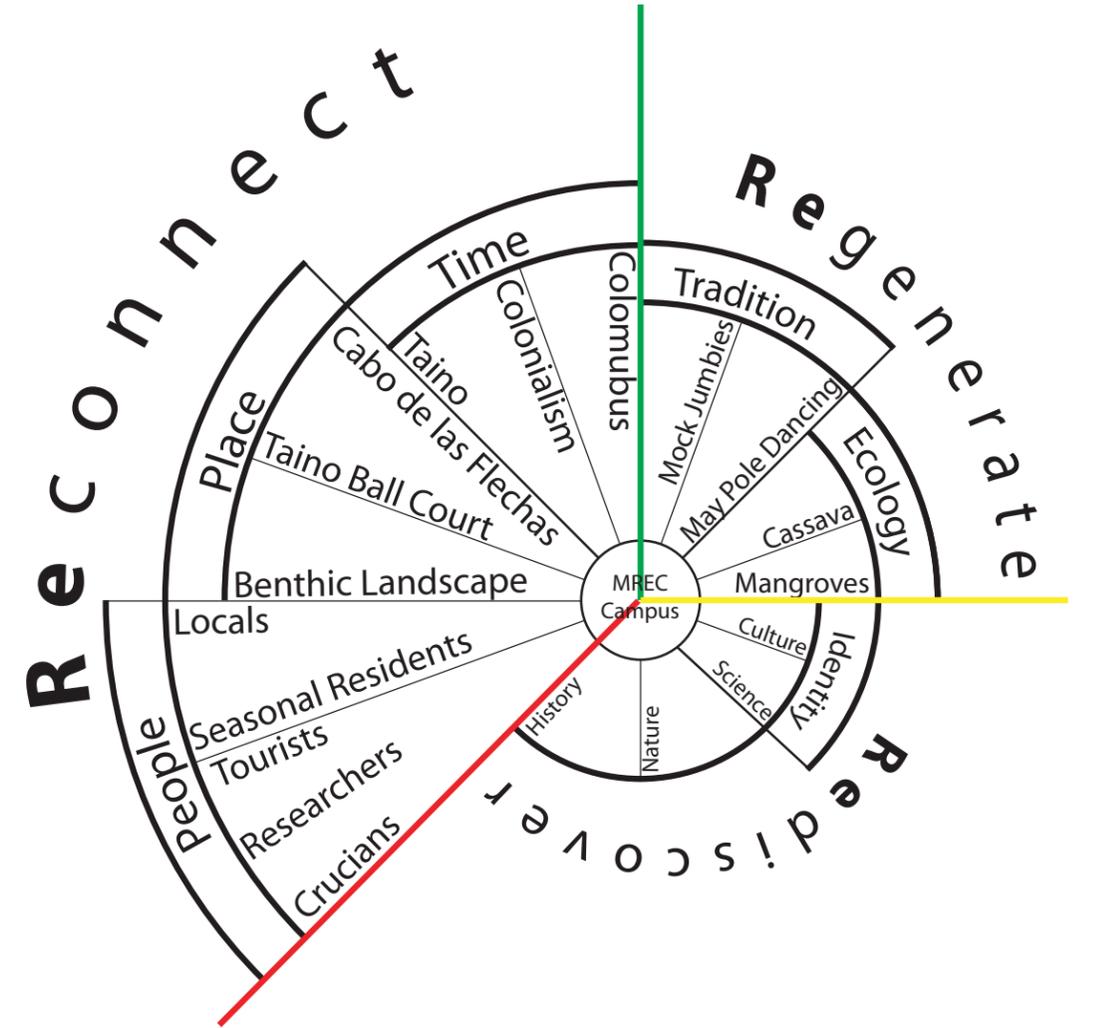


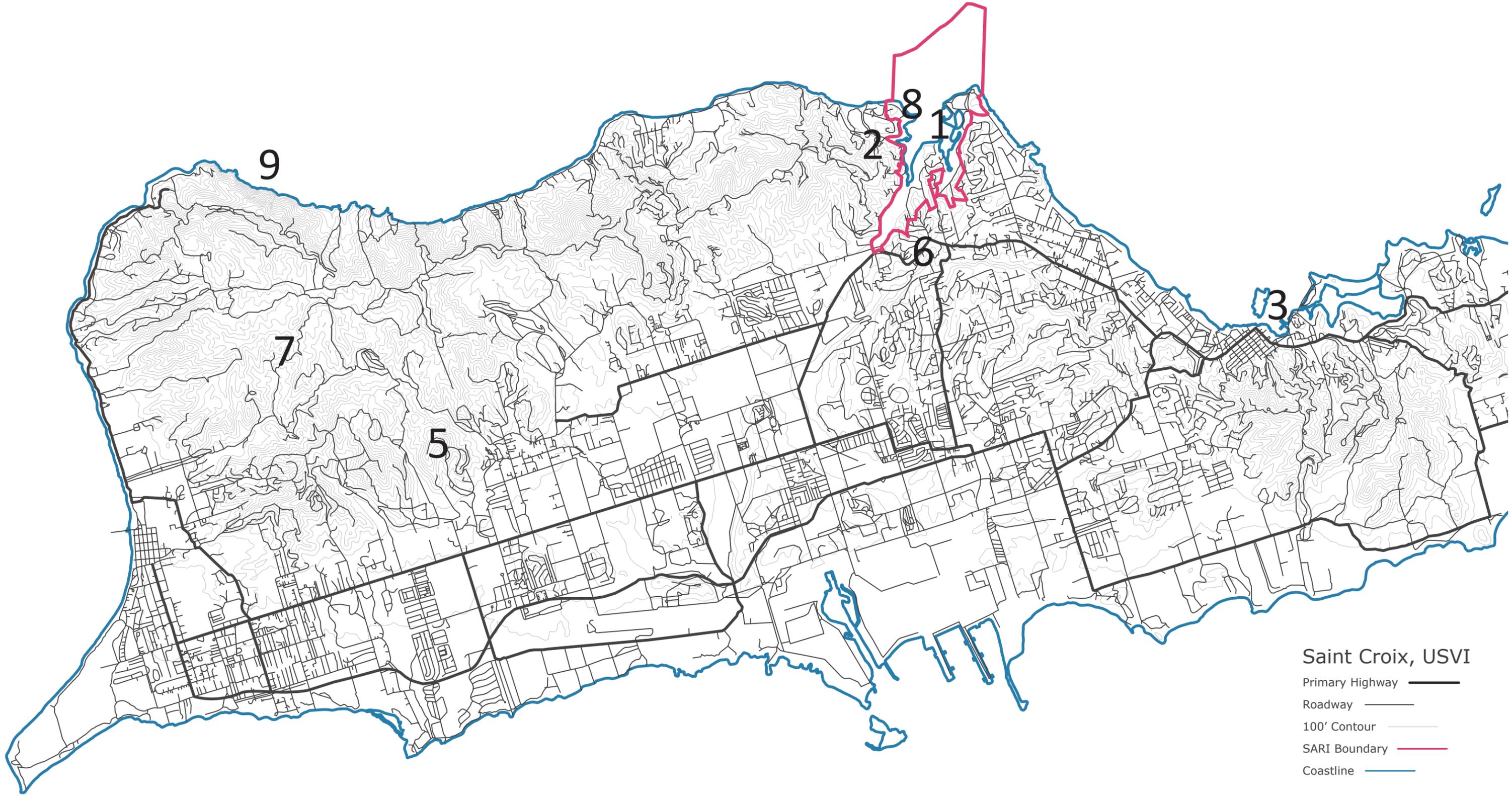
St. Croix - USVI

Rediscover Reconnect Regenerate

REDISCOVER REGENERATE RECONNECT

The rich terrestrial landscape and the benthic landscape provide a rigid framework to the island of St. Croix. In a symbiotic relationship these systems protect the island and support the diverse habitats and ecosystems. Throughout time, the different inhabitants of St. Croix have been heavily influenced by these various environmental features, transforming culture, tradition, and architecture. Simultaneously these features served as habitats to the aquatic and terrestrial species on the island. History has identified the Salt River Bay site in St. Croix as the region that in particular has continually attracted new inhabitants. Located in an estuary the site supplied those who chose to inhabit with freshwater and food creating ideal conditions for settlement. As power over the island transferred from the Tiano to the colonialists, so did the connection back to the landscape. Today St. Croix exists as a microcosm of larger global issues relating to resource management, economic sustainability, vehicular dependency, and environmental degradation. The framework which protects the island must be strengthened and the first stage is rediscovering historical elements that are to be learned from and adapted. Second is the regeneration of these essential factors that heal the landscape and intertwine culture, education, resources, and economy. Finally the reconnection of these elements stabilizes the framework and reintroduces the inhabitants, the visitors, and the tourists on the island to a balanced terrestrial and benthic landscape.

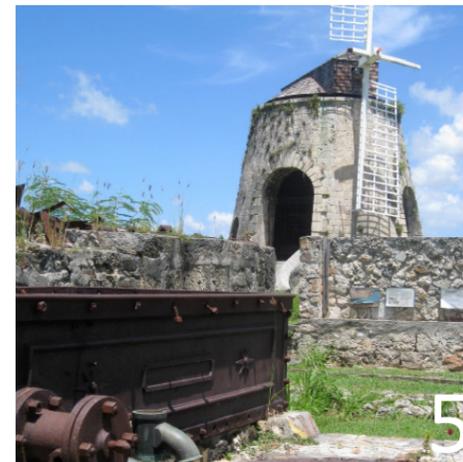




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- Salt River Bay (East End) - 1
- Salt River Bay (West End/ Visitor Center) - 2
- Downtown Christiansted - 3
- Point Udall - 4
- Whim Plantation - 5
- Chicken Shack - 6
- Organic Farm - 7
- Columbus Landing - 8
- Maroon Ridge - 9





St. Croix St. Croix is the largest the US Virgin Islands at a little over 82 square miles located in the Caribbean Sea. The other two major islands are St. John and St. Thomas and of course there is the smaller Water Island, which is often forgotten. The Virgin Islands have been a part of US territory since 1917 and before that period seven different nations have colonized the islands. The name St. Croix comes from the word Santa Cruz, which Columbus gave it after his first encounter with the island on the Salt River Bay Site. There are two main towns on the island, Christiansted and Fredericksted, along with seven smaller sub districts. St. Croix is the flattest of the Virgin Islands and, even still, the terrain is hilly and rugged. The highest point on the island is Mt. Eagle, at 1,165 feet. St. Croix can be described as a dry tropic, particularly along the Northeast side of the island, where the winds that run along the length of the island eventually make their way up the steep slope of the landscape. North of St. Croix is Buck Island,

which has been protected as a reserve for its valuable marine environment. The eastern most point of the United States is Point Udall represented by the Millennium Monument. Since the end of industry and agriculture on the island, tourism has become one of the island's main sources of revenue. Fredericksted remains the center for tourism while Christiansted is mostly commercial. One of the largest oil refineries in the world, Hovensa, is located to the south of the island, and exists as the largest employer to the Crucians. The Cruzan Rum distillery finds home on St. Croix, importing in the sugar cane used to make some of the most revered rum in the world. Taxi's and personal vehicles remain the dominant forms of transportation, resulting in 80% of Crucians owning a car. Even for a small island, travel is not quick, short distances take longer than expected, and drivers must ride on the left side of the road even though almost all the automobiles on the island have left side steering. The beauty of the beaches and landscape is a site that captivates.

St. The St. Croix I experienced and the St. Croix I expected were completely different. Unlike St. Thomas, which has been completely transformed for tourism, St. Croix remains a place of history and culture that emanates through the landscape, highlighting important turning points and crossroads in the island's time. There is a sense of belonging that the locals extend to visitors which I believe has probably evolved due to the multiple periods of colonization. The landscape and beach front are not cluttered with resorts and tourist locations as I expected. Granted, there is some residential development that dots the hillsides, but there is still a respect for the natural beauty of the island. The air is thick with the smell of the salt sea surrounding the island, and the sun is relentless, pausing only for the occasional cloud. St. Croix holds a history and culture that is precious to those on the island that appears to be patiently waiting to be expressed.

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HISTORY One of the most prominent aspects of St. Croix history remains the seven flags which have been flown over the island. Spain, Great Britain, the Netherlands, France, the knights of Malta, Denmark and now the US have all colonized the island. The history of St. Croix begins way before that first western encounter in 1493 though, spanning a period of 5000 years, in which some historians believe that the first Mesoamerican groups began to leave their mark on the landscape. The ancient people of St. Croix are believed to have made their way up from South America and more proof lies in the artifacts discovered on the island which can be traced back to similar styles and techniques found in Northeastern part of South America. Their society revolved a class system which was physically represented by the way they structured their villages. The center being the most sacred area of the territory and the rest of their housing spread out in a centralized manner, the closer to the center the more importance one held in the village. The Taino people are thought to have been run out by another attacking tribe until finally western contact occurred in

1493. After that period a new chapter was started for the island, in which conquest dictated leadership. The history of slavery began to take up root in St. Croix as part of the Danish West India Company. Slavery was finally abolished in 1848 and the right to education was given to all, but it was only shortly after this when Fredericksted was burned down as a result of a labor revolt in what is now known as Fireburn. The year 1917 was when the US finally purchased the Virgin Islands from the Dutch out of fear of the Germans taking control. This was followed by a period of strong agricultural push until tourism and industry finally became the dominant source of economic prosperity for the island. In 1989, Hurricane Hugo left much the island destroyed, in particular the former Farleigh Dickinson University's Marine Research center. There still reminders of the past all around the island, whether they are the windmills that tower in the landscapes, the historic cities of Christiansted and Fredericksted, or the stories that are still told.

HISTORY The story of the island remains visible and strong, yet many parts people prefer to not discuss. Of course, I am referring to the topic of slavery. As an important part of the history and one of the most altering this issue must be recognized and the people must realize that recognition is not celebration. This is the only way to open up doors to the future, by making sure our memory to all the doors in the past have been opened. Nation after nation has conquered the island of St. Croix, but the island has not lost its identity and there still exists a uniqueness I have never seen elsewhere before. The history is done and over with, and there is no way to change it, but there are ways to learn from it and to continue on to a better path with a more promising future. Rediscovering this history and retelling it through design and program becomes a vital element for the story to continue to be told.



Context As a US Territory, St. Croix is one of the four US Virgin Islands in the Caribbean Sea. The capital of the islands is Charlotte Amalie, located in St. Thomas which is roughly 40 miles away from the St. Croix. Both St. Thomas and St. John have terrain that made agriculture more difficult which resulted in a different history than St. Croix. Roughly 60% of St. John is protected as US Virgin Islands National Park, and its world famous beaches and historic preservation have transformed the island into an elite tourist location for the wealthy. St. Thomas is the most developed of the three Virgin Islands, where commercial tourism has prospered greatly. The three islands have been given nicknames by the locals, “Twin City” for St. Croix, “Rock City” for St. Thomas, and “Love City” for St. John. Puerto Rico is only a 35 minute flight from St. Croix. Migration from Puerto Rico to St. Croix was prevalent in the 1930’s to 1950’s leaving a strong influence on the island today. Puerto Rico, northwest of “Twin City”, becomes one of the closest islands to attract

visitors and tourists to the island of St. Croix and with a heritage that is deeply entwined in custom and language the door of opportunity opens wider. Haiti, which is west of Puerto Rico. The earthquake in 2010 left much of the city still destroyed and with many displaced and without resources is there perhaps a way St. Croix can help reestablish the country? The residents of St. Croix are considered US citizens, even though they are not given the right to vote. With little or no economic opportunity on the island many tend to travel to the US for education and work. What becomes the United States role in St. Croix to help them develop a more sustainable community and economy? Do American’s even know that St. Croix exists as a US territory and if they do how does the fact even concern them? US connection to the island, economically and culturally is weak, hope remains in the proposed research center which will connect the universities involved in the project to a part of St. Croix, but what is the role of program and design to strengthen these new links?

Context The distance of St. Croix from major continents has kept the tradition and culture alive on the island. But this great strength also becomes a weakness due to the weak connections with the US and other neighboring territories. Rediscovering the role of these nations and cities nearby will help guide a promising future for St. Croix I believe. There is a strong resentment for not having the ability to participate in US elections, being governed again and not having a choice in the matter is a role in history the island has played too often. Of course the US citizenship does grant locals an opportunity to travel and extend beyond the island, but how can this right be capitalized to give back to St. Croix? Rediscovering St. Croix’s neighbors and the role they can play in interacting with the island becomes a strategy that could have positive outcomes. Reconnecting becomes a new priority that highlights not just an economic connection, but even maybe even a cultural one.

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the site The National Park Service created Salt River Bay National Historical Park and Ecological Preserve in 1992. The park is 1015 acres and over 600 of the park acres are underwater. Control of the site has been transferred from the Taino, to the colonists that followed from Spain, Great Britain, the Netherlands, France, the knights of Malta, Denmark, the US, and then to the St. Croix government. Now both the Government of the US Virgin Islands and the National Park Service manage the site. The prevention of further residential development or resort expansion was a major reason in transforming the site into a preserve. The University of the Virgin Islands, the University of North Carolina, the University of South Carolina, and Rutgers University have been assigned as the consortium of universities to develop the program for a new marine research and science center. The closest community to Salt River Bay is Judith's Fancy, a private development directly to the east and south east of the site. Passage into the site can currently be accessed through Judith's Fancy. The second gateway into Salt River Bay is found through the south east side closest to the bay. Christiansted, the commercial city of St. Croix, is the neighboring town, and directly adjacent to the North of the island is Buck Island Reef National Monument, one of the most ecologi-

the site Rediscovering and regenerating the land have been the two main thoughts on my mind. Rediscovery relates back to the history, the current culture, and the NSP culture and the struggle of expression and power between the three. The history is rich and layered, with important events and time periods, it's difficult to decide which gets priority. Is there a way to combine the histories in Salt River Bay? The role of policy will be the greatest issue between the locals and park service, but it becomes the role of program on the landscape to invite and celebrate local tradition, especially since the National Park Service looks for ways to reach out and educate the public as their mission. What role will these programs have outside of the site? Regenerating relates to the landscape that once existed that has now been lost. Through planning, the site can be partially restored to a condition that encourages diversity and agriculture that could be used as a tool to educate and encourage a sustainable economy.

cally diverse marine 'gardens' in the Caribbean. There is a powerful topography on the site that leads to multiple levels of natural systems, views and perspectives, and access to sun and wind. The northern lagoon is expected to soon close up as sediment collection has increased. Guinea grass, an invasive from Africa, covers the landscape and is a constant reminder of the sugar cane that once used to dominate the land. On the west side of the bay sits the new visitor's center for the site and a few residential homes near the site's edge. From here the whole east side of Salt River Bay can be seen with Buck Island in the distance. On the east side of the site are the remains of a large wind mill, a historic reminder and a monument to the past. The site appears to still be used for traditional crab catching, fishing, camping, and kayaking, though the future of these activities is uncertain. The only strategy that exists for local tradition to continue would be for the park to be designated as a National Heritage area. This way would support local residents in preserving their natural and cultural heritage, and does not impact private property or fishing rights. As a heritage area community-centered initiatives and decision-making at the local level would take charge, but the site would not part of the National Park System.



Culture can be defined, in part, as the attitudes and behaviors or tastes in art and manner of a given society at a particular time and place. As a dynamic element, culture evolves through time with the change of society. As we have learned the island of St. Croix has had 5000 years of history and with that there have been many who have stepped foot on its landscape. The general population of St. Croix today exists as a mix many of whom associate themselves, the present generation of the past ancestors of tribes such as the Taino. Others represent nations from the lesser Antilles, Puerto Rico, the Dominican Republic, Haiti, Jamaica, the Philippines, a large African community and the Americas. Those who consider him/herself a local identify with the term Crucian. Competitions on the historic Ball Courts were once used to resolve conflict, prepare rituals, or just as recreation. The current St. Croix Half Ironman Triathlon, in which participants complete a 1.2-mile swim, a 56-mile bike ride, and a 13.1-mile run on an extremely steep hill known as “The Beast”, gives the triathlon the nickname “Beauty and the Beast”. One

of the island’s largest festivals is the “Crucian Christmas Festival.” There is also the two week long Easter Camping Event which takes place on the site where Christopher Columbus is said to have first landed in the Americas and in Christiansted a nighttime festival known as “Jump-Up” occurs several times throughout the year. The organization CHANT (Crucian Heritage and Nature Tourism) has developed as one of the largest community based groups in order to establish heritage and nature through local tourism and as a force for a strong sustainable community. The history of slavery on the island has become a sensitive topic and almost a silenced discussion, a story of the island which many have strong feelings about. Next comes the issue of water; the value of such a scarce natural resource and how it has affected communities and homes is powerful. Just as powerful is the dependency on plants, particularly the Cassava. This plant is used in traditional dishes and as a medicine throughout the island. Though time has passed, cultural traditions are still hidden within the levels and extents of the landscape waiting to be discovered.

Culture One of the first things I noticed as I walked out of the airport was the Obama hats, Obama shirts, Obama bumper stickers, and Obama books. I thought it interesting that this US territory, which is not even given the right to vote, seems to be making such a strong political message. The people of St. Croix were not only political, but extremely welcoming and friendly. Whether standing online at the Chicken Shack or walking around town people don’t pass each other without saying hello. As a native of New Jersey this was one of the biggest cultural differences I first noticed. The more people our group met and the more we learned about the island and its evolution it became apparent that there was a strong cultural divide between the old and the new the local, the native, and the visitor. These became the major issues I observed and thought about. It became the refreshing St. Croix breeze which seemed to tell the whole history of the island, and as I listened to the wind I thought about the future of the island.

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Nature Nature holds a value on the island that cannot be ignored. There are several protected areas in St. Croix they are Buck Island Reef National Monument; Green Cay National Wildlife Refuge; Sandy Point National Wildlife Refuge; East End Marine Park; the newly proposed Castle Nugent Park; and Salt River Bay National Historical Park and Ecological Preserve. The landscapes are not the only places of importance, but the deep sea, bays, and coral that make up the underwater part of the island become forgotten too often. The island has been exploited after years of farming and burning the island for agricultural use leaving behind in most places an almost arid landscape filled with invasive plants, such as the Guinea Grass. Parts of the watershed have become disturbed by development and land grading that has altered the flow of water. The river that once used to flow down through the Salt River site has been long dried up in part the result of over-farming. Even still, the land is resilient and healing in certain locations. The northwest part of the island, which can be identified as a dry tropical forest, continues to represent the island as the lush green landscape

that used to exist. The numerous plants used for foods, medicines, dyes, poisons, and for infrastructure thrive on the island. The ethnobotany of the island continues to be remembered and shared by few, identifying the relationships these plants once used to have with the culture and the economy of St. Croix. The landscape is inspiring as the cliffs reveal layers of rock that have lived through hurricanes and earthquakes and remain as the only witnesses to the many runaway slaves that had jumped to their deaths in the search for freedom. The vegetation on the island has changed through time and continues to protect and house thousands of species. The mangroves protect the sensitive shorelines and serve as the first layer of defense during powerful storms and by filtering water that runs off the land and into the bay, protecting the corals and serving as fish nurseries. Salt River Bay encompasses the single largest mangrove system remaining in the Virgin Islands. It was only after Hurricane Hugo that the mangroves suffered a serious loss in numbers, but through community effort a large percentage of the mangroves were replanted.

N The land can regenerate and heal itself as we learned from Nate Olive, an organic farmer/ graduate student/ designer. Using the studies of permaculture Nate and his partner Ben have 200 acres of land from which he can harvest and give back to the land in a continuous cycle. The process of giving and taking from the land is not a new strategy, but it is one that was quickly forgotten on St. Croix's sugar plantations. On the hike with Olasee Davis, our group had an experience unlike any other as we hiked through the north western side of the island and the trails of Maroon Ridge. Once used as the runaway path for slaves that had escaped, there was an aura and level of appreciation, wonder, and learning that happened during the hike. Olasee pointed out plants that could be used to kill or heal and it was this relationship that all the locals of St. Croix once shared with the land. Is it possible to reeducate the public about the uses of these plants?



CONCERNS There are three primary issues of concern that exist in relation to the site and its context. They are the abused landscape that must be restored, the conflict of interest between the locals and the National Park Service, and the representation of history of the island, particularly the period of slavery. The landscape of the Salt River Bay site is covered with the resilient invasive species known as guinea grass. There are few native plants that can currently be found on site and there are hardly any trees large enough to shade. The mangroves, which guard the coast and serve as fish nurseries, should be protected and vectored as part of outreach and education. Any development must be sensitive so as to not disturb the mangroves and the hundreds of species that they shelter. Educating the local public, visitors, and tourists about the importance of the site vegetation, not just in terms of the history of the site, but also as a means to improve the future of both the benthic and terrestrial landscapes, is essential. There exists a strong dichotomy between the locals' perception and interaction with the Salt River Bay Site and with the National Park Service rules and regulations that must be enforced. The relationship between the islanders to the NPS has a history that dates back to when the National Park

CONCERNS As the site designer, I must play the role of mediator, understanding the site requirements on all levels and dimensions that exist, whether they are social, cultural, or environmental. I remain as a non biased liaison between both the natives and the National Park Service, taking into consideration, the rules and regulations that exist, while at the same time giving thought to the deep historical and cultural value the landscape has to offer, from a design perspective and an educational outlook. Attempting to keep all my clients happy is probably impossible, but by understanding their needs I know which issues must be addressed. The landscape architect in this role becomes a politician, an ecologist, a historian, a social psychologist, and a representative to the combined partners. Are their hierarchies in the concerns that exist that must be addressed immediately? Learning to curb my own personal emotions toward the issues are leadership qualities that will promote fluid communication between all parties involved in the design.

Service Superintendent Joel Tutein agreed to transform the only public parking lot in Christiansted into a park. The transformation of any parking lot into a park appears to be a good idea, but as the only existing parking lot downtown, visitors and tourists now had no place to park. This placed a heavy burden on the local businesses of Christiansted and has severely affected the local economy. There are issues of trust and concern over rights of their land between the two forces. A third issue on the site is the representation of history. With multiple layers of culture and society, hidden beneath the earth and standing as monuments on the landscape, which story is told? The appreciation of each culture and its history become important to the ancestors of the forgotten generations that have passed. Transformation of the site into a National Cultural Heritage area would benefit the locals in allowing them to make all the decisions concerning Salt River Bay, but would require all maintenance to be managed on the local level. The period of slavery on the island is almost like a scar that one attempts to cover or ignore, but at times it still hurts. It is difficult to determine how to represent something that has dug so deep into the roots of the landscape that it also seems like it is not supposed to come back out.

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U The history and culture must be rediscovered, the people must feel reconnected, and the landscape and relationships must be regenerated. There is truth in knowing where you come from to understand where you're going. An appreciation and representation of the history and cultural landscape of Salt River Bay will celebrate the "peoples" of St. Croix. The role of design, in emphasizing form and plants, that reveal stories and serve as reminders to the past or to cultural events are elements that can be respected by all parties involved in the project. The ethnobotany of the landscape and the interaction that played with the local culture must be represented. This project requires a phasing strategy in order for the process to be complete. First the landscape must be understood and the native species and cultural flora that used to flourish should begin to take hold again. This involves a replanting strategy that slowly heals the land and that is done in a sustainable manner. The reconnection to the plants will serve as the foundation to now con-

nect to the past. The second phase involves revealing the hidden layers of history and organizing spaces for activity. This is to find a middle level to achieve an equilibrium in emotions and desires between the natives and the National Park Service. This is very much a cultural site and that essence must drive design and form. Tourist, visitors, and locals should feel reconnected to the past walking through the landscape. The third phase is the integration of the new Marine Research facility, connecting the new story to the old, without one overruling the other. The lines of communication between the new students, faculty, and visitors with the locals and natives must be strengthened inside and outside of Salt River Bay. The construction and material choice element of the design should follow models of sustainability; economically, socially, and environmentally. National Parks are designed to protect and educate, this vision provides the framework to rebuild what should be protected and to serve as a display that teaches.

V A good design should set goals and objectives to be achieved. The problem that was addressed should be resolved in an innovative, intriguing, and of course aesthetic manner. The site vision serves as a framework I plan to follow. I begin to list steps and procedures that must be taken, but overall form and completion still remains unknown to me. There are delicate issues to be addressed and too many entities that could be easily offended. I must remain as a separate entity that has only entered to attempt to find connections, repair damaged ones, and create new lines of communication. It must be understood that the landscape is constantly communicating a message of sorts and just as important becomes the function of the message.



Marine Research and Education Center





Discovery Gardens & Canopy Trail



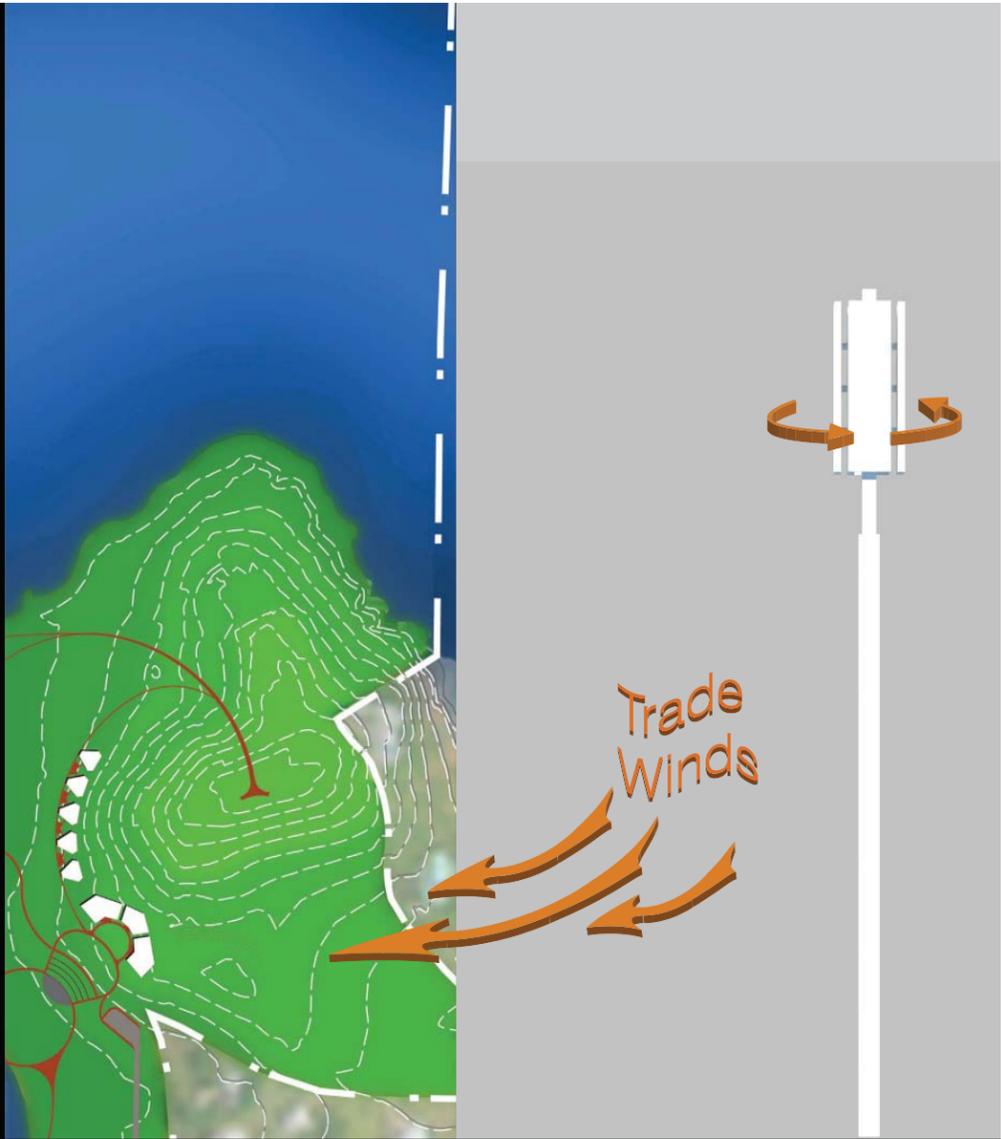
Campus Plan





Discovery Gardens & Canopy Trail





MREC Campus & Performance Space



