

From Mountain Tops to Coral Bays...

St. John, U.S. Virgin Islands

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Building Association
and
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St. John-USVI

Virgin Islands Coral Reef National Monument & National Park Boundaries



-  Virgin Islands National Park
-  Virgin Islands Coral Reef National Monument

1000 0 1000 2000 Meters

1 0 1 2 Miles

Aerial Photo Source:
1999 NOAA/NOS/NOAA/
Biogeography Program
NOAA Aerial Photos
Map Developed at
Virgin Islands
Biosphere Reserve Center
7/6/2004
Christy Loomis

Virgin Islands Coral Reef National Monument Boundary

What's Happening in Coral Bay?

Reef sedimentation, rapid development, poor site planning and construction practices, enforcement/status quo issues, deforestation/habitat loss, poor understanding of connectivity as landowners build “dream homes”

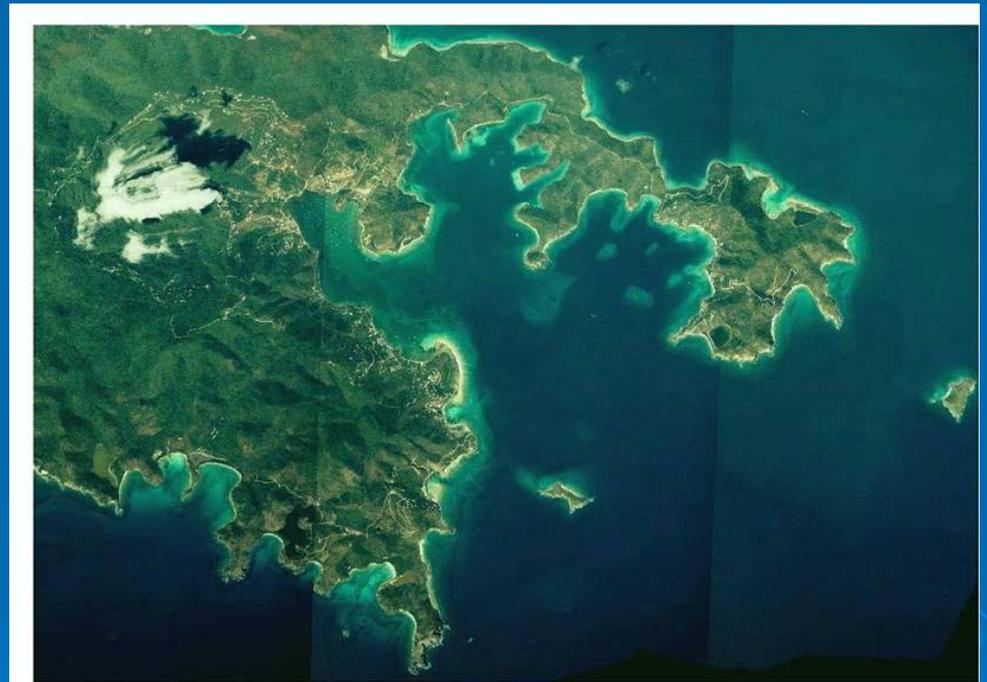
- Unpaved Roads, changing natural water flows, 100-year rainfall events more often, flooding

Coral Bay Community Council's (CBCC) : FOCUS
ROADS, GHUTS

Island Green Building Association (IGBA): FOCUS ON
CONSTRUCTION PRACTICES

Coral Bay, St. John

- Remote 3,000-acre steep hills watershed
- APC, coral, sea grass, shark nursery, mangroves
- Background: Lack of govt. knowledge, under the radar, little regulatory protection
- Need for local resources for education, guidance and support.





**Endangered Elkhorn Coral
in Coral Bay, 13 years ago.**



Reefs smothered by sediment – 2 years ago.



Coral Bay after major rainfall

CBCC's Coral Bay Watershed Mgt Project: Stop the Plumes!

EPA –CARE \$300,000 for Planning and Design, and Partnership Relations: *Minimizing Environmental Toxins (Stormwater Engineer, Env. Consultant)*

NOAA Recovery Act, \$1.4 M to manage for VI RC&D to implement construction of BMPS to *minimize main toxin: Sedimentation into Shoreline and Marine ecosystems*. 18 locations improved.

Numerous small grants to implement projects, and local govt. participation

Volunteers, HOA funding and donations

Methods: Sediment basins, detention ponds, water bars, swales, curbs/diversions, geotextiles, rock basins, rain garden, revegetation

Watershed Mgt Plan Actions

11 Recommendations:

- 1. Direct On-site Technical Assistance
 - 2. Planning Processes - Infrastructure
 - 3. Repair Erosion and Drainage Problems
 - 4 to 6. Better Regulations and Enforcement
 - 7. Protect Wetlands and Shoreline
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Watershed Mgt Plan Actions

- 8. Implement Demonstration Projects
 - 9. Detect and Eliminate Illicit Discharges
 - 10. Adopt Steep Slope Building Standards
 - 11. Update Mapping/GIS for Watershed
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Plumes into the Bay

One
stopped!



Rainwater conduit swale straight to Ocean



Change flow to land:





**Promoting Responsible and
Sustainable Development in the
U.S.V.I.**

**Watershed Mgmt via Proper Site Planning
Construction**

Tropical Green Building Certification Program

- **CERTIFICATION LEVELS:**
IGBA AWARDS THREE LEVELS OF GREEN BUILDING CERTIFICATION
- **5 STAR TROPICAL GREEN BUILDING:**
90% of Checklist Items.
- **4 STAR TROPICAL GREEN BUILDING:**
80% of Checklist Items.
- **3 STAR TROPICAL GREEN BUILDING:**
70% of Checklist Items.

Site Planning & Design

- Minimum Site Disturbance = Maximum Environmental Protection
- Landscaping, Green Belts & Native/Natural Vegetation
 - Inventory Species First
 - Locally grown, native, non-invasive plan
 - Thorough, maintained erosion/sediment prevention planning & control

ReSource Center

- 3 R's - All Connected to Climate: materials extraction, fabricating, shipping.
- Donated building supplies = tax deductible
- Major savings vs. buying new = happy!
- Win-Win-Win! Donors, Buyers, Enviro.

NOAA Coral Reef Conservation Program

- Media Campaign
 - Develop Training Modules
 - Workshops
 - Inspection
 - Promotion of “Contractors Who Care”
 - Partners: TNC, DPNR, EPA, USFWS, USGBC, NMFS, others...
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Discussion

- Visit www.coralbaycommunitycouncil.org
- Sharon Coldren, Pres. & Executive Dir.
- CBCC Office 340-776-2099
- Research and project opportunities...



www.igba-stjohn.org

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