	Andrew	University of Hawai'i, Tropical Plant and Soil Sciences	1					

	A	B	C	D	E	F
30	Kiang	Sue		1		facilitator
31	Koike	Terri	Division of Urban Forestry	1		
32	Kraus	Michael	Tree Works Inc.	1		
33	Kurokawa	Brad	Ki Concepts LLC			
34	Kurokawa	Joel	Ki Concepts LLC	1		speaker
35	Kuulei-Birnie	Kim		1		facilitator
36	Kwan	Carol	Aloha Arborist Association	1		food allergies
37	Lemmo	Samuel	Office of Conservation and Coastal Lands			
38	Lum	Richard		1		facilitator
39	Macias	Sandy	USDA Forest Service	0		
40	Mann	Sheri	Division of Forestry & Wildlife	1		day 2 only
41	Martin	Christy	CGAPS	1		
42	Mastroianni	Susi	Maui Association of Landscape Professionals	1		
43	Murata	Masatomo	Murata Landscape Architect	1		
44	Nakamoto	Dustin	Hawaiian Electric Company, Inc.			
45	Nishek	Lelan	Kauai Nursery & Landscaping	1		
46	Nutt	Terry	Maui County Arborist Advisory Committee	1		
47	Oka	Stan	Division of Urban Forestry	1		
48	Ralya	Jackie	Division of Forestry & Wildlife	1		
49	Ready	Boyd	Landscape Industry Council of Hawaii			
50	Rollman	Keith	C&C of Honolulu	1		speaker
51	Sakoda	David	County of Maui	1		
52	Singeo	Winifred	Honolulu Botanical Gardens			
53	Slay	Hudson	Department of Health			
54	Smith	Miranda	Koolau Watershed Partnership	1		speaker
55	Spooner	Deanna	Hawaii Conservation Alliance			
56	Steiner	Mary	The Outdoor Circle	1		
57	Trueman-Madriaga	Teresa	Division of Forestry & Wildlife	1		
58	Usagawa	Barry	Board of Water Supply		1	

	A	B	C	D	E	F
59	Wanger	Jolie	University of Hawai'i, School of Ocean & Earth Science and	1		Speaker
60	Whalen	John	Plan Pacific, Inc.	1		
61	Burney	David	National Tropical Botanical Garden			
62	Wung	Matthew E.K.	US Department of Agriculture			
63				34	10	
64		<b>Total RSVPs</b>				<b>44</b>



## Board of Hawaii Department of Land and Natural Resources

The Board of Land and Natural Resources (BLNR), is composed of seven members, one from land district and two at large, and the Chairperson, the executive head of the Department. Members are nominated and, with the consent of the Senate, appointed by the Governor for a 4-year term. No more than three members of the board may be from the same political party. Any member having any interest, direct or indirect, in any matter before the board must disqualify him/herself from voting on or participating in the discussion of the matter. The BLNR convenes twice monthly to review and take action on department submittals, including land leases and Conservation District Use Applications (CDUAs). Testimony from the public on program actions, development plans, permit applications, and all other BLNR actions are accepted and heard at this time. For further information about the BLNR, please refer to the Hawai'i Revised Statutes, Chapter 171-4. Inquiries regarding board submittals can be directed to the Land Board Secretary at (808) 587-0404 or in writing to P.O. Box 621, Honolulu, Hawai'i 96809.

Laura H. Thielen

Chairperson

Robert Pacheco

Hawai'i Member (Term: 7/01/07 - 6/30/10)

Ron Agor

Kaua'i Member (Term: 7/01/08 - 6/30/12)

Jerry Edlao

Maui Member (Term: 7/01/09 - 6/30/13)

Dr. Samuel M. Gon III

Member-At-Large (Term: 7/01/09 - 6/30/13)

David Goode

Member at Large (Term: 5/01/09 - 6/30/10)

John Morgan

O`ahu Member (Term: 7/01/09 - 6/30/13)