Coral Bay SDAT Report

Coral Bay, USVI • May, 2013

AIA Communities by Design

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Introduction

The Design Assistance Program

With nearly 300 state and local chapters and over 76,000 members, the American Institute of Architects serves as the voice of the architecture profession and the principal way for the profession to give back to society. The AIA has a 46-year history of public service work. Through the Center for Communities by Design, the AIA has engaged over 1,000 professionals from more than 30 disciplines, ultimately providing millions of dollars in professional pro bono services to more than 200 communities across the country, and engaging thousands of participants in community-driven planning processes. Through these processes, the AIA has produced recommendations to improve the design and development of some of the most recognizable places in America. In 2010, the AIA received the *Organization of the Year* Award from the International Association for Public Participation (IAP2), recognizing its program impact on communities and contributions to the field.

- **Regional and Urban Design Assistance Teams (R/UDAT):** Created in 1967, the AIA's R/UDAT program pioneered the modern charrette process by combining multi-disciplinary teams in dynamic, multi-day grassroots processes to produce community visions, action plans and recommendations.

- **Sustainable Design Assessment Teams (SDAT):** In 2005, in response to growing interest and concern about local sustainability planning, the AIA launched a companion program to the R/UDAT that allowed it to make a major institutional investment in public service work to assist communities in developing policy frameworks and long term sustainability plans. During the first 7 years of the SDAT program, the Center for Communities by Design has worked with over 60 towns, cities and regions.

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The Center's Design Assistance Team programs operate with three guiding principles:

- **Multi-disciplinary Expertise.** Each project is designed as a customized approach to community assistance that incorporates local realities and the unique challenges and assets of each community. As a result, each design assistance team includes a multi-disciplinary focus and a systems approach to assessment and recommendations, incorporating and examining cross-cutting topics and relationships between issues. In order to accomplish this task, the Center forms multi-disciplinary teams that combine a range of disciplines and professions in an integrated assessment and design process.

- **Enhanced Objectivity.** The goal of the design assistance team program is to provide communities with a framework for action. Consequently, each project team is constructed with the goal of bringing an objective perspective to the community that is outside of the normal politics of public discussion. Team members are deliberately selected from geographic regions outside of the host community, and national AIA teams are typically representative of a wide range of community settings. Team members all agree to serve pro bono, and do not engage in business development activity in association with their service. They do not serve a particular client. The team's role is to provide an independent analysis and unencumbered technical advice that serves the public interest.

- **Public Participation.** The AIA has a four-decade tradition of designing community-driven processes that incorporate substantial public input through a multi-faceted format that includes public workshops, small group sessions, stakeholder interviews, formal meetings and presentations. This approach allows the national team to build on the substantial local expertise already present and available within the community and leverage the best existing knowledge available in formulating its recommendations.

The Coral Bay SDAT Project

In 2012, the Coral Bay Community Council (CBCC) successfully applied to the Sustainable Design Assessment Team (SDAT) program of the American Institute of Architects (AIA) for a grant to demonstrate "community-based planning and application of professional expertise to tackle the issues of protecting the natural environment while supporting appropriate development for the future" of Coral Bay, St. John, USVI. The grant request was supported by the Virgin Islands Chapter of the American Institute of Architects.

To address the issues surrounding economic development and protection of natural systems in Coral Bay, the American Institute of Architects' (AIA) Communities by Design program assembled a national team of experts in community development, marine ecology, low impact development, public realm design and landscape architecture, eco-tourism and civic engagement. The team included:

Harris M. Steinberg, FAIA, team leader, civic engagement
Roland Anglin, community development
Jessica Hornbeck, marine biology
Tom Von Schrader, low impact development
Diane Jones, public realm design and landscape architecture
Megan Epler-Wood, eco-tourism
Cristienne De Souza, eco-tourism

The following report contains a narrative summary of the team's findings, with additional information and resources.

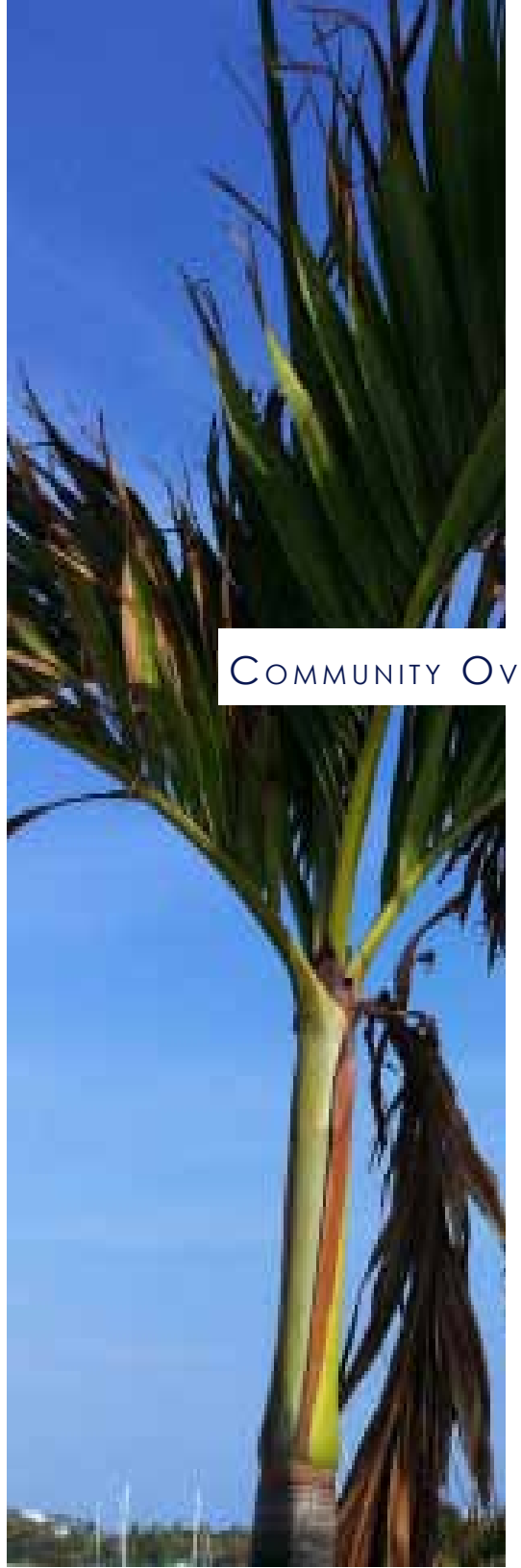
The Coral Bay SDAT Process

Team leader Harris Steinberg, executive director of PennPraxis of the School of Design of the University of Pennsylvania, conducted a preliminary site visit from March 6 through 8, 2013 to meet with civic and project stakeholders. The full team was assembled in Coral Bay from May 28 through 31, 2012. In order for the SDAT team to put forward a series of recommendations concerning the future development of Coral Bay, a full agenda was developed to include land and boat tours, site visits, meetings with stakeholders and public meetings.

The SDAT received significant public interest. More than 100 people attended a public meeting at the Coral Bay basketball court on May 29, 2013 to help inform the project team about:

- What services, infrastructure and transportation systems are needed?
- What employment opportunities will help the local population while supporting a diverse clientele?
- What is the culture of Coral Bay?
- What are the challenges to creating an equitable economy while protecting natural systems?

An audience of 100 people attended the presentation of the team's findings and recommendations at the Concordia EcoResort on May 31, 2013.



Community Overview

Background & Context

Coral Bay is a remote community of 1200 people located along the southeastern coast of the island of St. John – one of the three main islands in the Caribbean archipelago that comprises the United States Virgin Islands (USVI). It is located within a 3000-acre watershed surrounding a 5 square mile marine nursery bay. Of the approximately 700 housing structures, nearly 50% are vacation rental properties.

St. John is the least developed of the three main islands of the USVI as more than half of the island is a 7000-acre-plus national park. A 12,708-acre protected underwater coral reef national monument augments the national park, some within the waters of Coral Bay. St. John is a well-known tourist destination renowned for its beaches, underwater explorations, boating and sailing, fishing, hiking and camping. St. John contains important land, coastal and marine ecosystems – including dry to moist forests, salt ponds, beaches, mangroves, seagrass beds, coral reefs and algal plains. The land-based topography is quite steep with slopes averaging 30 percent on the island-as-a-whole.

Pre-Great Recession tourism-related development, which continued through 2009 in Coral Bay, put significant pressure on natural systems such as mangrove swamps and seagrass beds and caused serious runoff problems from steep slope housing development. Since 2003, the Coral Bay Community Council has been an effective watershed management agency; addressing many of the runoff issues associated with storm water management, water quality and the health of the bay.

Coral Bay experienced an 80% increase in population from 1990 to 2000. The current level of development in Coral Bay represents only 5% of the land that is allowed to be developed – causing concern among many that overdevelopment will further pressure already fragile ecosystems. Typical development patterns consist of housing subdivisions with poorly engineered roads that are often unpaved. These roads often wash out in the island's torrential rain events.

As an organized, unincorporated US territory, the USVI are governed by an elected governor. Fifteen senators are elected to the unicameral Virgin Islands Legislature with only one at-large senator required to reside on St. John. Residents of the USVI do not have local land use control and all land use, planning and zoning decisions, building permitting and enforcement are made by a centralized planning agency – the Department of Planning & Natural Resources. Any rezoning or zoning variance requests must be approved by passage of a bill by the Virgin Islands legislature. Coastal developments generally must be approved by one of three island-specific Coastal Zone Management Committees, made up of citizens appointed by the Governor. There is no provision within the laws governing the Virgin Islands for municipal governments. Without local planning, land-use and zoning control, residents of Coral Bay do not have an official vehicle for engaging in planning for the future development of their community. The critical issues of the relationship between economic development, physical planning and natural and cultural systems protection and conservation are largely left uncoordinated, unchecked and unplanned. With the economy beginning to revive itself, there is concern that the next wave of development will continue to exacerbate the impact of the already-random development patterns and further imperil the fragile and threatened natural systems.

SWOT Analysis

The AIA team prepared the following SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) based on their time on the ground.

Strengths

- Passionate community
- Low density development
- Natural resources
- Harbor
- Viewscapes
- Community listens to each other
- National Park
- Hurricane Hole
- US Territory
- Tier 1 Coastal Zone management
- Isolated area, island within an island
- Small scale community
- Tradition, culture, and history
- Park is a repository of knowledge
- Mixed community working together
- Quirky nature of community
- Food culture
- Valley, flatland that is arable
- Volunteerism
- Community council
- Faith based community
- Intellectual capital, untapped network of opportunity to benefit the community
- Personal passion and inspiration of individuals
- Afro Caribbean roots of community

Weaknesses

- Lack of local control
- Lack of local institutional leadership
- Suspicion and mistrust of institutions/formal structure
- Social inequity
- No access to public shoreline
- Slow permitting process
- Lack of transparency
- Importation of all goods
- Remoteness
- Lack of affordable housing
- Cost of living
- No public lighting
- Cost of doing business
- Lack of access to capital for locals
- Lack of awareness of their strengths
- Sense of futility and no hope
- Victim mentality, helplessness
- Divided culture mentality, guilt driven
- Poor roads, lack of infrastructure
- Water treatment
- No public square
- Public transit
- Inadequate medical and senior services and facilities
- School limitation (no public high school)
- High unemployment
- Inequitable tax structure
- No data autonomy for planning purposes (tied to St. Thomas)
- Youth flight
- Solid waste management
- Erosion of indigenous culture
- Lack of development controls
- Land rich and cash poor
- Lack of planning
- Heirs issues with land ownership and development
- Lack of comprehensive land and water use plan for VI as a whole

Opportunities

- Strengthen existing institutions
- More representation on community council
- Harbor
- Protect viewsheds
- Supply chain businesses, linked economy opportunities
- Leveraging cultural authenticity for tourism
- Cultural restoration and revival
- Develop UVI relationship & research station
- Law school alliance for probono probate work (heirs issues)
- Alliance with marine science institution
- Rockefeller Foundation investment
- Ford and Packard Foundation investment
- Virgin Islands community foundation
- Tapping local wealth of Coral Bay
- Untapped opportunity for responsible tourism development & comprehensive strategy
- Prototype for smart development and smart growth
- Community building opportunity
- Accessible coastline, public access law
- Charter yacht sailing opportunity
- Coral Bay planning for water and wastewater
- Possibility of forming local municipal governments
- National Park management plan
- Start with St. John Senator as advocate of CB plan
- Search for federal grants (Dept of Commerce, HUD, Dept of Interior)
- Dividing island into further districts for more local representation
- Get park to reopen plan development process
- Clarification of right of local authority with the Congressional Research Office
- Leverage Natural Heritage area on St. Croix as a template
- Legislative opportunity to have local representation

Threats

- Environmental degradation
- Elkhorn coral endangered status
- Sediment runoff
- Lack of circulation of the bay
- Inertia, the cost of doing nothing
- Non-context-sensitive design and development
- Loss of indigenous culture
- Environmental damage caused by non-sustainable development impacting the bay
- Lack of a comprehensive development plan
- Environmental damage caused by tourism development
- Environmental resource management from federal agencies not fully representative of local protection needed
- Local organizations not equipped to fully vet environmental studies to make informed judgments
- Lack of local control preventing Coral Bay from realizing a sustainable vision
- Lack of diversity
- Heirs rights legal issues for local families
- Aging population
- Lack of transparency
- Legacy of big capital tourism development that doesn't serve local wellbeing in the Caribbean & VI

Findings

Based upon the team's site visits, stakeholder interviews, public meetings and research, the following findings were presented at the May 31, 2013 public meeting at the Concordia EcoResort. These findings informed the series of design, planning, and economic development recommendations.

Significant Natural Resources

Coral Bay and the island of St. John are blessed with an astounding abundance of natural resources. With over 800 species of trees, more than 50 species of tropical birds and a plethora of animals, fish and coral, St. John is a naturalist's paradise. Indeed, it is the quality of the natural resources of the island that draw sunbathers, snorkelers and sailors alike - with crystal-clear turquoise water and more than 7000-acres of preserved national parkland.

Strong institutions

From the historic Emmaus Moravian Church to the more recently-founded Coral Bay Community Council, Coral Bay has strong faith-based and civic institutions that provide the community with strong social capital.

Culture of Volunteerism

While many come to Coral Bay to "get away from it all" there is also a strong culture of volunteerism. Participants spoke of a community with an independent streak and a "help thy neighbor" ethos. Many related stories of neighbors-helping-neighbors following serious hurricane events.

Lack of Local Control

Without any local form of government or home rule, all forms of governance reside in St. Thomas. As a result, citizens of Coral Bay must continually monitor development activity on an ad hoc basis. Without local land use and planning controls, individual political ties to St. Thomas tend to override the establishment of sound planning principles.

No Planning Capacity

With the lack of local control comes the lack of capacity for planning. Citizens do not have access to the data and expertise that is required to make reasoned decisions about the future of their community. As a result, the community suffers from the lack of a road map to guide development and the protection of natural resources.

No Public Realm

Due to historic development patterns and lack of planning, the team was struck by the lack of public realm improvements in Coral Bay. There is no town square, no sidewalks, and no esplanade along the bay. Indeed, one of the main public gathering spaces is the town recycling and waste collection area bordering sensitive mangrove swamps.

Inadequate Transit

As a remote island in a series of islands in the Caribbean, St. John suffers from lack of adequate public transportation options. This is significant to those who work on St. John and who do not own cars. The matter is further exacerbated in Coral Bay as the island's only bus line runs just five days a week and there is no service after 6:00 PM.

Environmental Resources under Threat

From the health of the harbor to the deforestation of the steep slopes, the environmental resources of Coral Bay are under threat with minimal levels of protection and oversight. The pace of development on the hillsides could quicken as the economy bounces back – an issue that should be seen as an alarm bell for at-risk natural resources.

Fragmented Social Capital

While Coral Bay has strong faith-based and civic institutions, it suffers from a lack of trust by its citizens in its institutions and its civic leadership. Without a trusted relationship between a citizenry and its civic leaders, it is very difficult to work together as a community and develop a vision for the future and a plan for how to achieve it. While the residents of Coral Bay represent a mix of Afro Caribbean and continentals with differing socio-economic backgrounds and historical relationships to the island, it is imperative that they seek ways to find common ground around shared values and concerns for the future in order to enhance and preserve the community that they all cherish.

Need for Economic Opportunities

Many reported on the lack of employment opportunities for the youth of Coral Bay – a fact which causes many local young people to seek careers and employment off of the island. Lack of access to capital was also noted as a problem along with lack of employment opportunities. In addition, citizens noted the lack of affordable housing in a community in which prices are inflated due to the need to import all goods and services from St. Thomas or the US mainland.

Infrastructure Challenges

As a remote island, St. John is challenged by minimal public infrastructure which is exacerbated by development. In particular, water, sewer and roadway systems are not capable of supporting urbanized populations and independent homeowners and developers must insure adequate levels of infrastructure service. As a result, Coral Bay itself is constantly under threat from runoff and pollutants from development pressures.

Doing Nothing is Not an Option

Many pointed to the recent negative developments in Cruz Bay as a cautionary tale for Coral Bay. Indeed, people spoke of the power of "Big Tourism" and the development dollars that it can bring along with the potential for unplanned and unchecked development with serious negative impacts on environmental systems. Residents of Coral Bay recognized that the very qualities of place that make Coral Bay special – small scale, remote, beautiful natural systems – are those that could drive development and ultimately wipe out the character of the community. The AIA team felt that this could be a rallying cause for the community to organize and implement progressive local planning efforts that could serve as a model for other communities in the territory.

Principles

Based on the findings and the result of the SWOT analysis, the AIA team developed the following planning principles to help guide the community in creating a vision for Coral Bay:

Let Nature Lead

Given the importance of the natural and ecological systems to both the local economy and the sense of place, it is imperative that all development be designed to enhance and protect natural systems. This includes public works such as roads, docks, marinas, sewer and water systems and private development as well. Coral Bay must embrace a sustainable approach to development in order to ensure that the assets that make Coral Bay unique are there for generations to come. This applies to land-based as well as water-based development and recreational uses.

Leverage Assets

The National Park represents a significant local asset that could help the community organize to achieve a vision. The park's management plan could be reopened and serve as a public forum for future development. The Virgin Islands Coral Reed National Monument represents another significant resource. Additionally, residents of Coral Bay could work with the University of the Virgin Islands and their degree programs in marine biology, hotel administration and other disciplines to bring expertise to augment the community's existing capacity.

Cultivate Civic Capacity

For Coral Bay to come together to create a vision for the future and a plan to achieve it, it must develop civic leadership with the capacity to work on projects that the whole community supports. The AIA team was impressed with the turn out at the community meetings held during the SDAT visit and the quality of the community conversations during the facilitated sessions. However, the AIA team was also aware of the fissures and tensions within the community around differing visions and leadership styles. This issue can be addressed by creating more inclusive and diverse community forums that work to find a common ground that is shared by community members.

Activate Networks

The AIA team was impressed with the wide range of civic, social, business and institutional connections that members of the Coral Bay community have. These networks could be leveraged to bring much needed attention and resources to Coral Bay. This includes everything from securing financial capital to political relationships. In this hyper-connected, 21st century networked world, Coral Bay has the potential to activate the many networks that run through the community in order to enhance and preserve the community's quality of life.

Plan for the Future

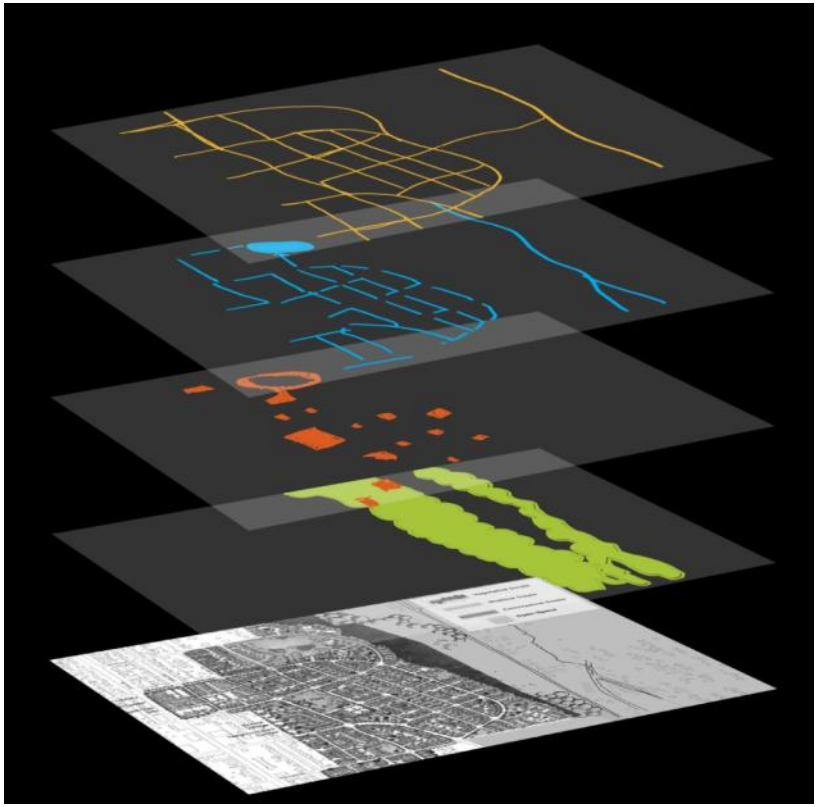
The AIA team was acutely aware of the lack of local governance and land use and planning controls. The team felt strongly that this should not dissuade the community from organizing around a vision for the future and creating a model process for other communities in the territory. Working with the Virgin Island's US Congressional representative was felt to be one way that Coral Bay could investigate the potential to receive local control and use it to develop a community plan that is actionable with regulatory power. Additionally, it was felt that Coral Bay should consider creating a non-profit community development corporation, with a board made from wide community representation that can both plan and implement development projects that are in the public interest.

Green Infrastructure

Low Impact Development & Green Infrastructure

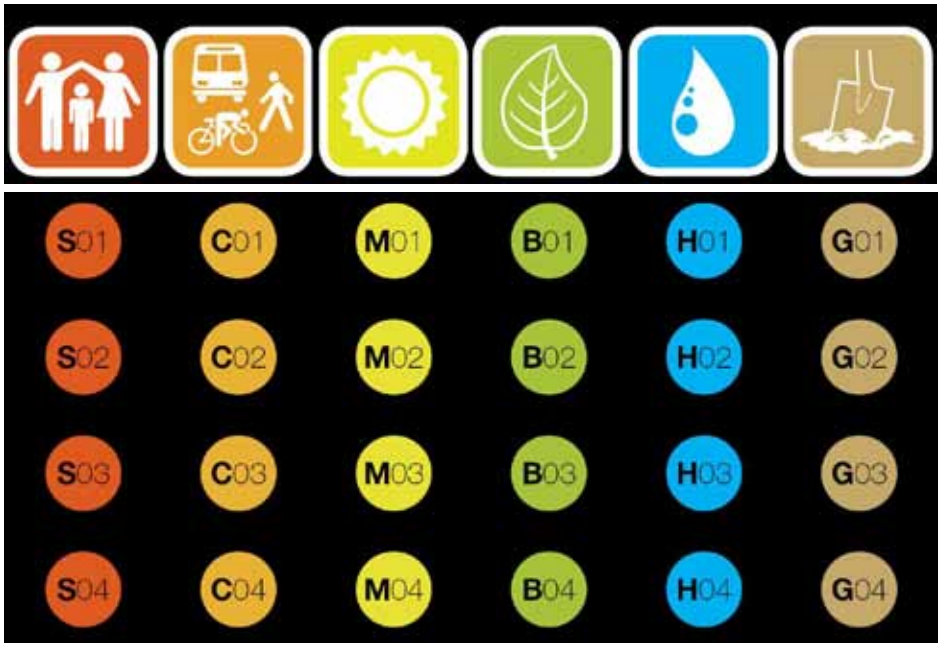
Low Impact Development (LID) is defined by the Environmental Protection Agency as an approach to development that uses nature or ecological services to manage stormwater as close to the source as possible. Green Infrastructure (GI), or more specifically Green Stormwater Infrastructure (GSI), is a set of systems and practices that use or mimic natural processes to infiltrate, evapotranspirate, or reuse stormwater runoff on the site where it is generated. Green infrastructure can be used at a wide range of landscape scales in place of, or in addition to, more traditional stormwater control elements to support the principles of LID. Examples of green stormwater infrastructure include bioretention and biofiltration facilities (e.g. rain gardens and bioswales), permeable pavements, green roofs, amendment of existing soils, trees, and rainwater harvesting.

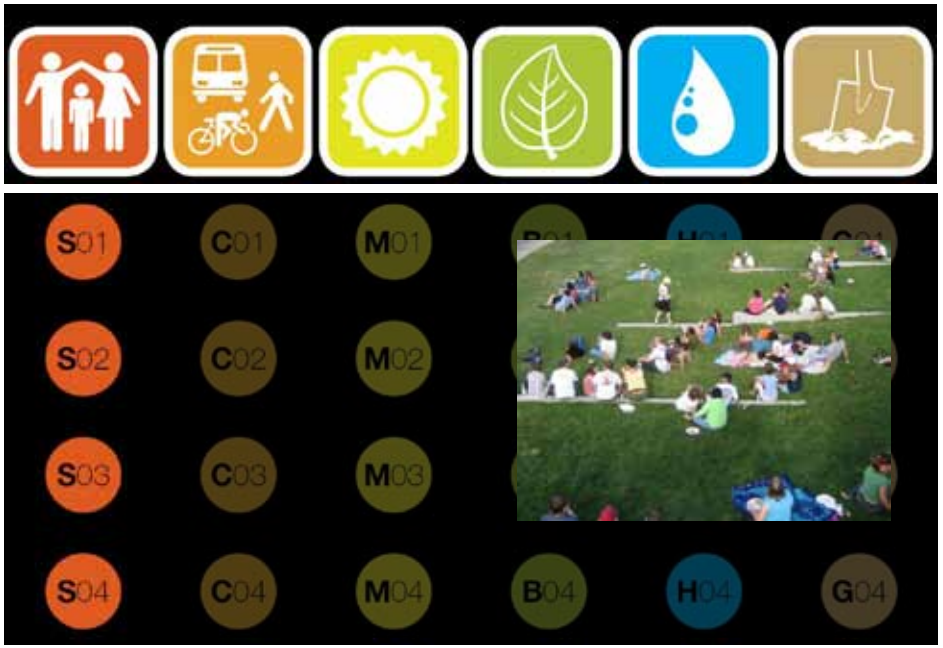
In many communities GI has become standard practice for managing stormwater runoff. In a broader sense GI systems are also recognized for the multiple benefits that can be achieved to improve our neighborhoods and streets. In addition to stormwater benefits, GI systems can support and enhance mobility needs, create inviting streetscapes and gathering spaces, offset urban heat island effects, and add desired character to the built environment. The graphic on this page illustrates how a green infrastructure design framework can be described through a set of interdependent systems that benefit mobility, community, habitat, energy, water and geologic systems.



• The circulatory system relates to functions such as pedestrian and bicycle facilities, transit, ADA compliance and the transport of goods.
• The social system relates to functions such as social interaction, recreation and play, cultural expression, and economic stimulus.
• The biologic system relates to functions such as wildlife habitat connectivity, photosynthesis, and climate moderation.
• The metabolic system relates to functions such as the production of energy, materials, and food, as well as the recycling or disposal of wastes.
• The hydraulic system relates to functions such as flood protection, water quality, aquifer recharge, sediment transport and irrigation.
• And the geologic system relates to functions such as erosion control, soil formation, substrate creation.

Green infrastructure is the key to vibrant, green communities. A systems-based approach for the planning and implementation of green infrastructure leads to high performance landscapes at the intersection of these systems, where they can perform multiple functions and engage diverse constituencies.





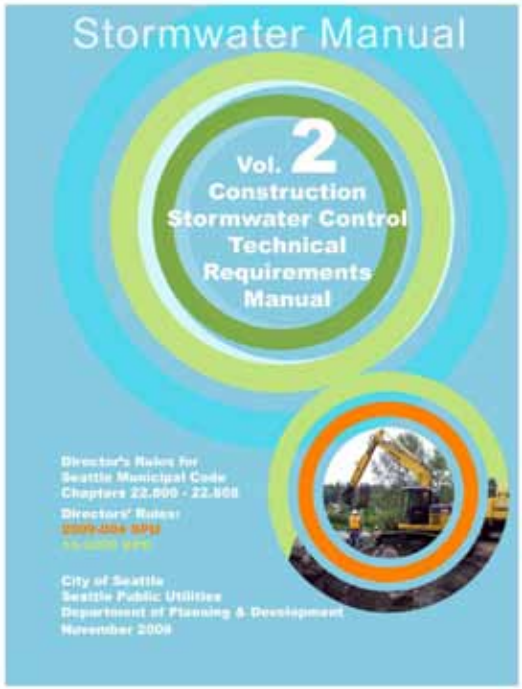
Immediate challenges for Coral Bay and how Green Infrastructure planning can help

The Bay itself is a stunning resource that helps define the community and its lifestyle, providing recreation and biological diversity. As a valuable and cherished resource the Bay needs to be protected from the risks associated with development or redevelopment that occurs with little or no jurisdictional oversight. Untreated stormwater with damaging pollutant and sediment loads are and will continue to affect the ecological balance of Coral Bay. The Coral Bay Watershed Management Plan is an important tool to address many of these issues.

Maintaining and enforcing minimum stormwater requirements for development within the watershed-wide code or land use policy is a fundamental task. The key elements of green stormwater code requirements should include:

1. Require the developer to prepare stormwater site plans for agency review that show the developer is using site appropriate LID techniques, retaining native vegetation and minimizing impervious surfaces.
2. Require a narrative and drawings detailing how the project will prevent erosion and discharge of sediment and other pollutants into the bay during construction. This may require seasonal work limitations, sediment traps, stabilizing exposed soils, protecting slopes and maintaining such facilities during construction.
3. Require that natural drainage patterns be maintained and that discharges from the project site occur at the natural location. Runoff from the project site should not cause significant adverse impacts to downstream receiving waters and down gradient properties.
4. Require that if thresholds are met that the project has permanent facilities to manage stormwater on site. These may include bioretention, rain gardens, permeable pavements and rain water harvesting.
5. Require that all proposed green stormwater facilities be maintained in working condition.

While many of these requirements exist in current policy, there is a real need to develop resources and capacity to operationalize these standards in future development.

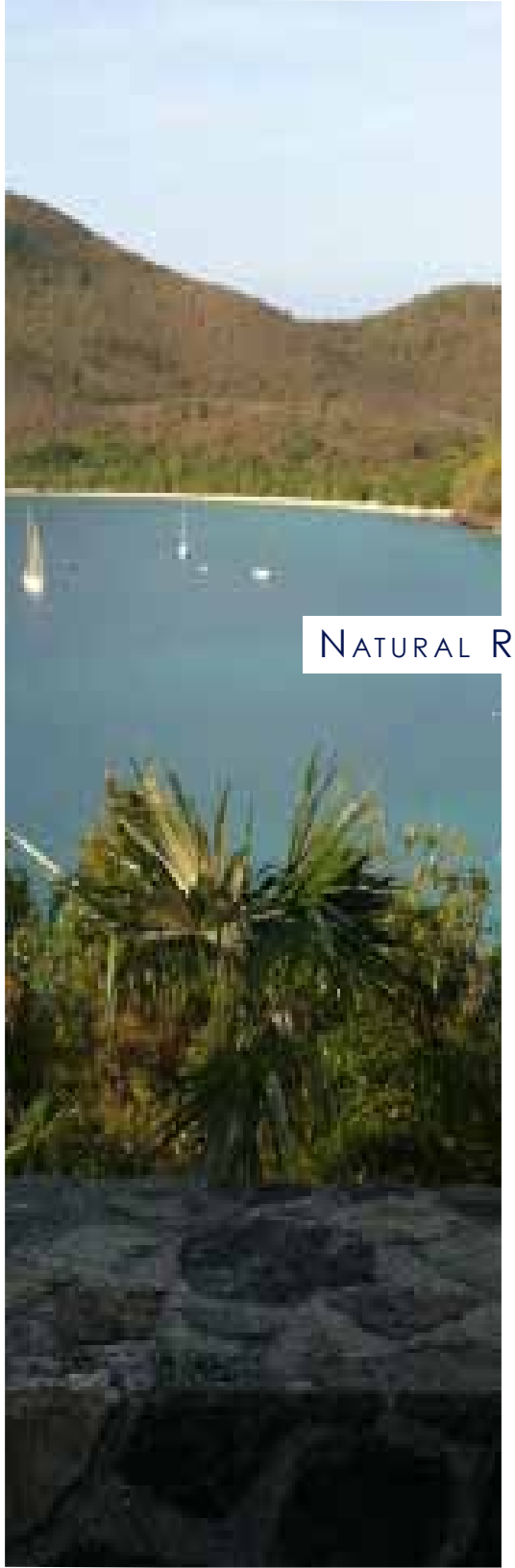


Lady Bird Johnson Center work in progress

There are several existing communities that can serve as important models in the application of stormwater codes and the development of manuals that can be used as a guide for the Coral Bay watershed. Communities in Maryland and Washington State have been working on codes and manuals for years and would have the most up to date standards as examples. Existing code, practices and materials could be updated following these examples. As more research is done the code and manual can be modified to be more performance based. It is understood that there are governance obstacles to implementing new regulations that are specific to a particular area in the USVI but there are many precedents around the country of districts establishing robust regulations for watershed protection.

Long term goals for Coral Bay and Green Infrastructure planning

The Coral Bay community should explore additional possibilities to partner with research institutions (possibly the University of the Virgin Islands) to create a living laboratory in the watershed. The ongoing work funded by NOAA and EPA in this area provides an important precendent. This Caribbean Green Infrastructure Institute could employ scientific methodology to measure the efficacy of the various facilities deployed throughout the watershed. Much the same way that Washington State University's LID center and the University of Texas' Lady Bird Johnson Wildflower Center are the go-to centers for cutting-edge green infrastructure research, the Coral Bay institute can become the place people in the Caribbean go to learn how to develop in a low impact, sustainable way.

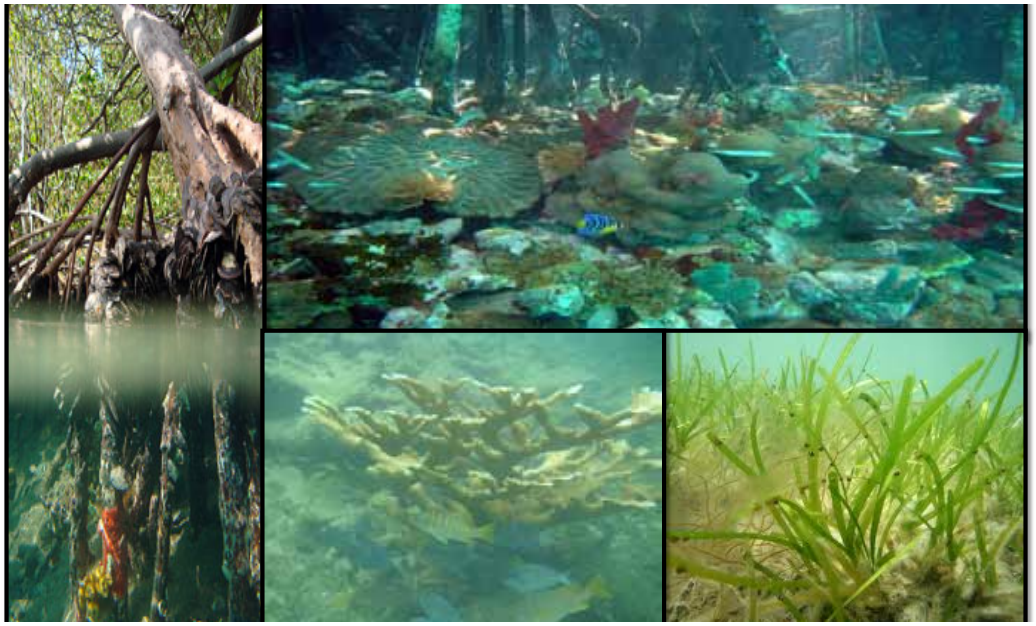


Natural Resources

Introduction

Coral reef ecosystems of the Virgin Islands Coral Reef National Monument, Virgin Islands National Park and the surrounding waters of St. John, U.S. Virgin Islands are a precious natural resource worthy of special protection and conservation. Coral reef systems are composed of a mosaic of habitats including coral reefs, seagrasses and man-groves. These unique habitats are home to a diversity of marine organisms that depend on a healthy ecosystem to survive. In turn, these benthic habitats and their associated inhabitants provide many important ecosystem services for their neighboring communities. Examples of such ecosystem services include: providing a source of food; protection of coastlines from storms and erosion, providing critical habitat, spawning and nursery grounds for economically important fish species, providing jobs and income to local economies by creating fishing, recreation, tourism, and education/ research opportunities. Coral reefs are hotspots of marine biodiversity and economies. Thus, coral reef ecosystems should be considered just as vital to the local community as it is to its marine dwellers.

In a recent study by van Beukering et. al (2011), the value of these ecosystem services for coral reefs of the USVI were estimated. The levels at an annual basis vary between ecosystem services: reef related tourism ($96 million), recreation ($48 million), amenity ($35 million), coastal protection ($6 million) and support to commercial fisheries ($3 million); totaling up to $187 million per year. This same study also listed the second most important beneficiary of coral reefs is the local community, who benefits from the reef in various ways. For example, mangroves and seagrass play an important role in land stabilization. The roots of mangroves help absorb the action from waves and help prevent shoreline erosion. When these trees and shrubs are removed, additional support structures such as seawalls are needed. Along the same lines, seagrass stabilize sediments on the seafloor. Without seagrass, these areas would become a seascape of shifting sand and mud and would decrease light penetration in the water column and impact coral survivorship as well as diminish habitat and food sources for a variety of marine life of which the local community benefits in a various ways. Mangroves and seagrass also filter pollutants, absorb excess nutrients from runoff, and trap sediments, helping to increase the clarity and quality of waters. Seagrass also absorbs carbon faster than rain forests, making it helpful to the atmosphere and air quality. The harbor of Coral Bay, St. John is dominated by seagrass and nearshore wetland areas that provide buffers from land and weather. Therefore, these habitats are critical for the local community in direct and indirect ways.



Anthropogenic and Environmental Threats and Existing Protection

Coral reefs throughout the U.S. Caribbean are under increasing pressure from environmental and anthropogenic stressors that threaten to destroy the natural heritage of marine habitats. Threats to coral reef ecosystems can be land or nature based. For example, the decline in water quality parameters (e.g. turbidity, nutrient levels, pH, etc.) can be caused by human land-based actions or natural environmental events (e.g. increased rainfall or sea water temperature changes). Some of these threats have long been identified as the cause of resource decline and some sources are obviously more easily controlled than others. A wide variety of human and natural impacts have greatly affected the USVI marine resources, including point and non-point source pollution, over-fishing, hurricanes, and coral diseases. Certain marine species that were once abundant in the USVI are no longer in existence, or have become rare, such as the Nassau Grouper, Mutton Snapper, Red Hind, and Queen Conch. Given the importance of the coral reefs to the United States Virgin Islands (USVI), and in light of the increasing threats caused by human development that could potentially reduce the services provided by this ecosystem, there is a protection framework already in place.

The National Park Service manages and protects more than 250,000 acres of coral reef in ten National Park units, two of which are located in St. John, USVI. The Virgin Islands Coral Reef National Monument includes 12,708 acres of submerged lands within 3 miles off the coast of St. John. Additionally, the Virgin Islands National Park includes 5,650 acres of submerged federal lands to protect and conserve a rich, but fragile coral reef seascape. Under National Park management general protection of every resource is in place to preserve the area for future generations. Fishing regulations, harvest restrictions, anchoring and boat use restrictions exist, and overall resource degradation is prohibited. However, limited resources prevent other territory and federal enforcement regulations in non-park areas.

In addition, the national Coastal Zone Management Act, while noting the importance of the entire coastal zone, declares that certain areas are of yet greater significance. The USVI Department of Planning and Natural Resources (VIDPNR) has identified Coral Bay, and several other local areas in the territory, as Areas of Particular Concern (APC) or natural areas to protect and conserve through conservation of their unique habitat for plant and animal species of particular interest or that are threatened and/or endangered, and/or provide a scientific or educational value. An APC is also in place to develop or identify mitigation banks with public or private land owners. Other long standing Acts such as the Endangered Species Act outline regulatory framework to protect critical species and habitats that it supports in such a way that prevents or limits destructive development of critical marine areas.

As environmental and anthropogenic factors persist, current regulations and restrictions are likely to increase; however, the failure to enforce existing regulations on resources and developmental practices will continue to cause resource decline. Without enforcement, any regulation is eventually proven ineffective. Ineffective regulations have long term impacts on the community and environment. The National Park is a good example. Studies have demonstrated that even ecosystems within currently managed and fairly enforced protected marine areas in the USVI, such as the Virgin Islands National Park (VINP), are deteriorating (Rogers and Beets 2001). Thus, demanding additional resource protection and attention is necessary because waht regulations are in place are simply not proving efficient or effective.

A Need for Evidence Based Decision Making and Increased Communication Sharing

Identifying the problem is the first step in taking action towards a solution. However, gathering credible evidence and the sharing of that evidence are necessary and needed steps of action. When data gaps are identified, partnerships can be sought after, and studies can be specifically targeted to the needs of managers and planners. Filling some of the gaps in existing studies using credible scientific organizations (with the help of local community expertise and backbone pilot studies) will enhance the value of the research and allow for more educated decision making that is sustainable for that specific environment. Engaging the community in any way possible will also help the community connect with its place and increase land stewardship. Information sharing with local environmental professionals will strengthen partnerships, bridge data gaps, and build continuity between different organizational data sets. This would also help to reduce workloads and increase resource investment of all parties involved. The Coral Bay Watershed Management Project is an important effort in this area.

Familiarization of historical data for coral/seagrass health, fish diversity and abundance, etc., is an obvious first step, but assessing its integrity and completeness is necessary as well. Further, where these studies are more than ten years old, it would be informative to do comparative analysis to see how things have changed over time. Much of this work represents recent and current efforts of the Coral Bay Community Council and other key partners. This type of comparative analysis could also be performed on or after impacting events (e.g. hurricanes or development). Continuing to use similar studies performed in surrounding areas as a model which could then be used for a comparison will help analysis over time. The following list provides an illustration of some research that is being performed, at some levels, and could be increased:

• Water quality and bacterial monitoring temporally and after rain events.

• Present day, very accurate ground-truthing of seagrass distributions in the bay for determining impacts of future development and trend analysis.

• More detailed sediment pollutant analysis from various ghuts and identification of where that material goes using flow analysis of Coral Bay to determine the impact levels at various run-off points.

• Baitfish studies as a way of assessing water quality and the health of the food chain.

• Mangrove health and impacts to them - important shoreline stabilizers, habitat, sediment reduction, pollutant extraction, etc.

A second step should be to increase opportunities for community engagement and educational programs. This will plant the seed of environmental stewardship and promote development with a sustainable mindset. This could be as simple as incorporating the expertise of local knowledge into credible experimental design or logistics or involving locals in the data gathering process. Through increased engagement of the public in local marine management, decision makers may build more local support for conservation-oriented measures while at the same time enhancing community awareness. Without public support from the community, the science will fall on deaf ears. The public must understand how much the science matters to help build financial support as well. Using some of the suggestions listed above will help to provide a complete story and allow for connectivity with other research.

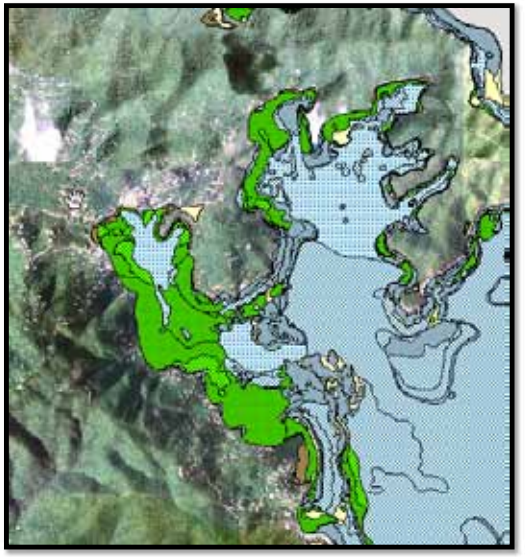
Establish Environmental Thresholds with Comprehensive Research

More comprehensive research could be used to determine pollution thresholds of specific areas by providing a solid scientific foundation to answer the basic question, "how much pollution is too much?" If data is not present, this research could also identify a baseline/or state-of-the bay record which would be a platform for future studies.

Some examples of uses for this research could be the following:
- Determine boat mooring capacities or needs
- Determine level of boat use appropriate for the harbor and surrounding areas
- Identify resources that are stressed and that should be noted as critical areas in need of attention.

There is still work to be done. The continued commitment of the community and the territory to better understand the bay's resources can only lead to more funding sources and increased conservation efforts. Below is a short list of recommended actions to consider while moving forward:

- Generate a more comprehensive document ("State-of –the-Bay" Report Card) similar to the National Park Service using community-based or supported scientific information. This could help enhance awareness of the bay and its resources as well as serve as a baseline comprehensive report.
- Consider adhering to technical guidelines of the Clean Vessel Act of the Fish and Wildlife Service when considering pump-out stations that could help generate future grants based on compliance (which favor private and non-profit institutions).
- Continue or increase competitive university support
- Continue to partner with existing local organizations
- Continue to update existing management plans
- Continue performing smaller scale action efforts
- Model existing framework and/or apply models used by others



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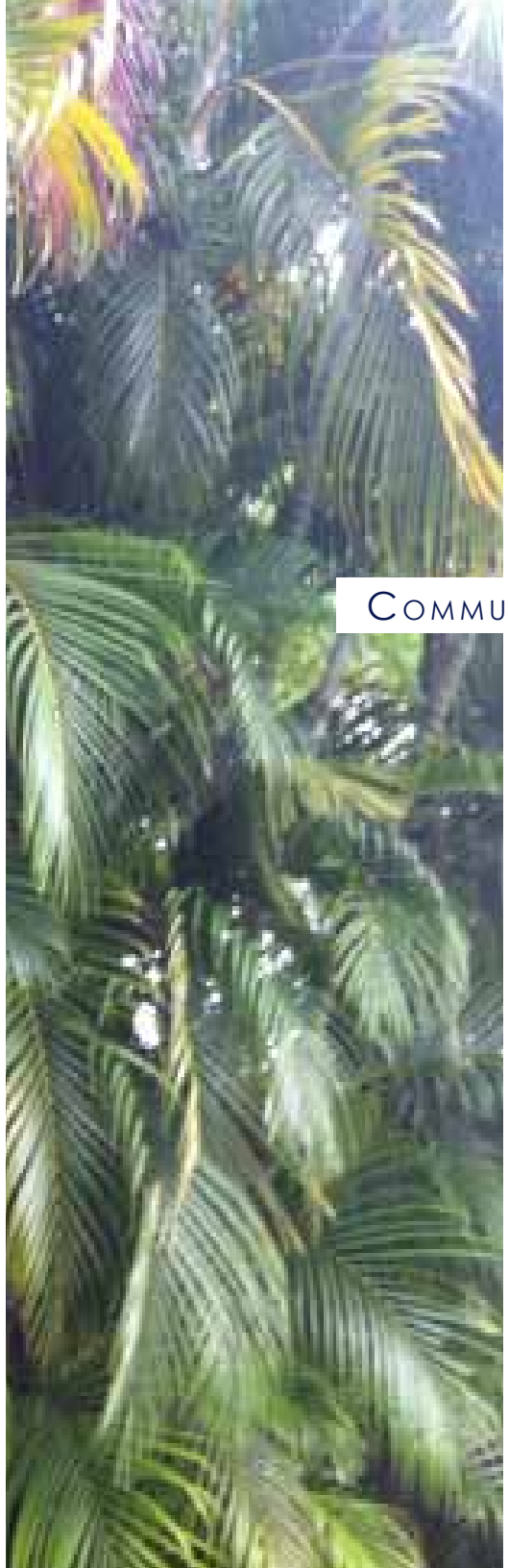
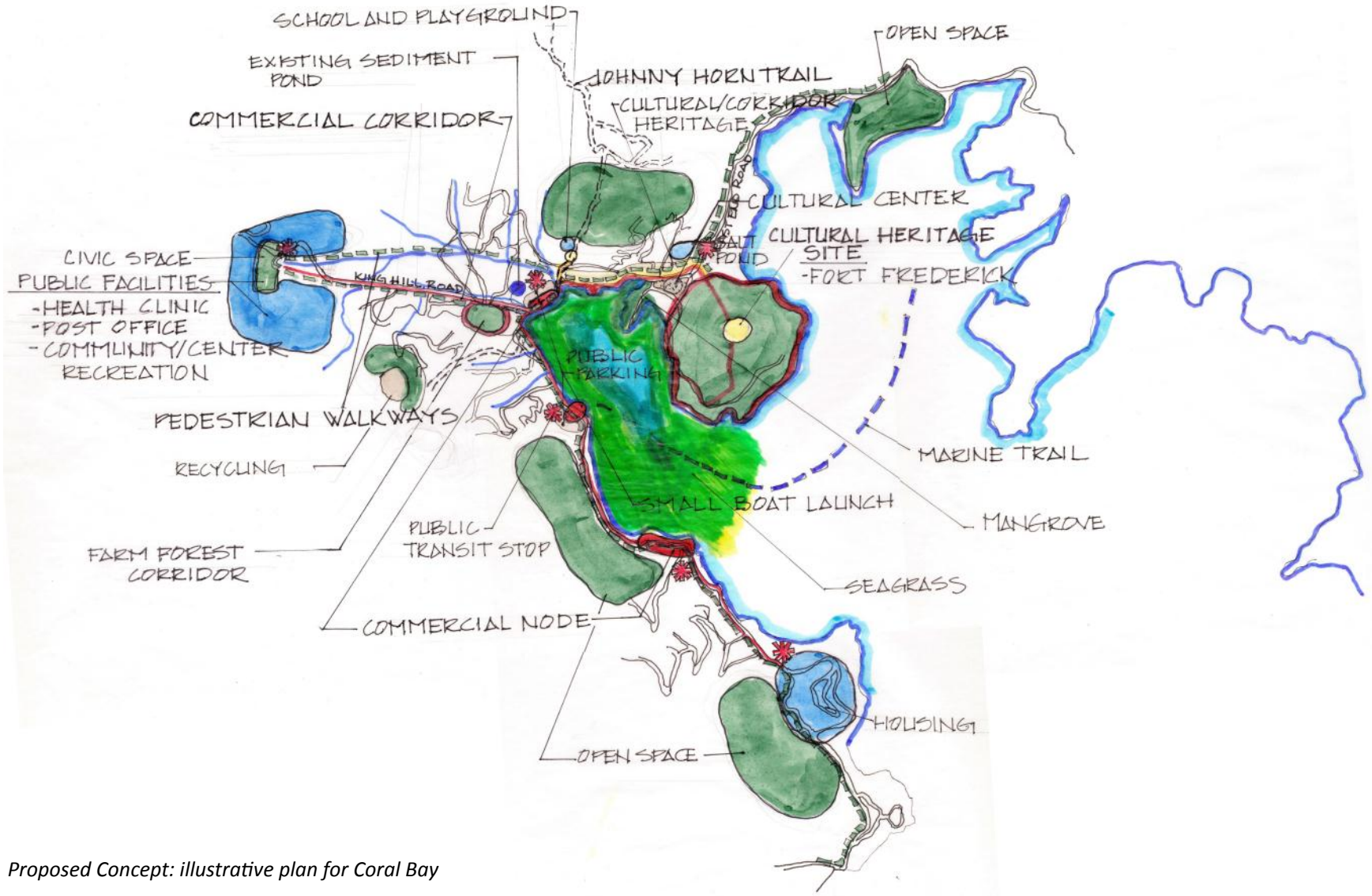


Community Design



Proposed Concept: illustrative plan for Coral Bay

A Concept Plan For Coral Bay

The goal of the concept plan is to support community services and economic development while respecting the cultural and natural environment of Coral Bay. This concept plan represents just one scenario for addressing the program presented by the AIA SDAT Team. The plan is rooted in low impact development and the protection of environmental and cultural resources on Coral Bay as a means to foster community and economic development, establish a public realm, and provide community services and access.

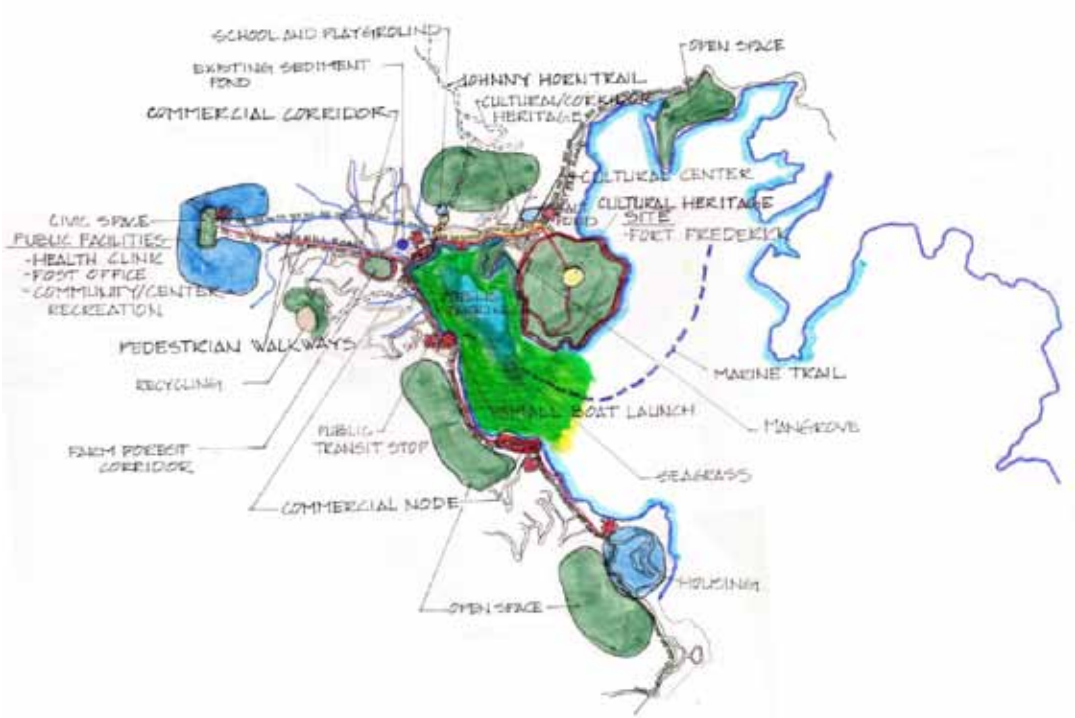
Proposed Land Uses

The colors of the areas on the plan represent three proposed land use categories. Specific and in-depth land inventory and analysis was beyond the scope of the study, therefore the map represents approximations for land use areas. It was designed to give a general idea of where proposed uses can occur.

Proposed institutional and public land uses are designated in blue. This would also include community and public services such as a community center, health clinic, library, postal services, etc. Red on the plan indicates a commercial corridor, and commercial and tourism uses. This would include locally owned restaurants, shops, small grocers and food markets, convenience stores, hardware store, bank, etc. The green areas indicate trails, and public open space and park areas.

Major Elements

The plan builds on the assets and desires of Coral Bay and its community. It expresses how physical development can organize, grow, and expand these assets to provide a more complete community and an equitable place to live.



Open Space & Recreation

The environmental and cultural resources of the Coral Bay community include its cultural heritage sites, such as Fort Frederik, existing trails such as the Johnny Horn Trail, and the waters and marine life of Coral Bay. Examples of development that could build upon of these resources are as follows:

1. **A small boat launch** could be located in the commercial corridor along the bay. This would provide access to small boats for recreational and commercial use by residents and tourists. This boat launch can provide economic opportunities; such as making it easier to provide tours of the bay through the use of small and resident owned boats. The plan also locates public parking adjacent to the boat launch to enhance access.

2. **Trails and walking paths** are another opportunity to provide access and appreciation of the environmental assets of Coral Bay, including expanding access to the Virgin Islands National Park. The trails designated on the plan are located along the Bay to provide access to its flora and marine life; for example, a mangrove walk or trail to highlight the importance of this plant life, and provide further incentive for restoration and protection of the mangroves.

Community Services

Building and further strengthening a sense of community is essential to any plans for development on Coral Bay. This can be accomplished by providing services that residents now have to travel to Cruz Bay to access. Citizens expressed an interest in a having a high school, bank, post office, and other services not present in the community. These services are essential to sustaining the residential community on the island.

1. One of the needs that residents expressed during the SDAT study was that of public services; for example, a health clinic, community center, and recreation facility. The plan locates these facilities in a **civic space** separate from tourist and commercial uses. This separation is important in establishing community identity, cohesiveness, and responsibility.

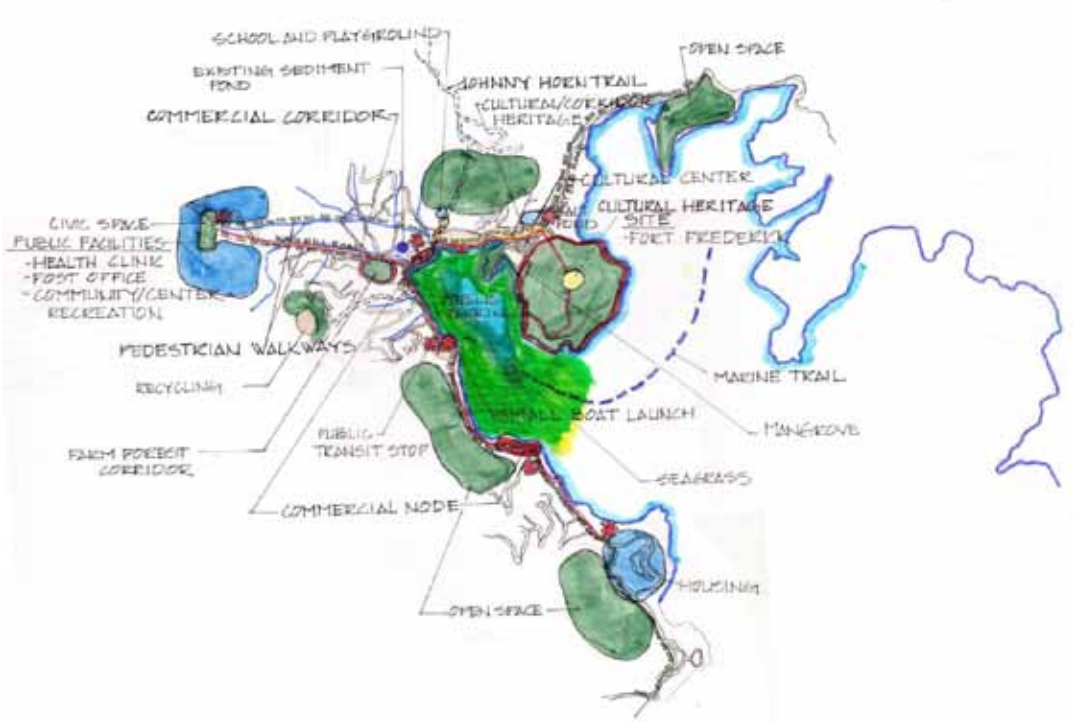
2. Cultural resources, histories, and traditions can be celebrated in the proposed Coral Bay Cultural Center. This facility will provide a place for residents and tourist to connect with and share in the culture and heritage of the island. This center is located along the proposed **cultural heritage corridor,** not far from the commercial corridor and the Fort Frederick cultural heritage site.

Pedestrian and Vehicular Circulation

Circulation is necessary to provide access and linkage to the proposed development nodes, and facilitating travel around the island. Adequate modes of vehicular and pedestrian circulation allow effective separation and location of uses.

1. This plan proposes linking the various nodes of activity with a **Coral Bay Circulator/Shuttle.** This vehicle would travel between the various destinations of activity, for example from the civic space to the cultural center with stops between the boat launch and various commercial nodes. Public parking at designated locations will also encourage people to park and take the shuttle.

2. Adequate pedestrian circulation is necessary for access, and will also support the use of transit. Places that are walk-able are also more transit friendly. **Pedestrian sidewalks** of the proper scale and design are essential to improving the public realm. Sidewalks should be designed with permeable material to prevent erosion, and be placed along major corridors, activity nodes and transit stops.



Economic Opportunities

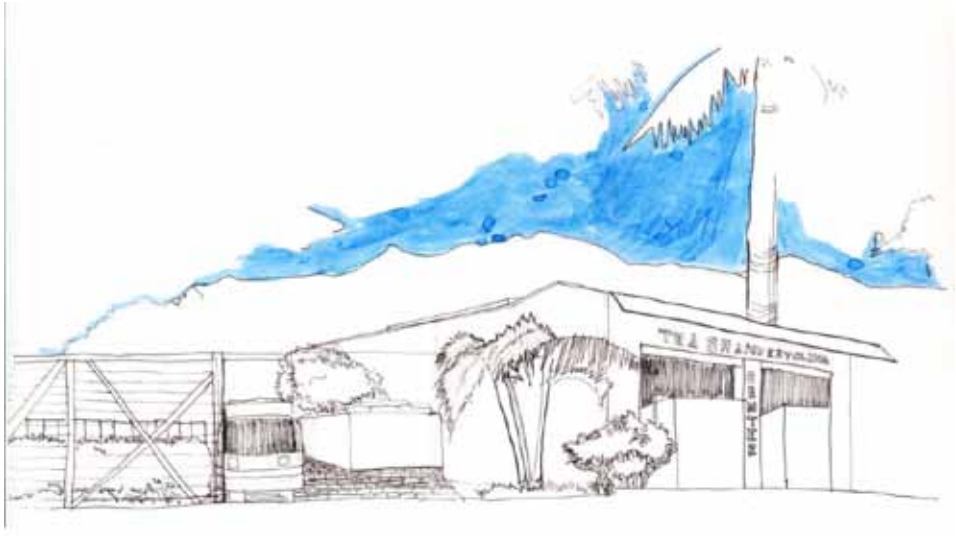
During the study many residents spoke about the need for economic opportunities, not only to support themselves, but for future generations. With sensitivity to the environment and sound economic thinking and planning, opportunities for jobs and entrepreneurship can be provided.

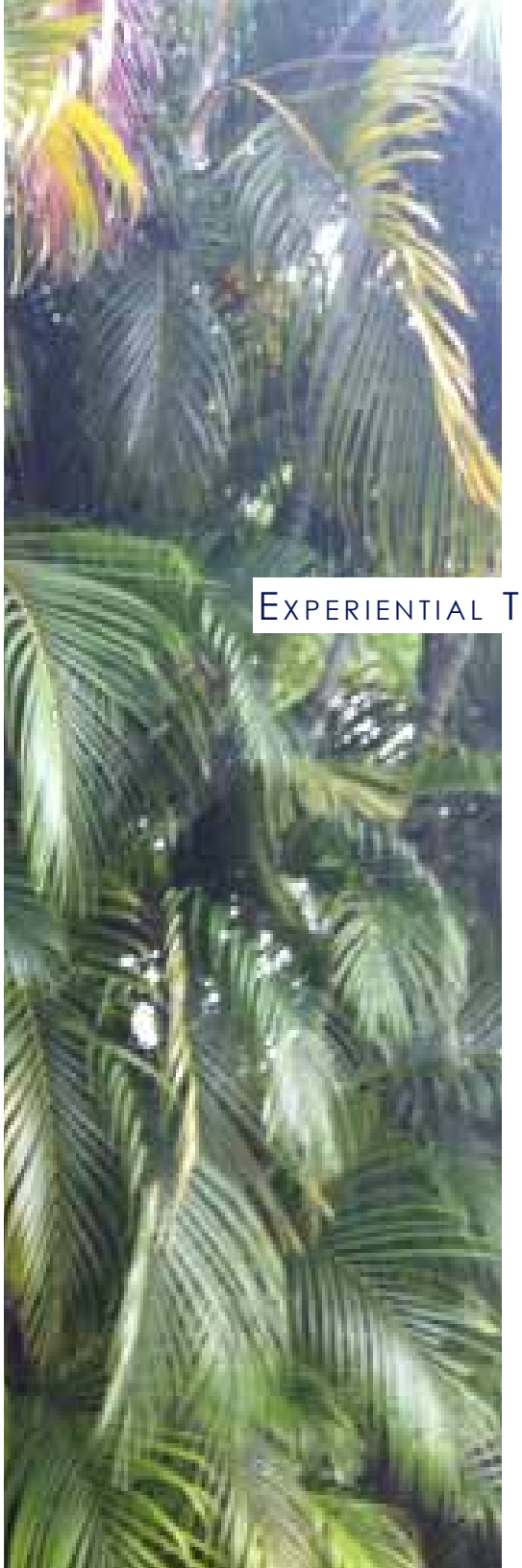
1. The plan designates a corridor for commercial and tourism uses. Nodes along this corridor can provide areas for shopping and dining that are unique to the island and owned and operated by locals. Convenience and grocery stores can also be located along this corridor to also provide some employment opportunities. The cultural center is also an opportunity to sell local crafts and works of art.

2. Relocating the trash collection to a new facility was a request of the majority of Coral Bay residents we spoke with, because the current method of trash disposal is inadequate. A trash and recycling facility could also provide some economic opportunity through the reuse, repurposing, and sale of material.

3. An agricultural or farm/forest corridor is also designated on the plan. Increasing the growth of locally grown produce and green products can be an economic driver, and also lead to the establishment of farmers markets, retail plant nurseries, and other retail activities.

4. Increasing water access is also an economic opportunity. If this is done in a way that doesn't go beyond the capacity of Coral Bay, as with a small boat launch, and does not harm the Bay's ecosystem or marine life, water access through small boats and limited shore line access can provide economic opportunities for local boat owners and guides.





Experiential Tourism

Introduction

Coral Bay, St. John is in a unique position to develop experiential tourism which attracts travelers who seek to enjoy the natural environment, local cultural heritage and have low-key interactions with local residents who live and work in the area. Experiential tourism allows travelers to take an active interest in the places they visit, enjoy taking part in local activities, and generally be actively engaged in the local scene without altering it or making it a place that is "just for tourists." St. John already has an excellent location for experiential tourism. With 60% of its land protected, and hiking trails and marine environments well maintained by the National Park Service for ecotourism and adventure tourism, there is already a natural set of attractions within easy distance from the community. In addition, there are no other communities on St. John that still maintain local heritage in a way that has not been extensively altered by tourism. Coral Bay can take advantage of its setting, local scene, and location near extraordinary land and sea natural assets to develop tourism that attracts travelers looking for the "real St. John." But Coral Bay must be developed in a way that protects the authentic heart of the community. This requires participatory, community-based planning with expert facilitation and spatial land-use planning that develops the area in a sensitive manner without destroying its culture, history or environment.

The Building Blocks of Experiential Tourism

Experiential tourism is the latest trend in global travel. It takes advantage of many trends that have preceded it. Ecotourism, the grandparent of experiential tourism, is responsible travel to natural areas that conserves the environment and sustains the well being of local people, according to The International Ecotourism Society. Since the 1990s, ecotourism advocates have recommended that destinations preserve their natural assets and use them to attract the types of tourists who value visiting the natural environment. In addition, Adventure Tourism, which bloomed in the same period, invites travelers to be active in their pursuit of the outdoors, enjoying scuba diving, hiking, zip lining and all manner of outdoor sports while on vacation. Finally, geotourism emphasizes that the integrity of places is preserved to encourage market differentiation and cultural pride.

A recent gathering of the top travel editors in the United States, written up by *Travel Weekly,* gives insights into the experiential travel trend. Keith Bellows of *National Geographic Traveler* states that compared with 5 years ago, travel is more experiential. "Live like the locals. Slow it down." Clara Glowczewska, editor of *Conde Nast Traveler,* agrees. "It's something not packaged, not canned. Authentic." Julia Cosgrove of *Afar Magazine* confirms, "I probably get 200 press releases a day that throw around the word experiential, but if they are really committed to that, they need to do it and not just say it."[1]

But Cosgrove points out that delivering on Experiential Tourism can be a challenge,

"I was just on a panel in the British Virgin Islands, and we talked about how you can't sell the Caribbean like you did 25 years ago, because blue water and white-sand beaches, that's not enough. There's no heart to that. There's no sense of "I should go to this island as opposed to that island, because I'm going to get this deeper cultural experience by connecting with people in one place versus another. Destinations need to respond."[2]

Coral Bay can build on its local authentic sense of place and its natural and cultural assets to develop a unique experiential tourism product. The basic building blocks required are:

- Well preserved and vibrant cultural heritage
- Beautiful and conserved natural environment
- History that can be told by residents or through interpretation at monuments
- A low-key setting that allows tourists to mix with locals in a natural way

All of these elements exist in Coral Bay, making it a very good target to develop experiential tourism. Experiential tourism development will have excellent economic benefits and will keep Coral Bay distinctive by preserving the town's cultural authenticity. But it will not happen on its own. There must be a well thought out plan in place.

Planning Experiential Tourism in Coral Bay

Land-use planning is presently not part of the way the USVI makes decisions about allocation of territory for the development of tourism, as there is no municipal authority to oversee town plans or zoning. The lack of town planning defeats efforts to zone and develop tourism according to the true goals and objectives of local residents. Outside developers can work through channels over the heads of local residents to gain permits to develop essentially without permission of the community.
It is difficult to combat this problem. The best approach is to develop the plan, be extremely proactive, and advance the community vision. Discussions with legislators in St. John indicated there is support for planning that can preserve Coral Bay's way of life. Suggestions for the lay-out of a town plan were laid out in conceptual form by the AIA team and are found in the preceding report section. The plan must be based on what the market desires, using research on the marketplace which reflects on the types of travelers interested in visiting the USVI and the Caribbean in general for overnight stay visits. A breakdown of the zeitgeist of this market is provided in this presentation by Cristienne de Souza.

The Experiential Tourism Market & the Community of Coral Bay

The Economic Downturn and Resetting of Priorities

With the global economic meltdown of the past several years, there's been a significant amount of economic hardship and loss in the United States, with millions of people losing their homes, their jobs and families, and their dreams of a secure retirement. From 2007-2010, there were over 4 million completed foreclosures and more than 8.2 million foreclosure starts,[3] and national unemployment hit an all-time high of 10.5 percent[4] (8.8 million jobs lost, $19.2 trillion household wealth lost), the highest rate since the Great Depression. With over 90 percent of all tourists visiting the US Virgin Islands coming from the United States, and tourism representing 80 percent of the island's economy and employment,[5] the US Virgin Islands as a whole experienced the effects of the economic downturn in a significant way.

It's been a tough road to recovery, and as a result, people are taking a step back and are reevaluating what is really important to them. For those who have returned to work, they have to work harder than ever before, and have less and less free time to enjoy. This free time is very valuable and precious, and people want their travel to be meaningful, feel good and have some impact in the world —not just to escape or indulge themselves, and this is why experiential tourism is booming.[6]

A Reconnection to Self, People & Culture of the World

More people are considering themselves "citizens of the world", suggesting a more globally mindful attitude. They also feel that where, why and how they travel says a lot about who they are. The 2012 American Express Spending & Saving Tracker Survey (survey respondents were 100 percent US Citizens) reported that 48 percent of the people surveyed seek meaningful experiences when they travel. They want to immerse themselves in the culture and heritage of their destination. "Seasoned travelers want an authentic, local experience versus a standard tourist itinerary," said David Patron, Vice

President of American Express Travel. "These are people who invest in travel and they want to do more than just see a destination they want to live like a local." Patron continued, "When a traveler visits a destination they want to understand the local traditions and feel like they are getting a true insider experience."[7] Most importantly, when these travelers return home from their journey, what impacts them the most, and what they remember the most is the local community , and that is why Coral Bay is the perfect destination for these travelers' need for reconnection.[8]

The Community of Coral Bay: The Ideal Destination for Reconnection

The community of Coral Bay, St. John USVI is the ideal destination for people's real need for reconnection. The AIA SDAT team conducted a host of community engagement meetings on the basketball court of the local public school in Coral Bay, and one of the questions asked to the local people in attendance was, "If you could describe the community of Coral Bay in one word, what word would you chose?" The responses from the local community are in perfect alignment with what US consumers are looking for through the booming market of Experiential Tourism.

Close Knit, Genuine, Relaxed, Natural, Accessible, Beautiful

Delivering on the Components of an Experiential Tourism Plan

Each of the main components of an experiential plan must be reviewed by the community to determine how they would like to offer the best experience for the traveler visiting Coral Bay. It is important to discuss some pre-conditions. They are:

- **Does the community seek to emphasize day visits or overnight visits?**

o This determines how the community will plan for development of the experience travelers have.

o The AIA Planning team assumed that a high percentage of the visitors would be day visitors from other locations on the Island. For this reason, good parking areas were incorporated to allow visitors to leave their car and be able to walk around the village and enjoy the water front, food, heritage, and take short boat trips. The team also recommended developing a transportation plan that would provide easy shuttle rides to Coral Bay from Cruz Bay for day visitors. This would be very important to lower car traffic impacts on the community.

o The decision to emphasize day visitation versus overnight stays is very important. Coral Bay is not structured now as an overnight hotel stay community. While one ecolodge is a good idea, and will remain small scale at least as it has been explained, in general the community can enjoy hosting visitors who leave at the end of the day. This allows the community to go back to "normal" at the end of each day and focus on small business opportunities, as opposed to the more complex planning process of incorporating a hotel or a number of hotels into the existing community.

• How many visitors would Coral Bay like to have?

o It would be wise to study how many visitors might be interested in coming to Coral Bay by looking at the existing patterns of visitation already transpiring on the island. Decide what percentage of St. John's existing visitors Coral Bay might like to target.

o With this rough number of target visitors, the size of the parking lot can be planned with expansion space in mind for the future. Keeping lots smaller is wise as parking areas need to be buffered with natural vegetation to prevent damaging run off and large lots are unsightly and encourage more visitors.

o The number of targeted visitors and the amount they will pay to local merchants can be estimated. This will help with a financing plan for the boardwalk on the waterfront, if it will be paid for as part of a loan or bond, similar to a school.

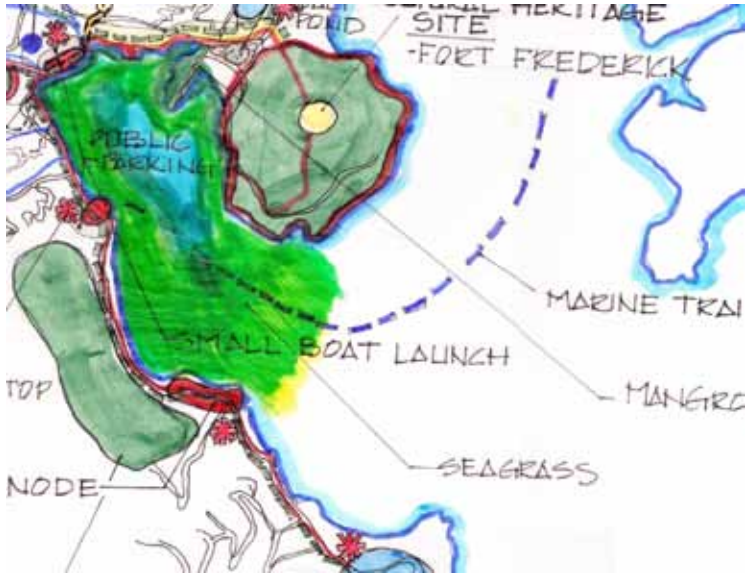
o Finally, a sewage and water systems plan is required to accommodate the number of people you want to visit. There will need to be financing included in your plan for these facilities as well.

o Restaurants and other commercial facilities should also base their plans on target numbers of visitors

• What type of docking facility does Coral Bay want?

o The AIA team assumed that Coral Bay might want a small boating dock which can accommodate scuba and snorkeling visits to Hurricane Hole. Given that this is the only part of the Virgin Islands Coral Reef National Monument available by land or short boat ride, it represents a highly marketable asset for Coral Bay. To preserve it and keep control of visitation, small boat businesses should be the number one recommended approach to visiting the area as part of the experiential tourism plan, with a limit on the number of boats visiting as part of the plan if possible. This would have to be discussed with the National Park Service.

o If Coral Bay decides to target some of the day cruise ship visitors that would normally visit the other side of the island, the docking facilities could serve the purpose of bringing guests directly from St. Thomas over to Coral Bay with a private boat service, or via transfer from Cruz Bay scheduled ferry service from St. Thomas. Assessing the type of visitors Coral Bay would like to receive may play a role in the design and development of the docking facility needed.



The Assets to be Built Upon

• Environmental Assets- # 1 Marine

o Waterfront and easy access to the Virgin Islands Coral Reef National Monument

o Small boat access to a pristine area that receives few visitors at present

o Hurricane Hole has a unique combination of mangrove and vibrant coral that offers an unusual and interesting snorkeling and diving experience. Fish populations are excellent, varied, and include game species not normally sighted in areas where fishing is allowed – such as snapper.

• Forest & Farm Corridor

o The AIA plan designated a path for walking along a farm road, on King's Hill Road

o The ecolodge will be located there as is the Agricultural station

o It is recommended that a farm stand is also developed to offer fresh produce for residents and visitors. This can be a weekly event that allows for locals to mix with visitors in a low key authentic way. Farmers markets feature fruits and vegetables not familiar to many visitors and are a wonderful way for folks to get a fresh taste of the islands! Often foods stands become highlights of farmers markets, and local fish fresh out of the ocean can be sold cooked or to be taken back to the many villa residences in the area for cooking.

o This area can also feature walks along the mangrove area

• A Cultural Center

o The AIA plan includes a new "town center" which is away from the tourism area and not part of the tourism plan, per se. This "town center" would include public services and a good meeting hall.

o The AIA plan designates an area for a Cultural Center to allow for the display of local living culture.

- The AIA recommends that this is placed on the waterfront or near the waterfront close to the Moravian Church.
- It would have exhibits, crafts, demonstrations, and live performances

o A Cultural Heritage Corridor would include the Moravian Church, the Cultural Center and Historic Assets

- Frederik Fort and its connection to the Johnny Horn trail should be the primary historic attractions. Access to the Fort would need to be maintained to ensure that visitors can walk there from the Cultural Center.

Conclusion

Coral Bay has the makings of an excellent experiential tourism destination. But only a plan with clear goals and objectives for new types of infrastructure, including a boardwalk and walking trails, water and sewer capacity and a parking lot can make this possible. Preservation of the waterfront would also have to be part of the plan, with designated areas for access.

Small business development will need to be a primary goal, to help local people to take advantage of the experiential tourism plan. This AIA concept plan is designed to allow for a wide variety of small businesses such as;

- Restaurants
- Craft outlets
- Docking facility with services
- Scuba and snorkeling boat businesses
- Farmer's market with farm stands for produce and food stands with local food
- Fresh fish outlet
- Ecolodge
- Shuttle buses
- Taxis
- Guides
- Exhibitors at the Cultural Center who can sell their wares including photographers and artists
- Book and magazine shop with guide books and other literature on Coral Bay

Financing and establishing small tourism businesses does not come easily to those who have never started businesses before. Small business development assistance will be required which should be available through the Small Business Administration as one good reference. Sources of capital for small businesses must also be researched and should be part of the plan to help local people to launch small tourism businesses.

A local chamber of commerce or other similar organization to promote and help small business to develop and finance their business plans can be one way to attract support in the long term.

It is essential to work together and create the vision and bring it to fruition by interacting with legislators and others to demonstrate why community planning is key to developing tourism in a manner that is economically beneficial and also is in harmony with local culture and conserves the environment.

Notes

[1] Travel Weekly, April 16, 2013, Consumer Travel Editors Get Personal, http://www.travelweekly.com/Travel-News/Travel-Agent-Issues/2013-Travel-Editors-Roundtable/

[2] Ibid

[3] Bennet, Pam. "The aftermath of the Great Recession: Financially fragile families and how professionals can help" http://ncsu.edu/ffci/publications/2012/v17-n1-2012-spring/bennett.php (accessed June 10, 2013).

[4] US Department of the Treasury, "The Financial Crisis Response in Charts", April 2012, http://www.treasury.gov/resource-center/data-chart-center/Documents/20120413_FinancialCrisisResponse.pdf (accessed July 15, 2013).

[5] Euromonitor International, "Country Report: Travel and Tourism in US Virgin Islands", April 2012, http://www.euromonitor.com/travel-and-tourism-in-us-virgin-islands/report (accessed July 15, 2013)

[6] Sustainable Travel International, "Experiential Travel: Differentiating Your Destination While Bringing Benefits to the Community", January 10, 2012, http://www.slideshare.net/david20/the-experiential-travel (accessed June 10, 2013).

[7] Miller, Shelly. The Huffington Post Travel, "Eight Effective Ways To Live Like A Local When You Travel ", July 19, 2012, http://www.huffingtonpost.com/shelley-miller/eight-effective-ways-to-l_b_1680313.html (accessed May 31, 2013).

[8] Amster, Robin. Travel Market Report: The Voice of the Travel Seller, "Tour Outlook 2013: Boomers, Experiential Travel Will Drive Sales", January 7, 2013, http://www.travelmarketreport.com/articles/Tour-Outlook-2013-Boomers-Experiential-Travel-Will-Drive-Sales (accessed May 31, 2013).

Community Development

Building community and Institutional Capacity: The Coral Bay Community Development Corporation

Coral Bay can build a diverse, inclusive, sustainable economy that provides a livelihood for its residents, preserves its natural assets, and lastly, possesses the institutional capacity to plan and influence land use, economic development and infrastructure decisions. There are opportunities and challenges to Coral Bay in its search for sustainable, inclusive development. Some of these challenges emerged from discussions during our visit and are summarized below:

Community divisions that often fall along class and racial lines. There is no good way to mention these divisions without evoking the strong emotions that they bring. To be clear, Coral Bay is not riven with racial and class divisions. Indeed people of good will on all sides of these standard divisions abound and should give comfort and hope that progress in addressing long-term sustainability can be achieved. Much of the division is not intrinsically race and class, but rather the limited ways in which residents are able to cross these lines of demarcation and work in formal ways to change important policies impacting their community. A good example of how the St. John community needs to enhance cohesiveness emerged during one of the team's listening sessions. An Afro-Caribbean elder related what was for her a breach of trust. She told the story of someone, presumably a continental, who wrote a grant application that had consequences for the resident's land.[1] The Afro-Caribbean resident was more upset that she was not consulted, as opposed to being in opposition of the grant itself. This miscommunication (or differing communication styles) is magnified by general concerns in the Afro-Caribbean community that efforts to limit growth undermine that community's ability to survive if their youth cannot find jobs and must leave to find opportunity.[2]

Lack of Representation in Territorial Government. We listened to others in the community, including many continental residents, who discussed corruption and lack of representation in territorial government in strong terms. These individuals conveyed a palpable concern that they were not getting services and due representation from the central government. Whatever the merits of the concerns surfaced by our meetings, the practical reality is that the Coral Bay community feels powerless to impact land use and infrastructure development in ways that produce the public good. Standard economic development strategies and planning tools will find limited traction if organizing the full-spectrum of the Coral Bay community toward inclusive development is not first put in place. We recommend the following to simultaneously build a sense of collective efficacy, trust and action.

Recommendations

Form a CDC

Coral Bay must develop a community-based organization that (a) promotes area-wide development and collective decision-making, and (b) builds sustainable development that empowers the residents and their families. Existing institutional capacity for community-driven development is sparse, but the community has important assets on which to build.[3] Some of those assets include the wealth, education and expertise located in the community, but the community also has a history and culture that can only help to strengthen the base for community and economic development processes.

Utilize Best Practices

Employ practices used by the community economic development (CED) movement (found all over the world) that places a premium on community voice, professionalization of the development process, and sustainability to frame a community and economic development process. If done thoughtfully, this process will (1) generate livelihoods for island youth and (2) manage growth so that the natural assets of the island can be enjoyed in perpetuity.[4]

Engage the Community

Vet the idea and viability of using a community economic development institution to manage the economic sustainability process.[5]

A Community-Based Economic Development Corporation for St. John, VI

Establishing a non-profit corporation is a fairly standard precursor to community and economic development in the developed and developing world. In the United States, such corporations are helped by the tax code that provides them tax-exempt status. In other national contexts, they are called Non-Governmental Organizations that, depending on the country, are registered and pay little or no taxes. Standard actions in developing a non-profit development corporation include (1) establishing a mission and a set of goals (2) building a board of directors with a wide range of expertise and (3) raising operating capital and project support.[6] After listening to Coral Bay residents, we recommend these core functions for the organization:

- Establish and maintain a data platform that residents of Coral Bay can consistently use in making evidence-based social and economic development decision-making;
- Serve as a trusted authority on community needs and plans through periodic surveys of resident attitudes toward development and a repository of case examples for Coral Bay to improve their development strategies;
- Evolve into an institution that develops and implements projects of scale. Such projects can include workforce development, small enterprise development helped along by the organization providing loans and technical assistance, and a land trust to purchase land parcels consonant with the community's land use plan.[7]
- Develop leadership capacity in Coral Bay through specialized adult and youth programming that builds skills and social capital.[8]

Possible Programming Strategies

Though the recommended community and economic development institution will need time to evolve and become strong, the following are some development strategies that it might eventually take on that will address both stewardship of the environment and providing livelihoods for the island's youth:

Strategy: Develop community-organizing effort that results in building community-planning capacity. This community organizing and planning capacity can then be used to exert a stronger policy voice and influence with the territorial government.[9]

Strategy: Conduct a study of the local economy complete with projections for (1) the development of supply chain linkages in possible industries such Eco Tourism and craft production (2) preparing St. John youth for the local and regional workforce.

Strategy: Develop an Eco-Tourism and/or a craft production project: "Things Coral Bay/Made in Coral Bay" using local expertise to introduce low-capital intensive businesses so Islanders can earn livelihoods.[10]

Strategy: Promoting the preservation of local land assets for long-standing Coral Bay families through (1) mediation (2) low-interest revolving loan facility (3) land trust (possible sources of loan capital, Banks, federal government).[11]

Summary

St. John is rich with potential to mount an effort focused on sustainable, inclusive, economic development. That growth will take place in St. John is not in question. What is in question is whether the various communities in St. John can build a common base of communication and understanding that manages growth so that is does not over wash the natural beauty and historical assets in trust to Island residents.

The team recommends that a diverse group of about ten 'fire starters' (respected members from all the various communities) come together to begin (1) a facilitated community dialogue that surfaces and manages community fault lines toward common action (2) use the community dialogue to build a legitimate base for a community-based economic development institution that addresses growth and development.[12]

Notes

[1] Continental is a term that has come to mean transplants from North America usually of European extraction.

[2] Land is very important to the St. John's Afro-Caribbean Community especially as land ownership gets diluted because title cannot be established when an elder passes on, or the heirs cannot agree on disposition. This happens in other communities around the world. A good example of how coastal communities in the state of South Carolina in the U.S. are trying to prevent land loss in marginalized communities can be found at: The Center for Heirs Property (http://www.heirsproperty.org). Accessed July 22, 2013.

[3] See this website for a good illustration of how a coastal community has organized to build on its natural assets: The Cape Cod Economic Development Council (http://www.capecodedc.org). Accessed July 15, 2013). See also The Town of Wareham (http://www.wareham.ma.us/Public_Documents/WarehamMA_Development/index). Accessed July 15, 2013). See this general resource for information on community planning http://www.communityplanning.net.

[4] See James B. Cook. Community Development Theory (http://extension.missouri.edu/publications/DisplayPub.aspx?P=MP568). Accessed July 2013). University of Missouri Extension.

[5] See Wisconsin Economic Development Institute Inc. (2003). A Guide to Preparing the Economic Development Element of a Comprehensive Economic Development Plan. (http://www.wi-edi.org/docs/WEDI-ED-Handbook.pdf) accessed July 22, 2013.

[6] See the Foundation Center for resources to build a strong non-profit organization. (http://foundationcenter.org/getstarted/topical/capacity.html). Accessed July 22, 2013.

[7] Ibid. See also The Cape Cod Economic Development Council (http://www.capecodedc.org). Accessed July 15, 2013) and the Lincoln Land Institute http://www.lincolninst.edu/subcenters/community-land-trusts/ on this score.

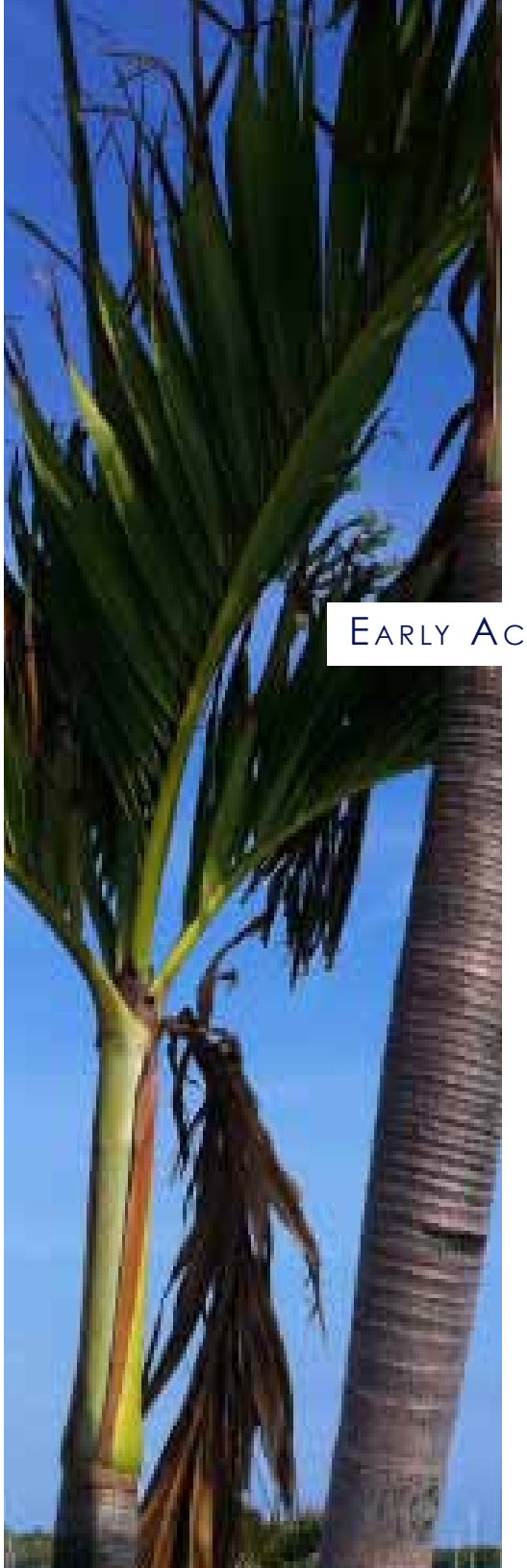
[8] See Wisconsin Economic Development Institute Inc. (2003). A Guide to Preparing the Economic Development Element of a Comprehensive Economic Development Plan. (http://www.wi-edi.org/docs/WEDI-ED-Handbook.pdf) accessed July 22, 2013.

[9] Elaboration on building community capacity can be found at First 5 LA Champions for Our Children (Lahttp://www.first5la.org/articles/strategic-plan-community-capacity-building). Accessed July 22, 2013. See also John Kretzmann, John McKnight, Sarah Dumbrowolski, Deborah Puntenney (2005). "Discovering Community Power A Guide to Mobilizing Local Assets and Your Community's Assets." (http://www.sesp.northwestern.edu/images/kelloggabcd.pdf). Accessed July 22, 2013.

[10] See ORGANIZATION OF AMERICAN STATES, Inter-American Council for Integral Development (CIDI) (2003). "Culture as an Engine for Economic Growth, Employment and Development" (www.oas.org/udse/english/documentos/tema1estudio.doc). Accessed July 22, 2013.

[11] See http://www.cltnetwork.org for information on Community Land Trusts.

[12] The use of a skilled community builder/facilitators is strongly recommended here. Perhaps such a talent can be found at the University of the Virgin Islands.



Early Actions

Recommended Early Actions

Relocate the Waste and Recycling
Coral Bay's waterfront is one of its most important assets. The location of the waste and recycling center along the waterfront is a significant hindrance to creating a public realm and a community front door along the waterfront. Consider relocating the uses to a central location in the valley. This can be an early win for the community and begin to demonstrate collective action towards the creation of a sense of place in Coral Bay.

Start the Nature Trail
Begin to establish the proposed nature trail as an early action that can serve as part of an eco-tourism strategy. Coral Bay has significant water and land resources and the natural trail can be a quick win for the community to establish and market to visitors and residents alike.

Conduct a Cultural Inventory
Begin to collect and archive the stories and histories of Coral Bay's residents and families. The local history and customs are a unique component of Coral Bay's sense of place. Ensuring that the local culture continues to thrive will be vital to the creation of a strong community identity and aid in the development of an authentic heritage-based tourism strategy.

Convene a Community Development Corporation Task Force with Broad Representation
In order to create and implement a long-term vision for Coral Bay, it is clear that Coral Bay could benefit from the creation of a community development corporation (CDC) that can undertake planning and development in Coral Bay. In order to represent the community-as-a-whole, the CDC must be broadly representative and consultative. Start by convening a task force drawn from a wide cross section of the community to map out and plan for the creation of a CDC. Appoint civic leaders who have the trust of the community-at-large to work with the task force. In order to avoid the appearance of special interests establishing the agenda, the task force should be created fresh and not be housed in an existing institution or agency. Ensure that civic engagement is a fundamental role and responsibility of both the task force and the resulting CDC.

Work with Congressional Delegate on Municipal Rights under Organic Act

Our conversation with Congresswoman Donna M. Christensen, the USVI delegate to the United States House of Representatives, indicated that municipal rights might be able to be granted to communities living in the territories under the Organic Act of the Virgin Islands. Determining the viability of municipal rights would be an important first step towards ultimately establishing local control over land use and development. The Congresswoman's office is an important resource for the community to avail themselves of. Coral Bay could serve as a model for other communities within the USVI.

Explore Funding Opportunities from HUD, EDA, DOI, VI Community Foundation, Rockefeller Brothers Fund

The Coral Bay community would benefit by exploring the potential for funding and technical assistance from a variety of public and private agencies, offices and foundations. The United States Department of Housing and Urban Development (HUD) has community planning and development programs to assist communities with housing and economic development opportunities for persons with low to moderate incomes. HUD also offers the community block grant development (CBDG) program that provides funds for communities to address a wide range of development needs. The US Economic Development Administration (EDA) has a competitive grant process based on innovation and regional collaboration. The Department of the Interior provides grants for conservation and preservation that can be tied to heritage tourism. Private and community foundations are another important resource. Community foundations reinvest wealth in local communities. The Rockefeller Brothers Fund could be another source of community funding. Their interest in sustainable development could be a good match for Coral Bay given the significant role that the Rockefeller family played in the creation of the national park on St. John.

Work with National Park to Re-open Management Plan

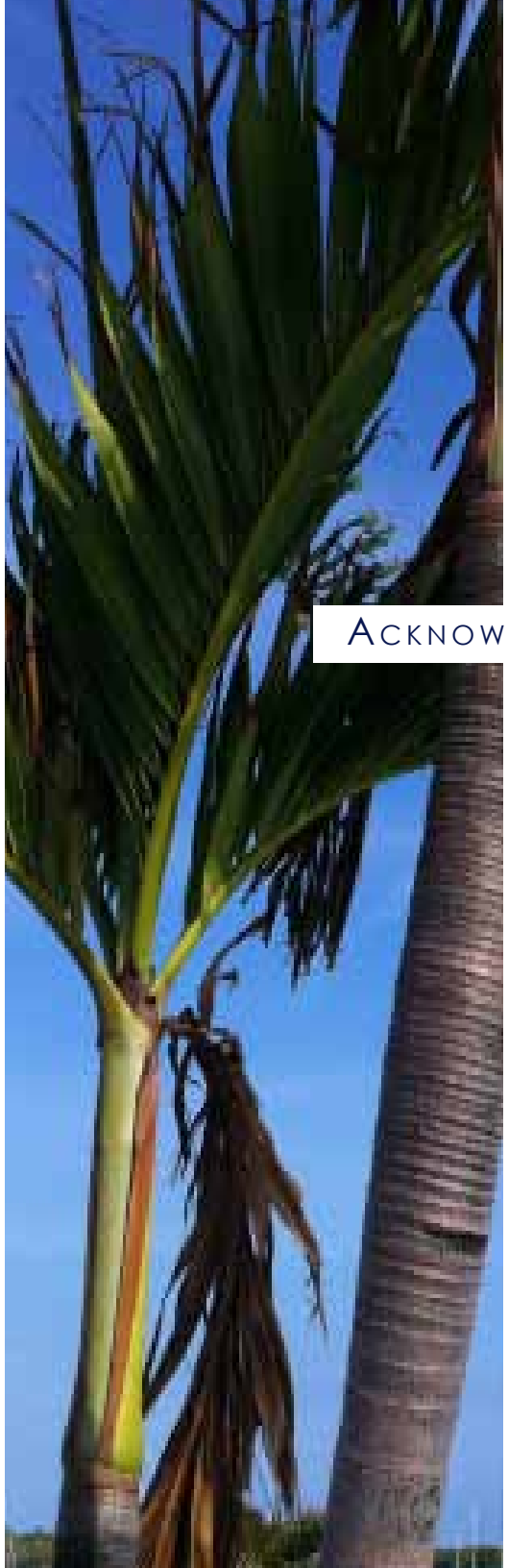
The National Park Service's Management Plan is an important participatory community visioning process that can aid both the park and the surrounding communities. Coral Bay could play an important role in working with the Park Service to help define a vision and a management blueprint that will guide the stewardship of the park for the next 15 to 20 years. Ensuring that Coral Bay's values and voice is part of the process will be an important step towards organizing the Coral Bay community around creating a vision for Coral Bay and forming the trusted civic alliances necessary to implement the vision. The Park Service should be viewed as an important partner and as an anchor institution on St. John and in Coral Bay. The Coral Bay community can leverage the resources of the park to help stimulate growth while protecting the natural resources of Coral Bay and St. John.

Partner with University of the Virgin Islands on Best Management Practices and Research Opportunities

Academic institutions can be important resources and community partners for positive change. As laboratories for advancing best practices they can help local communities implement new management policies in land-use, development, ecological services and other important practices that have a direct impact on the quality of the environment in Coral Bay. The University of the Virgin Island's Caribbean Green Technology Center is focused on alternative energies. The UVI's Water Resources Research Institute is an important educational and community resources for rain water systems for domestic water supply. And UVI's Center for Marine and Environmental Studies is an outreach arm of the university's Marine Science Program. These, and other programs of UVI, are significant resources for Coral Bay as the community identifies the core issues it faces in planning for the future.

Investigate Creating a Citizen Assembly

Without a clear local mechanism for municipal self-organizing, the citizens of Coral Bay should consider forming a citizen assembly. Citizen assemblies are a way for citizens to organize around a civic issue, become educated about the issues and provide a deliberative framework for fairly and neutrally arriving at common ground. The recommendations produced by the assembly can be presented to the public, politicians and government as the result of a democratic and deliberative process designed to create change. Coral Bay could consider convening such an assembly to deliberate about creating local municipal authority and present the recommendations, as a reflection of the will of the citizens of Coral Bay, to the Senate in St. Thomas. This is a way for citizens to productively participate in deliberative democratic reform.



Acknowledgements

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The entire SDAT Team would like to thank the citizens of Coral Bay for hosting this process. It is our sincere hope that processes involving the entire community will continue beyond this process. In particular, we would like to extend our gratitude to the following organizations and individuals for their contributions to the process:

Congresswoman Donna M. Christensen
The Coral Bay Community Council - Board Members: Sharon Coldren, Joan A. Thomas, David Silverman, Robert DeBonis, Sarah Donovan, Bonny Corbeil, and Jason Hayman; and Staff: Patricia Reed, and 400 members providing input and support.
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Connections East & Keep Me Posted, St. John Ice, Skinny Legs
VI Dept. of Agriculture
Coral Bay Yacht Club

Through the SDAT process, the team came away with a deep sense of the community values, generosity and hospitality that Coral Bay citizens all share. We are thankful for the opportunity to work with you, and look forward to your future successes.

The SDAT Team

The SDAT Team

Harris Steinberg, FAIA - Team Leader

Harris M. Steinberg, FAIA, is the founding executive director of PennPraxis, the clinical arm of the School of Design at the University of Pennsylvania, whose mission is to foster faculty and student collaboration on real world projects across the five disciplines of the school: architecture, landscape architecture, city and regional planning, historic preservation and fine arts.

From 2003 until 2006, Harris was the Director of the Center for Innovation in Affordable Housing Design. He was a lecturer at PennDesign from 1998 to 2003 and an adjunct assistant Professor in PennDesign's Architecture Department from 2003 to 2006.Harris' professional experience includes work at Venturi Raunch Scott Brown and Geddes Brecher Qualis Cunningham. He was the founding partner of Steinberg & Schade Architects and Steinberg & Stevens Architects.

Harris led the process for "Creating a Civic Vision for the Central Delaware Riverfront," which brought more than four thousand Philadelphians together to build a vision plan for seven miles of Philadelphia's Delaware riverfront. His prior civic engagement work includes the 2003 Penn's Landing Forums with the Philadelphia Inquirer and the 2006 casino forum with the Philadelphia Daily News. The riverfront vision plan was released in 2007.

Harris has had chapters in Rebuidling Urban Places after Disaster, The Deliberative Democracy Handbook, and The Sustainable City II: Urban Regeneration and Sustainability. His articles appear regularly in The Philadelphia Inquirer, the Philadelphia Architect, and City Space. He has been published in the Wharton Real Estate Review, Architectural Record, and Mid-Atlantic Construction.

Roland Anglin - Community Development

Roland V. Anglin's career spans over twenty years of working in the public, educational, and philanthropic sectors. In all his professional positions, Anglin has focused on promoting economic and community development in and for marginalized communities. Currently, he is Faculty Fellow at the Edward J. Bloustein School of Planning and Public Policy, Rutgers University, and directs the Initiative for Regional and Community Transformation (IRCT), which is housed at the school. The IRCT is a national initiative whose mission is to support the transformation of marginalized communities and people in urban and rural places through applied research and program management.

Dr. Anglin began his academic career at Rutgers University. There he examined issues related to economic development and growth management. During this time, he published some of the seminal work on citizen attitudes toward sprawl development. In 1991 he was recruited to the Ford Foundation, where he spent eight years. He served first as the program officer responsible for community development. Subsequently, he was asked to become Deputy Director for Community and Resource Development, which is part of the Asset Building and Community Development Division.

After leaving Ford, Dr. Anglin went to the Structured Employment Economic Development Corporation (Seedco), a national community development intermediary. At Seedco, Dr. Anglin was the Senior Vice President responsible for building the capacity of community-based housing organizations in 23 cities partnering with Seedco. Since returning to academia, Dr. Anglin has pursued an active research agenda and has managed many demonstration initiatives for philanthropy, state governments and national associations including the National League of Cities.

Tom Von Schrader – Low-Impact Development & Green Infrastructure

Tom brings 29 years of experience in implementing sustainable visions that balance community development needs, right-of-way demands, and environmental objectives in corridor, streetscape, and civic enhancement projects. His design experience focuses on establishing and meeting performance standards across the overlapping systems of mobility, water (drainage), community, habitat, energy and geology. Tom's thoughtful leadership and collaborative management style help project teams implement cost-effective, sustainable solutions that meet our clients' goals in Seattle and nationally.

Tom's projects include every aspect of roads, complete streets, parking, stormwater and LID, integrated corridor treatments, green streets, and other infrastructure. Tom has presented at numerous conferences and workshops on sustainable streets, green streets, and green infrastructure and has participated in coordinated numerous design charrettes.Tom has a BA in Biology from Kenyon College and a BS in Civil Engineering from the University of Iowa.

Jessica Hornbeck – Water Resources & Environmental Management

Jessica Hornbeck is a senior technician for the Florida Fish and Wildlife Research Institute. Based in Key West, FL, her current research focuses on outplanted corals to assess the impacts of various parameters on coral survivorship. She has held previous positions as a Park Guide and Biological Technician for Virgin Islands National Park, where she spent several years, and provided baseline monitoring data and conservation recommendations for resource managers at the park. Prior to that, she spent 5 years as a research assistant for the Florida Fish and Wildlife Research Institute, conducting a number of research and conservation activities at the Florida Keys National Marine Sanctuary and Buck Island National Reef Monument (St. Croix). She holds degrees from Eastern Michigan University (Science/ Biology), and a Masters in Environmental Studies/Conservation Biology from Prescott College.

Diane Jones - Urban Design & Landscape

Diane Jones, ASLA, RLA has 25-years of diverse experience in private and public practice focused on the areas of land use design/planning, transportation planning, and large-scale residential and park design projects. Jones has worked in numerous landscape architecture/planning firms and public agencies around the country and was principal of her own professional practice, Terra Designs Inc. in New Orleans, LA, for 11-years. Diane is currently Principal Landscape Architect with Design Jones, LLC, and an associate professor in the Graduate Department of Landscape Architecture at Morgan State. She teaches design studios, environmental design seminars, and contemporary landscape history. Ms. Jones holds a Master's of Landscape Architecture (MLA) from the University of California at Berkeley and a Bachelor of Fine Arts (BFA) from the Washington University, St. Louis, Missouri. She is currently a doctorate student in Civil Engineering at Morgan State University in Baltimore, Maryland, completing her dissertation on Transit Deserts.

The framework of emphasis that guides all aspects of Ms. Jones' research is environmental justice, especially as it affects minority and urban communities, from a physical planning perspective. She recently collaborated on a joint studio effort with Louisiana State University to serve as a critical catalyst in the rebuild of the Du Centre-Ville Historique de Jacmel, Haiti in a manner that empowers the Haitian people of Jacmel, through participation with the Mayor's Office of the City of Jacmel, the Haiti Ministry of Tourism, the major property owners, the Louisiana/Haiti Sustainable Village Project, the Port of Jacmel, the Jacmel Chamber of Commerce and a host of concerned Haitian business owners and citizens. She is a member of the Urban Design Architecture Review Panel (UDARP) for the City of Baltimore which advises the City Planning Commission and other City Agencies on matter of architecture, landscape architecture and urban design. Specifically the panel is empowered to provide review and design assistance in signature sites and significant projects that are proposed in planned unit developments(PUD), renewal or conservation areas, and master plans.

Megan Epler Wood - Eco-Tourism

Megan Epler Wood founded The International Ecotourism Society in 1990, the first NGO in the world to be dedicated to sustainable development of tourism and was its president and CEO for 12 years. Under her leadership, TIES developed a membership program in over 100 countries, publications, workshops and stakeholder meetings that reached tens of thousands, and an international communications program that reached millions. Since 2003, Megan's firm EplerWood International has worked for the World Bank, the International Finance Corporation (IFC), USAID, and the Multilateral Investment Fund (MIF) of the Inter-American Development Bank developing market-based sustainable tourism programs in biodiverse regions of Sri Lanka, Mexico, Brazil, Ecuador, Honduras, Sierra Leone, and El Salvador. She led a multidisciplinary team to write the 2010-2012 Action Plan for the Belize Tourism Board. Epler Wood is a Core Instructor for the graduate school for Sustainability and Environmental Management at Harvard University Extension and a Senior Fellow at the Center for Sustainable Global Enterprise at the Johnson School of Management at Cornell University. From 2010-2012, Megan was the Executive Director of the Planeterra Foundation, the corporate foundation for G Adventures -- the largest adventure travel company in the world. She led a mission driven strategic planning process via a staff of 3 to develop projects worldwide according to international development standards. She re-developed all accounting and reporting systems. And she led the creation of the Planeterra Amabassador program, to allow local guides working for G Adventures to be trained to monitor and manage Planeterra projects in key G Adventures destinations. In 2012-2013, Epler Wood managed the design, proposal process, and start-up for the Tour Operators Plan for Sustainability supported by the Multilateral Investment Fund of the Inter-American Development Bank and G Adventures, a $1 million project to bring small community suppliers in 4 Latin America countries into international supply chains. It is the largest, most ambitious project ever developed under the Planeterra Foundation banner. Epler Wood is a published author and editor of many titles, including Ecotourism; Principles, Practices and Policies in 2002 for the United Nations Environment Program. Her numerous academic papers investigate sustainable tourism markets, certification, economic growth, alleviation of poverty and environmental conservation.

Cristienne De Souza - Eco-Tourism

Cristienne De Souza is a fourteen year industry veteran in travel and tourism, with a specialized focus in the cruise industry with Royal Caribbean Cruises, LTD (RCCL). With prior experience in yield management, marketing, sales and business strategy (holding a BBA in Marketing and MBA in International Business & Management), she has witnessed tremendous changes in the travel and tourism industry over the past decade and the environmental impact of this explosive growth on destinations worldwide and related coastal development. De Souza is transitioning her role at RCCL from business strategy into environmental stewardship and sustainability, and is currently an ALM degree candidate in Sustainability and Environmental Management (SEM) at Harvard University Extension School (HES).

Her key areas of research include air and water pollution, water use and management, aquatic ecosystems, energy and climate change, biodiversity, toxic substances in the environment, solid waste management, and regulatory strategies for risk assessment and environmental management. In addition, she evaluated and assessed specific methodologies for managing tourism sustainably worldwide including management of air, water, waste water, and solid waste for hotels, tour operations, airlines, airports, ski resorts, new destination development and cruise lines. De Souza created sustainability solution strategies for environmental management challenges in tourism including the use of natural resources, poor management of human behavior, water use and pollution, and competition for resources, and pitched solutions to key stakeholders including government, non-governmental organizations, intergovernmental agencies and the private sector. Key solution strategy types included (but not limited to) spatial planning & tourism, bioregional planning, zoning for tourism, community based land-use planning, private sector leadership, governmental regulation, establishment of protected areas, and mandatory use of environmental impact analysis.

Erin Simmons- Director, AIA Design Assistance

Erin Simmons is the Director of Design Assistance at the Center for Communities by Design at the American Institute of Architects in Washington, DC. Her primary role at the AIA is to provide process expertise, facilitation and support for the Center's Sustainable Design Assistance Team (SDAT) and Regional and Urban Design Assistance Team (R/UDAT) programs. In this capacity, she works with AIA components, members, partner organizations and community members to provide technical design assistance to communities across the country. Through its design assistance programs, the AIA has worked in 200 communities across 47 states. In 2010, the Center was named Organization of the Year by the International Association for Public Participation (IAP2) for its impact on communities and contributions to the field.

Erin is a leading practitioner of the design assistance process. Her portfolio includes work in over 60 communities across the United States. A frequent lecturer on the subject of creating livable communities and sustainability, Erin contributed to the recent publication Assessing Sustainability: A guide for Local Governments. Prior to joining the AIA, Erin worked as historic preservationist and architectural historian for an environmental and engineering firm in Georgia, where she practiced preservation planning, created historic district design guidelines and zoning ordinances, conducted historic resource surveys, and wrote property nominations for the National Register of Historic Places. She holds a Bachelor of Arts degree in History from Florida State University and a Master's degree in Historic Preservation from the University of Georgia.

Joel Mills - Director, Center for Communities by Design

Joel Mills is Director of the American Institute for Architects' Center for Communities by Design. The Center is a leading provider of pro bono technical assistance and participatory planning for community sustainability. Its processes have been modeled successfully in the United States and across Europe. In 2010, the Center was named Organization of the Year by the International Association for Public Participation (IAP2) for its impact on communities and contributions to the field.

Joel's 20-year career has been focused on strengthening civic capacity and civic institutions around the world. This work has helped millions of people participate in democratic processes, visioning efforts, and community planning initiatives. In the United States, Joel has worked with over 100 communities, leading participatory initiatives and collaborative processes that have facilitated community-generated strategies on a host of issues. During the past five years, this work has catalyzed over $1 billion in new investment. His past work has been featured in over 1,000 media stories, including ABC World News Tonight, Nightline, CNN, The Next American City, Smart City Radio, The National Civic Review, Ecostructure Magazine, The Washington Post, and dozens of other sources. He has served on numerous expert working groups, boards, juries, and panels focused on civic discourse and participation, sustainability, and design. He has also spoken at dozens of national and international conferences and events, including the World Eco-City Summit, the Global Democracy Conference, the National Conference on Citizenship, and many others.

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