Photo: James Byrne – Clouds observed travelling over Kohala and Mauna Kea during field trip with South Kohala Conservation Action Planning Team on September 22, 2011. Created by the same atmospheric conditions that generate ocean swells, these clouds foretold a large west swell arriving the next day.

South Kohala Conservation Action Plan

Final Report

September 2012

Prepared for Hawaii's Division of Aquatic Resources, Department of Land and Natural Resources
by The Nature Conservancy, Hawaii Marine Program

The Nature Conservancy
Protecting nature. Preserving life.™

DAR Hawaii Division of Aquatic Resources

NOAA CORAL REEF CONSERVATION PROGRAM

Table of Contents

Quick Reference Summary 3-4

Acronym Reference Table 5-6

Rationale 7

Geographic Scope 8

Conservation Action Plan Process for South Kohala

Planning Process Description 9

Participant List 10

Process Summary 12

Plan Outcomes

Conservation Targets 15

Critical Threats 16

Strategies 18

Measures 21

Outcome Summary 25

Supplemental Materials

Attachment 1 –Conservation Action Planning Overview 26

Attachment 2 – Process Detail 29

Attachment 3 – Participant Evaluations 33

Attachment 4 – Brainstormed Targets 38

Attachment 5 – Brainstormed Threats 40

Attachment 6 – Threat Ranking Criteria 42

Attachment 7 – Resource Fish Species 44

Attachment 8 – Phase 2 Workshop Agendas 46

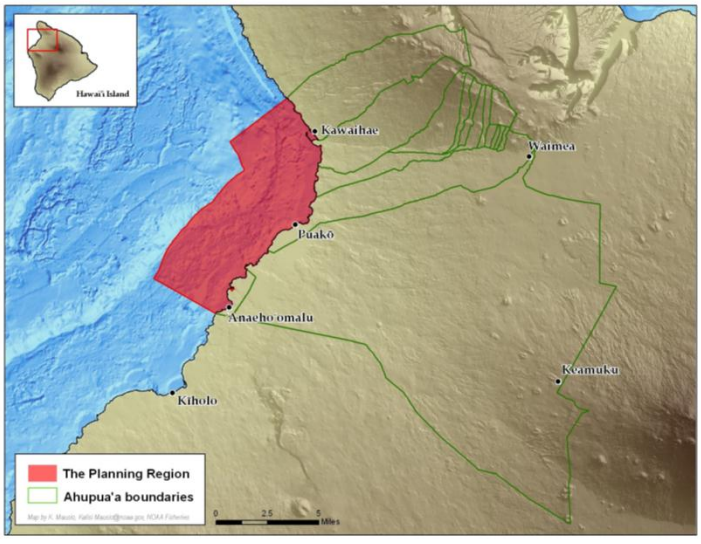
Quick Reference Summary

Planning Team Vision

A restored healthy, abundant, resilient South Kohala coastal system, cared for and cherished by an island community guided by the values and traditions of South Kohala

Key Points

1. **South Kohala is important** for many reasons: as a place where residents can recreate and gather food, as the central hub for travel tourism on Hawaii Island, as the main shipping and military port for West Hawai`i, as a biologically significant coral reef habitat, and as a cultural treasure with a rich history that has shaped the entire state of Hawai`i.
2. **Degradation and decline *are* impacting** South Kohala's coastal and marine life with declines observed by community members and documented through scientific research.
3. **Engaged community members are eager** to support actions that address impacts to coastal and marine life in South Kohala.
4. **Cooperative partnerships** at all levels are vital to implement strategies that address multiple threats.
5. **Broad-based community participation and support** are important for implementation, long term success, and as valuable goals in their own right.
6. **Traditional practices of South Kohala** helped shape this place, are important, and still guide sound conservation strategies.
7. **Management is needed and welcome**, not just to provide funding for strategic actions in the region, but to support training and education of community members to build the local capacity for long-term sustainable conservation success.



South Kohala CAP Outputs

♦**Six fully reviewed and prioritized conservation strategies** to address threats to coastal and marine life in South Kohala
♦**Measures** for evaluating strategies and targets
♦**A dynamic partnership** committed to implementation
♦**Work plans** for six priority strategies
♦**Seventy-six member participant network**

Participants analyzed and agreed on **six priority conservation targets:**

coastal & marine food resources ❂ coral reef ecosystems ❂ native reef herbivores ❂ native reef predators ❂ coastal wetlands ❂ community kinship & stewardship

Priority CAP Strategy Summary

South Kohala's conservation targets are in jeopardy. In the words of a planning team member who grew up at Paniau in the 1950's, *"For every fish you see here today, I've seen seven."* Implementation of CAP strategies will seek to shift this baseline in a positive direction. This work will honor the wishes of South Kohala kūpuna and community members who do not wish to see their traditions and the places they care about degrade and disappear before their eyes.

Strategy: COMMUNITY PARTNERSHIPS

> **Why?** *Agencies cannot manage without community support and communities need agency capacity. Management, guided by the deep connections that still exist in South Kohala, and supported by diverse partnerships, is resilient and effective in the long term.*

Objective: Active **communities engaged in managing** all six target coastal resources throughout the South Kohala region and incorporating kinship into their approach by 2015.

Strategy: COMMUNITY CO-MANAGED AREAS

> **Why?** *Co-management of natural resources at a local scale is a proven effective strategy for socially-beneficial long-term sustainability of coastal and marine life, and is consistent with traditional Hawaiian management systems.*

Objective: Work with communities to **establish at least one community co-managed area** in South Kohala with strong community support by 2015, and initiate at least two additional areas by 2020.

Strategy 3: FISHERIES MANAGEMENT

> **Why?** *Effective management is needed to ensure that take does not degrade marine life or habitat. Recovery of resource fish and fish habitat requires development of and compliance with sound rules.*

Objective: Implement fisheries management actions that ensure healthy coastal resources through supporting pono (responsible and appropriate) fishing practices, and increase compliance by 50% by 2020.

Strategy 4: SEDIMENT REDUCTION

> **Why?** *Land-based pollution negatively impacts coral reef habitat. Sediment delivered from South Kohala streams smothers coral and blocks sunlight needed for coral growth and survival, causing mortality and loss of habitat for coastal and marine life.*

Objective: Implement priority projects to **reduce sediment and measurably improve the condition of priority coastal targets** in at least one priority coastal area by 2015.

Strategy 5: INVASIVE SPECIES

> **Why?** *Invasive species have the potential to displace native species and alter entire eco-systems. Prevention is more cost effective than management, but both are important tools for keeping native ecosystems intact and healthy for the people who depend upon them.*

Objective: Prevent new introductions and manage existing non-native and invasive species to restore/maintain ecosystem function for 50% of managed priority anchialine pools, fishponds, and reefs by 2020.

Strategy 6: ADDITIONAL THREAT ASSESSMENT[1]

> **Why?** *CAP is an iterative process and managers understand that new threats emerge constantly. If emerging threats are planned for in advance, managers will be prepared. Early management is often most cost-effective.*

Objective: Understand and quantify effects of specific additional threats on CAP targets by 2020.

[1] NOTE: Strategy 6 is not a priority for implementation in 2012-13.

Acronym Table for Reference

Acronym Key	
Acronym	Agency
AIS	Aquatic Invasive Species
ALKA	Ala Kahakai National Historic Trail, National Park Service
ATA	Ala Kahakai Trail Association
CORAL	Coral Reef Alliance
DAR	Division of Aquatic Resources
DLNR	Department of Land and Natural Resources
DOCARE	Division of Conservation and Resources Enforcement
DOFAW	Division of Forestry and Wildlife
DOH	Department of Health
DWA	DW Ainalea Developments
EOTR	Eyes of the Reef
EPA	Environmental Protection Agency
EPSCoR	Experimental Program to Stimulate Cooperative Research
FEMA	Federal Emergency Management Agency
HCFRU	Hawai`i Cooperative Fisheries Research Unit
HI County	County of Hawai‘i
HIHWNMS	Hawaiian Islands Humpback Whale National Marine Sanctuary
HIMB	Hawai`i Institute of Marine Biology
HIRMI	Hawai‘i Island Reef Monitoring Initiative
HISC	Hawai`i Invasive Species Council
HNR	Hualalai Resort Natural Resources
HPA	Hawai‘i Preparatory Academy
HWF	Hawai‘i Wildlife Fund
KANU	Kanu o ka 'aina New Century Charter School
KCRA	Kohala Coast Resort Association
KHA	Kailapa Homesteads Association
KMLAC	Ka`ūpūlehu Marine Life Advisory Committee
KWP	Kohala Watershed Partnership
LAS	Local Action Strategy
MLRA	Mauna Lani Reef Alliance
MLSA	Mauna Lani Sea Adventures
NARS	Natural Area Reserve System
NFWF	National Fish & Wildlife Foundation
NKW	Na Kalai Wa'a
NOAA	National Oceanic and Atmospheric Administration
NOAA CRCP	NOAA Coral Reef Conservation Program
NOAA CRED	NOAA Coral Reef Ecosystem Division
NOAA MPA Center	NOAA National Marine Protected Area Center
NOAA OCRM	NOAA Office of Coastal Resource Management

Acronym Key	
Acronym	Agency
NOAA PIFSC	NOAA Pacific Islands Fisheries Science Center
NOAA PSC	NOAA Pacific Services Center
NPS	National Park Service
NRCS	Natural Resource Conservation Service
OCCL	Office of Conservation and Coastal Lands
PCA	Puakō Community Association
PICCC	Pacific Island Climate Change Collaborative
PIRO	Pacific Islands Regional Office
SKCDP AC	South Kohala Community Development Plan Action Committee
STEM	UHH Keaholoa Science Technology Engineering and Math Program
TKC	The Kohala Center
TNC	The Nature Conservancy
TNC APM	TNC Asia Pacific Marine Program
TNC HIMP	TNC Hawai‘i Island Marine Program
TNC HMP	TNC Hawai‘i Marine Program
UCB	University of California at Berkeley
UH	University of Hawai‘i
UHH	University of Hawai`i Hilo
USACE	US Army Corps of Engineers
USDA	US Department of Agriculture
USFWS	US Fish & Wildlife Service
USGS	US Geological Survey
WHFC	West Hawaii Fisheries Council
WLC	Waikoloa Land Company

Rationale

The Nature Conservancy (TNC) facilitated a conservation action planning (CAP) process for the South Kohala coastline (Figure 1) on behalf of the Hawai'i Department of Land and Natural Resources (DLNR), Division of Aquatic Resources (DAR) to help establish priorities for Hawai'i's Coral Reef Strategy (HCRS).

Coral reefs function within a complex network of interconnectivity between land, air, and sea. Therefore effective management must consider both the benefits confered by these systems, and the potential impacts that originate beyond the geographic boundaries of coral reef habitat.

We recognize the fact that coral reef and coastal habitats are globally significant resources that provide ecosystem services to people through supporting food resources, cultural practice, shoreline protection, recreation, subsistence, diverse livelihoods, carbon cycling, and research to name a few. As these activities support complex economies and social networks, the value of coral reefs cannot be expressed in concrete terms.

What can be stated is that coral reefs are at risk globally, and Hawai'i is experiencing the influence of human-induced drivers of decline and degradation that have led to losses of these ecosystem values, with examples of highly degraded reefs and wetland habitats on each of the main Hawai'i Islands. Global climate change is likely to exacerbate these current threats, exceeding the natural resilience of Hawai'i's coral reefs to resist chronic stressors and recover from severe events such as storms and elevated ocean temperatures, and expanding degradation in both scope and severity.

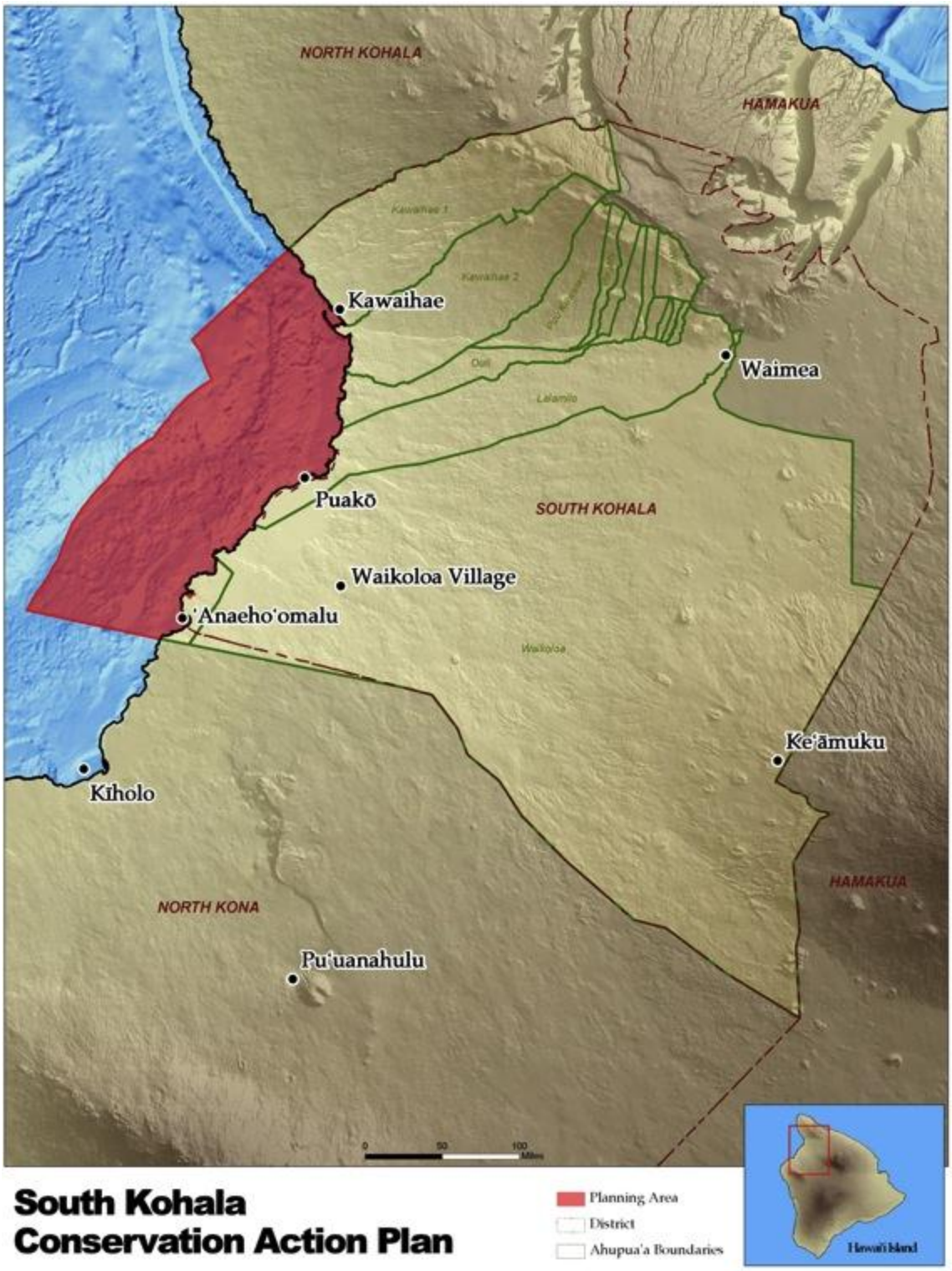
Unique and important natural features such as anchialine pools, estuaries, subterranean water sources, coastal vegetation, sandy embayments, and lava flows influence coral reef health and are themselves influenced by human activities such as shoreline hardening and residential development. Just as these activities must conform to policies and procedures in accordance with development plans, so too should conservation actions fit within a big picture framework for success.

It is vital that conservation actions be developed and implemented to address known coral reef threats in order to maintain or restore coastal and marine life health for the benefit of people and the environment - before threshholds are crossed from which the system cannot naturally recover.

This planning process was designed to give key stakeholders and community members the opportunity to develop and provide input on strategies to address coral reef threats, and, in doing so, to empower communities to care for local resources and to build their capacity to continue doing so. This document is not merely a plan or a process summary, but a template for how and why to plan collaboratively.

Aspects of this plan, designed to meet the HCRS objectives, are already being implemented as this final report is drafted. This plan is not designed to be static or final: when it is revisited, adapted, and refined in the future, the success or failure of implemented actions can inform better conservation at scale in Hawai'i, and should enable other regions to utilize information and encourage further collaboration and partnership.

Figure 1 – Geographic Scope of South Kohala CAP



Map made by Kalisi Mausio, NOAA Fisheries Service, Pacific Islands Regional Office, June, 2011

South Kohala Conservation Action Planning Process

Conservation Action Planning: The Conservation Action Planning (CAP) process guides project teams to identify effective conservation strategies using a proven, iterative adaptive management model (Attachment 1).

South Kohala CAP (SKCAP) Process: Over 30 agencies and organizations (Attachment 2) contributed to the SKCAP planning process, which began in fall of 2010 and ended in July, 2012. With support from DLNR, National Oceanic and Atmospheric Administration (NOAA), and Hawai'i Wildlife Fund (HWF) staff, TNC facilitated two pre-planning webconference calls and ten participatory workshops designed to allow participants to develop priority strategies to care for south Kohala's coastal and marine life.

The CAP was conducted in two Phases to maximize participation and support effective implementation.

During Phase 1, a **Core Team (CT)** from TNC, DLNR, and NOAA CRCP invited two project teams to develop a plan for South Kohala:

1. **Planning Team (PT)** composed of twelve local experts and stakeholders (blue rows in Table 1)

2. **Advisory Group (AG)** to represent the broader South Kohala community and additional experts active in the region (magenta rows in Table 1).

TNC coordinated a series of meetings with both of these teams to develop strategies through the CAP process – these meetings are outlined in greater detail below. For this plan, the project scope was previously defined by Hawaii's Coral Program, which designated the coral reef system from Kawaihae to Anaeho`omalu as a priority site in 2009 (Figure 1).

During Phase 2, results of this collaborative planning process were evaluated by three additional groups:

1. **Target and Strategy Experts** with knowledge of ecosystems in Hawai'i
2. **Lead Agency Representatives** capable of leading implementation of conservation actions
3. **Measures Experts** experienced in evaluating ecological, social, and geophysical indicators

Representatives from Ala Kahakai National Historic Trail (ALKA), Natural Resource Conservation Service (NRCS), and the Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) joined the Core Team to bring additional expertise to the CAP partnership. All participants[2] are listed in Table 1.

[2] Additional individuals, agencies, and organizations participated in pre-planning and/or have asked to be briefed on the results of the CAP, but did not participate directly in workshops and are not listed as participants.

Table 1 – South Kohala Conservation Action Planning Participants

Participant Key			
Core Team in **bold**	Facilitation Team	Planning Team	Advisory Group

South Kohala Conservation Action Plan Participants		
Name	Affiliation	Title
Aric Arakaki	ALKA, ATA, NPS	Superintendent
Allison Cohan	TNC	CAP Coach
Annick Cros	TNC APM	CAP Coach
April Goodson	NOAA	Hollings Scholar Intern
Audrey Newman	Global IslandPartnership	Facilitator
Chad Wiggins	TNC	Marine Coordinator
Chadd Paishon	NKW	Navigator
Cindi Punihaole	TKC	Public Outreach Coordinator
Cynthia Grace-McCaskey	NOAA PIFSC	Anthropologist
Dana Okano	NOAA OCRM	Coastal Resource MGT
David Chai	HNR	Natural Resources Manager
Doug Harper	NOAA PSC	Climate Change Planning
William Walsh	DAR	Biologist
Elia Herman	DLNR/HIHWNMS	State Co-Manager
Emily Fielding	TNC HMP	CAP Coach
Emma Anders	UH/DAR	Recreational Impacts
Eric Conklin	TNC	Marine Science Director
Francis Ruddle	MLSA	Owner/operator/ kūpuna
George Fry	PCA	Vice President
Hannah K. Springer	KMLAC	Kūpuna
Hudson Slay	EPA	Planner
Ivor Williams	NOAA CRED	Coral Reef Researcher
James Byrne	TNC Florida Keys	CAP Coach
Jason Sumiye	TNC	CAP Coach
Jean Tanimoto	NOAA PSC	Partnerships
John Hoover	SKCDP AC	Committee Member
John Kahiapo	DAR	Education Specialist
John Pipan	KWP Pelekane	Soil Scientist
Jonah Yardley	KHA	Shoreline Fisherman
Justin Viezbicke	HIHWNMS	Coordinator
Kainoa Keawe	DOCARE	Enforcement Agent
Kalisi Mausio	NOAA CRCP	GIS Specialist
Kanani Frazier	HIHWNMS	Assistant Coordinator
Kara Osada D'Avella	CORAL	Monitoring Coordinator
Katherine Cullison	Invasive Species LAS	Coordinator

Kathy Chaston	NOAA CRCP	Watershed Specialist
Kawika Auld	Community	Shoreline Fisherman
Kekaulike Tomich	KS/TNC	Student Intern
Keola Childs	HI County	Planner
Kim Hum	TNC	Marine Program Director
Kristana Erikson	TNC AP Marine	GIS Intern
Laurie Richmond	NOAA IEA	Social Scientist
Lisa Hadway	DOFAW - NARS	Manager
Lisa Marrack	UCB	Climate Change Researcher
M. Kalani Souza	FEMA	Cultural Practitioner
Maha Kanealii	KHA	Resident
Malia Chow	HIHWNMS	Superintendent
Manuel Mejia	TNC HMP	CAP Coach
Marc Rice	HPA	Educator/Turtle Researcher
Marni Herkes	WHFC	Secretary
Matthew Wung	USDA-NRCS	District Conservationist
Megan Lamson	HWF	Community Coordinator
Mel Malinowski	MLRA	Resident
Melora Purell	KWP	Partnership Coordinator
Mike Field	USGS	Geologist
Nahaku Kalei	TNC HIMP	Assistant Coordinator
Nancy Carr Smith	SKCDP AC	Action Committee Member
Nina Hadley	TNC	Partnership Dep. Director
Paul Jokiel	HIMB	Coral Reef Biologist
Pelika Bertlemann	STEM	Educator/Researcher
Pi`i Laeha	Kalahuipua`a Fishpond	Loko i`a Manager/ kūpuna
Pomai Bertlemann	KANU	Educator
Reese Libby	NRCS	GIS Specialist
Rick Gmirken	ALKA	Archaeology
Roxie Sylva	TNC HMP	Assistant Coordinator
Ruby McDonald	OHA	Community Coordinator
Sara Peck	UH SeaGrant	Extension Agent
Sharon Sakai	KCRA	Director
Sierra Tobiason	HNR	Fish Husbandry Specialist
Steve Cotton	DAR	Researcher
Steve Dunnington	DWA	Developer Representative
Steven Victor	TNC - Micronesia	CAP Coach
Tara Seely	TNC HIMP	GLOBE Intern
Terry Dunlap	HI County Planning	Planner
Tim Cooke	WLC	Fish Pond Manager
Verl Nakama	DOCARE	Supervisory Agent

Process Summary

June 20-23, 2011 Planning Team Meeting Waimea, Lalamilo, South Kohala

- selected eight priority conservation targets
- evaluated viability of conservation targets
- provided known status of priority targets
- evaluated threats by ranking stress and source criteria

July 20, 2011 Advisory Group Meeting Waikoloa Beach, Waikoloa, South Kohala

- agreed on conservation targets
- refined viability of conservation targets
- refined known status of priority targets by providing expert rankings
- refined threats by providing expert rankings
- made suggestions for target and threat evaluation to Planning Team
- completed workshop evaluation forms

Sept. 6, 2011 Planning Team Meeting Waimea, Lalamilo, South Kohala

- evaluated Advisory Group feedback
- finalized target viability
- finalized threat rankings

Sept. 27-29, 2011 Planning Team Meeting Waimea, Lalamilo, South Kohala

- developed CAP vision statement
- developed threat abatement objectives for priority threats
- developed strategies to address threats
- populated results chains for four strategy categories

Oct. 26, 2011 Advisory Group Meeting Waikoloa Beach, Waikoloa, South Kohala

- evaluated four strategy categories
- provided suggestions to Planning Team to refine strategies
- completed workshop evaluation forms

Oct. 26, 2011 Planning Team Meeting Waikoloa Beach, Waikoloa, South Kohala

- considered Advisory Group suggestions
- refined strategies

May 8-9, 2012 Strategy Expert Meeting Waimea, Lalamilo, South Kohala

- evaluated strategies based on feasibility, effectiveness, and potential impact
- refined objectives
- developed actions for priority strategies
- ranked actions for implementation

June 21-22, 2012 Lead Agency Meeting Waimea, Lalamilo, South Kohala

- evaluated priority strategies against agency missions
- refined actions
- developed leads for priority strategies and actions
- recommended additional partners for implementation

June 23-24, 2012 Measures Meeting Waimea, Lalamilo, South Kohala

- determined status and strategy measures to monitor CAP progress
- identified data gaps
- recommended partners for finalizing and tracking measures of success

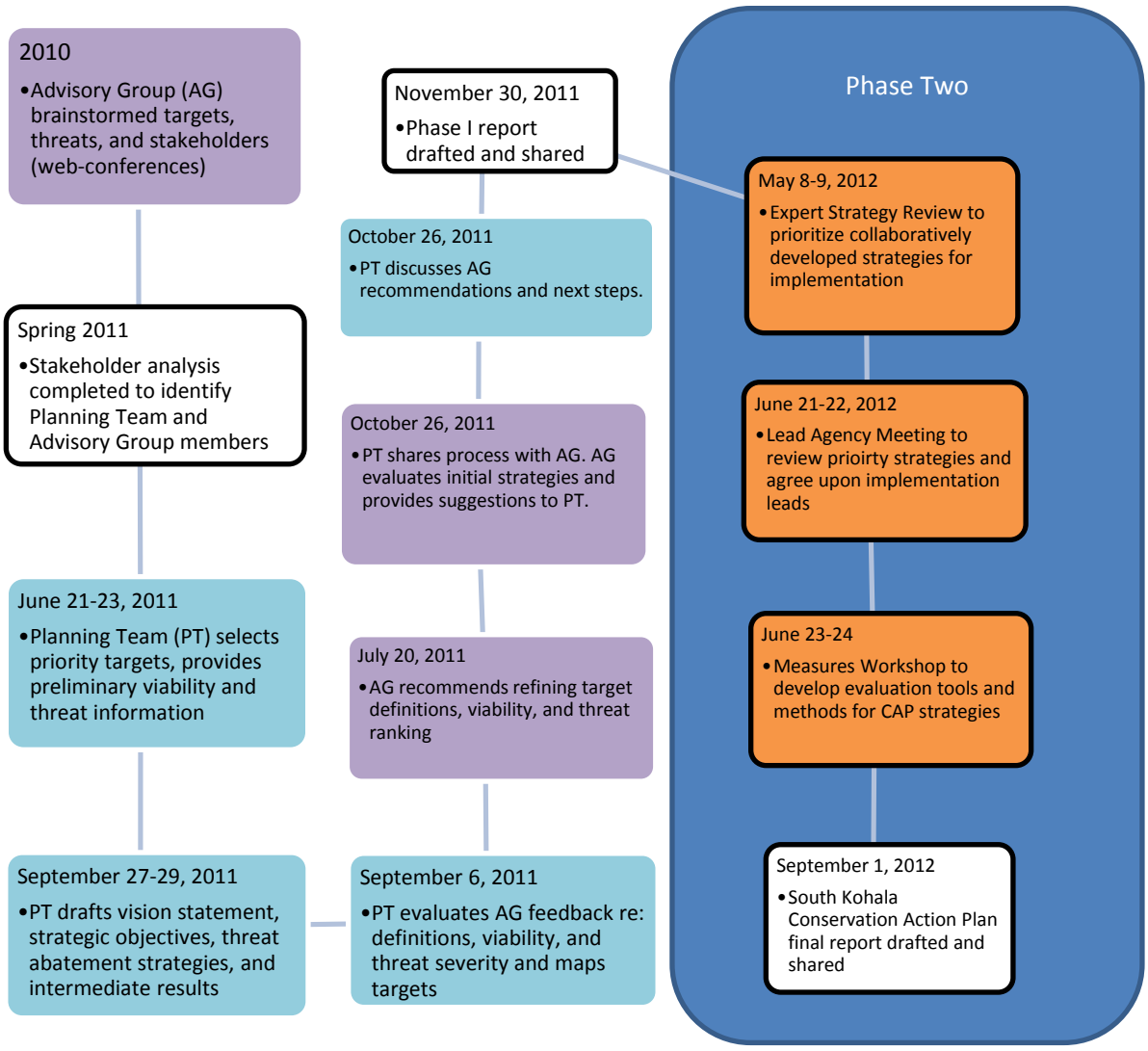
August 8, 2012 Core Team Meeting Waimea, Lalamilo, South Kohala

- clarified core team roles
- evaluated priority actions for 2012-2013 implementation
- developed preliminary work plans and budgets for priority actions

August 15, 2012 Core Team Meeting Honolulu, Oahu

- explored successful conservation partnership characteristics
- discussed partnership structure for CAP implementation

Figure 2 - CAP Participatory Process Summary



A more detailed description of the CAP process is provided in Attachment 2.

CAP Outcomes

During Phase 1, a thorough evaluation of conservation targets was completed including detailed assessment of viability criteria such as indicators of health or degradation and evaluations of where S. Kohala targets fall on a four point ordinal range of poor to very good. Many details related to this evaluation can be found in the Phase 1 report at: http://www.hawaiicoralreefstrategy.com/PDFs/3_Priority_Sites_Kohala/C12717_SKCAP_Phase_1_Report.pdf, and is not repeated here. Key points are summarized below

South Kohala Conservation Targets and Definitions

1. **Coastal and Marine Food Resources** - *abundant food resources including but not limited to limu, salt, `opihi, he'e, ha'uke'uke, wana, lobster, leho, food resource fish (Attachment 6), reef, coastal pelagic fish (`ōpelu, akule), reef ko'a, found from the high water mark to 3 miles from shore*
2. **Coastal Wetlands** - *anchialine system (surface and subterranean), fishponds, estuaries (output of the Wai`ula`ula River), brackish waters, and associated native flora and fauna*
3. **Community Kinship and Stewardship** - *familial/personal/spiritual connection to natural and cultural resources, guided by those with ancestral connections and inclusive of everyone, that leads to active community-based management of coastline and resources including cultural sensitivity, education, information, regulation, ancestral connections, maintenance, and stewardship practices*
4. **Coral Reef Ecosystem** - *includes fringing, patch, reef flat habitats, and associated organisms including: corals, invertebrates (e.g. lobster octopus), fish [e.g. mu, white tip sharks, eagle/manta rays, jacks, barracuda, eels, parrotfish, surgeonfish (paku'iku'i), goatfish (weke, moano `ukali, kūmū), soldierfish, bigeyes, flagtails, milkfish, threadfins)], and turtles*
5. **Native Reef Herbivores** - *Important grazers including, but not limited to, urchins, parrotfish, surgeonfish, turtles*
6. **Native Reef Predators** - *Predatory fishes including, but not limited to, jacks, sharks, and uku*

Water quality and sandy beaches were initially evaluated as conservation targets, but not included in the final list of six priority conservation targets. The group agreed that water quality is a key attribute of healthy targets rather than an independent target. For sandy beaches, the group agreed it was not appropriate to separate them from rocky shoreline areas. Both potential targets were brought to the attention of CAP participants by CAP experts and participants agreed that, although both are incredibly important components of South Kohala's coastal system, neither had to be evaluated as a separate target for South Kohala.

In addition to the ecological targets standard to CAP, South Kohala participants designated two socio-cultural targets that will be important for realizing healthy and abundant coastal and marine life. "Community kinship and stewardship" and "coastal and marine food resources" have as their foundation the relationship between people and nature and were developed in full recognition of the importance of healthy interaction with nature for human livelihood and well-being.

According to CAP participants, by effectively managing these six targets, South Kohala's coastal and marine life will be healthy and abundant.

South Kohala CAP Threats and Definitions

Threats lead to decline or degradation of targets over time. The threats characterized during the planning process are:

1. **Unsustainable Fishing Practices** – *harvest that exceeds the natural replenishment rate*
2. **Lack of Community Capacity** – *insufficient engagement, technical capacity, or influence for effective management*
3. **Invasive Species Introduction** – *arrival and establishment of invasive species not currently present*
4. **Established Invasive Species** – *non-native species or single species that dominate and diminish the viability of native communities*
5. **Land-based Pollution** – *nutrients, sediments, toxins, and chemicals delivered to coastal areas from land (e.g. freshwater transport)*
6. **Disruption of Groundwater** – *changes in the volume of freshwater delivered to coastal areas*
7. **Liability** – *loss of access, rights, or traditions due to legal burden on landowners*
8. **Lack of Government Capacity** - *insufficient engagement, technical capacity, or ability to support management*
9. **Shoreline Alteration** – *modifications of coastal areas from natural condition (e.g. seawalls, structures, sand mining)*
10. **Recreational Misuse** – *non-extractive human interaction w/ coastal systems (e.g. trampling, rubbish, dumping, human waste)*
11. **Poor Diving Practices** - *damage to habitat from commercial diving operations*
12. **Inappropriate Boat Operations** – *habitat damage from anchors or chemicals*
13. **Storms** – *natural severe weather events (e.g. hurricanes, large swells, tsunamis)*
14. **Sea Level Rise** – *seawater intrusion into coastal areas resulting from increases in sea level*

South Kohala CAP Threat Rankings

The known impact of each threat was evaluated for each target individually using rankings standard to CAP (Table 3). Each threat was considered based on the *source*, or the proximate activities or processes that directly have caused, are causing, or may cause the destruction, degradation and/or impairment of conservation targets (e.g. grazing by feral ungulates), and the *stress*, or impact that results directly or indirectly from the source (e.g. increased sedimentation).

Sources of stress were evaluated based on two criteria: *contribution*, or the expected influence of the source alone to the full expression of a stress under current circumstances, and *irreversibility*, or the reversibility of the stress caused by the source of stress.

Stresses were further evaluated based on two criteria: *severity*, the level of damage to the conservation resource that can be reasonably expected within 10 years under current circumstances, and *scope*, or the geographic footprint of impact on the conservation resource at the site that can be reasonably expected within 10 years under current circumstances (Attachment 3).

All four of these criteria were ranked on a four point scale during Phase 1 to generate a matrix of threat rankings.

Table 3 - Threat Rankings for South Kohala Conservation Targets

Threats \ Targets	Community Kinship and Stewardship	Coral Reef Ecosystem	Coastal and Marine Food Resources	Native Reef Herbivores	Native Reef Predators	Coastal Wetlands	Summary Threat Rating
Unsustainable Fishing Practices	Low	Low	High	High	High		High
Lack of Community Capacity	High						Medium
Invasive Species - Introduction		Low	Medium	Medium	Low	High	Medium
Invasive Species - Existing		Low	Medium	Medium	Low	High	Medium
Land Based Pollution		Low	Medium	Low	Low	High	Medium
Disruption of Ground Water		Low				Medium	Low
Liability	Low						Low
Lack of Government Capacity	Medium						Low
Shoreline Alteration			Low				Low
Recreational Misuse	Low	Low	Low	Low	Low	Medium	Low
Poor Diving Practices		Low	Low	Low	Low	Low	Low
Inappropriate Boat Operations		Low	Low	Low	Low	Low	Low
Storms		Medium					Low
Sea Level Rise		Low	Low				Low
Summary Target Ratings:	Medium	Medium	Medium	Medium	Medium	High	High

Some threats, such as *lack of community capacity*, may only directly influence one target, while others, such as *unsustainable fishing practices* impact several targets. Overall threat ranking is a function of both the ranking of each target/threat interaction and the number of targets a threat influences. This ranking was considered when prioritizing strategic objectives.

These rankings were reviewed by experts in Phase 2 and adjusted slightly based on additional knowledge, but the overall threat ranking did not change as a result of this refinement. These threat rankings can be re-evaluated over time based on better information and to determine whether management actions are being effective.

The result of this collaborative and systematic ranking process resulted in **three high priority threats** that measurably impact multiple targets:

1. Unsustainable fishing practices
2. Invasive species
3. Land-based sources of pollution

One or more objectives was developed to reduce each priority threat and used as a guide to draft initial strategies during Phase 1. These strategies were refined and prioritized by experts in Phase 2.

South Kohala CAP Strategies

The collaboratively developed strategies of Phase 1 were reviewed and refined by experts during Phase 2.

Six priority strategies were agreed, refined, and prioritized to address these top ranked threats.

1. Community partnerships
2. Community co-managed areas (CCAs)
3. Fisheries management
4. Sediment reduction
5. Invasive species
6. Additional threat analysis

Each priority strategy is presented below in two components: 1) the desired outcome or objective and 2) the actions that are essential and sufficient to achieving the outcome, assuming all actions are successfully implemented. Each strategy was rigorously reviewed to meet internationally recognized "SMART" planning criteria (Specific, Measurable, Achievable, Relevant, and Time-bound). The actions are also ranked. "H" represents an action that is expected to be high impact and, therefore, a high priority for immediate implementation. "M" represents an action that is expected to be medium impact, and "L" represents an action that is expected to be low impact and, therefore, a low priority for implementation.

Strategy 1: COMMUNITY PARTNERSHIPS

Objective: Active **communities engaged in managing** all six target coastal resources throughout the South Kohala region and incorporating kinship into their approach by 2015.

1. ***Identify organizations, agencies and individuals*** *with activities or interests in marine resource management in South Kohala (e.g. community groups, government, non-profit organizations, businesses, schools, visitor industry), and* ***develop working community partnerships*** *with those that share the objectives of this Conservation Action Plan (CAP). (H)*

2. ***Seek guidance*** *from communities and individuals with ancestral connections to South Kohala to respect, support and foster their traditional kinship with and stewardship of the target coastal resources. (H)*

3. *Design, convene, establish and facilitate an effective* ***South Kohala network of community partners*** *committed to managing all six target coastal resources throughout the region. (H)*

4. *Establish a program to* ***strengthen local resource management capacity*** *that responds to priority needs identified by community partners (e.g. Makai Watch, grant writing, working with volunteers, communications). (H)*

Strategy 2: COMMUNITY CO-MANAGED AREAS

Objective: Work with communities to **establish at least one community co-managed area** in South Kohala with strong community support by 2015, and initiate at least two additional areas by 2020.

1. ***Provide technical support*** *to community partners for planning, implementing, and financing community co-managed areas in South Kohala. (H)*

2. *Work with DLNR and South Kohala community to* ***establish and pilot a process for creating community co-managed areas,*** *including agreement on a model set of rules. (H)*

3. ***Establish a monitoring program*** *to understand how human activities and target biological resources change over time based on management actions. (M)*

4. ***Develop a communication strategy*** *to build support for community co-managed areas in West Hawai'i by key decision makers. (M)*

Strategy 3: FISHERIES MANAGEMENT

Objective: Implement fisheries management actions that ensure healthy coastal resources through supporting pono (sustainable and appropriate) fishing practices, and increase compliance by 50% by 2020.

1. *Support passage of DLNR's current* ***West Hawai'i rules package****. (H).*

2. ***Integrate traditional ecological knowledge, modern science, and community information*** *to identify and support improved rules and best management practices needed for effective fisheries management to ensure healthy coastal target resources in South Kohala. (H)*

3. *Reassign lead responsibility for handling* ***violations of state coastal resource laws, rules and regulations*** *from the criminal courts to the civil penalty system administered by DLNR. (H)*

4. *Support* ***Makai Watch****, including Educational Rangers, in at least two sites. (H)*

5. *Conduct a pilot study to evaluate the potential for a* ***recreational fishing license program*** *in at least one priority area of South Kohala. (M)*

6. ***Implement effective research and monitoring*** *to quantify effects of fisheries management actions on relevant CAP targets. (M)*

7. ***Increase community-specific and location-appropriate education*** *to increase awareness, buy-in, malama i ka aina, and voluntary compliance to ensure healthy CAP resources in South Kohala. (M)*

Strategy 4: SEDIMENT REDUCTION

Objective: Implement priority projects to **reduce sediment and measurably improve the condition of priority coastal targets** in at least one priority coastal area by 2015.

1. ***Implement priority projects from existing watershed management plans*** *that address priority coastal targets. (H)*

2. *Implement projects that* ***establish riparian buffer zones*** *in priority areas. (H)*

3. ***Measure effectiveness of implemented sediment reduction projects*** *on relevant priority targets. (H)*

4. *Review existing state and Hawai'i county* ***land management regulations & policies,*** *and strengthen them to reduce sediment and nutrient run-off. (M)*

Strategy 5: INVASIVE SPECIES

Objective: Prevent new introductions and manage existing non-native and invasive species to restore/maintain ecosystem function for 50% of managed priority anchialine pools, fishponds, and reefs by 2020.

1. ***Remove habitat modifying non-native and invasive species****, starting with mangrove and tilapia, to restore/maintain ecosystem function for 50% of managed priority anchialine pools and fishponds. (H)*

2. ***Assess*** *impact of potentially habitat-modifying non-native and invasive species, starting with* ***kiawe and roi****, and identify appropriate management actions. (M)*

3. ***Establish an effective early detection/rapid response protocol*** *for invasive species in anchialine pools, fishponds, and reefs. (H)*

4. *Review and revise state and county policies and rules to* ***implement precautionary principle on importation, culture, and movement of non-native aquatic species*** *(e.g. "white list," Chapter 197). (M)*

Strategy 6: ADDITIONAL THREAT ASSESSMENT

Objective: Understand and quantify effects of specific additional threats on CAP targets by 2020. NOTE: Strategy 6 is not a priority for implementation in 2012-13.

1. ***Understand*** *sources and relative impacts of* ***nutrients*** *from cesspools/septic systems, injection wells, golf courses, and agricultural lands for South Kohala (nutrient budget). (M)*

2. ***Understand*** *circulation patterns in and around Kawaihae, evaluate impact of* ***Kawaihae Harbor on sediment residency*** *time in South Kohala, and recommend best management practices for action. (M)*
3. ***Review fuel spill prevention and response*** *plan for Kawaihae Harbor, and revise as necessary to protect target coastal resources. (M)*
4. ***Assess*** *potential impacts to target coastal resources from* ***offshore aquaculture and energy development****, and develop strategies to address if warranted. (M)*
5. ***Assess*** *the projected impacts of* ***climate change*** *on the target coastal resources in South Kohala and implement priority actions to optimize climate change resilience. (M)*

Prospective leads were identified for each strategy and action by lead agency representatives. Generally, lead agencies volunteered to lead strategies themselves, but, in multiple instances, representatives recommended agencies or organizations with the capacity to lead or support actions that were not represented at the meeting. These groups will need to be consulted to confirm their support for relevant actions in order to ensure their participation, and are not named herein as not all of these consultations have taken place.

South Kohala CAP Measures

Project implementers will need to be able to demonstrate the success or failure of conservation actions using reliable metrics.

A team of experts identified measures that could be used to evaluate target health or threat abatement and strategy implementation in order to determine the success of conservation actions and adapt, adjust, halt, or scale up implementation. Two different sets of measures were developed:

1. **Status measures** to evaluate changes in the health of the priority target resources (Table 4)
2. **Strategy effectiveness measures** to evaluate the impact of the conservation actions on abating the priority threats and achieving the strategy outcomes (Table 5)

The experts recommended measures that are feasible, effective, and realistic for South Kohala based on proven success, cost, technical capacity, and resolution. For many measures, the proposed indicators and methods need to be refined further with expert input, which can be done in conjunction with implementation as each strategic action implemented will need to be monitored for effectiveness. For each of the recommended measures, the tables below present the following information based on what was known to workshop participants:

- *Indicator* – specific indicator(s) to be measured to quantify changes in target health or threat level.
- *Current Status* – existence of baseline data and/or syntheses for this indicator
- *Method* – whether there is a standardized protocol for gathering indicator data
- *Who* – lead agency who is (or can) keep track of this indicator
- *Cost* – estimate of annual/iterative cost for tracking this indicator ($=0-$50,000, $$=$50,000-100,000, $$$=>$100,000)

Table 4 – Proposed Status Measures

South Kohala CAP Proposed Status Measures: Used to evaluate changes in target resource health independent of management actions					
Target Name	**Indicator**	**Current Status**	**Method**	**Who**	**Cost**
Coastal and Marine Food Resources	Opihi, and other intertidal food resources	Need s. Kohala baseline	Existing	HIMB, UHH	$
Coral Reef Ecosystem	Fish Biomass & Functional Guilds	Synthesis existing;	Existing	DAR, NOAA, TNC, UH	$$$
	1.Coral Cover & Diversity 2.Coral Size & Frequency	Synthesis existing	Existing	DAR, NOAA, TNC, HIMB	$$$
Native Herbivores	Biomass of Herbivores	Synthesis existing	Existing	DAR, NOAA, TNC, UH	$$$
	Diversity of Herbivores	Synthesis existing	Existing	DAR, NOAA, TNC, UH	$$$
	Key Functional Guilds	Synthesis existing	Existing	DAR, NOAA, TNC, UH	$$$
Native Predators	Encounter rates	Synthesis existing; Spatial improv.	Existing, HIRMI, REEF vol. surveys	TNC, NOAA, DAR, HIRMI [i]	$
Wetlands	Presence of `ōpae ula	Baseline scheduled	Existing	UC Berkeley and NPS	$
	Absence of floating or benthic macroalgae	Baseline scheduled	Existing	UC Berkeley and NPS	$
	Spatial Extent and adjacent habitat	Baseline scheduled	Existing	UC Berkeley and NPS	$$

Workshop participants acknowledged the existence of several data gaps in South Kohala. They recognized the need to expand the geographic scope of current datasets in order to answer CAP specific questions (e.g. *Is herbivore biomass in S. Kohala increasing as a result of improved fisheries management?*). In some cases, the scope of existing monitoring efforts could be expanded to improve spatial coverage throughout the region, while, in others, new surveys may need to be implemented that may directly inform conservation actions (e.g. s*patial extent of anchialine pools and fish ponds in S. Kohala*). New public/private sector partnerships may need to be explored to expand opportunities for observation provided by area businesses (e.g. *Encounter rates for native predators*). Each of these measures will need to be evaluated by knowledgeable parties if progress toward CAP objectives is to be evaluated, and each measure could constitute a project in its own right. However, the CAP Core Team made a strategic decision to consider measures and actions together when evaluating projects designed to meet CAP objectives, unless the failure to do so would compromise the plan itself.

Several agencies and organizations are conducting similar monitoring programs in South Kohala at present and would likely benefit from enhanced coordination of activities and data to answer questions at different scales. It is encouraging to note that this inter-agency and organizational cooperation is already occurring for coral reef fish monitoring, and the lessons learned through this cooperative exercise may be applied to other complementary monitoring programs.

In addition to measuring the response of conservation targets to conservation actions, threat reduction can be evaluated through strategy effectiveness measures, which can also be used to track the progress of the plan overall.

Table 5 – Proposed Strategy Effectiveness Measures

South Kohala CAP Proposed Strategy Effectiveness Measures: Used to evaluate changes in priority threats and progress or success of strategic actions. These can be used to ensure implementation proceeds as planned and achieves expected outcome.				
Threat Name	**Indicator**	**Current Status**	**Who**	**Cost**
Unsustainable Fishing Practices	biomass and key functional guild representation over time	long term decline for food fish, increase in AQ fish in FRA	DAR, NOAA, TNC, UH	$$$
Invasive fish on coral reefs	abundance and biomass relative to native fish	present throughout project area; impact undetermined	DAR, NOAA, TNC, UH	$$$
Invasive fish in pools and ponds	presence in system	unknown; impact high	NPS, UCB	$
Mangroves	presence of mangrove	unknown; present; impact high	NPS, UCB	$
Invasive algae	presence of algae	unknown; present in Kawaihae Harbor	EOTR[i]	$
Invasive Invertebrates	presence and abundance	needs to be developed	TBD	$
Land-based pollution	soil retention	Pelekane baseline done by KWP (2009)	USGS, NRCS, KWP, Landowners	$$

In order to manage implementation of the CAP itself, it will be vital to have focused coordination of activities in partnership with individuals, groups, and agencies engaged in implementation.

Additional strategy effectiveness measures specifically designed to track the progress of the CAP itself, independent of the status of ecological targets, were developed for five priority strategies. These measures include many social indicators that could be tracked through perception surveys (e.g. *community support for fisheries management*) as well as milestones (e.g. *community management plan adopted by State*). The purpose of these additional measures is to check in on the plan to determine whether or not it is proceeding as expected in order to explore adapting, continuing, or leveraging strategies implemented through the CAP partnership.

Table 5 – Additional Strategy Effectiveness Measures

Additional SKCAP Strategy Effectiveness Measures These can be used to ensure implementation proceeds as planned and achieves expected outcome.					
Strategy	Indicator	Current status	Method	Who	Cost
Community Partnerships	% shoreline managed by community partnerships	None	monitoring protocol consistent throughout network	CAP coordinator, NPS	$
	progress on capacity assessment scorecard	existing assessment methods	annual compilation of facilitated self-assessments	NPS	
Community Co-Managed Area (CCA)	co-management plan adopted by State	no plans developed	capacity building training and planning support	TNC[i], community leads	$$
	herbivore & predator populations harvested by communities	trend comparison	before-after-control-impact creel survey	DAR, TNC, NOAA, HCFRU	$$$
	perception of spill-over	# of fishers fishing MPA boundary	observation	Makai Watch, HCFRU	$
Fisheries Management	# of violations reported & enforced	ongoing	report monitoring	DLNR-DOCARE	
	# of observations of illegal activity	baseline established in Puako, need to be scaled up to other sites	coastal use surveys	PCA	$
	community support for fisheries management	not yet established	interviews or periodic poll	NOAA OCRM	$$
Community Kinship and Stewardship	# of communities engaged in managing targets	20%	community assessment	ATA[i]	$
	% of community incorporating kinship in their plans & programs	3/6 or 7 needs to be reviewed	community assessment	ATA[i]	$
	core community support for management	may exist at some sites	interview/ Survey	NOAA OCRM[i]	$

These additional measures will help the CAP partners track, refine, and communicate strategic success more effectively, especially with regard to conservation benefits to people.

Individual projects should be able to demonstrate their own effectiveness with monitoring guidance provided by the list of known measures currently being employed in South Kohala, but may have access to resources - including funding, personnel, or equipment - that enable monitoring at a different scale or resolution than what was considered feasible by the workshop experts. These recommended measures are not intended to be limiting or restrictive, but are deemed sufficient to observe the indicators listed, which are linked to collaboratively developed CAP targets, threats, and strategies.

Keeping track of the moving parts of this plan will be a challenge, but should be rewarding as the benefits of implemented conservation actions on South Kohala ecosystems and communities increase through 2015.

South Kohala CAP Outputs

- **Six fully reviewed and prioritized conservation** strategies to address threats to coastal and marine life in South Kohala
- **Measures** for evaluating strategies and targets
- **A dynamic partnership** committed to implementation
- **Work plans for six priority strategies** submitted to the Coral Reef Working Group
- **Two-page summary** document for sharing CAP
- **Seventy-six member participant network**

Phase one of the South Kohala Conservation Action Plan established a firm foundation based on cooperation, collaboration, partnership, and mutual respect. It focused firmly on developing and implementing a plan that meets both ecological and socio-cultural goals for South Kohala. The commitment and participation of the Planning Team and Advisory Group continues into the next phase to finalize the first iteration of this plan and begin implementing priority strategies

During phase two, fourteen different agencies and organizations agreed to lead CAP implementation of specific strategies and actions. This represents significant commitment to implementing collaboratively developed strategies that represents a huge increase in partnership capacity to manage South Kohala's coastal and marine life. Additional organizations were identified as potential partners who could lead specific strategies and actions, and are being consulted. As additional partners come on board, this plan will continue to build momentum and leverage on-the-ground and in-the-water action for the benefit of people and the environment to "a restored healthy, abundant, resilient South Kohala coastal system, cared for and cherished by an island community guided by the values and traditions of South Kohala…".

Acknowledgements: Each and every participant listed in this document has been a constructive and valuable supporter of the process, and their time, commitment, perspective, and willingness to share are solely responsible for success. Without taking anything away from these amazing participants, additional individuals were instrumental in making this process possible including: Jan Eber, Deb Matsukawa, Petra MacGowan, John Parks, Jason Philibotte, Mimi Diorio, Arielle Levine, Lisa Sakurai, Shirley Ann Fukumoto, Margo Mau, Susy Ruddle, Sharon Sakai (whose home cooked snacks merit a second acknowledgement!), Daniel Devost and the staff at Canada France Hawai'i Telescope in Waimea, Starbucks Waimea, Puakō's Hokuloa Church, Puakō General Store, Waikoloa Queen's Marketplace, Anna's Ranch Heritage Center, Hawai'i Preparatory Academy, Village Burger, and Lilikoi Café, and Ruby MacDonald, forever an advocate for the people of Hawai'i, a powerful voice for tradition and respect, a trusted advisor, and a speaker of truth. May your contributions carry forward to the benefit of all. Mahalo no.

Attachment 1 Conservation Action Planning Overview

Conservation Action Planning

Conservation Action Planning (CAP) is a powerful process to guide conservation teams to develop focused strategies and measures of success. CAP is The Nature Conservancy's version of the "Open Standards for Conservation". It has been utilized with hundreds of diverse projects at multiple scales from different parts of the world and is supported by a network of trained professionals that make up the Conservation Coaches Network.

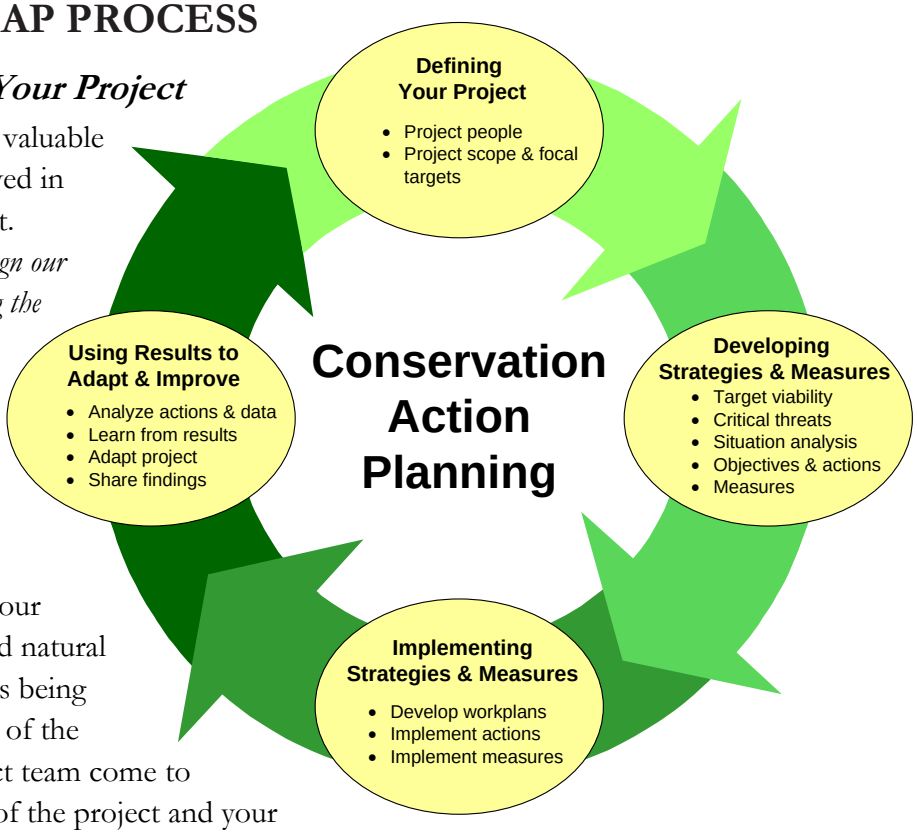
The CAP process guides project teams to identify effective conservation strategies. It provides an objective, consistent and transparent accounting of conservation actions and the intended and actual outcomes of conservation projects. It enables project staff to responsively adapt their actions to improve strategy effectiveness and achieve greater conservation impact.

A brief summary of the CAP Process is provided below. For a full set of CAP and Open Standards information, visit http://conserveonline.org/workspaces/cbdgateway/cap/index_html.

THE 10 STEPS OF THE CAP PROCESS

1. Identify People Involved In Your Project

This step asks you to identify your most valuable resource – the people who will be involved in designing and implementing your project. Addresses questions like: ♦ *"Who will design our project?* ♦ *"Who will be responsible for ensuring the plan goes forward?, " "Who can give us advice?,* ♦ *"Who will help us through this process?"*



2. Define Project Scope & Focal Conservation Targets

With this step you define the extent of your project and select the specific species and natural systems that your project will focus on as being representative of the overall biodiversity of the project area. This step helps your project team come to consensus on the overall goal and scale of the project and your ultimate measures of success. Addresses questions like: ♦*"Where is our project?"* ♦ *"What are we trying to conserve or restore?"*

3. Assess Viability of Focal Conservation Targets

This step asks you to look at each of your focal targets carefully to determine how to measure its "health" over time. And then to identify how the target is doing today and what a "healthy state" might look like. This step is the key to knowing which of your targets are most in need of immediate attention, and to measuring success over time. Addresses questions like: ♦ *"How do we define 'health' (viability) for each of our targets?"* ♦ *"What is the current status of each of our targets?"* ♦ *"What is our desired status for each of our targets?"*

4. Identify Critical Threats

This step helps you to identify the various factors that immediately affect your project's focal targets and then rank them so that you can concentrate your conservation actions where they are most needed. Addresses questions like: ♦ *"What threats are affecting our targets?"* ♦ *"Which threats are more of a problem?"*

5. Conduct Situation Analysis

This step asks you to describe your current understanding of your project situation – both the biological issues and the human context in which your project occurs. This step is not meant to be an unbounded analysis, but instead probes more deeply into the conditions surrounding your critical threats and degraded targets to bring explicit attention/consideration to causal factors, key actors, and opportunities for successful action. Addresses questions like: ♦ *"What factors positively & negatively affect our targets?"* ♦ *"Who are the key stakeholders linked to each of these factors?"*

6. Develop Strategies: Objectives and Actions

This step asks you to specifically and measurably describe what success looks like and to develop practical and *strategic* actions you and your partners will undertake to achieve it. In particular, you want to try to find the actions that will enable you to get the most impact for the resources you have. Addresses questions like: ♦ *"What do we need to accomplish?"* ♦ *"What is the most effective way to achieve these results?"*

7. Establish Measures

This step involves deciding how your project team will measure your results. This step is needed to help your team see whether its strategies are working as planned and thus whether adjustments will be needed. It is also needed to keep an eye on those targets and threats that you are not acting on at the moment, but may need to consider in the future. Addresses questions like: ♦ *"What do we need to measure to see if we are making progress towards our objectives and whether our actions are making a difference?"* ♦ *"Are there other targets or threats that we need to pay attention to?"*

8. Develop Work Plans

This step asks you to take your strategic actions and measures and develop specific plans for doing this work as your project goes forward. Addresses questions like: ♦ *"What do we specifically need to do?"* ♦ *"Who will be responsible for each task?"* ♦ *"What resources do we need?"*

9. Implement

Action and monitoring plans won't do any good sitting on the shelf – your challenge here is to trust the hard work you have done and implement your plans to the best of your ability. Implementation is the most important step in this entire process; however, given the diversity of project needs and situations, the only requirement is: ♦ *Put your plans into action*

10. Analyze, Learn, Adapt, & Share

This step first asks you to systematically take the time to evaluate the actions you have implemented, to update and refine your knowledge of your targets, and to review the results available from your monitoring data. This reflection provides insight on how your actions are working, what may need to change, and what to emphasize next. This step then asks you to document what you have learned and to share it with other people so they can benefit from your successes and failures. Addresses questions like: ♦ *"What are our monitoring data telling us about our project?"* ♦ *"What should we be doing differently?"* ♦ *"How will we capture what we have learned?"* ♦ *"How can we make sure other people benefit from what we have learned?"*

Attachment 2 – Process Detail

Pre-Planning Phase: This CAP benefitted from a series of facilitated conversations that occurred prior to workshops and meetings. Knowledgeable local experts and agency representatives participated in two web conference sessions designed to inform them of the CAP process and to gather general information based on their knowledge of the region and stakeholders who needed to be engaged. These conversations were followed by consultation with additional experts in South Kohala who contributed additional information to this initial brainstorming.

An outcome of the first planning call was a list of fifty-seven conservation targets for South Kohala (Attachment 3). There was no effort made to restrict this initial list based on geography, applicability, or viability; rather, it was an exercise designed to gather as much information as possible about what local experts believed to be important in the region. Experts were guided to consider the scale of targets and selected targets that fit the criteria of individual species, communities, ecosystems, and cultural resources. Although there was no geographic limitation in the region, targets without a measurable geographic footprint whatsoever, were not compiled into the target list developed by this group. This list of targets was refined by nesting targets with similar foci (e.g. considering herbivorous fish species as a community within Reef Herbivores) and this refined list was evaluated by the PT during the first workshop to select eight priority conservation targets for South Kohala coastal systems.

The second web conference was focused on a suite of threats (Attachment 4) that impact this broad list of targets and on identifying additional stakeholders to participate in the planning process. Again, the focus was on listing rather than refining and participants were encouraged to think broadly about threats based on the list of 57 targets developed during the first conversation. This list was utilized by the PT in their analysis of threats during the first workshop.

Following the web conference sessions, the core team conducted a stakeholder analysis and invited participants to join either the PT or the AG.

Concurrent with these conversations, a Participatory Mapping Project conducted by NOAA CRCP in partnership with the National Marine Protected Area Center was conducted at Kaleamanō. More information about this project, which engaged many of the CAP advisors, is available online at http://www.mpa.gov/dataanalysis/hi_coastal_use/. These coastal use maps were used to guide discussions during workshops and will be instrumental in refining and implementing strategies.

Pre-Planning Outputs:

- Fifty-seven conservation targets
- Fifteen active threats
- Stakeholder analysis
- Coastal use maps generated by partners

Phase 1

The first meeting of the PT occurred from June 21-23, 2011 in Waimea, Lalamilo Hawaii Island and was facilitated by James Byrne, an experienced CAP facilitator who successfully completed several coral reef CAPs in Florida and the Caribbean. Over these three days, the PT defined focal conservation targets (*What do we want to care for?*) and evaluated these targets using viability (*How are the things we want to care for doing?*) tools standard to CAP (Table 3). Additionally, the PT evaluated the Key Ecological Attributes (KEAs) for each target as a means to evaluate viability. KEAs are aspects of targets that, if missing or altered, lead to the loss of that target over time (e.g. coral abundance). These KEAs were used to develop primary indicators (measurable criteria related to a specific information need) for each target (e.g. percent coral cover). Next, the Planning Team developed a range of values for each indicator on a scale of Poor-Fair-Good-Very Good. Team members estimated the current status of each target based on this range, or noted areas that warranted additional information from Advisors.

The PT also identified critical threats (*What impacts the things we want to care for?*) to South Kohala conservation targets, and evaluated their impact based on four criteria: Scope, Severity, Irreversibility, and Contribution. At the conclusion of this three-day workshop, the PT defined and evaluated eight conservation targets and fourteen threats for consideration by the AG.

On July 20th, AG members met in Waikoloa and evaluated the collaboratively developed conservation targets and threats the PT identified. During this single day workshop, three facilitated break-out groups confirmed their agreement with the targets selected. Experts provided additional information to refine target viability (KEAs, indicators, ranges, and rankings). AG members then evaluated threats by providing missing information on the four ranking criteria and indicating their level of agreement with the initial rankings developed by the PT.

AG feedback was evaluated by the PT on September 6th. The PT considered AG recommendations. In many cases, the expert opinions of the AG were incorporated into the CAP. In some instances, the opinions of AG members were considered in the context of the planning process, but the original assessment of the PT was justified based on the tools utilized during the first Planning Team meeting.

Once target viability and threats were resolved through this feedback loop, the PT again met for three days from September 27-29 with James Byrne and Annick Cros, from TNC's Asia Pacific Marine Program facilitating two break-out groups to develop initial strategies to address high ranking threats. During the course of these three days, the PT developed threat abatement objectives (specific measurable objectives associated with threat reduction – e.g. 80% of artificial nutrient load delivered to coastal areas reduced by 2025). These objectives were used to develop strategies (specific actions to abate threats). For fisheries and enforcement, these strategies were ranked by the group using a simple points system. For highly ranked strategies, the PT developed results chains (step-by-step process models predicated on if-then logic). For land-based and community kinship and stewardship strategies, the group chose to develop results chains first and have the strategies ranked by Miradi software criteria (effectiveness and feasibility) to prioritize their strategies. These

priority strategies were simplified by TNC staff and accepted by the PT during a meeting on October 25.

The AG met to evaluate these strategies at Waikoloa on October 26th. Members of the PT shared their experience developing strategies and presented results chains for four strategies during round-robin style break-out sessions with AG members. Strategies were consolidated into four categories: Fisheries, Actions on Land, Community Kinship and Stewardship, and Invasive Species Management, and each break-out group provided feedback on every strategy category.

Feedback from the AG was presented back to the PT and discussed to evaluate any substantive changes to the plan. Most feedback was complimentary and sought to contextualize strategies based on the perspective of AG members. Modest adjustments were made to incorporate this feedback into initial strategies.

A Phase 1 report was drafted outlining the process through the end of 2011 and preparations made to finalize the first iteration CAP document in 2012.

Phase 2

Phase 1 strategies were drafted and evaluated by a panel of experts at a two-day workshop May 8-9, 2012. Facilitated by Steven Victor of TNC's Micronesia Program with consultation from Audrey Newman from the Global Island Partnership, this two day workshop convened coral reef management experts with knowledge of South Kohala to evaluate each strategy based on whether it was essential and sufficient to achieve target goals and/or threat abatement objectives. Participants divided into break-out groups to discuss each strategy and added the *Additional Threat Assessment* strategy to what had been developed previously. Participants also adjusted strategy language to ensure consistency with objectives, and modified specific actions based on the expected outcome and feasibility thereof. Finally, experts ranked overall strategies and actions across the entire plan to develop priorities for implementation.

Audrey Newman facilitated a meeting of Lead Agency representatives from July 21-22. They broke out into small groups to review strategies and actions and further refined language for clarity and consistency before convening together to evaluate leads for each strategy and action. In most cases, representatives from likely lead agencies and organizations were present and volunteered to support actions. In other cases, lead agency representatives recommended other agencies and/or organizations with experience or capacity to lead and flagged these actions for consultation with representatives of groups not present.

Annick Cros facilitated a measures workshop from July 23-24 to work with researchers and managers on developing and refining measures of success against which CAP progress can be evaluated. Through break-out and full group discussion, participants evaluated two types of measures for all CAP targets, objectives, goals, and strategies and refined results chains as needed. Experts also identified additional sources of information and recommended others for consultation related to specific measures.

Following this workshop, the Core Team met twice more to develop work plans for priority strategies, evaluate the CAP process, and clarify CT roles moving forward. The second meeting was facilitated by Nina Hadley, Deputy Director of Global Partnerships for TNC, and focused on identifying possible structures for the CT beyond planning and into implementation, based on successful partnership models from Hawai'i and California.

Attachment 3 - South Kohala CAP Participant Evaluations

In addition to developing priority strategies for South Kohala, an important goal of this planning process was identifying and building support for implementation. During Phase 1 workshops, a participant evaluation was completed by attendees to evaluate their understanding of and support for the outcomes of the planning process. An analysis of participant evaluations determined overall support from participants for both the planning process and the outcomes that were presented, and found a general increase in support evident over time.

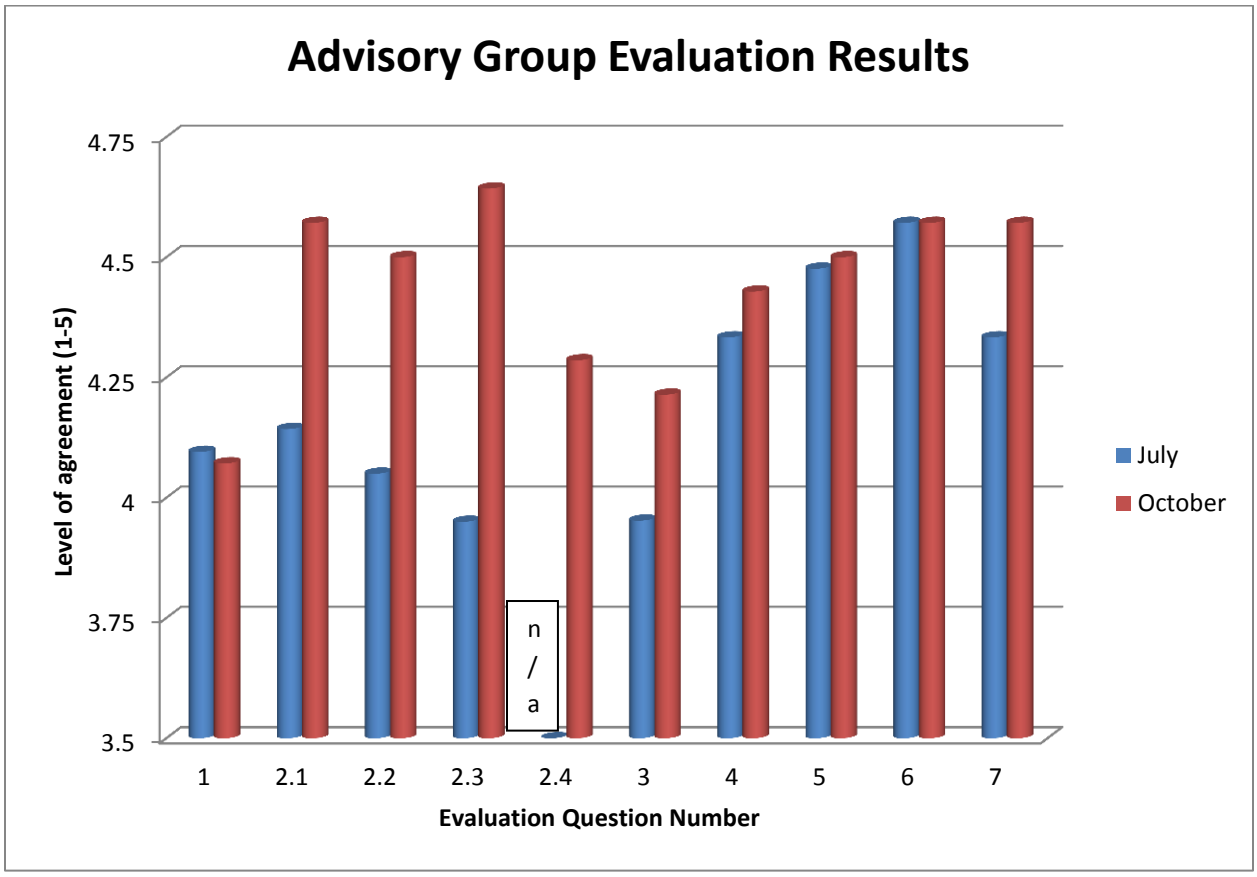


Figure 2 – AG level of agreement per question (1 = Strongly disagree – 5 = Strongly agree) during July and October AG meetings. The number of participants in agreement with all questions asked (choosing either strongly agree or agree as their answer choice) increased from 96% in July to 99% in October. There was no question 2.4 in July, hence the n/a.

Phase 2: All participants were asked to evaluate the strategies contained in this report through an online survey available at https://www.surveymonkey.com/s/T8NGCNQ. Nineteen respondents completed the entire survey and 90% either agreed or strongly agreed with all twenty-eight CAP strategies with one exception. One respondent began the survey by strongly disagreeing with the community partnership strategies, and did not complete the remaining pages of the evaluation, and one respondent was unsure about their organizations level of support and requested more information. 100% of respondents were supportive of the final CAP overall (33% were strongly supportive).

Participant Evaluation of the

South Kohala Conservation Action Plan

Advisory Group Workshop #1

July 20, 2011

Queen's Marketplace, Waikoloa

Directions: Please rate how much you agree or disagree with each of the statements listed below.

The **overall goal** of this workshop is to discuss and enrich results to date – what we want to care for; what is its current status; and what are the threats to it that we can address?

1. The goal for this workshop was fully achieved. (*please check one*)

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

2. There were **3 objectives** associated with this goal to be achieved by the participants. Please rate (check one) how much you agree or disagree with the achievement of these objectives:

Objectives	**I don't know**	**Strongly disagree**	**Disagree**	**Neither agree nor disagree**	**Agree**	**Strongly agree**
1. What we want to care for (Conservation Targets)						
2. What is its current status? (Target Status)						
3. What are the threats to it that we can address? (Threats)						

3. My own (personal) expectations for why I attended this workshop were fully achieved.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

4. The workshop was well organized.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

5. The workshop was well facilitated.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

6. I will continue to support this process.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

7. I enjoyed participating in this workshop.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

Continued on other side…

8. The things I liked most about this workshop were: (list/write)

9. The things I liked least about this workshop were: (list/write)

10. If I had to recommend that some changes be made on the workshop, they would be: (list/write)

11. Other thoughts, comments, or suggestions on the workshop or the overall process?

Participant Evaluation of the

South Kohala Conservation Action Plan

Advisory Group Workshop #2

Oct 26, 2011

Queen's Marketplace, Waikoloa

Directions: Please rate how much you agree or disagree with each of the statements listed below.

The **overall goal** of this workshop is to discuss and refine collaborative strategies to care for South Kohala's coastal and marine life.

1. The goal for this workshop was fully achieved. (*please check one*)

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

2. There were **4 strategies** associated with this goal. Please rate (check one) how much you agree or disagree that these strategies will benefit coastal and marine life in South Kohala:

Strategy	**I don't know**	**Strongly disagree**	**Disagree**	**Neither agree nor disagree**	**Agree**	**Strongly agree**
1. Land Management						
2. Fisheries Management						
3. Community Kinship and Stewardship						
4. Invasive Species Management						

3. My own (personal) expectations for why I attended this workshop were fully achieved.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

4. The workshop was well organized.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

5. The workshop was well facilitated.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

6. I will continue to support this process.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

7. I enjoyed participating in this workshop.

I don't know ○	*Strongly disagree* ○	*Disagree* ○	*Neither agree nor disagree* ○	*Agree* ○	*Strongly agree* ○

Continued on other side…

8. The things I liked most about this workshop were: (list/write)

9. The things I liked least about this workshop were: (list/write)

10. If I had to recommend that some changes be made on the workshop, they would be: (list/write)

11. Other thoughts, comments, or suggestions on the workshop or the overall process?

Attachment 4 - Conservation Targets Brainstormed by initial Advisory Group (7/12/2010)

Conservation Targets: a limited suite of species, communities, ecosystems, and socio-cultural resources that are chosen to represent and encompass the full array of biodiversity found in a project area. In theory, conservation of the focal targets will ensure the conservation of all native biodiversity within functional landscapes. In other words, **"What is important?"**

Draft species targets

- Honu - Pacific Green Sea Turtle
- Kohola - Humpback Whales
- Sharks and Rays
- Heʻe - *octopus*
- Limu sp. limu kohu – *seaweed/macroalgae*
- Jacks – *Ulua, ʻŌmilu, papio…*
- Pākuʻikuʻi – *Achilles tang*
- Ahi – *Yellowfin tuna*
- Red Fish – *Menpachi, Aweoweo*
- Manini – *Convict tang*
- ʻOpihi – *Yellowfoot, Blackfoot, and Koele - limpet*
- Uhu - *Parrotfish*
- ʻŌpelu – *Mackerel Scad*
- Akule – *Big Eyed Scad*
- Kahala - *Amberjack*
- Moi – *Pacific Threadfin*
- ʻAmaʻama, ʻAnae - *Mullet*
- ʻOʻopu - *Goby*
- Hīhīwai – *Endemic grainy snail*
- Hapawai - *Shellfish*
- ʻŌpae ʻula – *Endemic shrimp commonly associated w/ brackish water*
- Koʻa – *Largest native tree*
- Sandlewood – *native tree*
- ʻŪlei - *native spreading shrub; wood used for digging sticks, fish spear, and musical instruments*
- Olonā – *native shrub; fibers used to make fishing nets and line, and as a base for ti leaf raincoats and feather capes*
- Kokiʻo – *native shrubby hibiscus w/ red flowers- wood produces fine charcoal*
- Montipora sp.- (e.g. Montipora capitata or patula) – *reef building coral species*
- FLASH species – *top ten fish species list from Fisheries Local Action Strategy*

Draft Community Targets

- Coral reef fish assemblage

OR

- Reef predators
- Corallivores
- Herbivores
- Planktivores
- Omnivores

- Lowland dry forest
- Freshwater communities
- Anchialine pools
- Inter-tidal and sub-tidal lava bench

Draft ecosystems targets

- Subterranean fresh water system (brackish water system)
- Coral reef ecosystem
- Mauka/upland ecosystems
- Streams, gullies, gulches (both perennial and non-perennial)

Draft socio-cultural targets

- Field Systems (Kohala, Waimea, Kona)
- Hale o Kapuni – (submerged shark heiau)
- Fishponds
- Fishing koʻa
- Limu
- Traditional Values
- Traditional Fishing Practices
- Ala Kahakai National Historic Trail
- Puu o Kohola Heiau (terrestrial heiau)
- Recreational Use Areas
- Traditional Use Areas

Attachment 5 - Threats Brainstormed by initial Advisory Group (8/17/2010)

Draft Threats

Stresses impair viability of targets, sources are causes of the stresses

- Introduced Species
  - marine fish species and invasive algae
  - freshwater/brackish fish
  - land animals (e.g. goats, mongoose)
  - land plants
- Over-development
  - freshwater diversion
  - riparian hardening
  - impervious surfaces
  - chemical/nutrient/thermal pollution
  - too much human use
  - desalinization
  - disruption of ocean currents
- Unsustainable harvest of marine species
  - illegal use of lay gill nets
  - removal of large fecund females and sexually immature fish
  - legal unsustainable harvest
    - economic incentive
- Marine Pollution
  - Nutrient pollution
  - Chemical pollution
- Run-off
  - Nutrient run-off
    - Landscaping and golf courses
    - Ranching/grazing incl. feral ungulates
  - Urban and suburban
    - Velocity, thermal and chemical components (quantity and quality)
  - *Need to consider drainage control systems in addressing this threats*
- Dry Wells
- Sedimentation
  - Over grazing
  - Grubbing, grading, compaction, and paving
  - Vegetation loss/absence
  - Overgrazing
  - Stream alteration
  - Feral ungulates
  - Wild fire
  - Wind
  - Invasive plant species: fountain grass, kiawe
- Wastewater, increased nutrification

    - Injection wells
        - May need to collect data in future, but will be a growing problem
        - Hudson can provide more info on DOH work
    - Aging cesspools and septic systems
- Non-extractive human use
    - Anchor damage and trampling
    - Disruption of marine species
- Climate Change
    - Ocean acidification (Fossil fuel use globally, Sulfur dioxide?)
    - Rising temperature
    - Rising sea level
    - Increased storm frequency and severity
- Freshwater diversion (both illegal and legal)
- Disruption of natural circulation patterns
    - E.g. Kawaihae Harbor
- (Offshore) aquaculture
- Marine disease
    - Fish disease
    - Coral disease
- Industrial thermal pollution (discharge from deepwater energy systems)
    - Online sources for degree of threat (Mike L.)
    - NOAA sponsored workshop summary should be available in Sept.

Attachment 6 – Threat Ranking Criteria

Ranking Stress: Severity

Severity of Damage -- the level of damage to the conservation resource that can reasonably be expected within 10 years under current circumstances (i.e., given the continuation of the existing situation).

 Very High: The stress is **likely to destroy** or eliminate the conservation resource over some portion of the resource's occurrence at the site.

 High: The stress is **likely to seriously degrade** the conservation resource over some portion of the resource's occurrence at the site.

 Medium: The stress is **likely to moderately degrade** the conservation resource over some portion of the resource's occurrence at the site.

 Low: The stress is **likely to only slightly impair** the conservation resource over some portion of the resource's occurrence at the site.

Ranking Stress: Scope

Scope of Damage -- the geographic scope of impact on the conservation resource at the site that can reasonably be expected within 10 years under current circumstances (i.e., given the continuation of the existing situation).

 Very High: The stress is likely to be **very widespread** or pervasive in its scope, and affect the conservation resource throughout the resource's occurrences at the site.

 High: The stress is **likely to be widespread** in its scope, and affect the conservation resource at many of its locations at the site.

 Medium: The stress is likely to be **localized** in its scope, and affect the conservation resource at some of the resource's locations at the site.

 Low: The stress is likely to be **very localized** in its scope, and affect the conservation resource at a limited portion of the resource's location at the site.

Ranking Sources of Stress: Contribution

Contribution -- expected contribution of the source, acting alone, to the full expression of a stress (as determined in the stress assessment) under current circumstances (i.e., given the continuation of the existing management/ conservation situation).

 Very High: The source is a **very large contributor** of the particular stress.

 High: The source is a **large contributor** of the particular stress.

 Medium: The source is a **moderate contributor** of the particular stress.

 Low: The source is a **low contributor** of the particular stress.

Ranking Sources of Stress: Irreversibility

Irreversibility -- reversibility of the stress caused by the Source of Stress.

 Very High: The source produces a stress that is **not reversible** (e.g., wetlands converted to a shopping center).

 High: The source produces a stress that **is reversible, but not practically affordable** (e.g., wetland converted to agriculture).

 Medium: The source produces a stress that **is reversible with a reasonable** commitment of resources (e.g., ditching and draining of wetland).

 Low: The source produces a stress that is easily **reversible at relatively low cost** (e.g., off-road vehicles trespassing in wetland).

Attachment 7 - Food Resource Fish (from Williams et al. 2009)

Table A1. 'Target Fish' taxa used in analyses.

Family, Taxon	**Family, Taxon**
Surgeonfish - Acanthuridae	**Snappers - Lutjanidae**
Acanthurus achilles	*Aphareus furca*
Acanthurus blochii	*Aprion virescens*
Acanthurus dussumieri	
Acanthurus leucopareius	**Goatfishes – Mullidae**
Acanthurus nigroris	ALL
Acanthurus olivaceus	
Acanthurus triostegus	**Big-Eyes – Priacanthidae**
Acanthurus xanthopterus	ALL
Ctenochaetus spp.	
Naso spp.	**Jacks – Carangidae**
	ALL
Wrasse - Labridae	
Bodianus albotaeniatus	**Soldier/Squirrelfish - Holocentridae**
Coris flavovittata	*Myripristis* spp.
Coris gaimard	*Sargocentron spiniferum*
Iniistius spp.	*Sargocentron tiere*
Oxycheilinus unifasciatus	
Thalassoma ballieui	**Barracuda – Sphyraenidae**
Thalassoma purpureum	ALL

Parrotfish – Scaridae	**Others**
ALL	*Chanos chanos*
	Cirrhitus pinnulatus
Snappers - Lutjanidae	*Monotaxis grandoculis*
Aphareus furca	all Belonidae
Aprion virescens	all Scombridae

Note: other families including Albulidae, Elopidae, Mugilidae, would normally be considered as targeted taxa, but were not recorded during FHUS surveys of 10-50ft deep hard-bottom habitats and are only rarely encountered in that habitat. Kyphosidae and zooplanktivorous triggerfish (*Melichthys* spp.) are also taken by fishers in Hawai'i, but were excluded from analyses due to extremely clumped distributions.

Attachment 8 – Phase 2 Workshop Agendas

South Kohala Conservation Action Plan - Strategy Review Meeting

8 - 9 May 2012 (Tuesday & Wednesday) **8:30am – 4:00 pm**
Anna's Ranch Heritage Center, 65-1480 Kawaihae Road Kamuela, Hawai`i Island

Meeting Objectives

1. **Finalize and prioritize key strategies** for the four priority program areas identified in Phase 1 of this planning process:
    - fisheries
    - invasive species
    - land management
    - community kinship & stewardship

2. **Recommend top priority strategies** for implementation by 2015

Tuesday, May 8 – Evaluate Key Strategies

8:30 am *Coffee, Tea & Light Refreshments – please come early, so we can start on time*

9:00 am **Welcome** **- Chad & Steven**
- Introductions & Expectations
- Meeting Objectives & Agenda

9:30 am **So Kohala Conservation Action Planning Overview** **- Chad & Core Team**
- Participants & Process - Phase 1 & 2
- Results from Phase 1
    - Priority Targets & SMART Goals
    - Priority Management Areas & Key Strategies
- Questions & Comments

10:30 ***Break***

10:45 **Refining Key Strategies** **- Steven**
- Introduction to good strategies
- Review proposed strategies (see doc)
- Quick feedback to Strategy Teams (e.g. major gaps, issues, etc)

11:30 **Strategy Team Breakouts**
- Instructions to Strategy Teams
- Breakout into 4 teams to refine strategies

12:30 pm ***Working Lunch***

1:15 **Team Reports & Group Feedback** (15-20 min each) **- Steven**
- Fisheries
- Invasive Species
- Land Management
- Community Kinship/Stewardship

- Homework: Team incorporates feedback & presents tomorrow morning

2:45 ***Break***

3:00 **Working Criteria to Prioritize Strategies**
- Review draft criteria
- Discussion
- Agree on *short* list of criteria
- Homework: Apply criteria to strategies & present in priority order tomorrow

3:45 **Prep for Next Day**
- Homework: & Action items
- Tomorrow's agenda
- Feedback on today

4:00 ***Pau for Today***

Wednesday, May 9 – Recommend Priority Strategies for Implementation

8:30 am *Coffee, Tea & Light Refreshments – use this time to do homework together*

9:00 am **Quick Review** **- Steven**
- Follow-up on yesterday's feedback
- Day 1 Outputs & Agreements
- Agenda for today

9:30 am **Team Reports & Group Agreement** (10-15 min each)
- Fisheries
- Invasive Species
- Community Kinship/Stewardship
- Land Management

- Agreement on Key Strategies

10:30 ***Break***

10:45 **Prioritize Key Strategies – Round #1**
- Refine criteria, if needed
- Apply criteria to key strategies and/or actions across program areas (small groups)

12:00 pm ***Lunch***

1:00 **Prioritize Key Strategies –Round #2**

- Report results
- Identify TOP key strategies (based on agreement)
- Refine/clarify TOP key strategies (breakout if needed)
  - Add critical actions, time permitting

2:45 ***Break***

3:00 **Priority Recommendations for Implementation**

- Review recommendations for Lead Agency meeting
- Identify action needed to resolve any outstanding issues

3:45 **Wrap-Up**

- Action items
- Phase 2 Meeting & Report Schedule
- Feedback on today
- Mahalos

4:00 ***Pau for Now***

Invited Participants		
Name	**Specialty**	**Agency**
1. Allen Tom (na)	Management	NMS
2. Aric Arakaki*	Community	NPS
3. Bill Walsh*	Reef Ecology	DAR
4. Chad Wiggins*	Project Coordinator	TNC
5. David Chai (na)	Anchialine Pools	HR
6. Elia Hermann	MGT	DAR/NMS
7. Emma Anders*	Community & Marine Resources	DAR
8. Eric Conklin*	Marine Invasives	TNC
9. Flint Hughes	Terrestrial Invasives	USFS
10. Gerry Davis	Coral	NOAA
11. Hudson Slay	LBSP	EPA
12. Ivor Williams (na)	Fish	NOAA
13. Kate Cullison	Marine Resources	DAR
14. Kathy Chaston*	Coral Management and Watersheds	NOAA – OCRM
15. Kim Hum*	Policy & Management	TNC
16. Manuel Mejia*	Community	TNC

17. Melora Purell*	LBSP	KWP
18. Mike Field	LBSP	USGS
19. Rick Gmirkin	Community & Coastal Resources	NPS
20. Doug Harper	Climate Change	NOAA
21. Jean Tanimoto*	Community Resilience	NOAA PSC
22. Steven Victor*	CAP Facilitator	TNC - Micronesia

Core Team in bold * = participation confirmed na = not available

South Kohala Conservation Action Plan (SKCAP)

Lead Agency Meeting

25 – 26 June 2012

Monday, June 25 – 8:30 am to 5:00 pm – Anna's Ranch Heritage Center[3]
Tuesday, June 26 – 8:30 am to 12:30 pm – HPA Village Campus Library[4]

Waimea, Lalamilo,
South Kohala, Hawai`i Island

Meeting Objectives

3. Review priority strategies and actions recommended by the community and technical expert groups (see SKCAP Strategy Workshop Summary).

4. Agree on top priority strategies and actions for implementation.

5. Identify lead partner(s), resources needed and next steps to begin implementation.

[3] 65-1480 Kawaihae Road Kamuela, HI 96743

[4] 65-1274 Kawaihae Rd. Kamuela, HI 96743

Working Agenda

rev: 21 June 2012

Monday, June 25 – Priority Strategies & Actions for Implementation

8:30 am *Coffee, Tea & Light Refreshments – please come early, so we can start on time*

9:00 am **Welcome** **- Chad & Audrey**
- Introductions & Expectations
- Meeting Objectives & Approach

9:30 am **So Kohala Conservation Action Planning Overview** **- Chad & Core Team**
- Participants & Process - Phase 1 & 2
- Priority Targets & SMART Goals
- Recommended Priority Strategies & Actions
- Questions & Comments

10:30 ***Break***

10:45 **Priority Strategies for Implementation: 2012 - 2015** **- Audrey**
- Introduction to SMART strategies
- Review recommended priority strategies
- Agree on priority strategies for implementation

11:30 **Key Actions for Implementation**
- Quick feedback on key actions (e.g. major gaps, issues, etc)
- Instructions to Strategy Teams
- Breakout into teams to update key actions for implementation

12:30 pm ***Lunch***

1:30 **Team Reports & Group Feedback** (15-20 min each) **- Audrey**

3:00 ***Break***

3:20 **Finalize Key Actions for Implementation**
- Team incorporates feedback
- Identify partner(s) ready to lead each action & overall strategy
- Outline partner resources available/needed
- Brainstorm immediate next steps needed (if time permits)

4:30 **Prep for Next Day**
- Tomorrow's agenda
- Roles & resources – quick input
- Feedback on today

5:00 ***Pau for Today***

Tuesday, June 26 – Collaborating on Implementation

8:30 am	*Coffee, Tea & Light Refreshments*	
9:00 am	**Quick Review** & Prep for Today	**- Audrey**
9:30 am	**Team Reports & Next Steps** (15 - 20 min each) • Feedback on key actions & team • Options to fill critical gaps • Next steps to begin implementation	
10:30	***Break***	
10:45	**Team Reports (continued)**	
11:15	Working Together • Structure needed to move forward	
12:00 pm	**Completing the CAP** • Action items from this meeting • Measures Workshop • CAP Schedule • Feedback	**- Audrey & Chad**
12:20 pm	**Mahalo**	**- Chad**
12:30	***Pau for now***	

S Kohala CAP Decision Makers & June 25th, 26th, 2012 Confirmed Participants		
Name	Title	Affiliation
Cindi Punihaole	Public Outreach Coordinator	The Kohala Center
Elia Herman	State Co-Manager	Department of Land and Natural Resources (DLNR) / Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS)
Emma Anders	Planner	Division of Aquatic Resources
John Hoover	Committee Member	South Kohala Community Development Plan Action Committee
Kathy Chaston	Watershed Specialist	National Oceanographic and Atmospheric Administation (NOAA) Coral Reef Conservation Program
Kim Hum	Director	The Nature Conservancy Hawai`i Marine Program
Laila Jayyousi	Soil Conservationist	Natural Resource Conservation Service (NRCS)
Lisa Hadway	Manager	Natural Area Reserves System Hawai`i Branch
Malia Chow	Superintendent	HIHWNMS
Matthew Wung	District Conservationist	NRCS
Rick Gmirkin	Archaeologist	Ala Kahakai National Historic Trail, National Parks Service
Terry Dunlap	Planner	Hawai`i County Planning Department

Core Team in bold * = confirmed as of 23 June

Lead Facilitator: Audrey Newman, Global Island Partnership

Support Team: Chad Wiggins, Nahaku Kalei, Tara Seely – TNC Hawai`i Island Marine

Priority Partners to Brief after Meeting:

- William Aila & Guy Kaulukukui, DLNR
- Eric Co, HKL Castle Foundation
- Jason Philibotte, Hawai`i Fish Trust, Conservation International
- Mike Field, United States Geological Survey
- Hudson Slay, Environmental Protection Agency

Draft Agenda South Kohala Conservation Action Plan Measures Workshop

Workshop Objective – Develop measures to evaluate South Kohala CAP priority strategies against objectives.

Wednesday, June 27 – Strategy Effectiveness Measures

8:30	*Coffee, Tea & Light Refreshments – please come early so we can start on time*	
9:00	**Welcome** • Introduction & Expectations • Meeting Objectives and Approach	- Chad & Annick
9:30	**South Kohala Conservation Action Planning Overview** • Presentation of Strategies, Goals and Objectives (result chains) • Strategy Effectiveness Measures and Status Measures	- Chad & Annick
10:30	*Break*	
10:45	**Strategy Effectiveness Measures** • Instructions: filling the measures table • Breakout into teams to complete measures table for each strategy	- Annick
12:30	*Lunch*	
1:30	**Team Reports & Group Feedback (15 -20 min each)**	
3:00	**Review and Finalize Strategy Measures** • Placing the measures in the result chain • Reviewing links between overlapping strategies	
4:30	**Prep for Next Day** • Tomorrow's agenda • Feedback on today	
5:00	**End of first measures day.**	

Thursday, June 28 – Target & Threat Status Measures

8:30 *Coffee, Tea & Light Refreshments – please come early so we can start on time*

9:00 **Welcome to New Attendees** - Chad

9:15 **Quick Review & Prep for Today** - Annick

9:30 **Status Measures - Introduction** - Annick
- Introduction
- Example and instructions

10:30 *Break*

10:45 **Status Measures – Development** - Annick
- Breakout groups according to threats & targets

12:30 *Lunch*

1:30 **Breakout Groups Continue**

3:00 *Break*

3:15 **Team Reports and Feedback (15 – 20 minutes each)**

4:00 **Finalizing Status Measures** - Annick

4:30 **Closing, Feedback and Mahalo** - Chad

5:00 ***Measures Workshop adjourned***.

S Kohala CAP Measures Workshop June 27-28, 2012 Confirmed Participants	
Name	Affiliation
Aric Arakaki	Ala Kahakai National Historic Trail, National Parks Service
Cynthia Grace-McCaskey	NOAA Coral Reef Conservation Program (CRCP)
David Chai	Hualalai Resorts Natural Resources
Emma Anders	Division of Aquatic Resources
Ivor Williams	National Oceanographic and Atmospheric Administation (NOAA) Coral Reef Ecosystem Division (CRED)

Lisa Marrack	University of California, Berkeley
Paul Jokiel	University of Hawai`i
John Pipan	Watershed Restoration Specialist