South Kohala Coastal Partnership

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South Kohala Coastal Partnership Coordinator

Coral Reef Working Group meeting
July 2014
Overview

- Updates on current projects
  - Preliminary results
    - Timeline
    - Deliverables
- Upcoming projects
  - Timeline
  - Deliverables
- Potential projects
- Discussion
Stream Corridor Assessment

- Sustainable Resources Group Intrnl Inc. (SRGII)
- $45,200
- Waiʻulaʻula watershed
- Project timeline: Ending Sept. 2014
- Preliminary results:
  - Monitoring 10 sites
    - Photo documentation, Erosion pin installation
- Outcomes:
  - Recommendation for stream corridor setbacks and remedial actions.
  - 5 sites selected for Department of Health Clean Water Branch Grant funding
Ungulate Exclusion and Sediment Reduction

- Kailapa Community Association
- $93,995
- North of Kawaihae and Honokoa Gulch
- Project timeline: Ending Sept. 2014
- Preliminary results:
  - 13 acre fenced area to exclude goats
  - Re-vegetating with native plants (some natural)
  - Built a sediment check dam to reduce and monitor runoff
- Outcomes:
  - Engaged community involved with watershed management
  - Reduction of LBSP

Partners: Kohala Watershed Partnership, Waikoloa Dry Forest Initiative, Ala Kahakai Trail Association
Sediment check dam community work day – June 6, 2014
With help from Kohala Watershed Partnership crew, and Kailapa community volunteers.
Coral Health and Land Based Sources of Pollution

- The Nature Conservancy
- Puako and Mauna Lani area
- $36,933
- Project timeline: Ending Sept. 2014
- Preliminary results:
  - Monitoring 12 sites
    - Water quality
    - Coral health
- Outcomes:
  - Evaluate impacts of LBSP on coral reefs in the area
  - Map of coral reef health
  - Describe patterns
  - Prioritize corrective action
- Partners: University of Hawaii at Hilo, Puako Community Association
ion and low coral cover.
Hawaiian Moon Fishing Calendar

- UH Manoa, Fisheries Ecology Research Lab
- Multiple locations
- Project timeline: Sept. 2014 +
- $29,885
- Preliminary results:
  - Spawning seasons are highly variable for Manini.
  - Size at maturity was significantly different between locations but above the 5” legal size limit at all locations.
  - Over 450 fishermen have participated.
  - Over 1,960 fish from 39 species analyzed.
  - Received West Marine Conservation Grant to help motivate fishermen.
- Outcomes:
  - Pono fishing practices identified by each community.
  - Community fish spawning moon calendars developed.
  - Comparison of spawning seasons at multiple sites.
Coral Settlement and Environmental Conditions

- University of Hawaii, HIMB
- $59,929
- Project timeline: January 2014 - January 2015
- Preliminary results:
  - 38 monitoring sites
  - Recruitment arrays deployed in April/May
  - Water quality data
- Outcomes:
  - Reports and publications:
    - Determine efficacy of land restoration
    - Understand the potential for marine ecosystems to recover
    - Assess the threat of mud deposits on coral reef ecosystems
Ongoing projects, education & outreach

- Developing and implementing communication plan
- Sharing updates at conferences, meetings and online
- Monitoring projects and providing assistance
- Facilitating site visits with partners and project development
- Helping with Malama Aina work days –
  - Beach clean ups, native planting, watershed restoration
S.Kohala projects & activities – NOAA habitat blueprint

Site visits & local stakeholder meetings
- Habitat blueprint team
- NOAA fisheries
- Pacific Services Center
South Kohala Mapping Project

- NOAA Habitat Blueprint Focus area
- Collaborative data sharing
- Online Tool for resource managers and community
- NOAA, Ala Kahakai National Historic Trail Association, The Nature Conservancy, Natural Resources Conservation Services, Hawaii Wildfire Management Organization, UH Sea Grant, Division of Aquatic Resources, Hawaii County
- Available – September 2014
Upcoming projects
Objective: Reduce storm water run off and non point pollution at 5 sites by implementing best management practices along 11,100 feet of the stream riparian corridor.
Install BMPs along stream riparian corridors

- Rain gardens
- Vegetative planting
- Geotextile erosion mats

Post Fire Recovery and fuels management – Hawaii Wildfire Management Organization (HWMO)

Community Workshops & educational opportunities

Partnerships: Queen Emma Land, Parker School, Kohala Watershed Partnership, HWMO, Waimea Trails and Greenways, Waimea Outdoor Circle, DOFAW, Waimea Center, PADTI and more.

Project funding is from Department of Health Clean Water Branch – Watershed Implementation Grant
Coastal Monitoring Tool Kit (C-WATER KIT)

- NOAA Marine Education and Training Grant
- $15,000
- Estimated to start: July 2014 – Sept. 2015
- UH Sea Grant
- Two tool kits: GPS, Camera, Nutrient test kits, YSI, multi-parameter meters, EOR info.
- Community awareness and Citizen Science training
- Online data portal
  - PACIOOS
- Additional data collection
  - Liquid Robotics

Spatial distribution and effects of sewage on Puako’s coral reefs

- Drs. Tracy Wiegner, Jim Beets, Steven Colbert, and Jason Adolf & Puako Community Association
- July 2014-Sept. 2015
- Water quality and nutrient studies, dye tracers
- Provide supporting data for cesspool replacement efforts
Mahalo from the South Kohala Coastal Partnership

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Strategies & Objectives

1. Community Partnerships
   Active communities engaged in managing all six target coastal resources throughout S. Kohala incorporating kinship into their approach by 2015.

2. Community Co-Managed Areas
   Work with communities to establish at least one Community Co-management Area (CCA) in S. Kohala by 2015 and initiate at least two additional areas by 2020.

3. Fisheries Management
   Implement fisheries management actions that ensure healthy coastal resources through supporting pono (sustainable and appropriate) fishing practices, and increase compliance by 50% by 2020.
Strategies & Objectives

4. Sediment Reduction

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

5. Invasive Species

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.

6. Additional threat analysis

Understand and quantify effects of specific additional threats on CAP targets by 2020.
<table>
<thead>
<tr>
<th>Priority Level 1 Projects (1-5 years)</th>
<th>Priority Level 2 Projects (6 to 10 years)</th>
<th>Priority Level 3 Projects (11-15 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR-2: Fence riparian areas to exclude cattle</td>
<td>NUTR-1, SED-1: Assist Farmers in Lālāmilo Farm Lots with Conservation Plans</td>
<td>SED-7: Identify and revegetate bare land in watershed</td>
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<td>NUTR-3: OSDS education and outreach</td>
<td>NUTR-4: Incorporate point-of-sale inspections of OSDS</td>
<td>STORM-4: Upgrade existing runoff control structures</td>
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<td>SED-2: Extend Waimea Irrigation System to lower watershed</td>
<td>SED-6: Remove goats below Queen K</td>
<td>STORM-5: Develop operation and maintenance guidelines for County roads</td>
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<td>SED-3: Divide large paddocks in grazing areas</td>
<td>FIRE-2: Fence large grass-dominated area below Queen K to manage fine fuels</td>
<td>EDU-1: Develop/ adapt educational materials</td>
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<td>SED-4: Assess streambank erosion</td>
<td>FIRE-5: Construct and maintain fuel breaks</td>
<td>EDU-2: Provide on-the-ground service learning opportunities</td>
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<td>SED-5: Remove goats between rock wall and Queen K</td>
<td>STORM-2: Dry well insert installation and maintenance program</td>
<td>ADMIN-1: Wai’ula’ula Watershed Coordinator</td>
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<td>FIRE-1: Fence large grass-dominated area above Queen K to manage fine fuels with cattle grazing</td>
<td>STREAM-1: Convert marginal grazing lands into native vegetation via CREP</td>
<td>MONIT-1: Implement monitoring program</td>
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<td>FIRE-3: Update fire resources maps</td>
<td>STREAM-3: Restore riparian areas within the watershed</td>
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<td>FIRE-6: Develop post-fire restoration manual</td>
<td>AQU-1: Remove illegal diversions</td>
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<td>STORM-1: Survey and line catch basins within the watershed</td>
<td>AQU-2: Evaluate need for specific instream flow standards</td>
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<td>STORM-3: Stormwater educ and outreach program</td>
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<td>STORM-6: Develop &amp; implement LID outreach program</td>
<td>AQU-5: Protect priority instream perennial pools</td>
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<td>STREAM-2: Educational events/projects to educate about riparian buffers</td>
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