

COMMUNITY BASED PARTICIPATION AND PROCESS

Sara Peck, UH SeaGrant College Program Coastal
Resources Extension Agent

August 27, 2008

Coral Reef Task Force Special Session Managed Areas



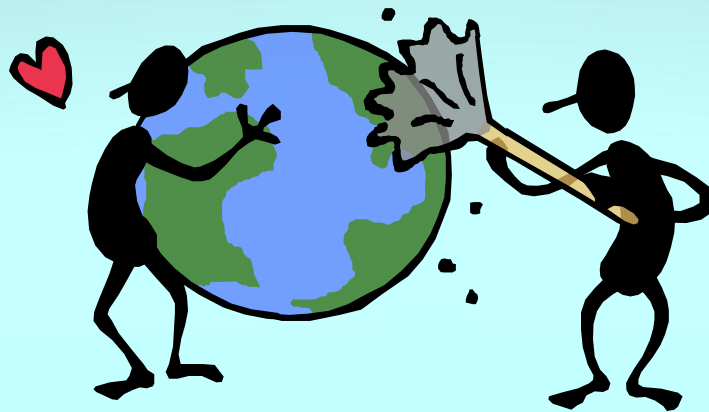
**What Does It Take To Change a
Resource Management
Paradigm?**

**More Than
a Village**

University of Hawaii Sea Grant College Program

GOAL

To raise the knowledge and understanding of how land and ocean uses impact all of the island's natural resources including land flora and fauna and marine and coastal ecosystems.



Link Mauka to Makai

Coastal and Ocean Literacy

NOAA and Sea Grant National/Hawaii Initiatives

Engage the Public in Outreach/Education

- **Partners – NGOs, Agencies, Policy Makers**
- **Interest Groups**
- **Communities**
- **Free Public Education Presentations**
- **Volunteer Programs**
- **Invited Presentation**
- **Major Community Events**



ENGAGE

Youth

School Groups

Scouts

Adults

Interest Groups

Communities

Businesses

COLLABORATE



ReefTalks Est. 1994



11/yr , 25-120 attend per talk

Taped & Edited - Public TV 4,000x6= 24,000/Talk

Alien: *Gracilaria salicornia*



Found on 3 islands

Reproduction: vegetative

Fish don't prefer to eat it

Moderate response to nitrogen

Once established—very competitive-3-d growth form, not space limited

Pristine reefs may be at risk

Very abundant in some areas—most dominant species in Waikiki & south Kane'ohē Bay

Out-competes native species

Overgrows coral

Eradication???

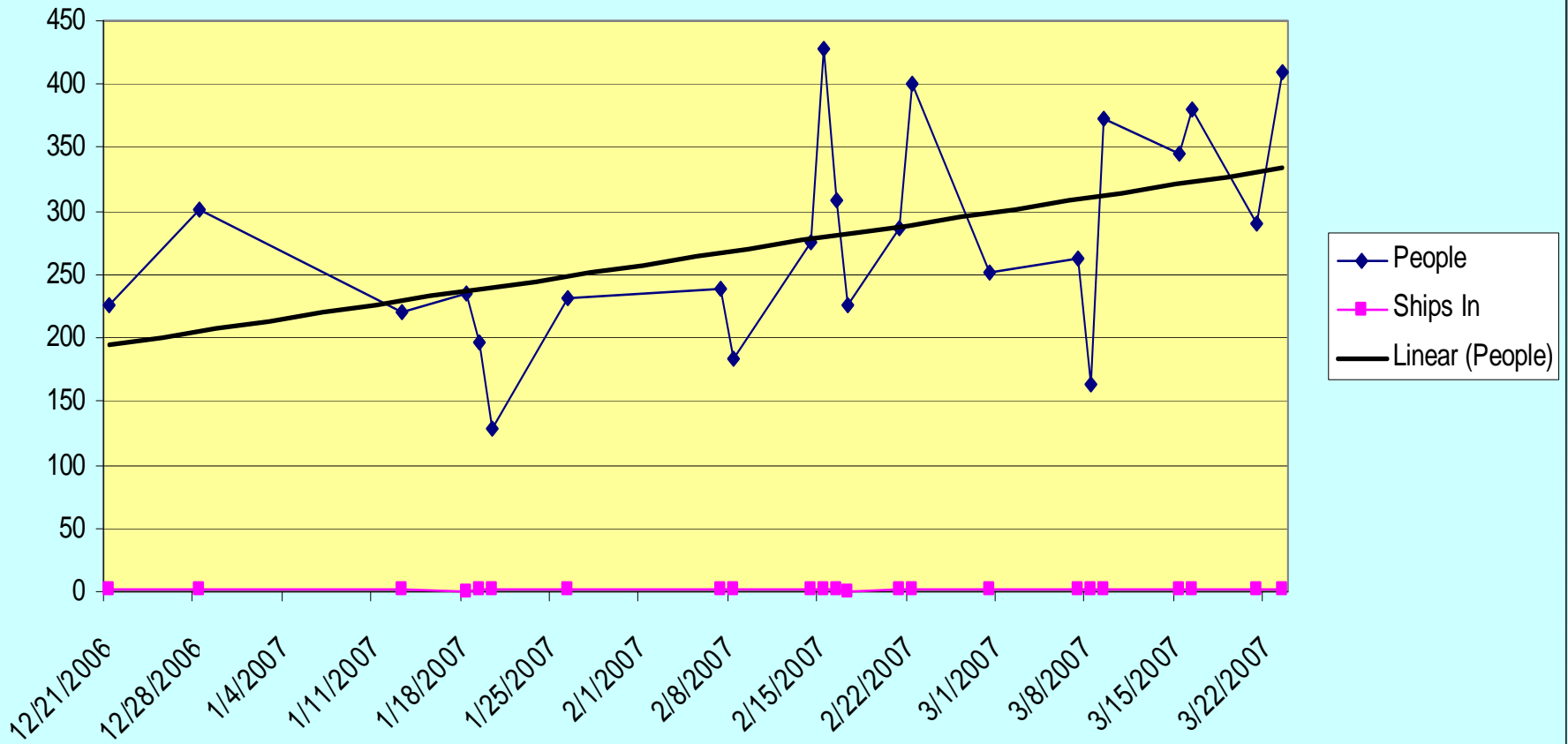
**THE SHOCKING
FACT IS WE HAVE
75 TO 80% FEWER
FISH THAN WE DID
100 YEARS AGO!**



Figure 13-The stocks of Hawaiian coral reef fish in the MHI are at most 20 to 25% of what they were 100 years ago.

Human Use @ Kahalu'u Beach Park

Kahalu'u Counts @ 10:30am 2006 - 2007





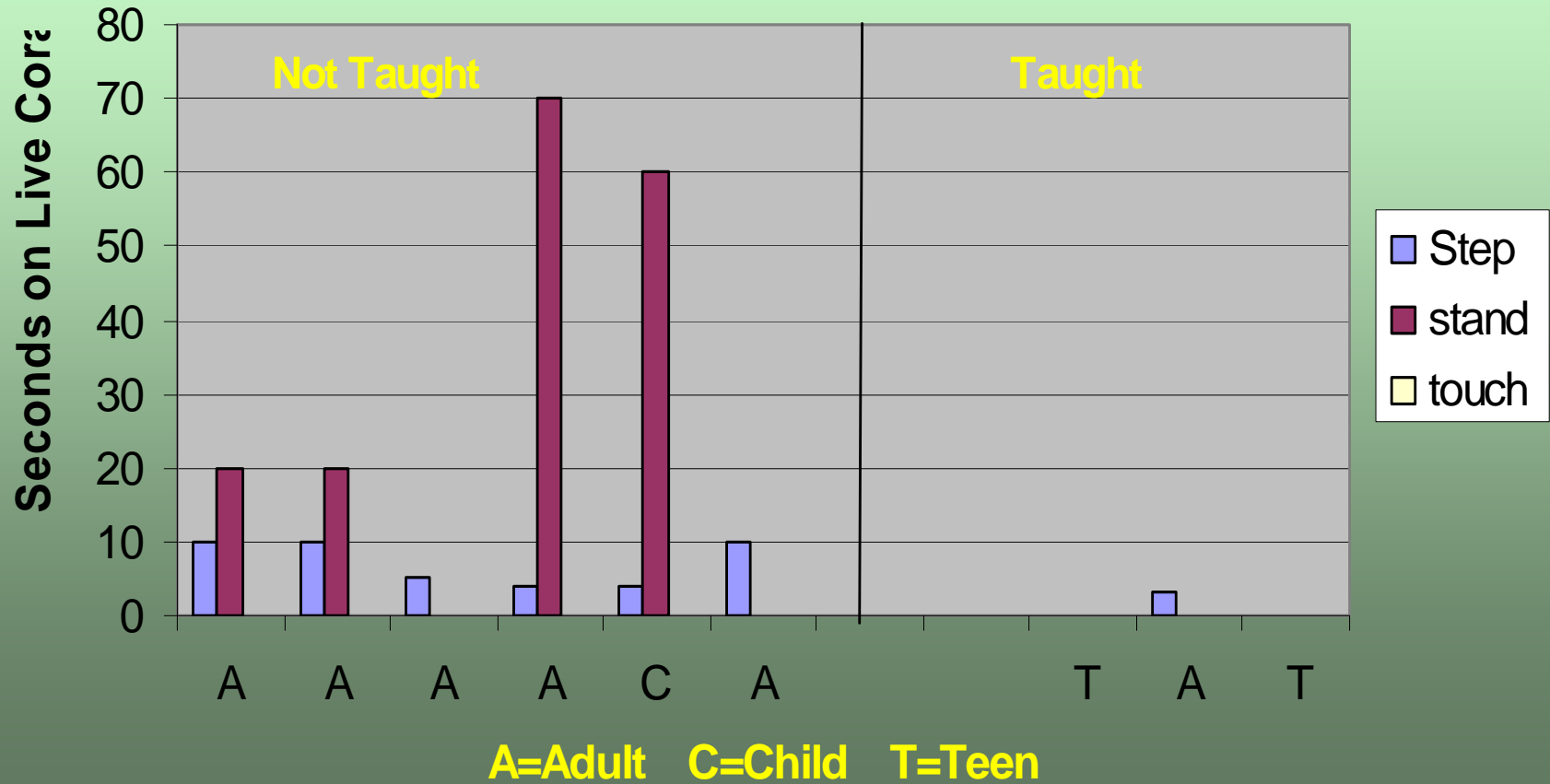
ReefTeachers at Kahalu'u

Est. 2000



**Sea Grant & Kolaha
Center Partnered to
Expand the Reef
Teacher Program
2007.**

ReefTeacher Effectiveness Not Taught vs Taught April 07



ReefWatcher Program

- Identify data needs
- Community members are trained to develop and carry out survey protocols to meet those needs
- Provide ongoing education opportunities

Est. 1998

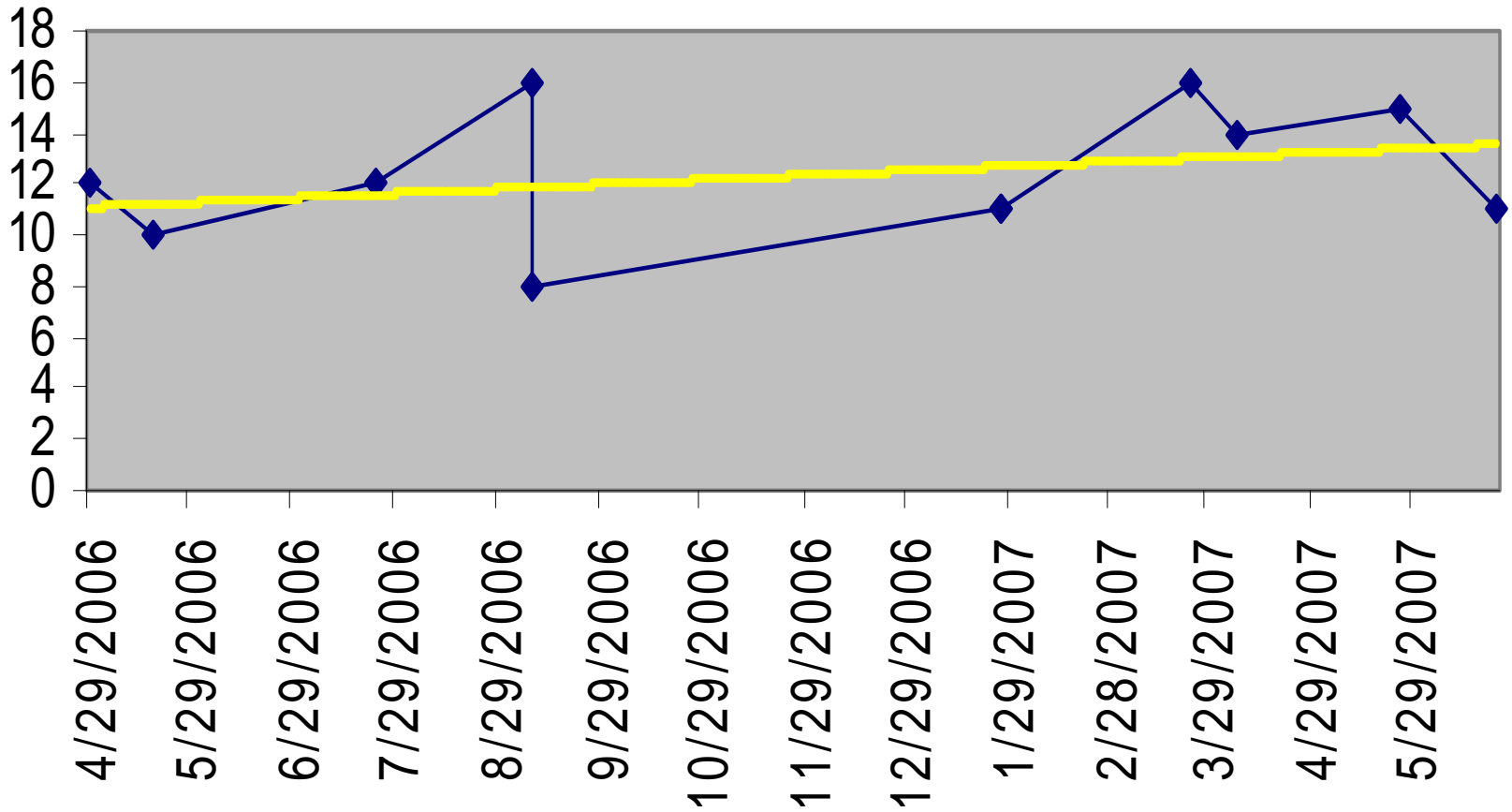


HUMAN IMPACT SURVEY RESULTS

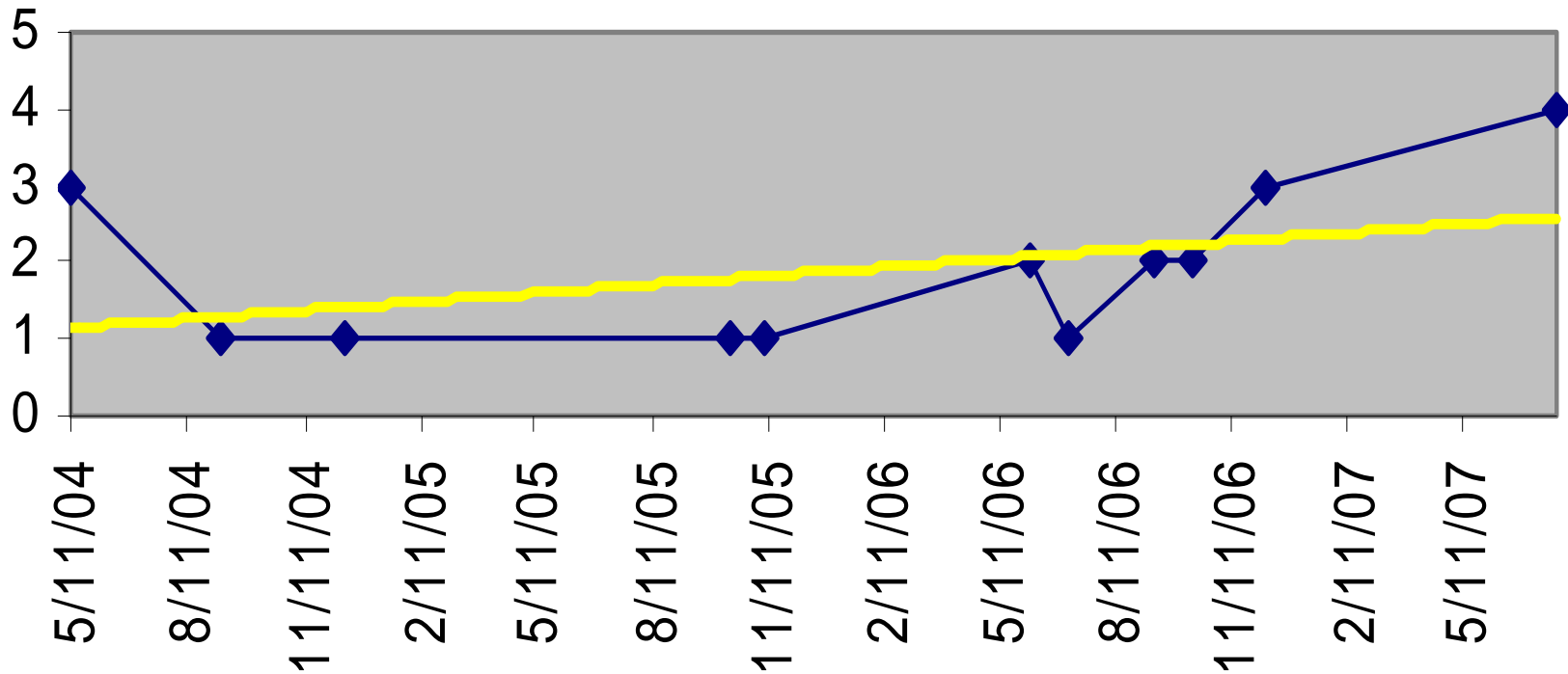
- Human Impact on Substrate - SCUBA
 - Impacts per diver = 3.1 (233 divers observed)
 - Impact categories and location use analyzed
 - Ecological briefings rated



Yellow Tang Population Observed by Barbara Kuehner at Kailua Bay (Swim Lane)



Orangespine Surgeon Population Observed by George Wilson at 4 Mile



High School Students Urchin Surveys

- **Contribute to the existing database**
- **Learn why we use databases**
- **Learn scientific methods**
- **Manage marine resources**



Coral Spawning Events 2008

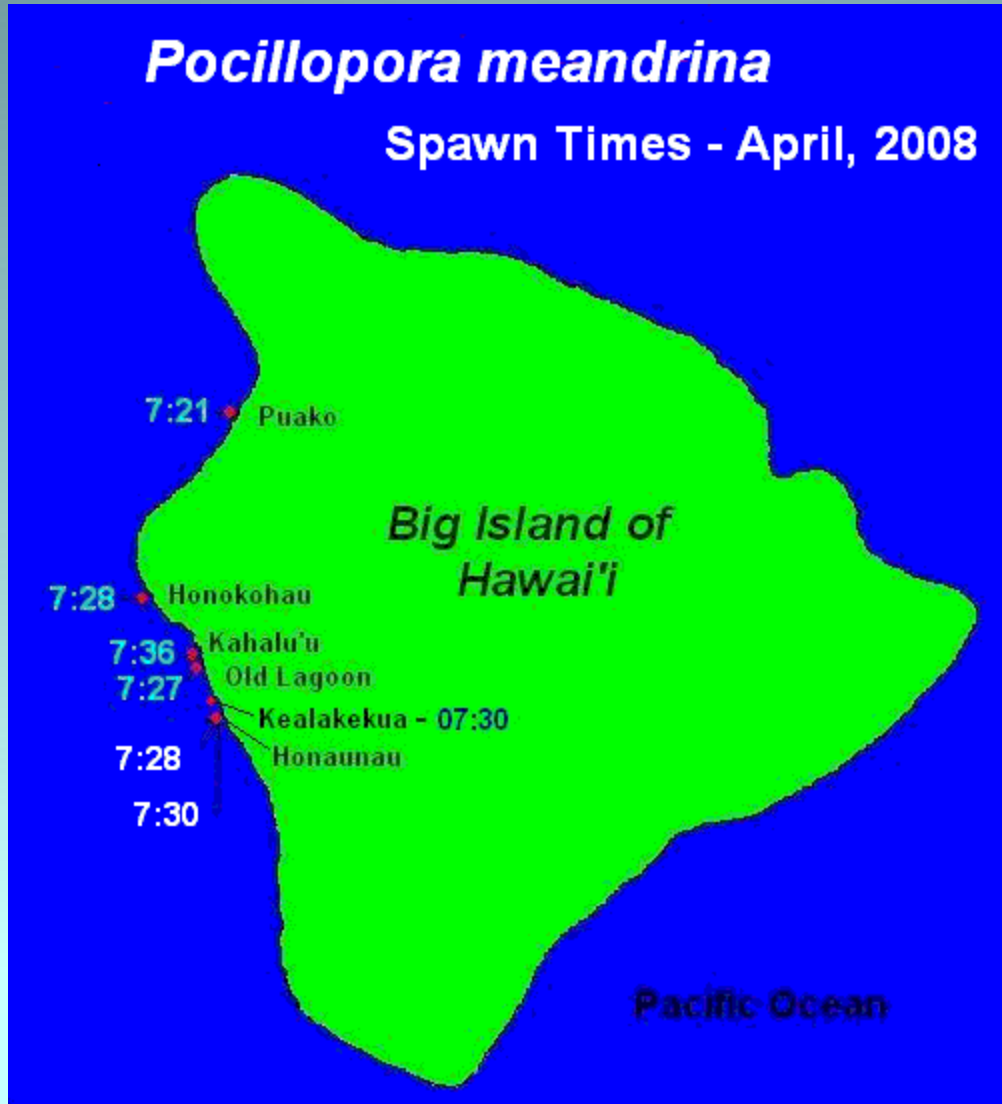
Pocillopora meandrina

**Observe
Spawning**



Pocillopora meandrina

Spawn Times - April, 2008



ReefWatcher
Spawning
Observed

April
May

June

Dana Riddle photo



Family Event = 8th Annual Coral Reef Awareness Day

Policy Maker
Virginia Isbell



800+/- Attended

Aloha Kai Teens Teach Elementary Students to Understand the Importance of Our Ocean



Girl Scouts Training to be ReefTeachers





What Conditions Produce Action ?

**Attract
Broad Community and
Influence Political Will**

West Hawai`i Regional Fisheries Management Area

West Hawaii Today, Thursday, July 21, 1988

There's not much left
at Mahukona

**Fish Coalition threatens
collectors with total ban**

**Tropical fish collecting
Must be banned now**

The onus is on fish collectors to
Police themselves – or else...

Limits being set

Divers, collectors at odds over
Decline in K

The war isn't over

CONFLICT!!

now developing
Hawaii fishery

Fishes disappearing around pier

Management area

Collectors, fishermen
At odds over harvest

**Work begins on aquarium
fish collection ban**

...Fishing restrictions still to be decided

"EXTINCTION-YEAR 2000"

**Study finds fewer fish
at collection sites**

Dead Aquarium Fish in Dumpster



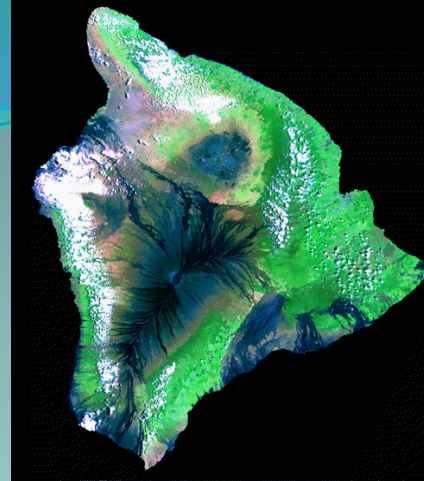
The Lost Fish Coalition



**Within 6 Months Over 4,000 Signatures to BAN
Aquarium Fish Collection**

Act 306 (1998)

Established the West Hawaii Fishery Management Area



- Establish No Aquarium Fish Collecting Areas <30%
- Establish No Gill Netting Areas
- Establish a Mooring Buoy System
- Establish No Take Areas

Ensure substantial involvement of the community in resource management decisions

First Public Hearing for Aquarium Rules

PEOPLE



April 28, 1999 Kailua-Kona

The Last Piece in the Puzzle!
Enforcement to Protect Our Reef Fish!
Come to the

Public Hearing

to Support the Enforcement Package
for Our Fish Replenishment Areas!

At the big hearing we had in 1998, the package of enforcement measures got left out of the rules. Now we can put them back in! Come to the public hearing and strengthen the FRAs by ensuring enforcement.

Support the amendments to Ch. 13-60.3!

Thursday, Dec. 9, 2004 6:00 PM

Kealakehe High School Cafeteria

(mauka of Honokohau Harbor)

For more information, go to www.lostfishcoalition.org

Missed the Public Hearing?

You Can Still Support Us!

**The DLNR Will Accept Public Testimony Until Dec. 24!
You will help the reefs by writing testimony in support of:**

All the enforcement measures and amendments
to be added to Ch. 13-60.3,

Adjusting the seaward boundaries of all protected
areas so they are uniform (Ch. 13-58), and

Allowing Hawaiian Kupuna access to the Old Kona
Airport MLCD for subsistence harvest of wana (Ch. 13-37).

SEND YOUR SIGNED AND DATED TESTIMONY TO:

Department of Land and Natural Resources
Division of Aquatic Resources
1151 Punchbowl St., Rm. 330
Honolulu, HI 96813

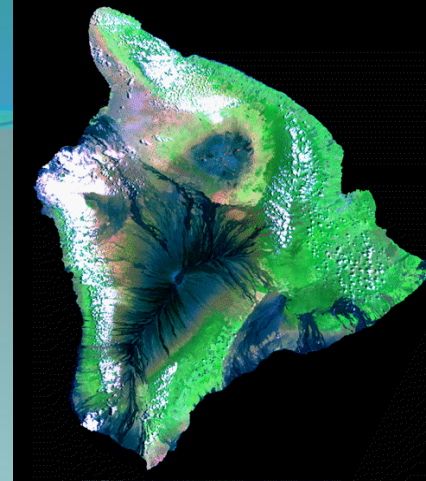
OR FAX TO: 808-587-0115

*Mail Early
to Avoid
Xmas Rush!*

FOR MORE INFORMATION GO TO WWW.LOSTFISHCOALITION.ORG

Act 306 (1998)

Established the West Hawaii
Fishery Management Area



HOW WERE WE GOING TO DO THIS?

- Establish No Aquarium Fish Collecting Areas <30%
- Establish No Gill Netting Areas
- Establish a Mooring Buoy System
- Establish No Take Areas

Ensure substantial involvement of the community
in resource management decisions

UH Sea Grant and DAR Tasks

- Develop PR and Membership Strategy
- Provide a Compiled WHFC Resource Background Manual
- Ensure WHFC has latest Information
- Provide Facilitated Leadership Training
- Dev. Effective Cross-Cultural Method for Conflict Resolution and Decision Making
- **EDUCATE everyone with scientific and anecdotal information**



Balanced Interest Groups And Resource Users

Council Membership



Criteria

- Stakeholder
- Geographic
- Ability to work with a group
- Commitment

Teresa Nakama
Glennon Gingo
Matthias Kusch
Lisa Choquette
Bob Owens
Jim Medeiros
Stan Lavine
Richard Prohoroff
Wayne Leslie
Jim Passon
Ed Aupuna
Andrew West
Fred Duerr
William Talley III

Hanna Springer
Dickie Nelson
Rick Gaffney
Mike Nakachi
Doug Robbins
Luna Haniao
Al Escention
Pete Basabe
Tony Nahaky
Damien Kennison
Dave Hoopaugh
Ernest Kanehaieu
Josephine Komoku

David Dart

Neil Dart

Ted Hardie

Junior Kanuha

Kalini Forcum St.

Joseph Stewart

George Paleudis

Bob Hajek

Zachary Caldwell

Kalani Forcum Sr.

Gill Kahele

Jeffrey Lorance

Donna Goodale

Doug Herkes

Kai Hoover

Kavika Leicher

Dale Sarver

Mike Henshaw

Nick Craig

Steven Meyer
Paul Warren
Ernest Kanehailua
Mike Nakachi
Hannah Springer
Dickie Nelson
Rick Gaffney
Steven Meyer
Paul Masterjohn
Leonard Torricer
Bill Stockley
Rob Shallenburger
Vern Yamakaka
Pedro Padillio

Tina Owens
Scott Brien
William Rickarts
JT Rosario
Duane Erway
John Kellum
Charlie Young
Ex-officio:
Dr. Bill Walsh DAR
Sara Peck UH Sea Grant
Scott Shero-Amba DOCARE
Brent Carmen DAR
Dan Mersburg DOBOR
Justin Viezbekie, NOAA
Jan Marsh DAR
Laura Livnant DAR
Kater Bourdon UH Sea Grant

??!!!



<http://loschistes.com>

Decision Making Process Includes

- 1. Define the issue(s).**
- 2. Educate ourselves: gather information.**
- 3. Hear all sides: area meetings, identify and invite stakeholders to WHFC meetings.**
- 4. Develop consensus.**
- 5. Include DOCARE in the conceptual phase and the writing/wording of the recommendation.**
- 6. Communicate to all interested persons, circulate the final recommendation..**

West Hawaii Fishery Council

Community Based Marine Resource Management Volunteer Advisory

- **FIRST & ONLY Fish Replenishment Areas (FRAs)**
- **First Gill Net Rule**
- **First Spearfishing with SCUBA Ban Proposed**
- **Conflict Resolution**
- **Working on Limited Entry (AQ Fish Licenses)**



WHFC-Solution or Problem ...continued

Barage of
Misinformation
and obfuscation!

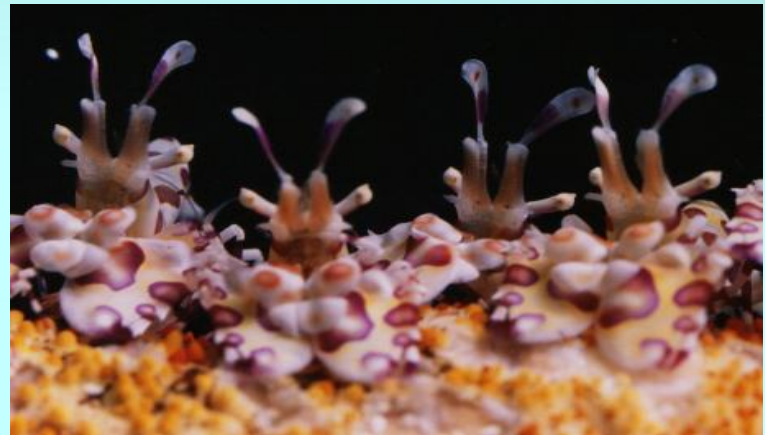
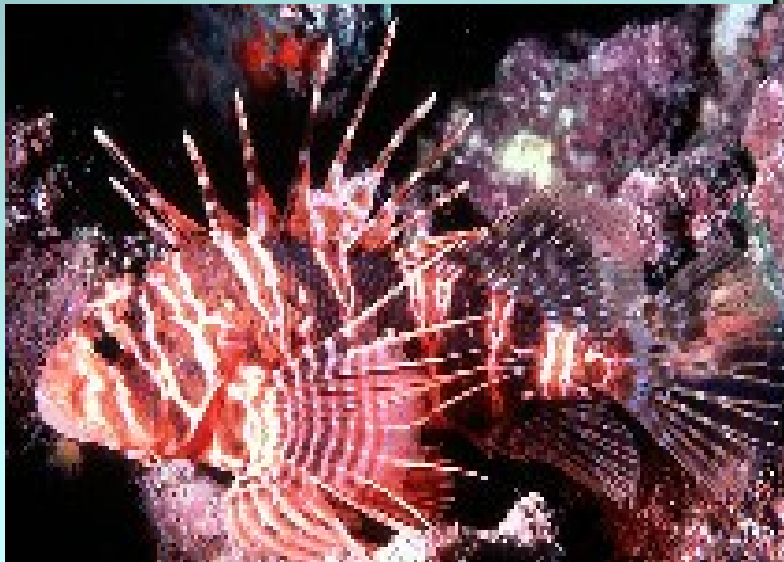
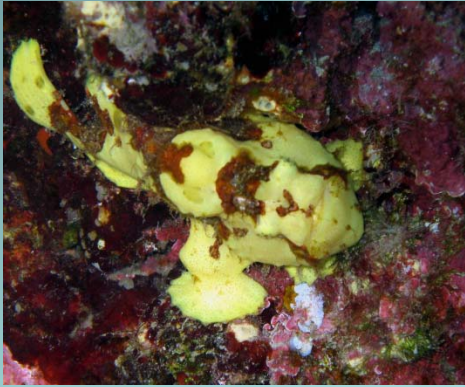


Smoking Ban at Kahalu'u Beach Park

West Hawaii Fisheries Youth Council



Species of Special Concern



Airing Multiuse Conflict Between Fish Collectors and a Subdivision Community



West Hawaii Fisheries Council est. 1998



īMilolīī

Kohala

Kawaihae Local Resource Council

10 Meetings Per Year/ 4.5 Years





Kawaihae Harbor and Community Issues

Ours ...

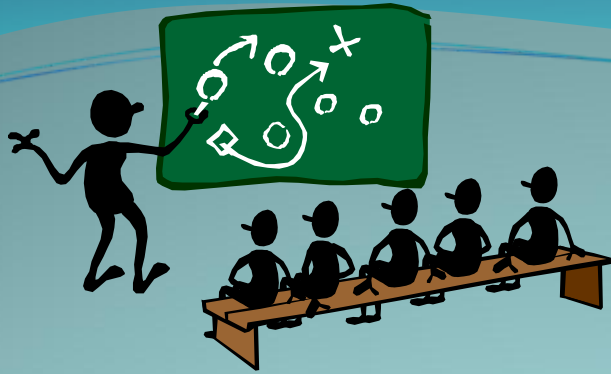


... To Malama

Mahalo to: Harold K.L.Castle Foundation, Hawaii Community Foundation, Malama Kai Foundation, The Fish and Wildlife Foundation, Hawaii County, The Kohala Center, CZM, HCRI, Bishop Holdings, DLNR, Atherton Foundation, UH Sea Grant College Program, SOEST, CCN, TNC



END



Objective 1: Throughout the year, six or more free, educational public information events on topics relating to the Coastal Communities and Economies theme will be scheduled.

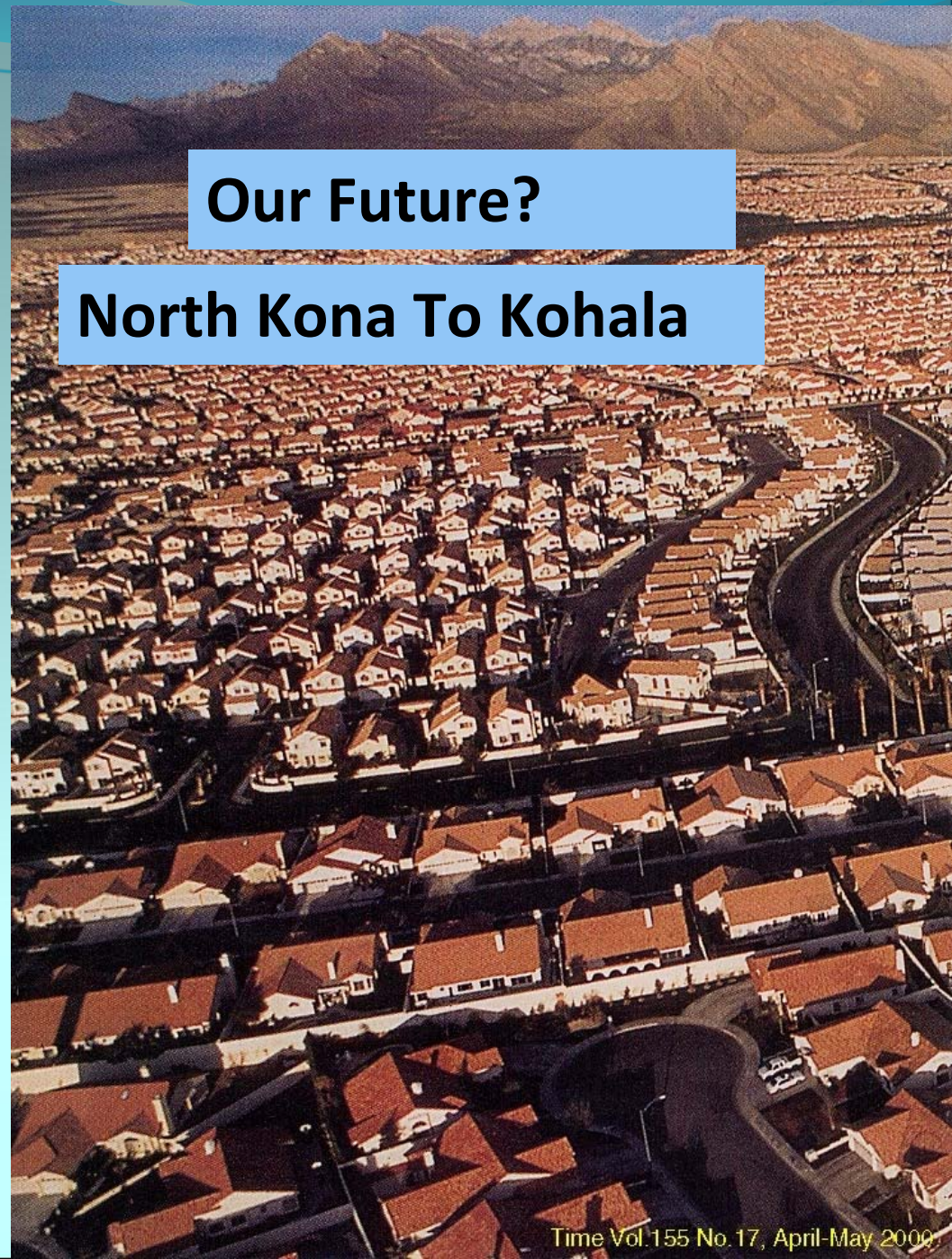
Hawaii Island residents will also be informed on priority topics identified by Hawaii County by providing resources, workshops and informational meetings as defined by the HCRC which generally include: community disaster preparedness, leadership development, identifying community needs and building community capacity

- NEED
- Title
- ReefWatcher Data
- More Pics of WHFC
- More Pics of ReefTeach

Address Land Use Issues SPRAWL Rural & Urban

- Obesity
- Diabetes
- Heart Disease
- Asthma
- Depression
- Childhood obesity
- Diabetes
- Bicycle accidents
- Isolation

- Overall productivity
- Quality of Life



Our Future?

North Kona To Kohala



**South Kona 2007's
Fifty Year Flood**

Cruise Ships Dwarf Kailua-Kona Village

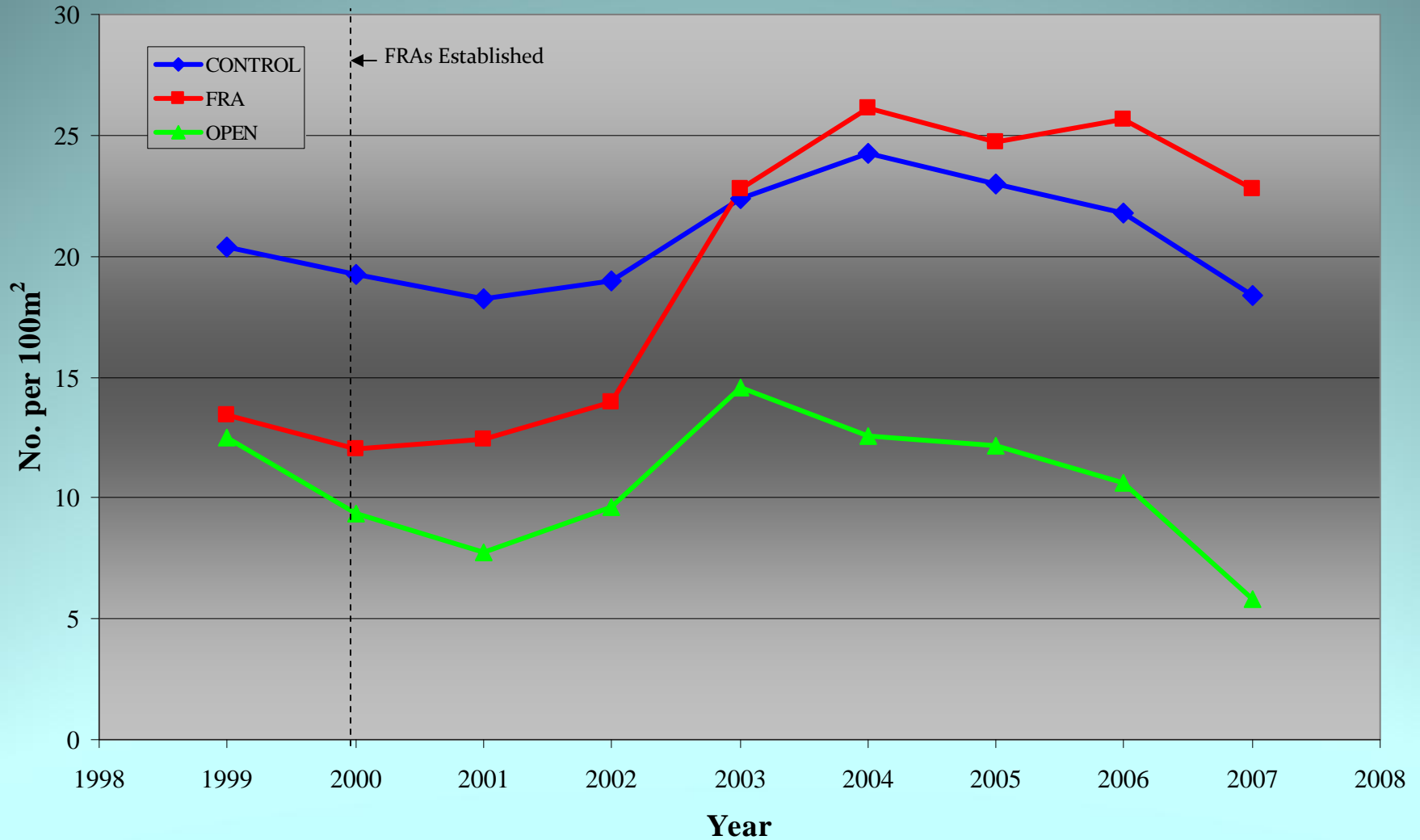


Management of the West Hawai`i Aquarium Fisheries



Photos: Jan Dierking

Yellow Tang (excl YOY) Annual Totals



Created Local Resource Councils



Miloli'i
Hawaiian
Fishing Village



Kohala & Kawaihae

Kawaihae Local Resource Council



Aquarium Fish Collectors



**Dive Operators , Recreational
Users and Fishes**

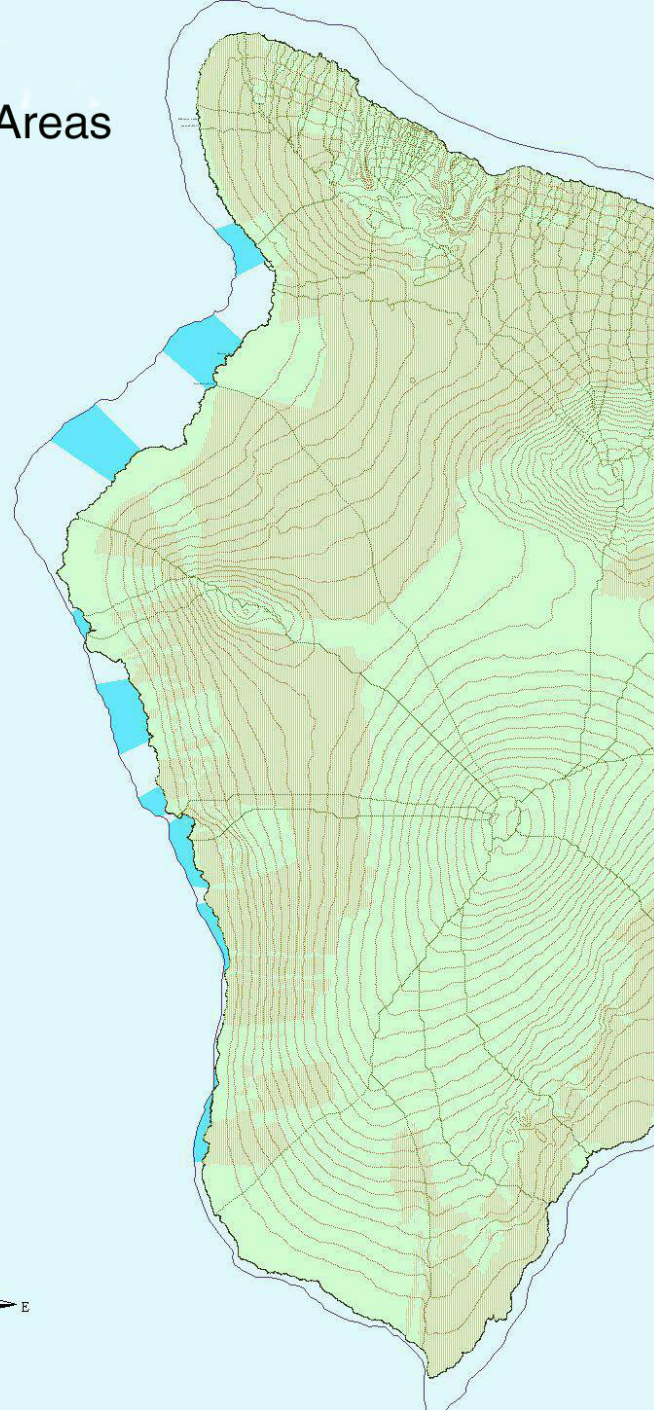


West Hawai'i Fish Replenishment Areas (FRAs)

 100 Fathom Contour
 Fish Replenishment Areas



**Nine FRAs Were
Agreed Upon 34.5%
Of the West Hawaii
Regional Fishery Area**



Map Projection: UTM Zone 4 1:600,000
Data Provided by: State of Hawaii
Map Created by: Lisa Wedding 6/27/02



 8 0 8 16 Miles

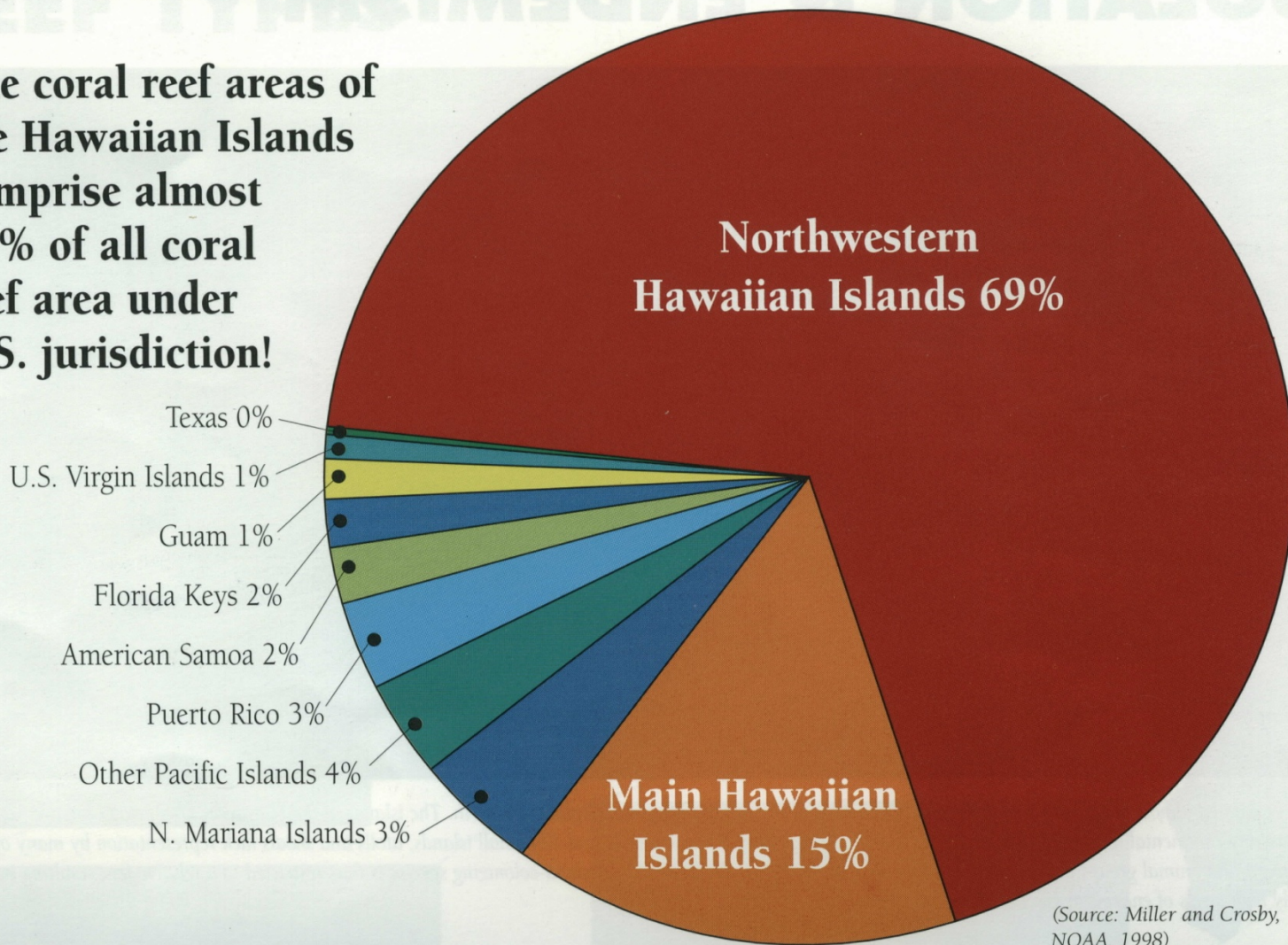
No Aquarium Collecting

No Fish Feeding

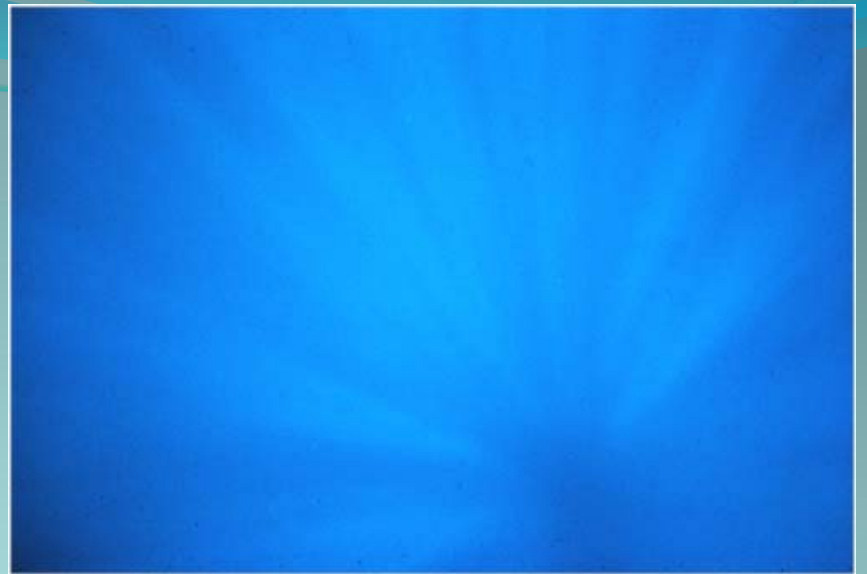


U.S. CORAL REEF AREAS

The coral reef areas of the Hawaiian Islands comprise almost 85% of all coral reef area under U.S. jurisdiction!



(Source: Miller and Crosby, NOAA, 1998)



Northwestern Hawaiian Islands

Main Hawaiian Islands

Our Aim as Reef Teachers...



Educate the public about the reef environment so they can enjoy it without damaging it!