



#FUTUREBARBUDA

TASK II

MASTER DEVELOPMENT PLAN AND DRAFT DESIGN BRIEF



CONFIDENTIAL

#FUTUREBARBUDA



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TASK I

STRATEGIC FRAMEWORK

- COMMUNITY ENGAGEMENT
- VISION
- EXISTING CONDITIONS REPORTS

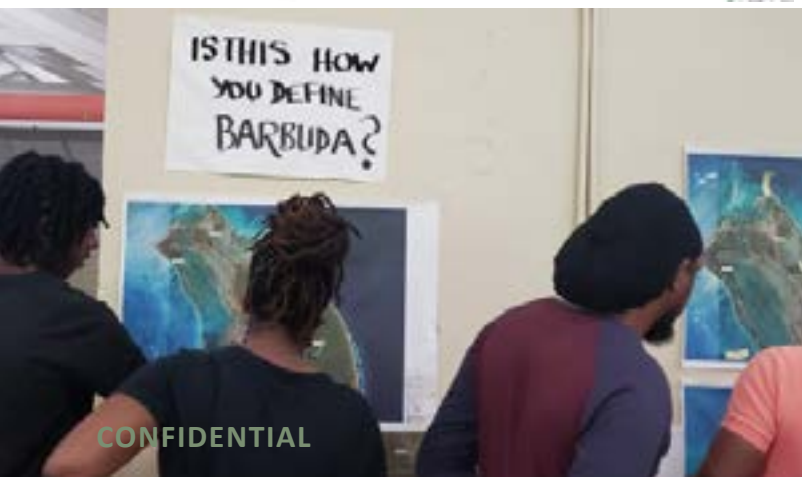


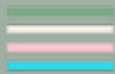
DEVELOPING A PLAN FOR THE PEOPLE, BY THE PEOPLE

Join and connect with us

Future Barbuda Public Events Program - February 2023

Sunday 26 February 16:00 - 18:00 Holy Trinity School	Community Meeting 1 - #FutureBarbuda Presentation: The Peoples' Vision (Draft One) After our first visit in July 2021, join us again as we present the first draft of the Barbudan Peoples' Vision for #FutureBarbuda and find out how you can help shape it further.
Monday 27 February 17:30 - 19:30 Holy Trinity School	Community Meeting 2 - Barbudan Future Services: What is essential? Have your say on housing, economic prosperity, food security, tourism and cultural heritage needs for #FutureBarbuda.
Tuesday 28 February 17:30 - 19:30 Barbuda Channel CTV - 6	Community Meeting 3 - One Planet Living: A tool for positive change Join our live discussion looking at ways for Barbuda to become the most sustainable island in the Caribbean. We have presentations from the Maya Blue Consortium with special guest Popran Desai, Founder of One Planet Living.
Wednesday 1 March 17:30 - 19:30 Holy Trinity School	Community Meeting 4 - Defining key spaces, places, and connections Input into discussions around a future growth strategy for Barbuda that encourages prosperity and supports sustainable land use.





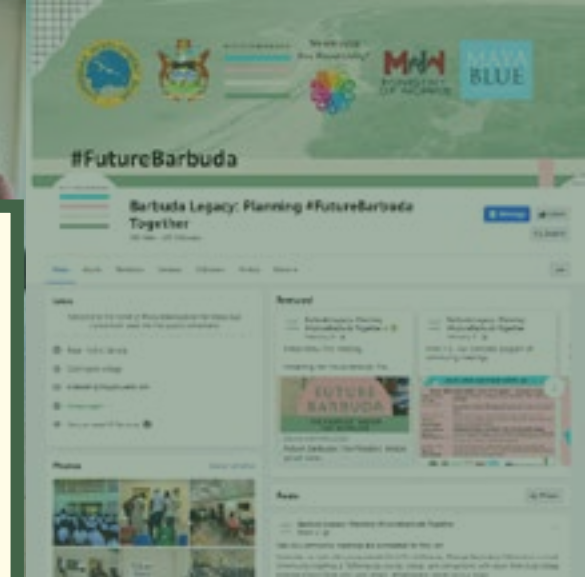
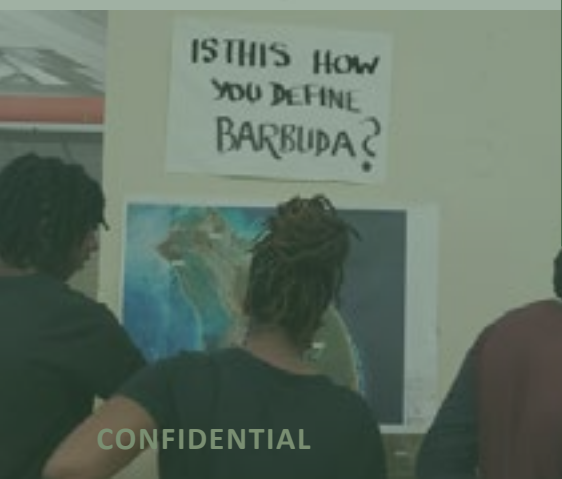
DEVELOPING A PLAN FOR THE PEOPLE, BY THE PEOPLE

IN-PERSON ENGAGEMENT:

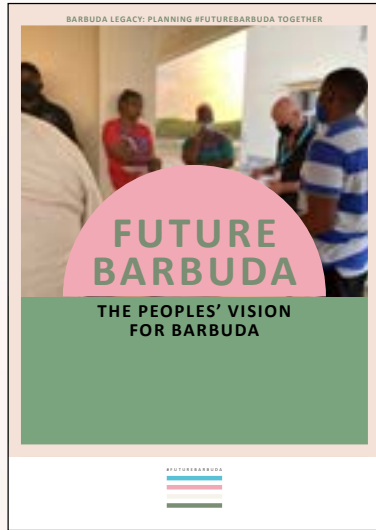
- ONE PLANET LIVING WORKSHOPS
- DROP-IN EVENTS
- POSTCARDS
- PRESENTATIONS TO BARBUDA COUNCILORS
- BARBUDA LEADERS MEETINGS
- ONE-ON-ONE CONVERSATIONS
- ISLAND REPRESENTATIVES

VIRTUAL ENGAGEMENT:

- FACEBOOK GROUPS
- BARBUDA CHANNEL PRESENTATIONS
- MEETING WITH DIASPORA



THE STORY SO FAR

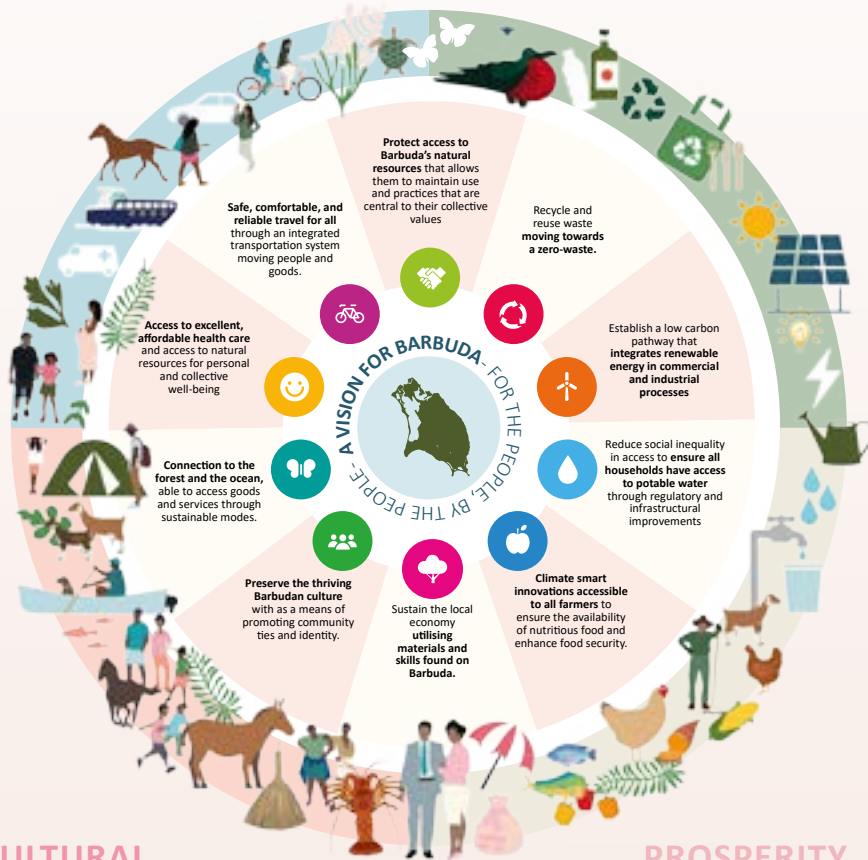


ENVIRONMENT

Build with the community the world's first one planet island

COMMUNITY

Create a new Barbuda with Barbudans that is safe & enhances wellbeing



CULTURAL

Enable a renaissance of community & cultural heritage

PROSPERITY

Shape a balanced economy & unlock the potential of people & resources



EXISTING CONDITIONS REPORTS

THE PEOPLE'S VISION FOR BARBUDA



WHO WE SPOKE TO

Led by Future Barbuda Community Liaisons, Darlene Beazer-Parker and Mohammid Walbrook

ORGANISATIONS, GROUPS AND INDIVIDUALS CONSULTED

LOCAL CULTURAL AND HERITAGE KNOWLEDGE

(Former) President, Barbuda Fishers Association and Councillor, Mr Devon Warner
(Former) Principal, Sir McChesney George Secondary School, Mr. John Mussington
Barbuda Youth- Mohan, Star George, Ricardo Antonio Nedd
Chair, Earth and Environmental Sciences, Brooklyn College, Dr. Rebecca Boger,
Chief Archaeologist (Retd) Dr. Reginald Murphy,
Dept. of Criminology, Law & Society, University of California Asst Prof. Dr. Lee Cabatingan,
Director of Anthropology and Archaeology, University of Nebraska, Prof. Sophia Perdikaris
Dwight Benjamin (Traditional broom maker)
Mr George Jeffrey, Tour Guide and Fisherman
Mr. Calvin Gore, Historian
Mr. Henry Griffin, Contractor
Ogden Burton, Ranger, Codrington Lagoon Park
President, Barbuda Fishers Association, Mr. Montique (Leroy) Gore
Senior Citizens, Nellie Webber, Lanis Desouza
Sir MaChesney George Secondary School Students
Chad Knight Alexander, Architect
Arthur Nibbs, Chair BRRC

BARBUDA SUPPORT BUSINESSES AND SERVICES

Air Express (Air SVG)
Barbuda Channel, Mr. Francois Clifton
Barbuda Express Ferry Service
Cable & Wireless (FLOW)
Summer Breeze Ferry Service

BARBUDA BUSINESS OWNERS

Art Café Crafts, Claire Frank
Barbuda Cottages, Kelcina George & Oliver Trunzer
Barbuda Hillside Bar and Grill
Barbuda Taxis & Tour Operators
BK Fuel Depot, Mr. Brandon Walker
CD Café , Ms. Claudette Beazer
Cheryl Suprette, Cheryl Gore
D&D Poultry Farm, Ms Dekelia
Eva May's, Eva May George and Yanick Beazer
Fancy's Way Supermarkrt, Francilla Francis
Follow the Flag, Mrs Tyrene Gift
Green Door Bar, Mr. Byron Askie
Highway Supermarket, Ms Cherry
Historic Dulcina Apartments, Mr. Andrae Lee
Island Chalet, Ms. Myra Askie
Island Nyam, Islyn Beazer
Lil' Lincs Supermarket, Burton Family
Lots of Choices Minimart, Mr. Ken Walcott
Shak A Kai
Sha-Shy Store and Office, Ms Racine Beazer
Silver Seal Freight
Summer Breeze Ferries
Swan Mini-Mart, Ms. Connie Desuza
Sweet D's Ice Cream Shop, Ms. Daphne de Souza
The Bus Stop, Mr. Kingsley Gordon
Uncle Roddy's Beach Bar and Grill, Ms Kelcina George
Wa'Omoni Restaurant, Ms. Jacquie Beazer-Desouza

INDIVIDUAL CONSULTEES

Carl Francis
Evangeline Charles
Godfrey Pinter Dyett
Yacht owner, Sail Moanaa
Ted and Karen Thomas , Barbuda
Violet Williams

NGO & BARBUDA COOPERATIVES

Antigua & Barbuda Red Cross Society
Barbuda Devotional Group
Barbuda Falcons Athletic Club
Barbuda Fisherfolk Cooperative
Barbuda Turf Club
Barbudan GO
Environment Awareness Group (EAG)
One Planet, Pooran Desai (Founder)
The Be Foundation
UNDP (United Nations Development Programme)
Waitt Institute Blue Halo

INSTITUTIONS

Antigua and Barbuda Museum
Barbuda Research Centre (BARBUDA)

MAJOR DEVELOPMENT PROJECTS

Princes Foundation International, Mr. Jeremy Cross
Escape to Barbuda, Seamus Kelly and Adrian Lee
Peace, Love and Happiness (PLH), Justin Wilshaw
Discovery Land Company, Mac Alderson
NOBU Inn (Paradise Found), Katie Horne
Discovery Land Company, Mac Alderson

STATUTORY BODIES & COMMITTEES

Agriculture Development Corporation (ADC)
Antigua & Barbuda Airport Authority
Antigua and Barbuda Port Authority
Antigua and Barbuda Tourism Authority
Antigua and Barbuda Transport Board
Antigua Public Utilities Authority (APUA)
Board of Education (BOE)
National Solid Waste Management Authority (NSWMA)
Barbuda Recovery and Rebuild Committee (BRRC)
National Office of Disaster Services (NODS) Philmore Mullins, Director (Former)

MINISTRY OF FINANCE, CORPORATE GOVERNANCE & PUBLIC PRIVATE PARTNERSHIPS

Ministry of Finance, Project Management Unit
Statistics Division, Mr Stachel Edwards, Mr Rohan Anthony

MINISTRY OF LEGAL AFFAIRS, PUBLIC SAFETY, IMMIGRATION AND LABOUR

Antigua and Barbuda Defence Force
National Office of Disaster Services
Royal Antigua and Barbuda Police Force Insp. Williams
Barbuda Fire Service, Mr. Neil George (BARBUDA)
Solicitor General, Mr. Martin Camacho
Crown Counsel, Ms Andrea Jacobs
Chief Valuation Officer, Mr. Lesroy Samuel

MINISTRY OF HEALTH, WELLNESS, SOCIAL TRANSFORMATION AND THE ENVIRONMENT

Department of Environment, Data Management Unit
Hannah Thomas Hospital Medical Professionals, Dr Jeremy Deazle, Ms Jenita Cuffy RN (BARBUDA)
Directorate of Gender Affairs, Raisa Charles
National Solid Waste Authority, Mr Daryl Spencer
Community Development, Ms Dale O'Brien
Gender Affairs Directorate, Raisa Charles

MINISTRY OF FOREIGN AFFAIRS, AGRICULTURE, TRADE & BARBUDA AFFAIRS

Antigua and Barbuda High Commission, London
Barbuda Council
Barbuda Council Department Heads
Department of Analytical Services, Dr Linroy Christian
Fisheries Division, Mr. Ian Horsford, Dr Tricia Lovel
Blue Economy, Mr. Dean Jonas (Former)
Statistics Research & Information

Technology (SRIT) Division Mr Statis Edwards
Barbuda Affairs Division, Ms. Samantha Marshall, (Former)
Barbuda Fisheries Department (BARBUDA)

MINISTRY OF TOURISM, CIVIL AVIATION, TRANSPORTATION & INVESTMENT

Barbuda Tourism Marketing Officer (BARBUDA)
Antigua and Barbuda Airport Authority (ABAA), CEO Ms Euletta Francis
The Port Authority, Mr Darwin Telemaque
Antigua & Barbuda Department of Marine Services (ADOMS)

MINISTRY OF INFORMATION COMMUNICATION TECHNOLOGIES (ICT), UTILITIES AND ENERGY
Minister Melford Nicolas
Antigua Public Utilities Authority (APUA) – Water & Electricity Divisions
APUA Electricity – Mr. Mathis, Mr Lynton Prosper (Barbuda)
APUA Water- Mr. Ian Lewis, Ms. Veronica Yearwood, Mr Jeffrey Brown, Mr Leonard DeSouza

MINISTRY OF HOUSING, WORKS, LANDS AND URBAN RENEWAL

Minister Lennox Western, Former Minister of Works (former)
Survey Division, Mr. Vernon Bird & Mr. Ato Kentish
Project Implementation and Management Unit (PIMU)
Development Control Authority (DCA), Mr Fredrick Southwell
Land Registrar, Sharon Simmons
Barbuda Recovery and Reconstruction Committee (BRRC), Chad Knight Alexander

MINISTRY OF EDUCATION, CREATIVE INDUSTRIES & SPORTS

Director of Education, Claire Browne
Holy Trinity School, Principal, Ms Charlene Harris (BARBUDA)
Sir McChesney George Secondary School, Principal. Mr Harries (BARBUDA)

METHODOLOGY

TASK 1 STRATEGIC FRAMEWORK

Discover

Understanding place /
Clarifying aims, objectives
and vision

Discover

existing conditions
analysis

opportunities &
constraints

aspirations

quiet conversations

community
consultation

design team workshops
/ meetings

defining the vision

Identify existing
proposals

TASK 2 MASTER DEVELOPMENT PLAN

Dec-Feb

Define

Agreeing preferred
growth strategy

Define

Conduct census

Establish Constraints Map
(validate map as part of census)

Present One Planet strategy to
members / council

Develop and Assess 3 Growth
Scenarios

stakeholder engagement
S1 - One Planet
S2 - Growth Scenarios

Identify preferred growth
scenarios

Identify existing proposals, plans,
policy and guidelines

Draft One Planet Action Plan
Objectives

Mar-June

Refine

Generating and testing
detailed options /
Developing preferred option

Refine

Assess / refine preferred Growth
Scenario

Develop concept design / framework
and local area plans

Refine design brief
(use, massing, quantum, space)

stakeholder engagement
S4 - Places, space and connections
S3 - Local Area Plans / Opportunity Areas
L - meeting with the leaders / council

identify targets, goals, actions, and
indicators / outcomes as part of OPL
action plan

review plans, policy and guidelines in
response to growth scenario

identify actions and targets

mid June-July

Detail

Finalising the Master
Development Plan

Detail

detail the preferred concept
design / local area plans
in line with consultation
feedback

develop draft design brief

coordinate plans, policy and
guidance

workshops and
consultation

consult on results
framework

preliminary layouts / plans
for critical infrastructure

develop guidelines

Aug-Oct

Report

Developing
mechanisms to
delivery quality

Report

finalise concept, local area
plans

develop illustrative images

finalise results framework
(OPL Action Plan)

Finalise Urban Design
Guidelines

finalise layout for
critical infrastructure

preliminary costings

Draft Master
Development Plan
issue report for Task II
sign-off

Oct

Sign-off

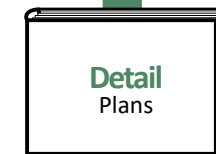
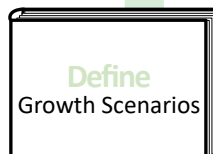
VOLUME 1:
GOVERNING
POLICY

VOLUME 2:
DRAFT DESIGN
BRIEF

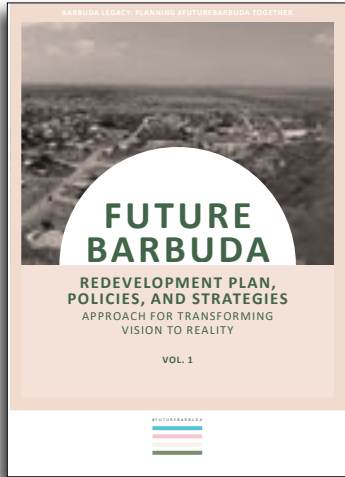
VOLUME 3:
CONCEPT DESIGN
& RESILIENT
APPROACH FOR
LAND USE

VOLUME 4:
PUBLIC AND
PRIVATE REALM
GUIDANCE

VOLUME 5:
THE RESULTS
FRAMEWORK /
THE ONE PLANET
ACTION PLAN

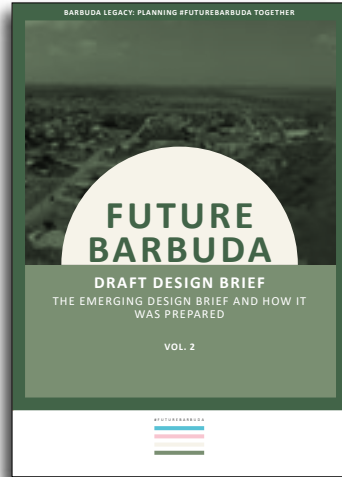


TASK II OUTPUTS



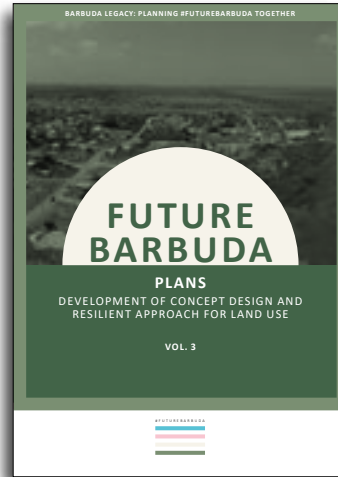
VOLUME 1 GOVERNING POLICY

Translating the vision into policies and strategies guided by principles of sustainability and resilience.



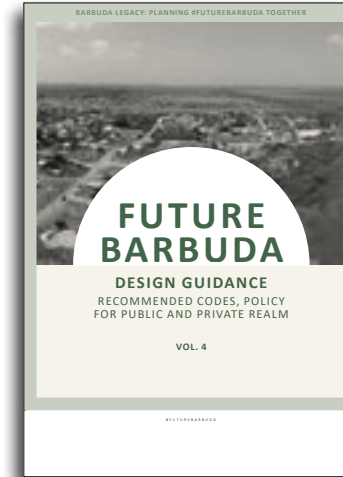
VOLUME 2 DRAFT DESIGN BRIEF

The emerging Design Brief for Codrington and defined local areas outlining the design goals and objectives, constraints, special analysis.



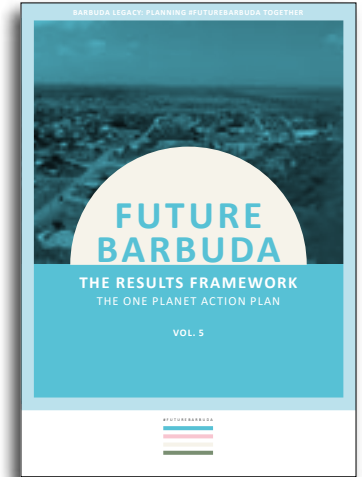
VOLUME 3 CONCEPT DESIGN & RESILIENT APPROACH FOR LAND USE

A series of plans presenting the concept design for Barbuda, Land Use, Built Form and strategies.



VOLUME 4 PUBLIC AND PRIVATE REALM GUIDANCE

Codes and policies governing the public and private realms, shaping the physical environment.



VOLUME 5: THE RESULTS FRAMEWORK / THE ONE PLANET ACTION PLAN

The implementation and institutional framework utilising One Planet as a providing objectives, actions and responsibilities.



VOLUME 1

GOVERNING POLICY

The Draft Master Development Plan comprises the following Volumes:



VOLUME 1: GOVERNING POLICY

Translating the vision into policies and strategies guided by principles of sustainability and resilience.



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The emerging Design Brief for Codrington and defined local areas outlining the design goals and objectives, constraints, special analysis.



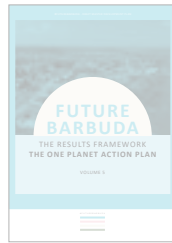
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Volume 1

GOVERNING POLICY

DRAFT
NOVEMBER 2023

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Barbuda: A One Planet Island

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Establishing a Policy Framework to Guide Public and Private Investment

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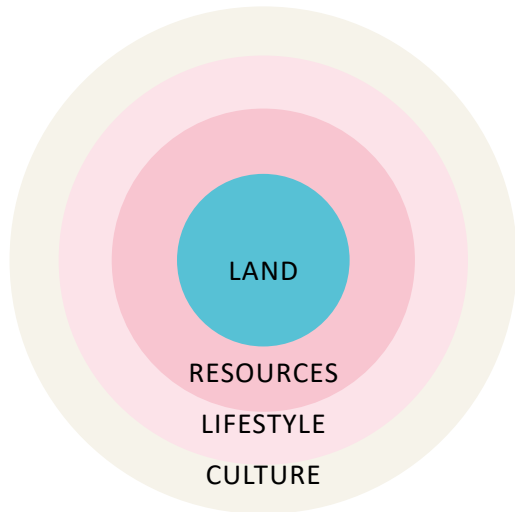
One Planet Living

18

Review / Comment on Any Required Amendments to Policies, Plans and Guidelines



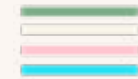
THE FRAMEWORK OF THE MASTER DEVELOPMENT PLAN



1 VISION

What we want to be as an island... And where we want to go in the future

BARBUDA



The world's first truly sustainable island and a model for communal living



Environment



Prosperity



Community



Culture

5 DESIGN GOALS

Building on the SIRMZP, the results of the CVA and the Strategic framework, these are the strategic goals for Barbuda.

The Strategic Benefits

Goal 1
Maintain and Enhance Ecosystem Integrity

Goal 2
Foster Economic

Goal 3
Enhance Livability

Goal 4
Improve Accessibility

Goal 5
Promote Efficient and Effective Governance

10 ONE PLANET PRINCIPLES

Establishing our results framework for exploring what we want Barbuda to be... how we will engage others and measure success.

a lens for the different requirements of the project



Health & Happiness



Equity & Local Economy



Land Use & Wildlife



Sustainable Water



Sustainable Materials



Culture & Community



Sustainable Transport



Local & Sustainable Food



Zero Waste



Zero Carbon

7 STRATEGIC TOOLS

The tools we will use to make it happen.

Implementation/Institutional Framework



Governance
Institutional Strengthening

VOL 1 & 5



Guidelines, Policies & Strategy

VOL 1 & 4



Plans
Strategic Plans / Concept Design

VOL 2 & 3



Results Framework
One Planet Action plan

VOL 5



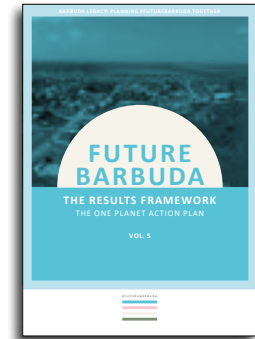
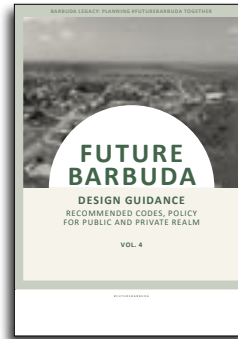
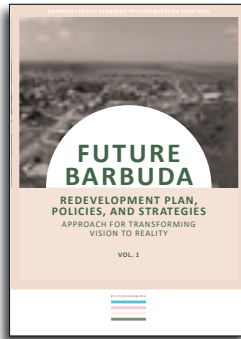
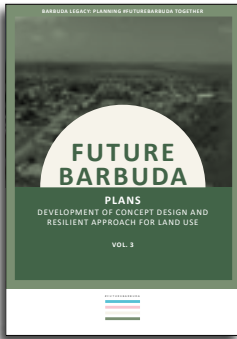
Financing



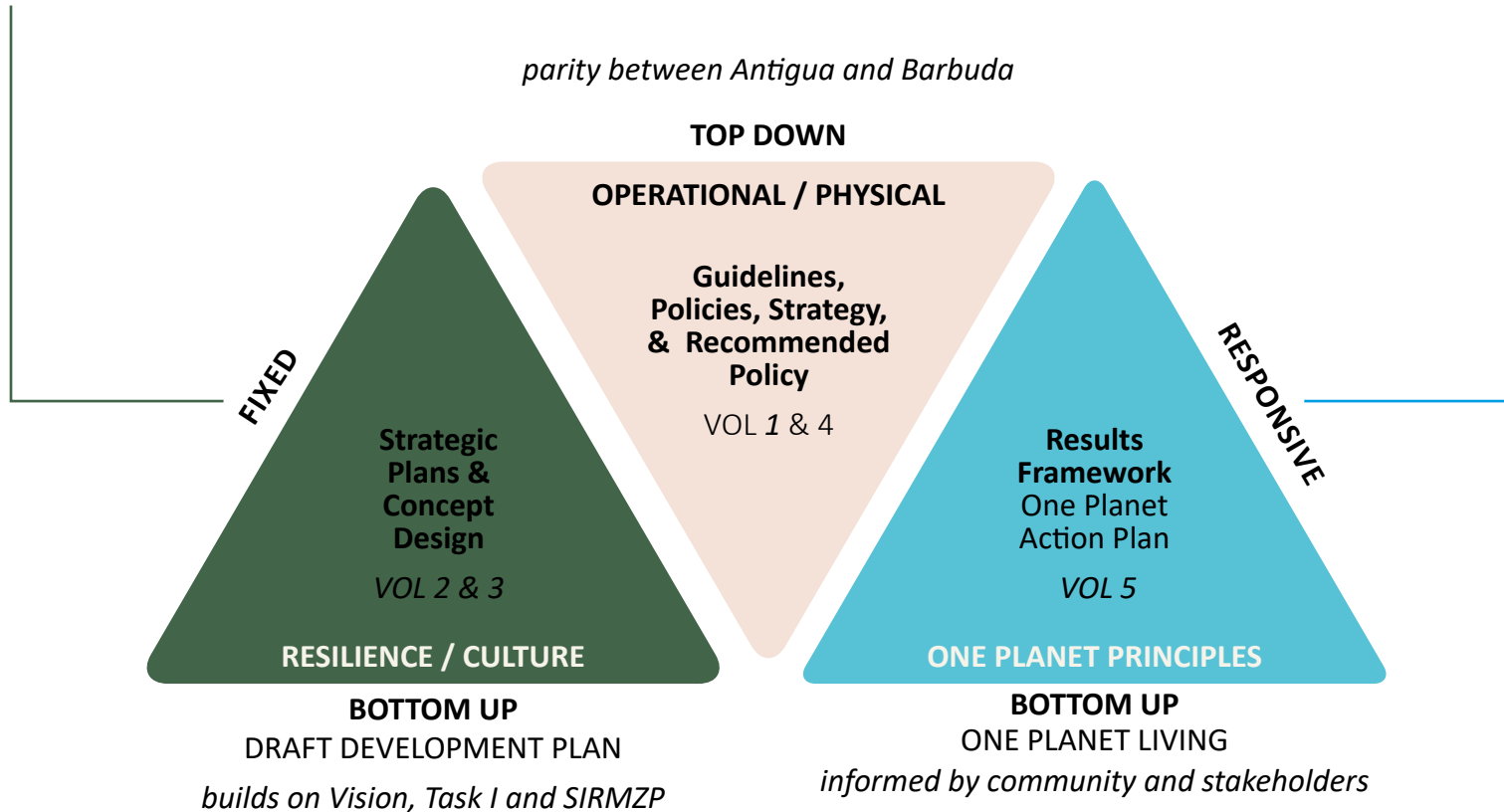
Partnerships



Knowledge



parity between Antigua and Barbuda



1 GOVERNING POLICIES

Volume 1 presents a strategic approach to translating the vision for Future Barbuda into a reality. This plan focuses on resilient, green, and sustainable policies. It also highlights the use of existing legal provisions for implementation. The plan's core principles centre on Prosperity, Community, Environment, and Culture, acknowledging their evolving nature in long-term planning.

The commitment to Barbuda's sustainable and prosperous future is at the core. Throughout these pages, emphasis is placed on dedication to fostering collaboration and preserving the island's cultural heritage and natural assets. This document embodies the collective determination to turn vision into concrete outcomes.

Capacity building, public-private partnerships, and institutional strengthening, especially the Barbuda Council, are recognized as vital for sustainable growth. The plan also interacts with the Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda, expanding the local framework.

Lastly, it addresses the organisational context, aiming to establish clear responsibilities between GOAB (Government of Antigua and Barbuda) and the Barbuda Council, with a key recommendation being the creation of a Single Planning Unit for Barbuda. This unit will guide the plan's implementation and provide a policy framework for public and private investments.



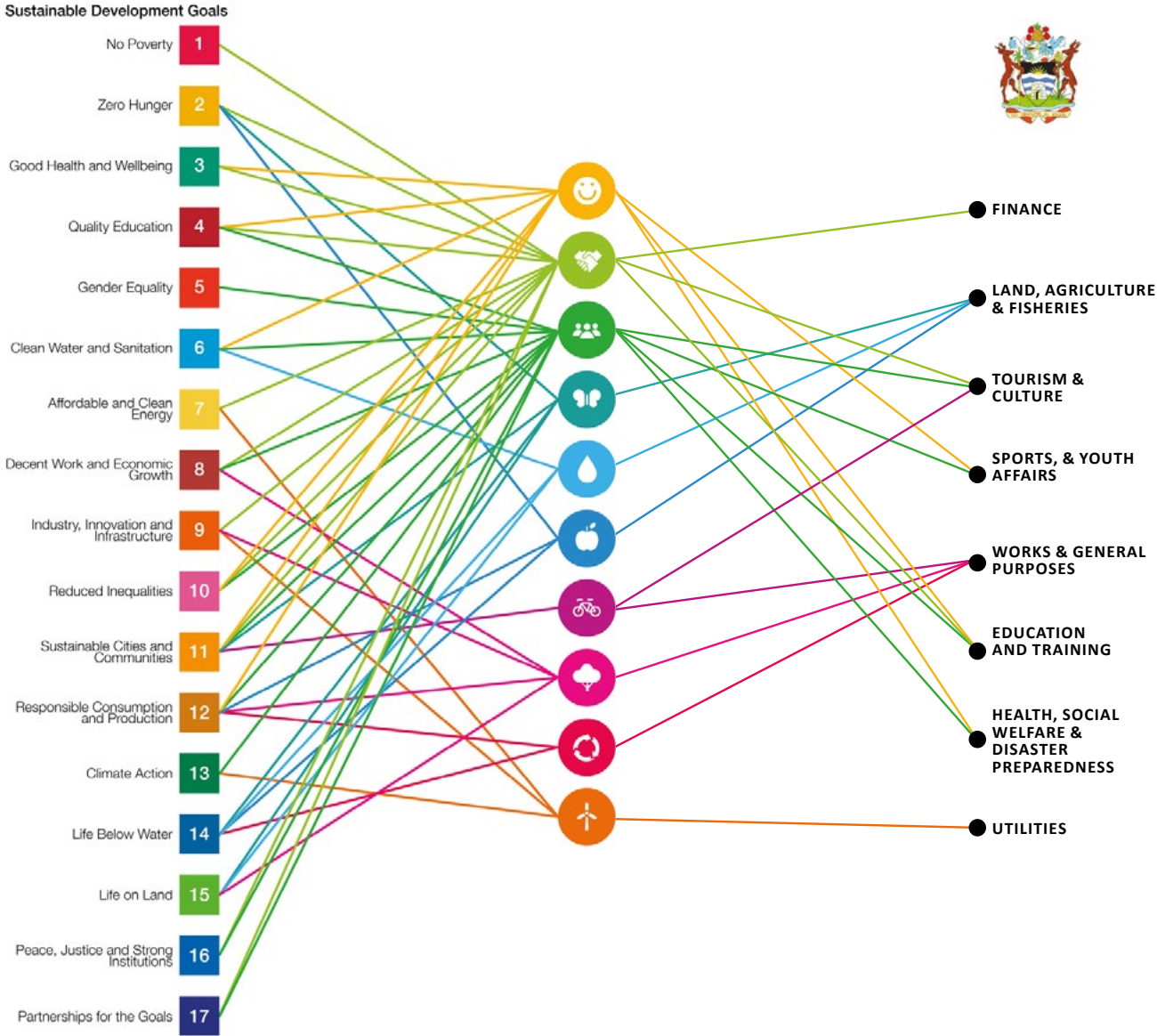
BARBUDA: A ONE PLANET ISLAND

The One Planet framework offers a valuable lens through which we can approach sustainable growth. It encourages us to view economic, social, and environmental aspects as interconnected elements rather than isolated components. By embracing this perspective, we prioritise responsible resource management, reduced carbon emissions, and a balanced quality of life for all. The One Planet approach challenges us to develop innovative solutions, adopt sustainable practices, and forge partnerships that harmonise progress with the well-being of our planet and future generations. It's a guiding principle that leads us toward a more sustainable and resilient future.

The OPL Action Plan is a crucial tool that guarantees Barbudans a powerful and enduring influence in shaping the island's future development. Through an inclusive and participatory process, the local community and stakeholders are actively engaged in crafting this strategic document. What makes it particularly effective is its annual renewal, which ensures that progress is continually assessed, challenges are addressed, and future plans are discussed in collaboration with the local community. This ongoing dialogue and commitment to local involvement create a strong platform for Barbudans to express their aspirations, concerns, and ideas, thereby fostering a sustainable and community-driven approach to development on the island.



One Planet organises different views and creates a framework for a sustainable future



Links between One Planet Living themes and UN Sustainable Development Goals

FINANCE	EDUCATION	HEALTH, SOCIAL WELFARE & DISASTER PREPAREDNESS	TOURISM & CULTURE	SPORTS, & YOUTH AFFAIRS	LAND, AGRICULTURE & FISHERIES	WORKS & GENERAL PURPOSES	UTILITIES

Links between One Planet Living themes and GOAB portfolios

THE FRAMEWORK OF THE DRAFT DEVELOPMENT PLAN

Utilising the CDB’s Urban Sector Policy, Strategy and Operational Guidelines and other relevant documentation, we have Identified the requisite policies and strategies to support the redevelopment plan. The governing policies support a resilient, green, sustainable, compact, and mixed-use policies to support future development.

The approach looks to support a resilient, green, sustainable, and efficient use of land that puts people and planet first.

We have identified strategies and policies to support the redevelopment plan. Where possible, the plan will seek to use existing legal provisions in its implementation. An example of this is Section 28 of the Physical Planning Act which facilitates Development Agreements to secure planning gain for the benefit of the island community. This is discussed below in more detail. Similarly, the existing provisions of Section 23 of the Physical Development Act in respect of the carrying out of Environmental Impact Assessments for major developments will also be utilised. For example, such studies are required for resort, industrial, landfill, ports, and airport developments.

The Future Barbuda Development Plan will provide a simplified, yet effective approach to planning for the future of Barbuda. The goals, benchmarks, principles, policies, and actions contained in Sections 3-5 aim to promote Prosperity, Community, Environment, and the island’s Culture.

Over time, how Barbuda defines Prosperity, Community Environment and Culture for long range planning purposes will change, and as such so should the components of the Core Values and Tools.

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And where we want to go in the future*

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Results Framework
One Planet Action plan
VOL 5



Financing



Partnerships



Knowledge

CURRENT REDEVELOPMENT PLAN POLICIES AND STRATEGIES

The following key pieces of legislation relate to Barbuda:

- Public Utilities Act, 1973.
- National Parks Act, 1984.
- Physical Planning Act, 2003.
- Paradise Found (Project) Act, 2015.
- Environmental Protection and Management Act, 2019.

The Caribbean Development Bank's Urban Revitalisation Strategy and Operational Guidelines, 2000 seek to assist Borrowing Member Countries (BMCs) in their effort to improve living and working conditions in urban areas. Specifically, the guidelines set out a framework within which urban revitalisation projects are to be designed considering contemporary understanding of the complexities of the social and economic conditions in urban areas. They have as their principal focus the eradication of poverty and the improvement of basic living standards in urban centres, while at the same time providing the basic infrastructure necessary for sustainable economic activity.

It is within the context of the strategy and guidelines that the Development Plan for Barbuda has been drafted with particular emphasis on 'building back better' in the post-hurricane Irma era. This will be achieved by establishing a framework for improving the economic, social and physical infrastructure of the island in a manner that is sensitive to its unique history and culture. The plan will set the basis for establishing robust and relevant environmentally sustainable planning policies which will work in tandem with the principles of One Planet Living. A phased approach is envisaged which will foster organic growth at the community scale. The emphasis will therefore be on the retention and creation of fifteen-minute neighbourhoods, starting with Codrington.

Resilience will play a key part in the island's development given its vulnerability to natural hazards. The plan has recognised this through the identification of constraints to development which will play a key part in improving the island's resilience to future natural disasters and the impacts of climate change and sea level rise.

The need for capacity building is evident and this will be done where possible through the strengthening of existing institutions, mainly the Barbuda Council, which will be given a primary role in managing, evaluating, and monitoring the plan's implementation. The need for greater public/private partnership is recognised. This will result in a collaborative and inclusive approach to the island's development and create the necessary conditions for sustainable growth.

The Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda, 2011 (SIRMZP) is the main strategic planning policy document prepared under Part III of the Physical Planning Act 2003. This document may need to be updated to reflect the output of the Development Plan for Barbuda.

SIRMZP provides a framework for the preparation of detailed local plans that are in accordance with national land use priorities and strategies. The plan also provides for the protection of critical ecosystem functions and habitats, the promotion of mixed-use settlements, road network improvements, economic growth and procedural regulations and frameworks to guide development. This Draft Development Plan for Barbuda will develop and expand this framework at the local level.

SIRMZP also includes draft guidelines for Land Use and Development Control Policies in Section 7, noting that primary responsibility for planning, development control and designated permitted land use rests with the Development Control Authority (DCA). The Town and Country Planner assumes responsibility for monitoring land use development, as well as the preparation of development plans, the approval of development permits and the execution of enforcement notices. Section 7 further notes that Development Plans may allocate land use, protected areas, protected buildings and comprehensive planning areas. Final approval of development plans rests with Parliament.

In this respect it should be noted that the Master Development Plan (MDP) for Barbuda is regarded as a National Plan in the context of the Physical Planning Act 2003. The Barbuda Land Act 2007 does not guide the Master Plan for Barbuda. It is therefore important to make the distinction that the MDP does not fall under the Barbuda Land Act 2007 or the Crown Lands (Amendment) Act. Similarly, the Barbuda Local Government Act, which sets out the functions of the Barbuda Council, does not include any Master Plan function.

It is in the above organisational context that the Development Plan for Barbuda will be adopted. Presently, there is no clear delineation of responsibilities between GOAB and the Barbuda Council and it is a primary aim of the Draft Development Plan to provide the necessary leadership and institutional framework to create a platform for effective governance and service delivery to the island. In this regard, a key recommendation of SIRMZP is the establishment of a Single Planning Unit for Barbuda (Section 6.6).

It is envisaged that the Barbuda Planning Unit will have sole responsibility for implementing the recommendations of the Development Plan together with the application of its policies in assessing future development proposals.

It is envisaged that the Barbuda Planning Unit will be formed within the Barbuda Council and will operate under the Physical Planning Act 2003. This will necessitate a revision to Section 5 of the Physical Planning Act to facilitate the delegation of planning functions to the Barbuda Planning Unit. Staff resources and training will also have to be made available to the Unit to enable this transfer of responsibility.

ESTABLISHING A POLICY FRAMEWORK TO INVESTMENT

Policy Framework

The Development Plan for Barbuda will seek to build upon the strategic vision of the Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda through the formulation of policies at the local level. These policies will be aligned to the principles and vision of the One Planet Living Action Plan with the aim of guiding both public and private investment. This means that all new developments will be assessed in the context of OPL principles to ensure that its objectives are met. The Barbuda Council, and by extension, Barbudans, will therefore have a greater say in the development process from inception to implementation. This will also benefit developers through early 'buy in' of their proposals leading to a more harmonious relationship between Barbudans and investors than currently exists.

In practice, the OPL Action Plan will be the document that guides planning policy. This means that when the Action Plan is reviewed, a review of planning policy will follow. This will ensure that policy remains relevant to the Action Plan's guiding principles. By way of an example, changing circumstances, such as the need to expand waste disposal provision due to an unexpected increase in population or tourist arrivals would require a revision to the OPL Action Plan to address the issue. This in turn would be reflected in planning policy, though, for example, the identification of a new waste disposal site, or enhanced recycling facilities.

The Development Plan's policies should be subject to ongoing review to ensure compliance and relevance to The OPL Action Plan, and may be modified to reflect changing circumstances, new development pressures or trends.

Defining the Objectives

The framework for policy stems from the five overarching policy objectives defined within SIRMZP and seeks to build on these. This will result in the formulation of policies to guide public and private investment to achieve the following goals:

- Sustainable economic growth.
- Job creation.
- Protection of the environment.
- Sustainable infrastructural improvements to assist in the transition to green energy, improved waste management, upgraded water supply and improved accessibility

The foregoing will require efficient and effective governance overseen by the Barbuda Council.

The Development Plan for Barbuda will therefore seek to build upon the vision and design goals of the Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda through the formulation of policies at the local level. The One Planet Living Action Plan will be the mechanism by which policy will be delivered and monitored, also at the local level. A key part of this process will be the ongoing review and updating of the Action Plan so that it remains relevant and so that any potential shortcomings can be identified.

Conduct Research and Analysis

It will be important to carry out the necessary research and analysis to determine policy direction. This will assist in identifying economic trends, investment potential and gaps in knowledge.

The Development Plan's policies should also be subject to ongoing review to ensure compliance and may be modified to reflect changing circumstances, new development pressures or trends identified through the OPL Action Plan review process

Stakeholder Engagement

Stakeholder engagement is possibly the most important part of the planning policy process as it facilitates scrutiny and review by all interested parties including the public, resulting in wider acceptance of the Plan. The OPL Action Plan will include stakeholder engagement through a consultation exercise that meets the needs and reaches out to all sections of society. The assessment of planning applications should consider both policy and the Action Plan, the priorities of which can change as a result of the continuous review process.

Similarly, it is recommended that public consultation be included within the planning application assessment process for major planning applications or applications that may impact negatively on individuals or the environment. This process will be overseen by the Barbuda Council.

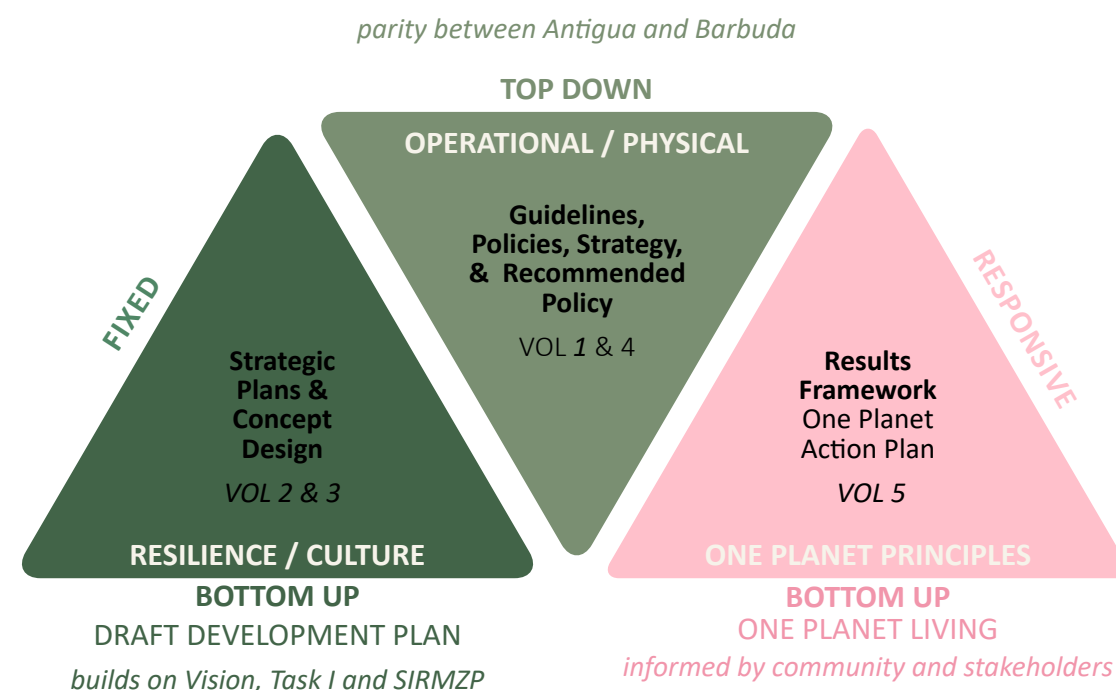


Diagram illustrating the interrelationship between top-down policy and bottom-up OPL approach in Development Plan delivery

GUIDING PRINCIPLES

The following guiding principles have been formulated to govern the policy framework based on the five Design Goals contained in SIRMZP:

Maintain and Enhance Ecosystem Integrity

Land use zoning combined with specific policies should be established to maintain, protect and enhance the island's existing valued ecosystems. More specifically, policy should be directed at:

- A presumption against new development within designated protected areas.
- Identification of the type of development that may be considered within a protected area and the criteria by which proposals will be assessed.
- Where new development is proposed, the proposal must be the subject of an Environmental Impact Assessment, for which the Terms of Reference must be drafted by the Planning Authority for the island. The EIA document should be made available to the public and the developer must engage in a public consultation exercise based on pre-established procedures.
- The formulation of policies in respect of coastal setbacks for new development and acceptable massing and density.

Foster Economic Development and Engaging Livelihoods

The Development Plan for Barbuda recognises the need to foster economic development in a manner that is sustainable and proportionate to the island's carrying capacity. To this end, policy will be directed towards:

- Encouraging the sustainable development of the island's existing economic sectors: tourism, agriculture, and fisheries by establishing best practice in each sector to avoid, for example, overfishing or insensitive tourism development.
- Enabling the establishment of new economic sectors such as cultural heritage, information technology, health and wellness and other services.
- Examining training initiatives for young school leavers and the underemployed that meet the needs of employers.
- Encouraging the Barbudan diaspora to invest in the island.
- Provide opportunities for collaborative working within shared workspaces.

Enhance Livability

Policies based on enhancing livability will be focussed on the creation of 15-minute neighbourhoods starting with Codrington and expanding south towards the port and separated by environmental green space corridors. These will be implemented in a phased manner linked to population growth. Each 15-minute neighbourhood will provide the full range of services to meet the daily needs of its inhabitants in respect of basic services, shopping needs, social, recreational, and educational services.

Policy will be directed towards:

- Encouraging a range of services to support each neighbourhood.
- Providing adequate formal and informal open space.
- Improving the walkability of each neighbourhood by creating more accessible routes.
- Encouraging cycling.
- Traffic calming.
- Public realm enhancements focused at giving each neighbourhood its own identity.
- Urban design guidelines in respect of building scale, use, spacing and the development of a new Barbudan vernacular.

Improve Accessibility

Improvements to accessibility will be encouraged at the macro level through the development of improved air and sea linkages with Antigua, and within the island through the development of a sustainable accessibility model aimed at promoting public transport, cycling, and walking, measures that will also enhance liveability. The main policy direction is to reduce reliance on the private motor car.

Policy will seek to:

- First, discourage private car use through road design measures.
- Encouraging the use of bicycles, cargo-bikes, e-bikes e-scooters.
- Examining the opportunities for the provision of bus services.
- Improving mobility for persons with disabilities and the elderly.
- Improving pedestrian access within and between neighbourhoods through the upgrading of existing routes and identification of new pedestrian linkages within the fifteen-minute neighbourhood context.

Identification of Priority Sectors

The key sectors that are important to achieving sustainable investment cover both public and private sectors. Tourism is the sector with the greatest potential for employment creation and economic development. However, it must be developed in a proportionate and sustainable manner.

Promote Efficient and Effective Government

The Barbuda Council will be empowered to guide and control the development process and determine policy direction in respect of public and private investment. It will function as the planning authority for the island within the context of the Physical Development Act, 2003.

ONE PLANET LIVING

Barbuda is an attractive location for tourism investment and development. To ensure that this development is sustainable and preserves the island’s unique ecological and cultural heritage, it is imperative to establish a comprehensive planning policy framework.

A One Planet Action Plan is a comprehensive strategy designed to promote sustainability, environmental protection, and responsible resource management while considering the limitations of our planet’s natural systems.

When properly developed, a One Planet Action Plan can serve as a viable policy framework to guide both public and private investment toward sustainable practices.

It can create such a framework by:

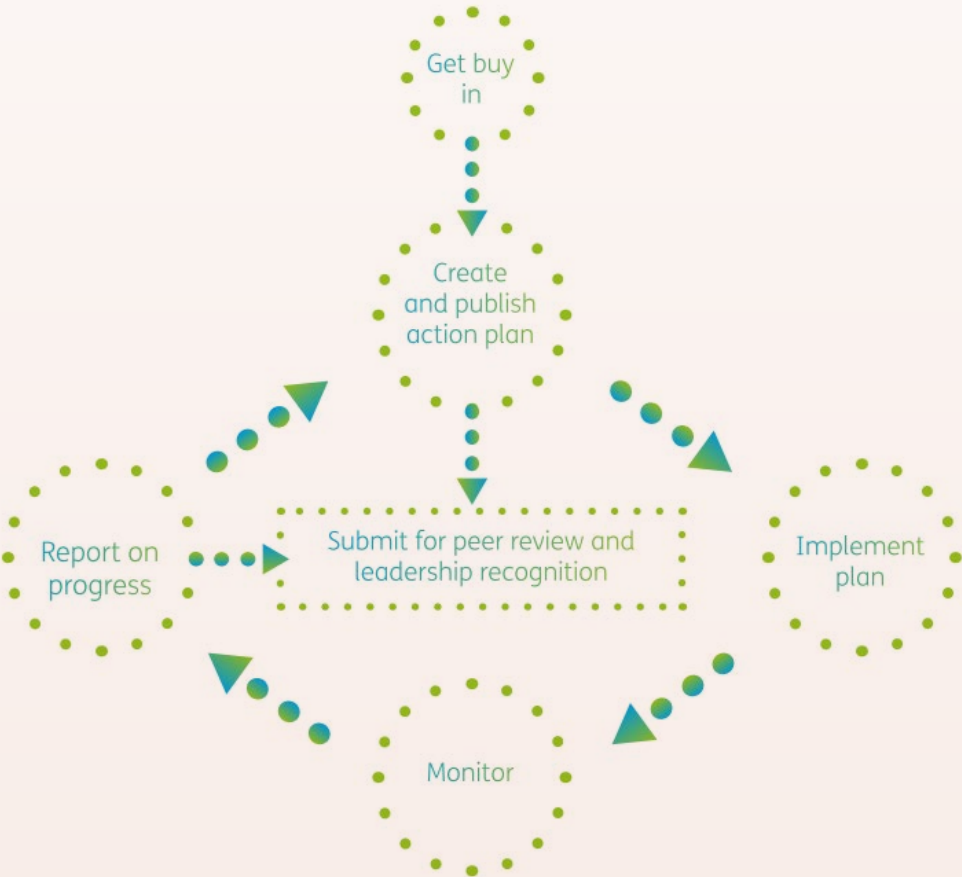
- Clear Goals and Objectives:** A One Planet Action Plan sets clear and measurable goals and objectives related to ecological sustainability, resource efficiency, carbon reduction, and social well-being. These goals provide a roadmap for public and private investments to align with long-term sustainability targets.
- Establishing an Integrated Approach:** One Planet Action Plans often take an integrated approach that addresses various aspects of sustainability, including energy, water, waste, land use, transportation, and more. This holistic perspective ensures that investments consider the interconnectedness of different sectors and their impacts on the environment and society.

- Public-Private Partnerships:** The plan can facilitate partnerships between public and private entities. By collaborating, governments and businesses can leverage each other’s strengths to implement projects that promote sustainability, such as renewable energy initiatives, eco-friendly infrastructure, and circular economy models.
- Innovation and Research:** A One Planet Action Plan can encourage research and innovation in sustainable technologies, practices, and business models by identifying goals and identifying opportunities. This can potentially attract private investment and educational institutions in research and development, as well as in commercialising new solutions.
- Investment Prioritization:** One Planet Action Plans often prioritise investments in projects that deliver both environmental and economic benefits. This can attract private investors by demonstrating how sustainable initiatives can lead to long-term profitability and resilience.
- Measurement and Reporting:** The plan establishes mechanisms for measuring and reporting progress toward sustainability goals. This transparency ensures accountability and allows investors to track the impact of their investments on environmental and social outcomes.
- Stakeholder Engagement:** The development of the plan usually involves consultation with various stakeholders, including businesses, local communities, NGOs, and experts. This engagement ensures that the policy framework considers diverse perspectives and needs, leading to more effective and inclusive investment strategies.

- Long-Term Vision:** The plan provides a long-term vision for sustainability, allowing investors to align their strategies with future trends and avoid investments that may become obsolete due to changing environmental and social conditions.
- Global and Local Alignment:** One Planet Action Plans often align with international sustainability frameworks, such as the United Nations Sustainable Development Goals (SDGs), while also considering local contexts and priorities. This dual alignment enhances credibility and helps attract both global and local investments.

Overall, a well-designed One Planet Action Plan serves as a guiding framework that signals a commitment to sustainability, encourages responsible investment practices, and helps public and private sectors work together toward a more sustainable and resilient future.

It is against this background of One Planet principles that planning policy will be formulated and, most importantly, monitored to ensure compliance.



Above: A One Planet Action Plan is a dynamic document developed with the community and stakeholders

REQUIRED AMENDMENTS TO POLICIES, PLANS AND GUIDELINES

Existing Planning Mechanisms for Achieving One Planet Living Objectives

Policy needs to be formulated to establish meaningful Incentives and Regulations for significant developments. This may involve providing tax benefits, grants, or subsidies to businesses and projects that align with sustainability goals, while also enforcing regulations that discourage harmful practices or provide investment in the community agreed at planning stage.

Section 28 of the Physical Planning Act facilitates Development Agreements to secure planning gain for the benefit of the island community.

Such agreements give the Development Control Authority the power to secure planning obligations or gains as part of the planning permission process. It is envisaged that these Development Agreements will be entered into between the Barbuda Council (acting as Planning Authority) and developers and that they will outline specific requirements, contributions (whether works, money or land), or conditions that the developer must adhere to in exchange for obtaining planning permission for their proposed development projects.

The intent of these Agreements will be to mitigate the impacts of new developments on local infrastructure, amenities, and services, as well as providing tangible benefits to the community. These contributions can encompass a wide range of obligations, such as:

Infrastructure Improvements: Developers may be required to contribute funds towards the improvement or expansion of local infrastructure, including roads, public transportation, utilities, and community facilities.

Affordable Housing: Commercial Developers may be obligated to provide a certain percentage of low-cost housing units within their development or contribute financially to low-cost housing projects in the area.

Community Facilities: Contributions may be directed towards the creation or enhancement of community facilities, such as parks, playgrounds, libraries, healthcare centres, and schools.

Environmental Enhancements: Developers may need to fund environmental enhancements or conservation efforts to offset any negative impact on the local ecosystem.

Transportation: Contributions might involve investing in public transportation services or infrastructure improvements to reduce the transportation-related impacts of the development.

Sustainability Measures: Developers could be required to incorporate sustainable design features into their projects or contribute to local sustainability initiatives.

Heritage and Culture: Contributions may also address heritage conservation, including restoration of historic buildings or preservation of cultural sites.

These contributions will be negotiated between the Barbuda Council and the developer and will be tailored to the specific needs of the local area. The intention is to ensure that development projects contribute positively to the surrounding community and mitigate any potential negative effects. These contributions will assist the Barbuda Council in the management of impacts of development and enhance the overall quality of life for residents.

Section 29 of the Physical Planning Act also facilitates the use of bonds as security for the compliance of conditions or agreements entered under Section 28 of the Act. These bonds will serve as a charge on the land to which they relate and are enforceable.



Above: Two Foot Bay

#FUTUREBARBUDA QUESTIONS

VOLUME 1
GOVERNING POLICY



#FUTUREBARBUDA



VOLUME 2

DRAFT DESIGN BRIEF

The Draft Master Development Plan comprises the following Volumes:



VOLUME 1: GOVERNING POLICY

Translating the vision into policies and strategies guided by principles of sustainability and resilience.



VOLUME 2: DRAFT DESIGN BRIEF

The emerging Design Brief for Codrington and defined local areas outlining the design goals and objectives, constraints, special analysis.



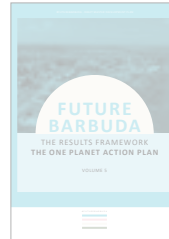
VOLUME 3: CONCEPT DESIGN & RESILIENT APPROACH FOR LAND USE

A series of plans presenting the concept design for Barbuda, Land Use, Built Form and strategies.



VOLUME 4: PUBLIC AND PRIVATE REALM GUIDANCE

Codes and policies governing the public and private realms, shaping the physical environment.



VOLUME 5: THE RESULTS FRAMEWORK / THE ONE PLANET ACTION PLAN

The implementation and institutional framework utilising One Planet as a providing objectives, actions and responsibilities.

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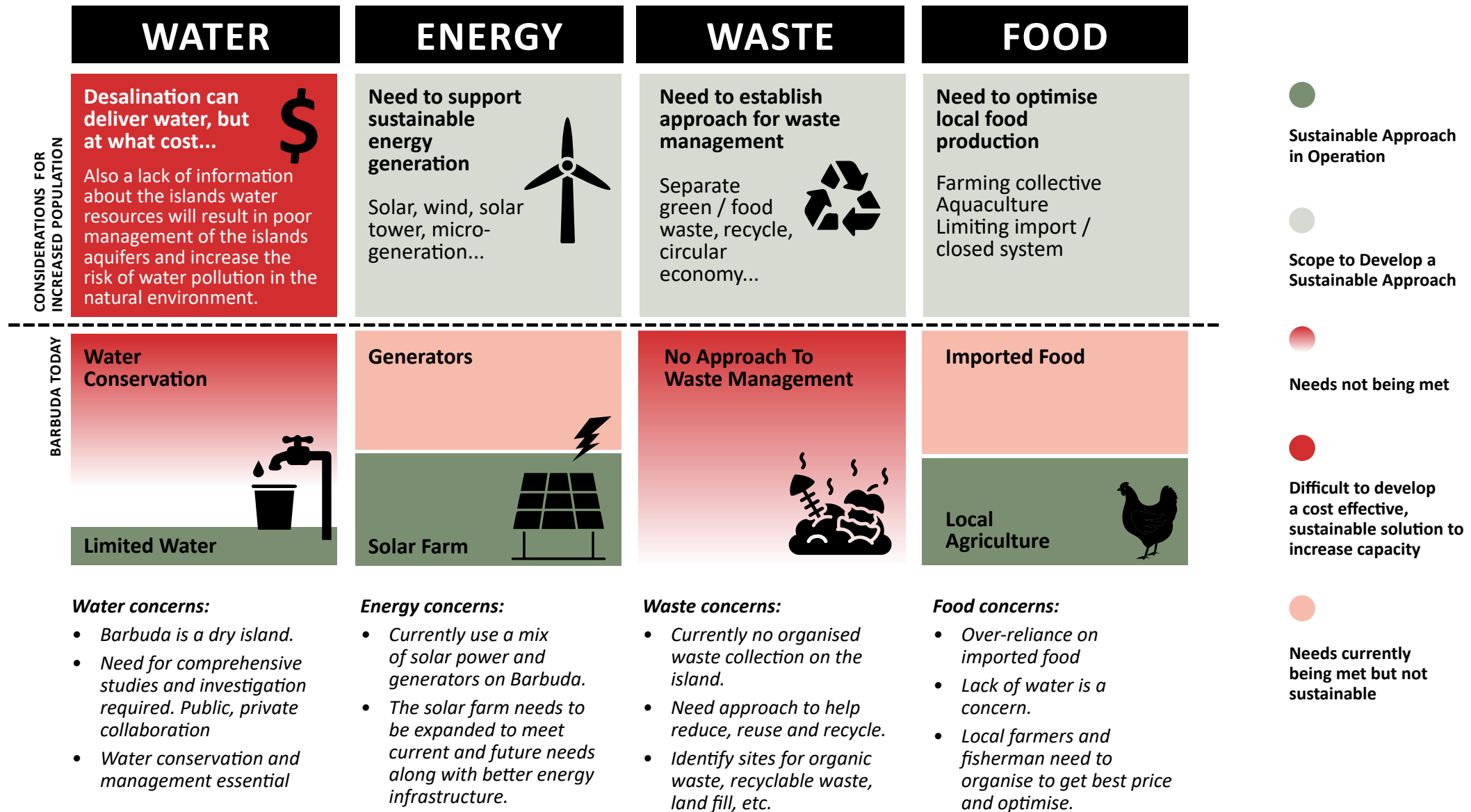
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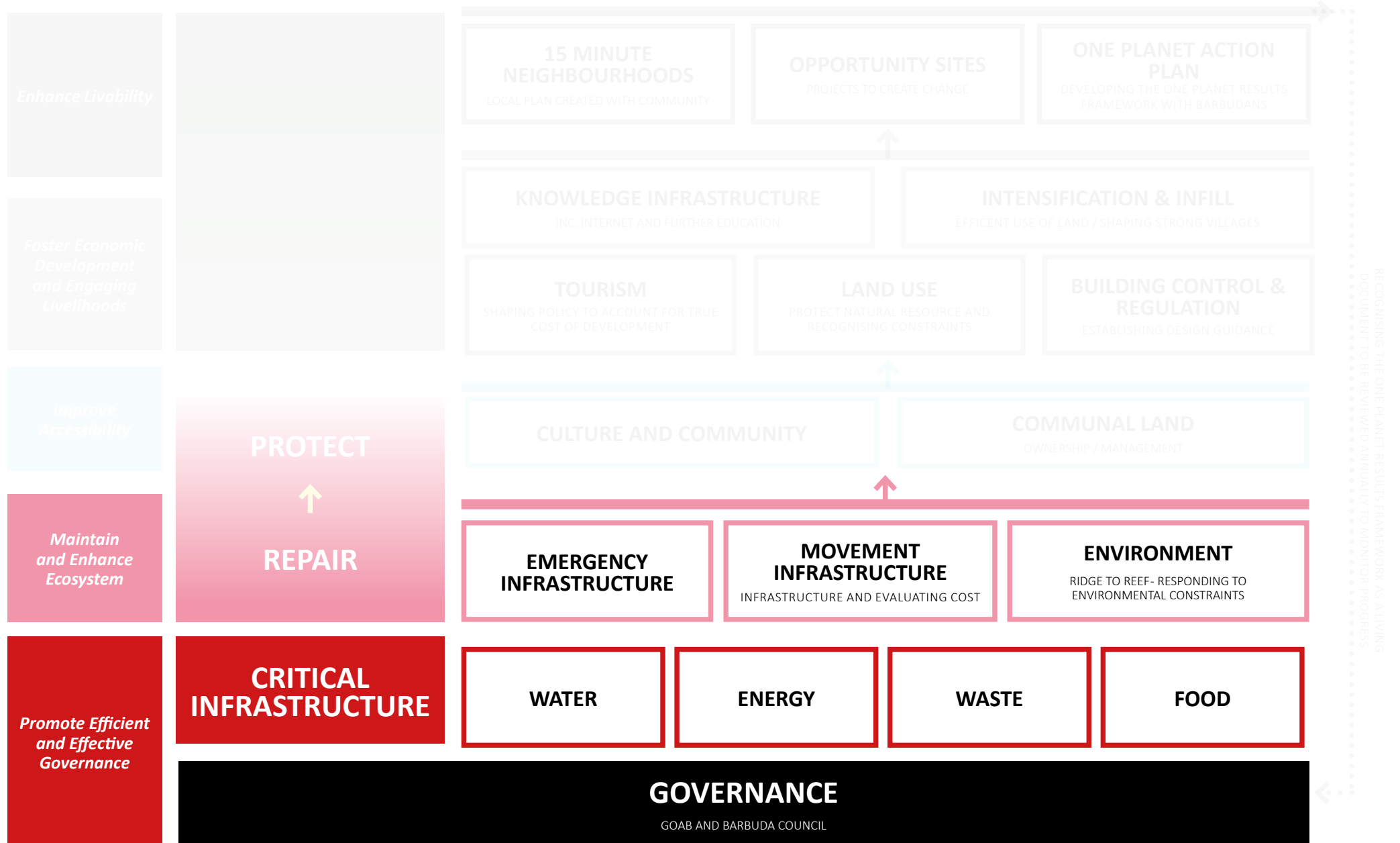




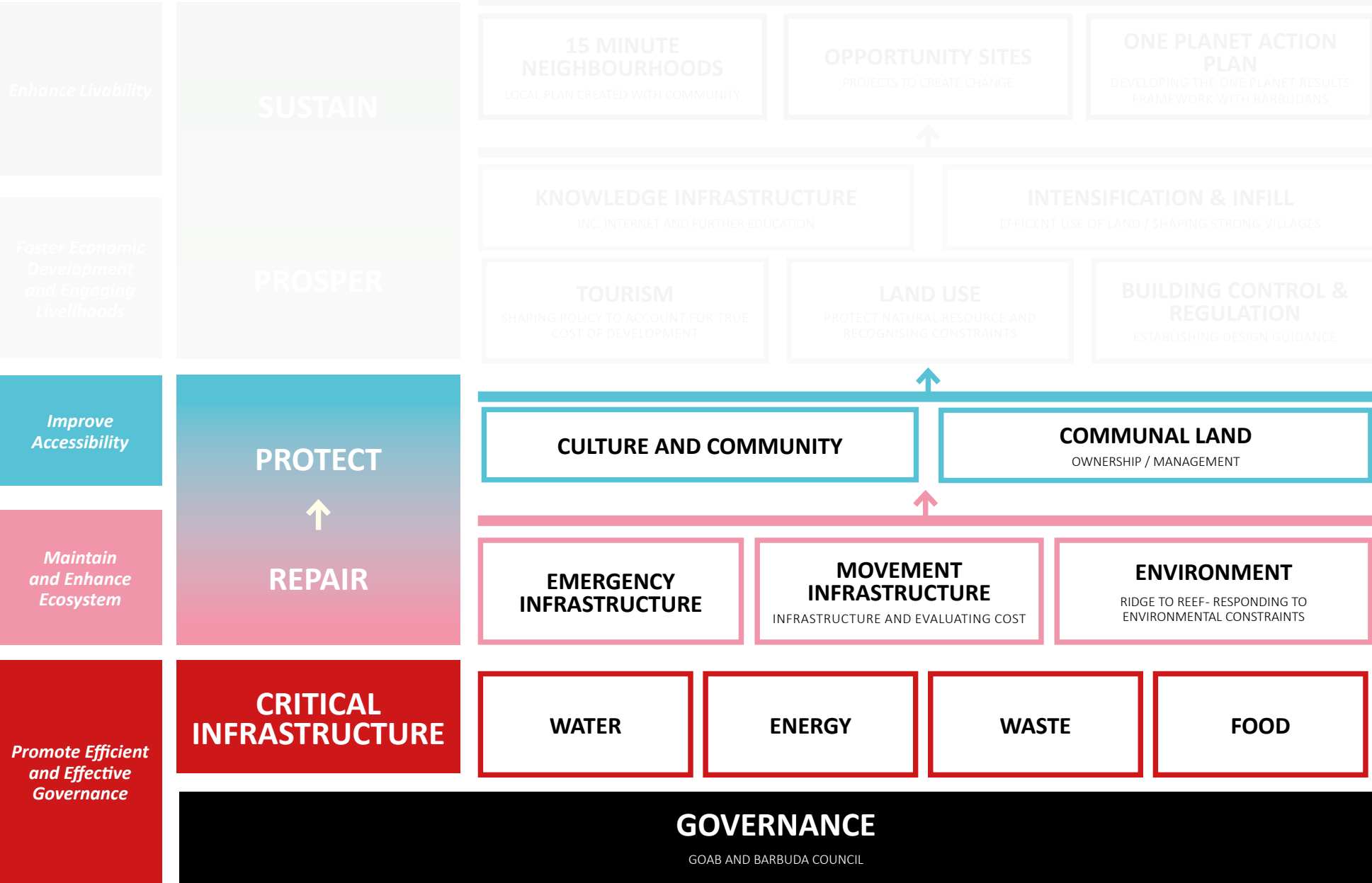
PLANNING AND DEVELOPMENT CONSTRAINTS



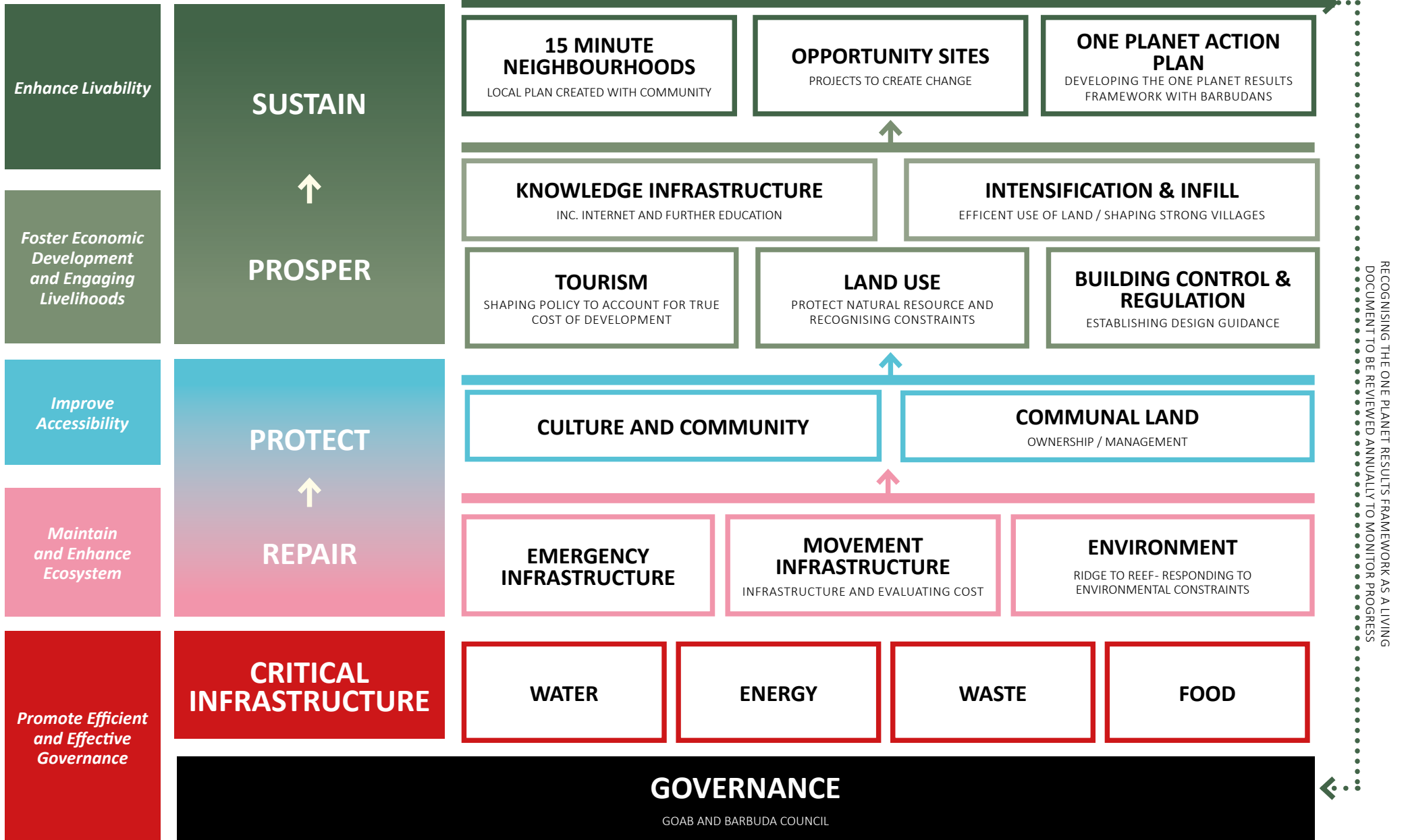
CRITICAL INFRASTRUCTURE



PROSPER & SUSTAIN

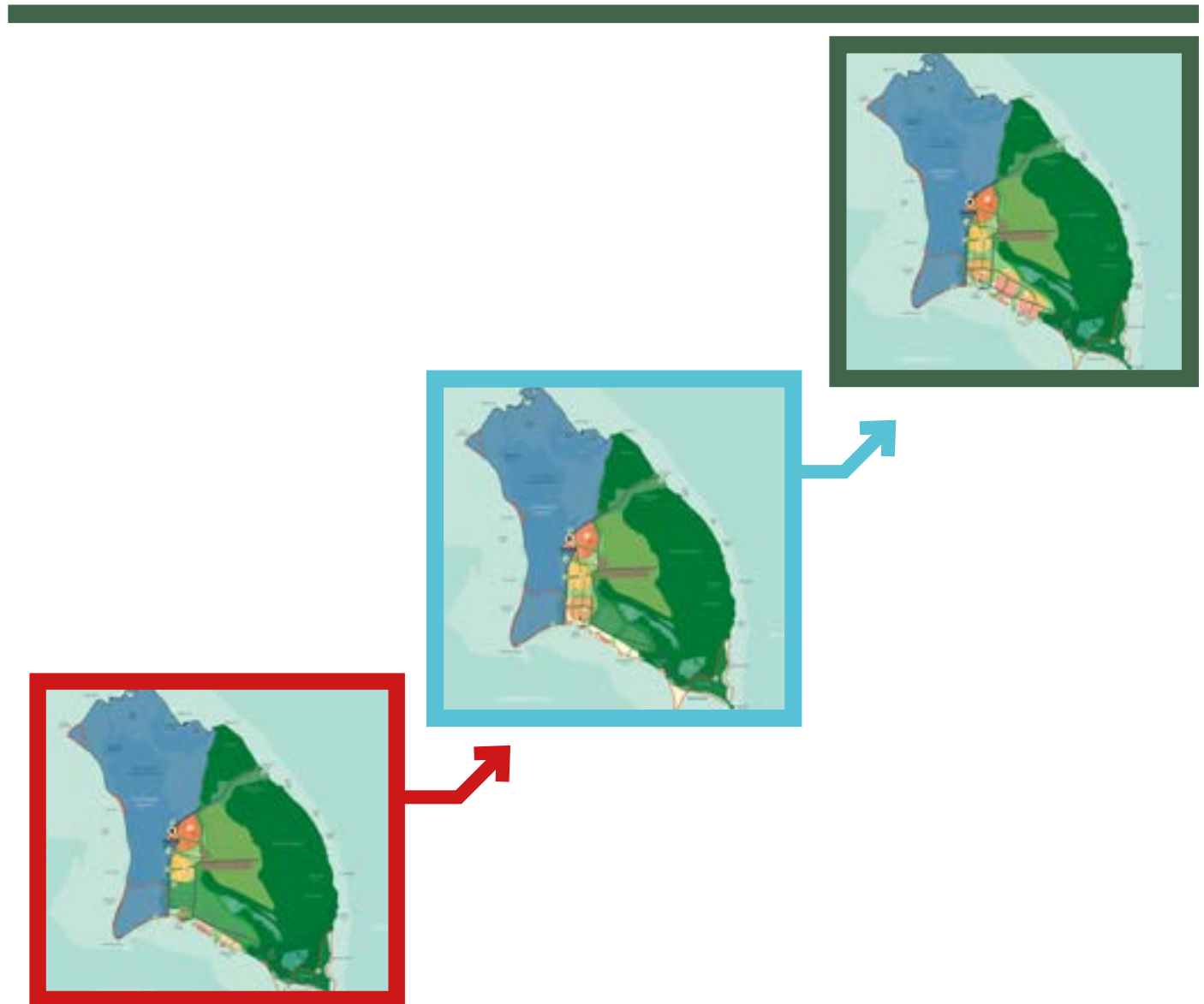
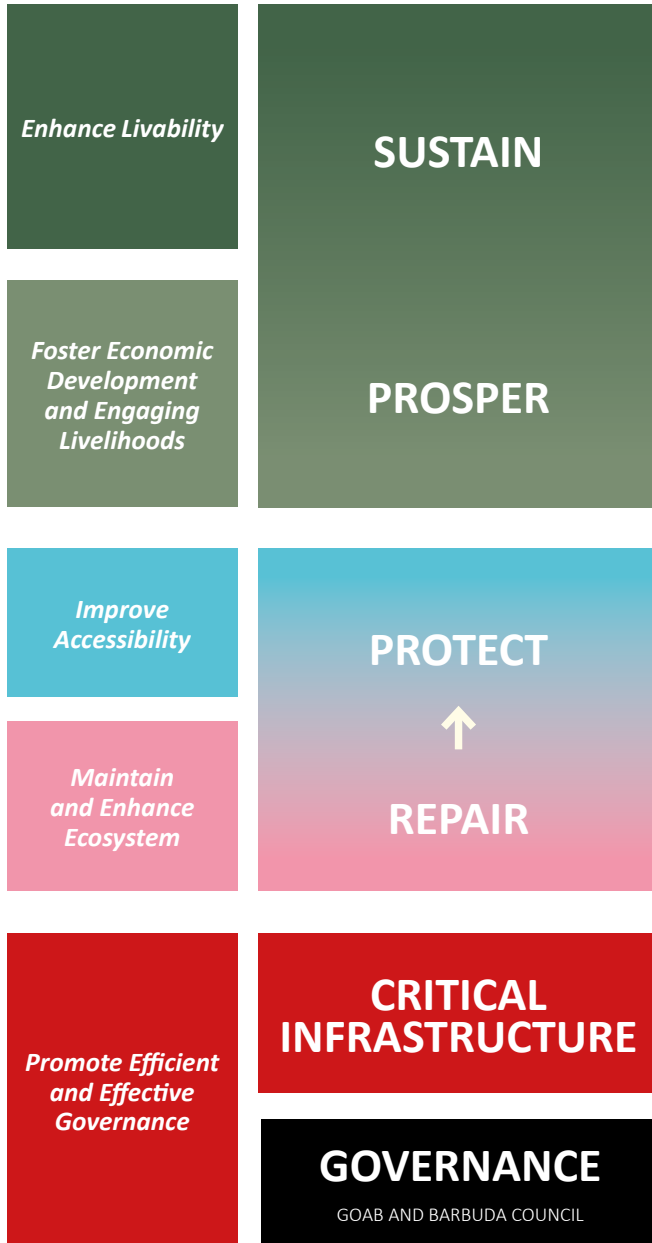


PROSPER & SUSTAIN





GROWTH STAGES





BARBUDA 2030 DEVELOPMENT PLAN

The Barbuda 2030 plan signifies a pivotal stride towards sustainable development. This foundational phase prepares the island for efficient growth. It underscores the imperative to promote compact settlement and the redevelopment of previously developed sites. This strategic approach serves a dual purpose: it reduces infrastructure costs and, critically, preserves the island's distinctive character. By optimising land usage, Barbuda is poised to responsibly expand while safeguarding its environment, culture, and heritage for future generations.



POTENTIAL REDEVELOPMENT SITES

BBQ Airstrip
Holy Trinity School



KNOWN DEVELOPMENT SITES



KNOWN LEASEHOLDINGS



HISTORIC AREA

Listed Buildings
Historic Conservation Areas



COMPACT SETTLEMENT

Supporting infill / brown-field development where possible

Targeting 10-20 du/acre



FUTURE GROWTH AREA

Once existing settlement areas are at capacity and need has been identified, these areas may be made available for development. This is provided that there is investment in essential infrastructure, the establishment of resilience measures, and the carrying capacity of island is not exceeded.



INDUSTRIAL USES

Transport, Manufacturing, Waste, Energy Infrastructure



SUSTAINABLE RURAL SETTLEMENT - AGRICULTURE / NURSERIES

Large Lot - 0 to 1 du/acre



COMMON LANDS ENVIRONMENTAL RESOURCE AREAS

Protection of environment, including watershed, ecology and biodiversity, as well as cultural traditions, including hunting lands and camping and communal land.



AGRICULTURE ENVIRONMENTAL RESOURCE AREAS

Protection of prime agricultural lands and watershed.



FLOOD RISK FROM EXTREME WEATHER CONDITIONS

Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.



ECO-TONES / GREEN INFRASTRUCTURE ENHANCED GREENING

Incorporate green spaces, planting, drainage swales where possible along roadways, tracks, trails and alleys.

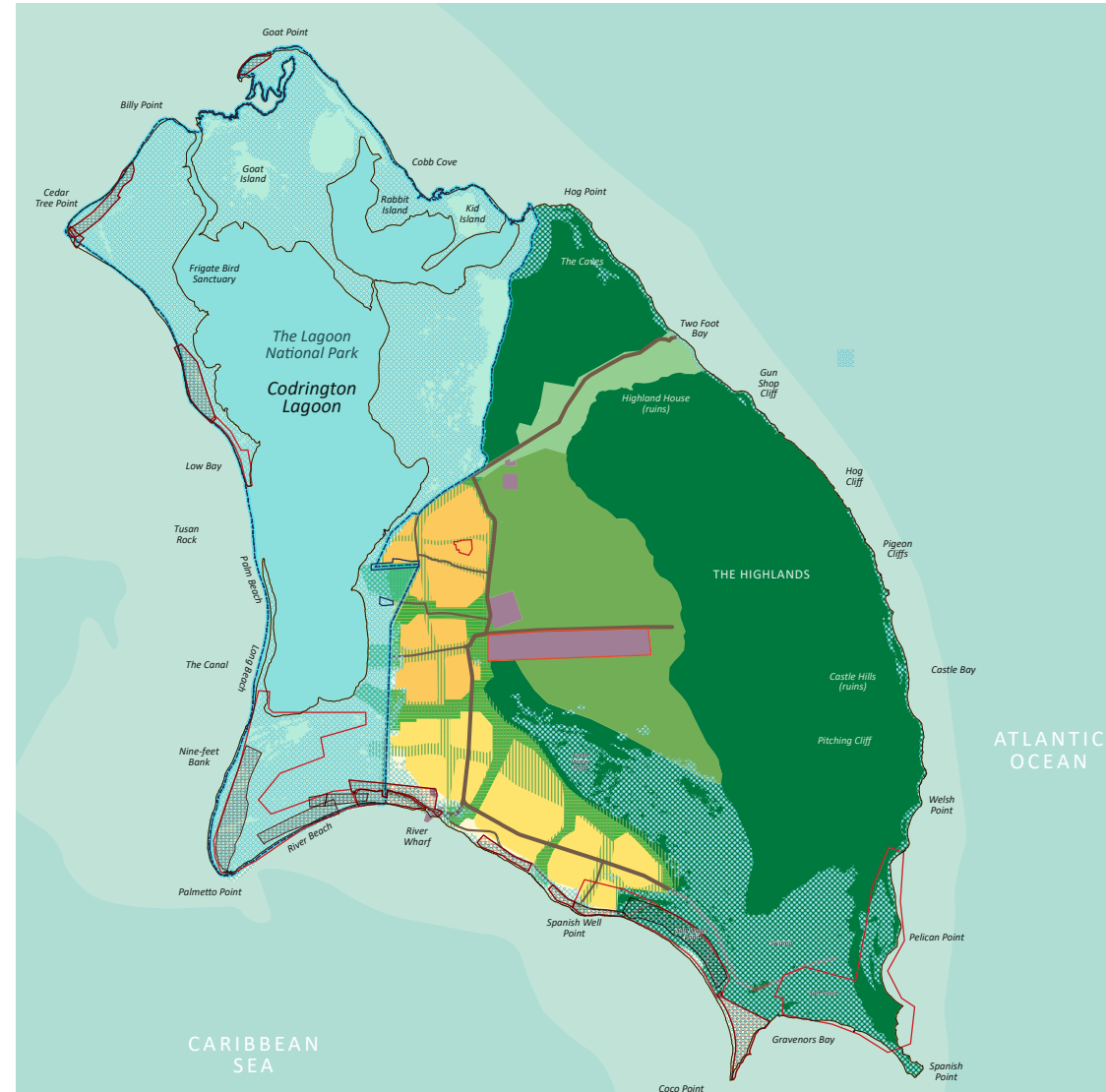
Provide green routes that connect to coastlines include parking, public facilities and alternative transportation modalities (bikes, electric tram, etc.)

Identify eco-tones that will transect built areas along open spaces, transportation corridors, roadways, trails, public parks, recreational spaces, drainage and utility corridors and outdoor civic spaces.



RIDGE TO REEF CORRIDORS DEFINING VILLAGES / CREATING ECOLOGICAL CORRIDORS

Identify ecological corridors connecting ridge to reef that will define villages and built areas and provide access to nature.



Development Plan

#FUTUREBARBUDA QUESTIONS

VOLUME 2
DRAFT DESIGN BRIEF



#FUTUREBARBUDA



VOLUME 3 CONCEPT DESIGN & RESILIENT APPROACH FOR LAND USE



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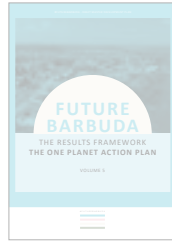
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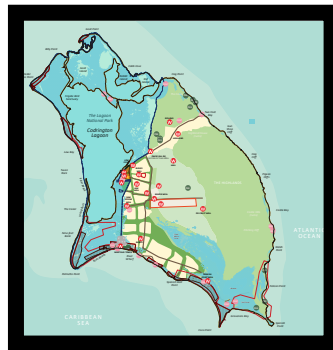
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'Barbuda Commons'

EMERGING PLANS

CONCEPT DESIGN

Island wide strategic plans



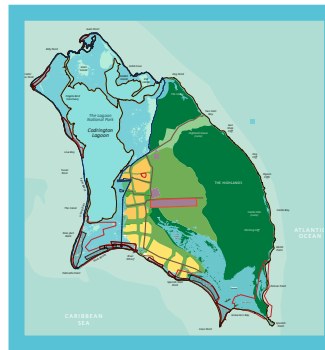
ENVIRONMENT

Maintain and Enhance Ecosystem Integrity



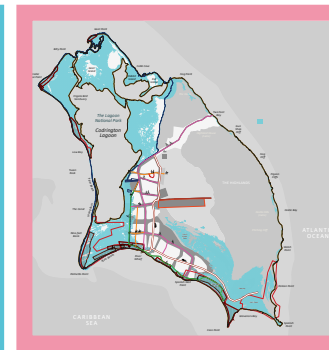
CULTURE & COMMUNITY

ENHANCE LIVABILITY



LAND USE

Guiding Development - Foster Economic Development and Engaging Livelihoods



MOVEMENT

Improve Accessibility



UTILITY & SERVICES

Promote Efficient and Effective Governance

OPPORTUNITY SITE STRATEGIES

Local area plans looking at strategic areas to create change in Barbuda



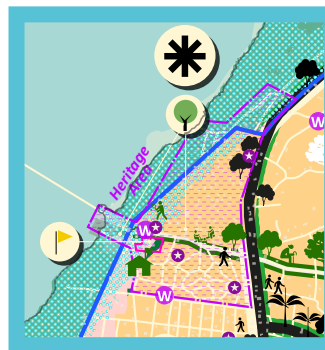
BARBUDA COMMON

Protecting Barbuda's natural resource and continuing traditions



CODRINGTON - A NATURAL 15 MINUTE NEIGHBOURHOOD

An approach to considered, compact growth building on tradition



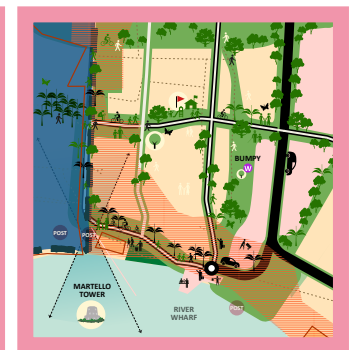
CODRINGTON CENTRE

A Defined Centre for community and culture



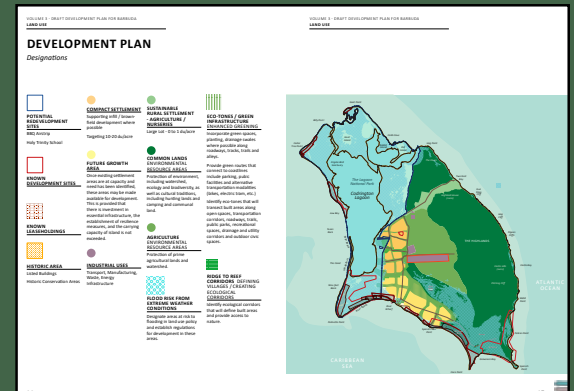
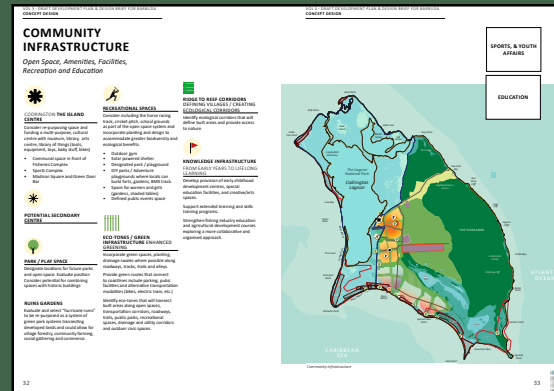
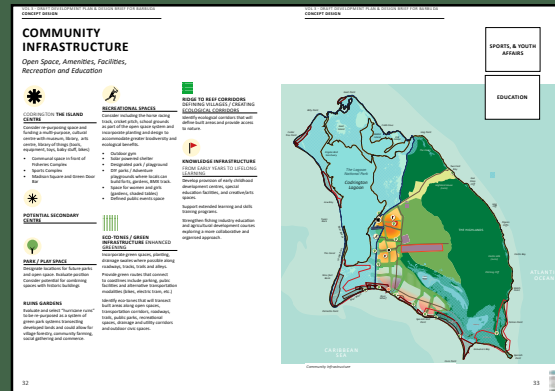
RE-IMAGINING RIVER ROAD

Rethinking the road



RIVER DOCK

A plan for future prosperity



ENVIRONMENTAL RISK

Flooding, Tropical Storms, Hurricanes, Earthquake, Sea Level Rise and Rising Sea Temperatures

Barbuda, like many coastal regions, faces a range of environmental risks, including flooding, hurricanes, sea-level rise, and rising temperatures. In this context, a comprehensive planning approach becomes imperative to mitigate these threats and safeguard the island's communities and ecosystems.

This planning approach not only seeks to identify and assess these environmental risks but also aims to develop proactive strategies and policies. It is designed to enhance resilience, minimize vulnerabilities, and ensure the sustainable development of Barbuda. By analysing past occurrences, current vulnerabilities, and future projections, this approach provides a roadmap for informed decision-making when considering future growth.



100-YEAR SEA LEVEL RISE

Avoid development in areas at risk of sea-level to build climate resilience.

Rising sea levels can lead to coastal erosion, increased flooding, and salt-water intrusion into freshwater sources. This poses a significant threat to the island's infrastructure, natural habitats, and overall stability.



EXTREME WEATHER CONDITIONS CAT 5 STORM / HIGH TIDE AND STORM SURGE

Implement zoning and land use regulations that restrict or limit development in high-risk flood zones. Avoid constructing critical infrastructure and housing in these areas whenever possible. Avoid sleeping spaces at ground floor and encourage raising buildings and flood-resistant landscaping.

Climate change can result in more intense hurricanes and tropical storms. Barbuda is prone to these extreme weather events, and the increased intensity can lead to more damage to property, ecosystems, and communities.



100-YEAR SEA LEVEL RISE + EXTREAME WEATHER CONDITIONS CAT 5 STORM / HIGH TIDE AND STORM SURGE + SEA LEVEL RISE

Understand the long term environmental risk from both extreme weather events and sea level rise. The information modelled shows the combined impact of sea level rise with extreme weather, such as a CAT 5 hurricane.



MARINE PROTECTION AREAS

Design and expand marine protected areas to conserve and protect vulnerable ecosystems, such as wetlands, coral reefs and sea-grass beds. These areas can serve as refuges for marine life, helping to preserve biodiversity and enhance resilience to temperature-induced stress.

Rising sea temperatures can cause coral bleaching, which threatens the health of coral reefs surrounding Barbuda. These reefs are crucial for protecting the coastline from erosion, supporting marine biodiversity, and sustaining the local fishing industry.



RISING SEA TEMPERATURES / CHANGING CLIMATE

Create actionable policy to address issues arising from climate change, such as dangerous high temperatures, increased frequency of extreme weather events, such as hurricanes and tropical storms, increased rainfall and flooding, dangerous high temperatures, coastal erosion and salt-water intrusion and longer dry seasons and shorter wet seasons.

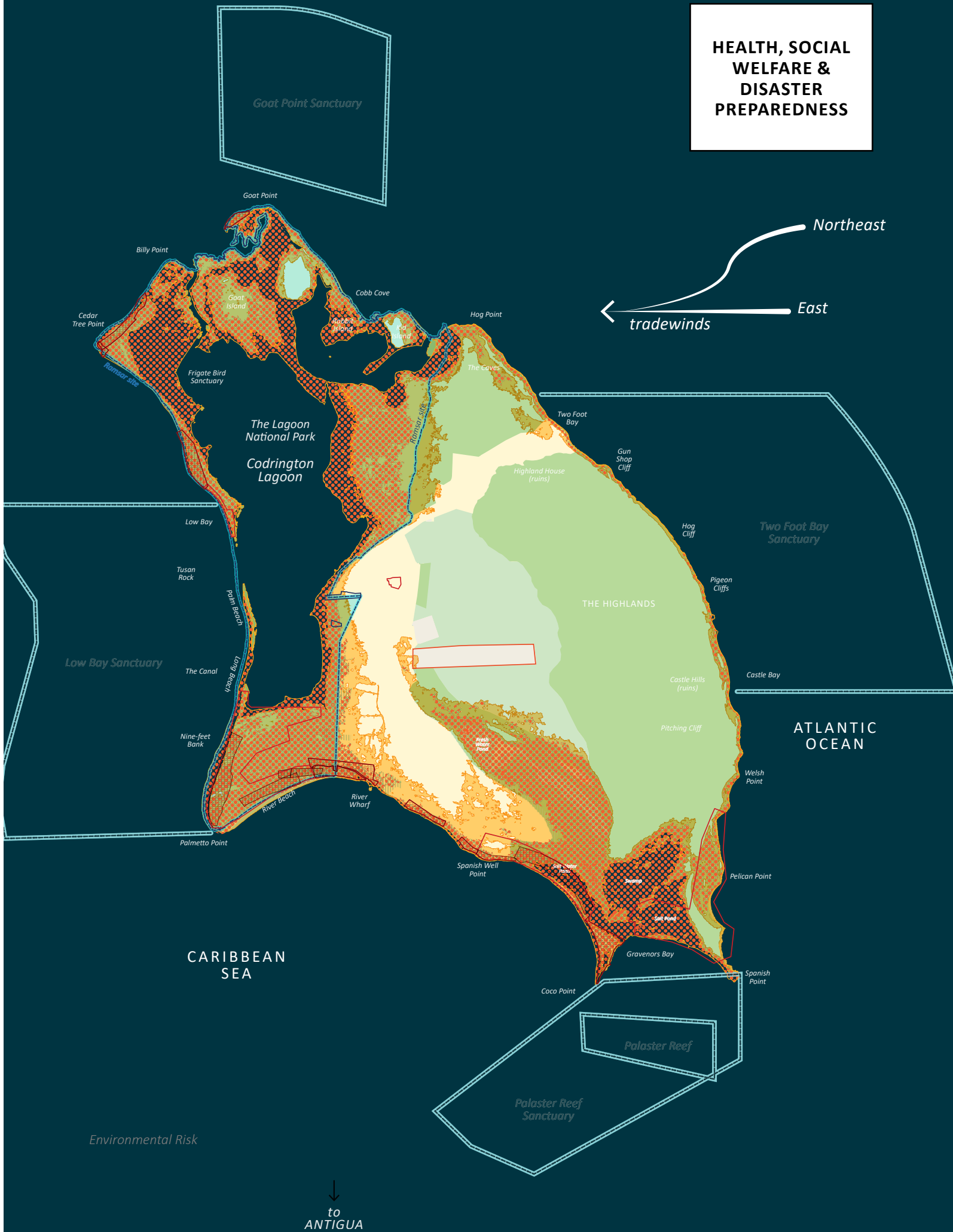
Increased carbon dioxide levels in the atmosphere are leading to ocean acidification, which can harm marine life and disrupt the delicate balance of marine ecosystems.



KNOWN LEASEHOLDINGS

KNOWN DEVELOPMENT SITES

POTENTIAL REDEVELOPMENT SITES



ENVIRONMENTAL RISK

Flooding, Tropical Storms, Hurricanes, Earthquake and Sea Level Rise



Flooding in Autumn 2022



Elevated property to allow for flooding

IMPLEMENT FLOOD-RESILIENT DESIGN
Implement flood-resilient design practices, such as using flood-resistant materials and building techniques. This includes elevating utilities and critical infrastructure above flood levels, designing buildings to withstand flood forces, and using flood-resistant landscaping.



Hotel property damaged by Hurricane Irma



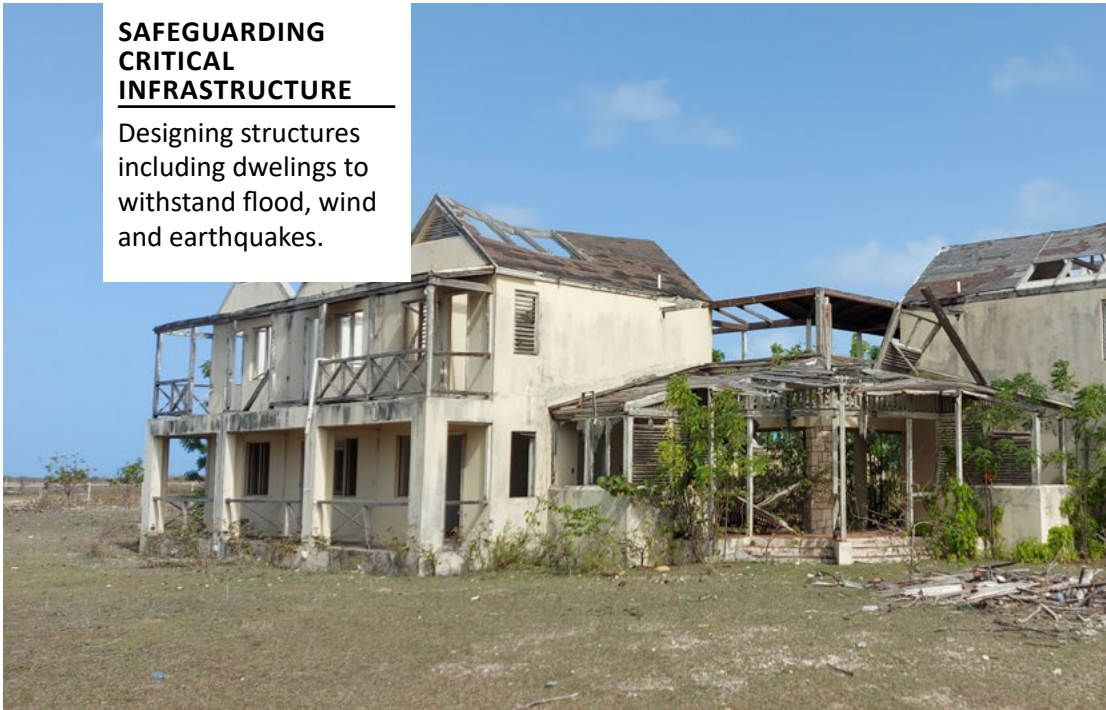
Property at Coco Point



Sunset Hotel (image from barbudaful.net)



Lighthouse Bay Resort (image from barbudaful.net)



Abandoned property

SAFEGUARDING CRITICAL INFRASTRUCTURE
Designing structures including dwellings to withstand flood, wind and earthquakes.

ADDRESS POST-DISASTER RESPONSIBILITY
In the aftermath of hurricanes, Barbuda bears the scars of abandoned hotels, resorts, and homes, once vibrant but now left in disrepair, requiring significant reconstruction efforts to revitalize its tourism industry and local economy.

ENVIRONMENTAL DESIGNATION / SENSITIVE FOOTPRINTS

Marine and Terrestrial Protection Areas for Ecology and Biodiversity and Common Resource

A 'Ridge to Reef' approach aims to maintain and enhance ecosystem integrity, while supporting a continued tradition of communal land management. The approach looks to conserve physical green space connections through agricultural lands and inhabited areas connecting to the sea. These green corridors, or eco-tones, are areas of steep transition between ecological communities, ecosystems, or ecological regions along an environmental gradient. The combination of environmental protection areas and ecotones will provide recreational amenity and wild life corridors throughout the island.

There are two designated Protected Areas in Barbuda namely Palaster Reef Marine Park and The Codrington Lagoon National Park Ramsar site.

The following wetlands are protected on Barbuda:

- Bull Hole and Fresh Water Pond.
- Spanish Point Flash.
- Welches's Flashes.
- Castle Hill; and
- Two Foot Bay.



KNOWN LEASEHOLDINGS

KNOWN DEVELOPMENT SITES

POTENTIAL REDEVELOPMENT SITES



ENVIRONMENTAL RESOURCE AREAS AGRICULTURE

Protect agricultural land to ensure sustainable food production. Recognising and harnessing the value of sustainable agriculture, encouraging natural pest control, water regulation, soil fertility, climate resilience, and research opportunities while conserving biodiversity and supporting eco-tourism.



ENVIRONMENTAL RESOURCE AREAS COMMON LANDS

Establish protection for watersheds and groundwater sources on Barbuda through the amendment of environmental legislation. Watersheds and groundwater sources on Barbuda need to be protected through the amendment of environmental legislation.

Protect and enhance nature reserves and highlands. Registration of areas of special scientific interest for Barbuda is required to protect the islands natural environment.

Establish sustainable and active management of hunting areas, wild animals, salt ponds, rivers, and waterways through policy and enforcement.



ECO-TONES / GREEN INFRASTRUCTURE ENHANCED GREENING

Identify eco-tones that will transect built areas along open spaces, transportation corridors, roadways, trails, public parks, recreational spaces, drainage and utility corridors and outdoor civic spaces.



RIDGE TO REEF CORRIDORS DEFINING VILLAGES / CREATING ECOLOGICAL CORRIDORS

Identify ecological corridors connecting ridge to reef that will define villages and built areas and provide access to nature.



MARINE PROTECTION AREA

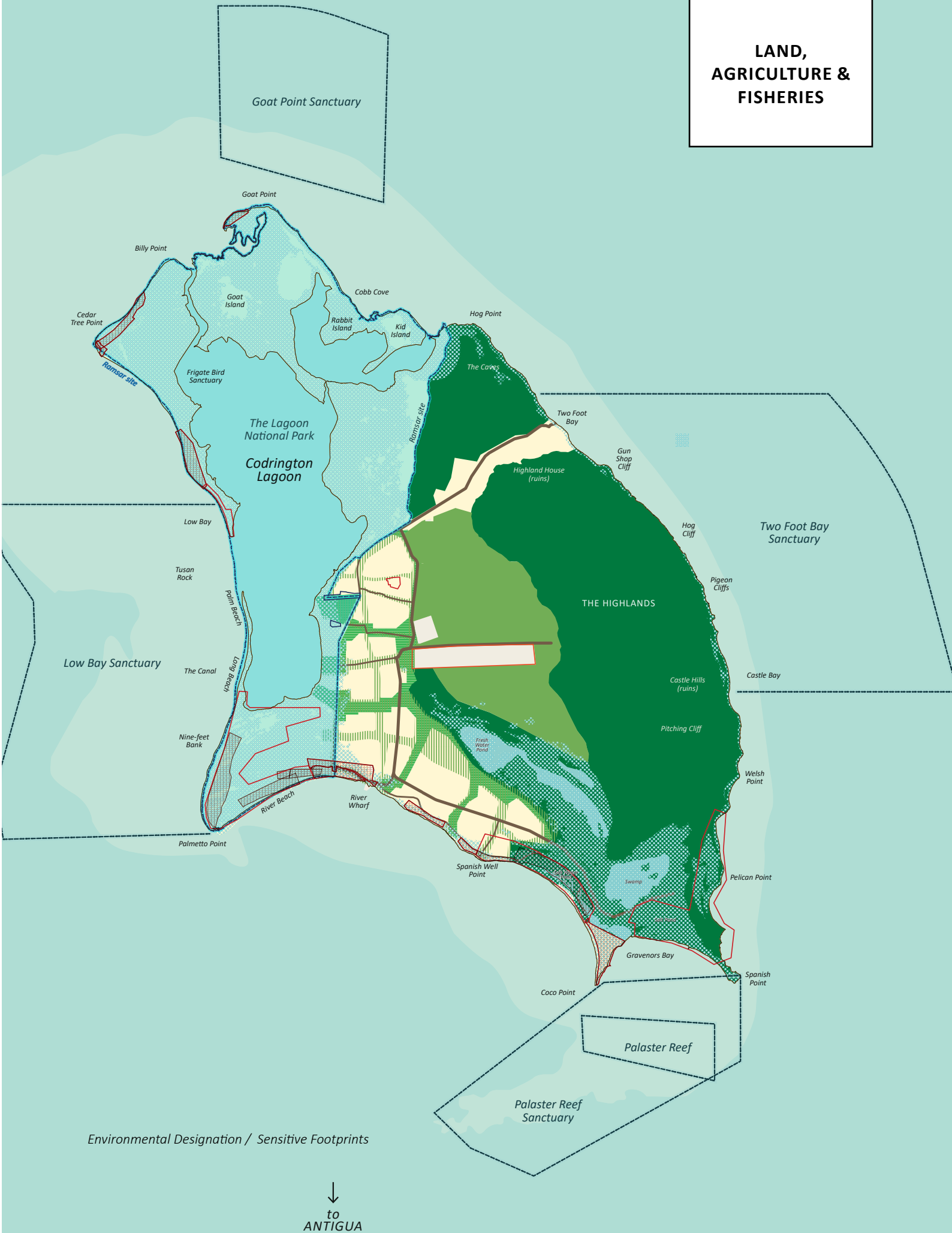
Design and expand marine protected areas to conserve and protect vulnerable ecosystems, such as wetlands, coral reefs and sea-grass beds. These areas can serve as refuges for marine life, helping to preserve biodiversity and enhance resilience to temperature-induced stress.



FLOOD RISK AREAS

Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.

LAND, AGRICULTURE & FISHERIES



ENVIRONMENTAL DESIGNATION / SENSITIVE FOOTPRINTS

*Marine and Terrestrial Protection Areas
for Ecology and Biodiversity and Common
Resource*

INCREASE PROTECTION

There are 7 proposed Protected Areas:

- Frigate Bird Reserve.
- Goat Island Wildlife Reserve.
- Highland Cliffs and Caves Reserve.
- Bull Hole Wetland Reserve. s
- Castle Bay Salt Pond Reserve.
- Gravenor Bay Reserve.
- Palmetto Point Reserve.

These locations are not currently protected in law.



Marine Protection Areas - Codrington Lagoon - Ramsar site



Aerial view of the sandbar protecting the Codrington Lagoon.
(Photo by John Mussington)



Ramsar designation not respected at Palmetto Point Image showing sand mining and destruction of natural vegetation (glanlaw.org)




Geo-bag, brackish water and deposit of sand and debris at Palmetto Point in Ramsar. (image from glanlaw.org)



Sandbar before 2017. A breach occurred in the sandbar after Category 5 Hurricane Irma.
(Photo by Goodwin)

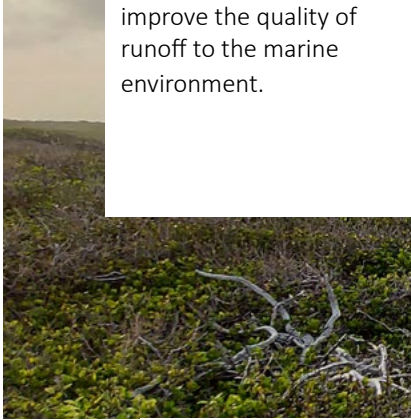

IMPROVE WATER CAPTURE AND RETENTION

The islands open space network should capture and retain water. Open spaces should include drainage swales, bio-swales, water catchment landscapes and artisanal wells where possible which will all contribute to aquifer re-charge and reduce the quantity and improve the quality of runoff to the marine environment.



ESTABLISH ECO-TONES

From the preserves, eco-tones (green corridors) will be created and maintained to reach out and go through communities to create a connective element throughout the island and connect “ridge to reefs” and people to their cultural and natural resources.



Two Foot Bay - The open space network to provide for local and tourism recreation.




Gauge success through improved biodiversity, soil quality, and minimized environmental impact.



ENCOURAGE REGENERATIVE FARMING

Consideration of regenerative and organic farming techniques could be included in the agricultural strategy on the island to provide healthy produce, repair and restore the land. Rotational grazing of animals should be included in the land use planning. The issue of roaming animals in Barbuda is interesting as it does conflict with productive island landscapes. However, a bountiful island should be able to provide for “all of its residents”.



Preserve distinctive locations while ensuring public accessibility.(Photo by Mohammid Walbrook)



Keep natural resources as communal assets, such as Salt Ponds and quarry

Critical and Retained Public
Infrastructure & Services

MOVEMENT

The concept design establishes an approach for sustainable movement in Barbuda. Investment in transport infrastructure is needed for pedestrians and cyclists, as well as vehicles. The approach looks to establish a new primary 'island road' to connect key destinations and avoids flood risk areas.

Secondary streets are enhanced to encourage slow vehicle speeds, while supporting walking and cycling. Roadways should look to include landscape spaces for scenic value, human comfort and to facilitate local commerce and social gathering - A Caribbean cultural phenomena of socializing and carrying out commerce on roadways should be supported through considered as part of the roadscape.



PRIMARY ROUTE ARTERIAL ROAD

Develop new primary arterial road connecting Codrington to River Port, the new airport and beyond. The road should be located outside of area at flood risk and designed to sustain extreme weather events.



SECONDARY STREET ACTIVE STREET

Enhance street design with careful interventions, such as tree planting, carriage width, to naturally slow speeds. Address issues of dust. Provide shade with structures and street tree planting to make for a more welcoming environment. Consider how road can better accommodate active ground floor uses with space for vendors and cafe space.

Attention will be required to develop new design ideas to facilitate this traditional aspect of road use while providing for increased safety and environmental health.



SECONDARY STREET THROUGH STREET

Develop plan to improve through streets to balance needs of pedestrians and cyclists with vehicles. Encourage tree planting to slow speeds and provide shade.



ACTIVE ROUTE WALKING AND CYCLING ROUTE WITH LOW TRAFFIC

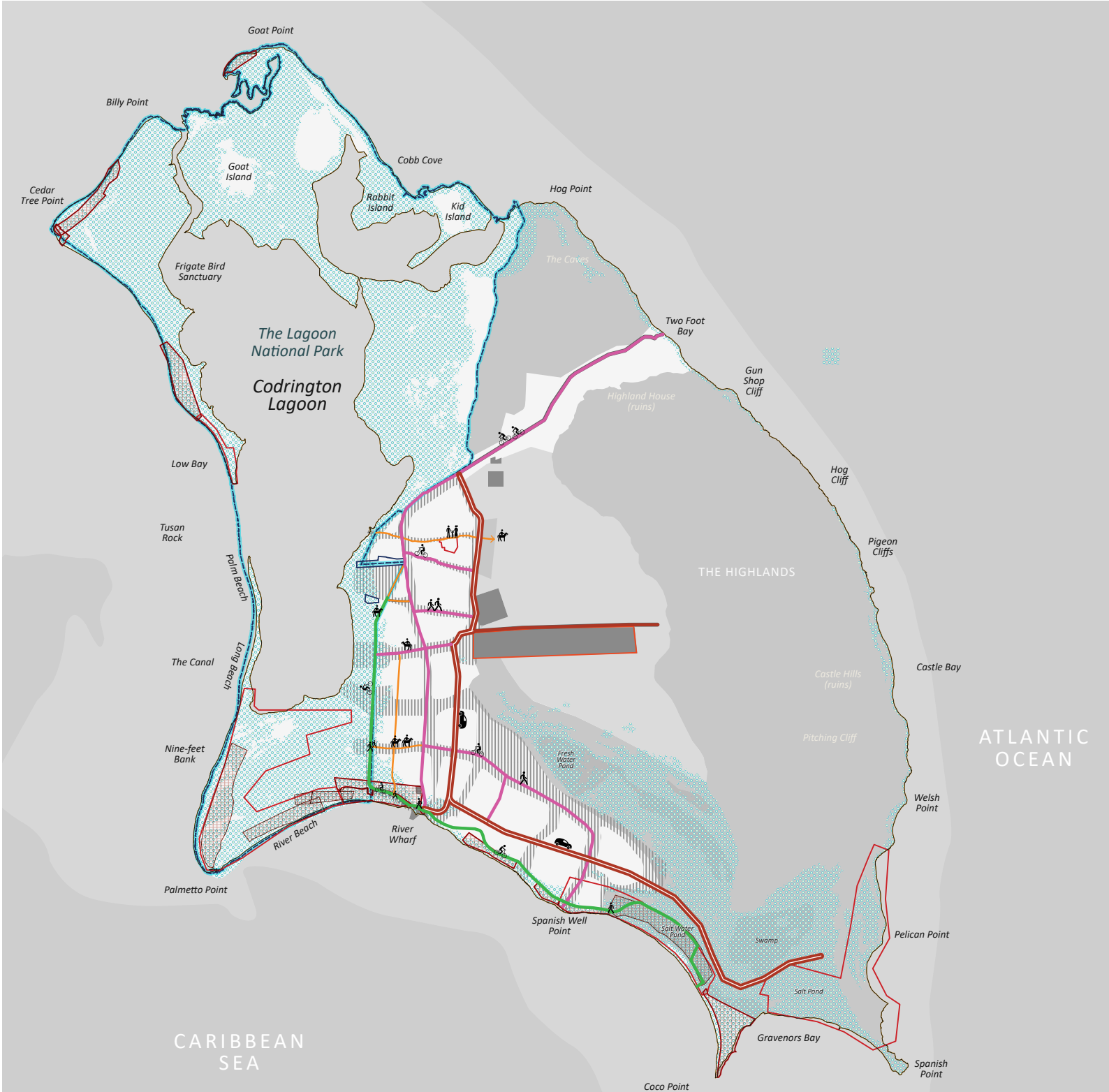
Rethinking River Road, Planting for shade / Separate Cycle Way or pedestrian / cycle priority.



FLOOD RISK AREAS

Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.

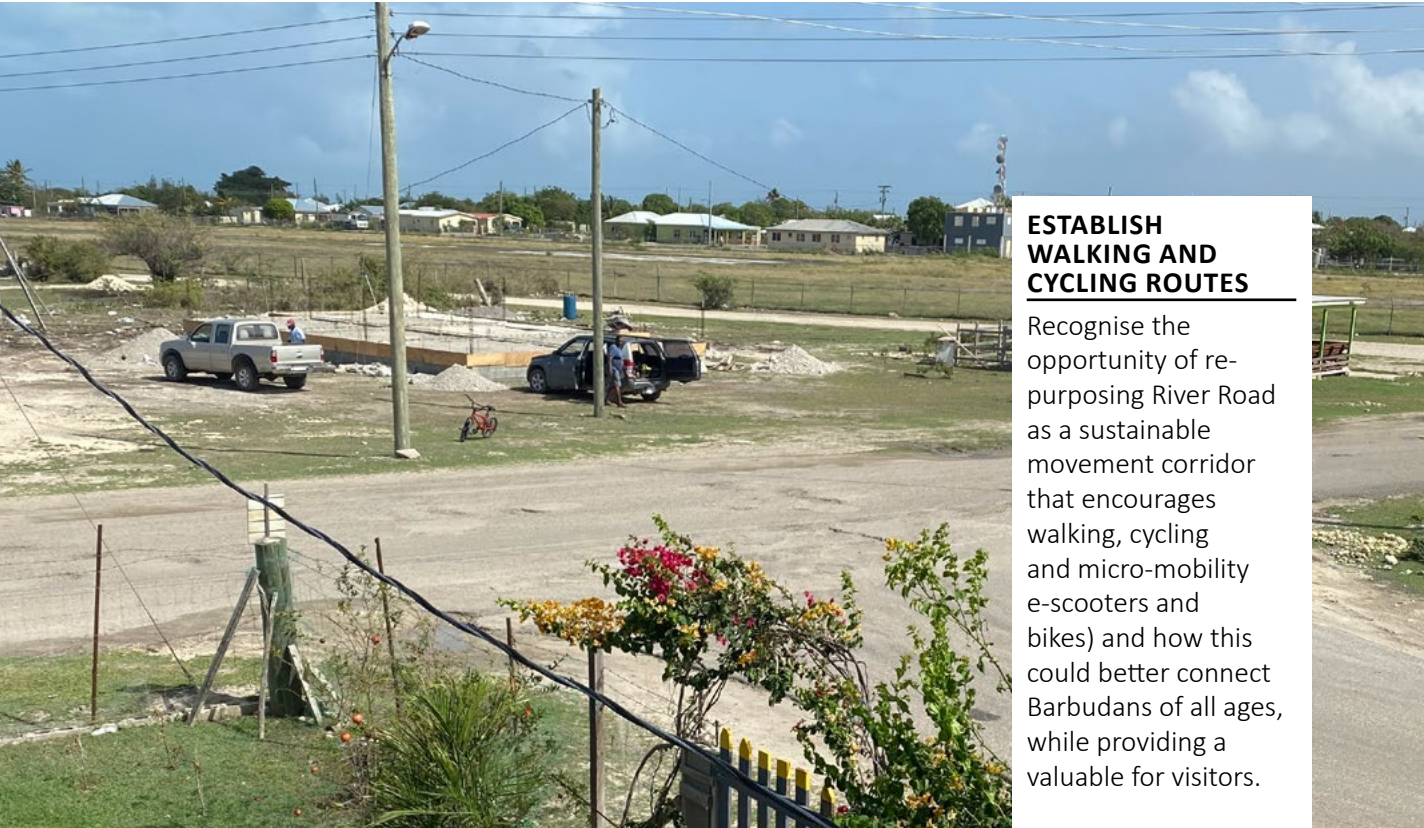
**WORKS &
GENERAL
PURPOSES**



Movement Hierarchy

Critical and Retained Public
Infrastructure & Services

MOVEMENT



ESTABLISH WALKING AND CYCLING ROUTES

Recognise the opportunity of re-purposing River Road as a sustainable movement corridor that encourages walking, cycling and micro-mobility (e-scooters and bikes) and how this could better connect Barbudans of all ages, while providing a valuable for visitors.

River Road the current primary road is prone to flooding



Managing animal movement and waste for a safer and cleaner street.



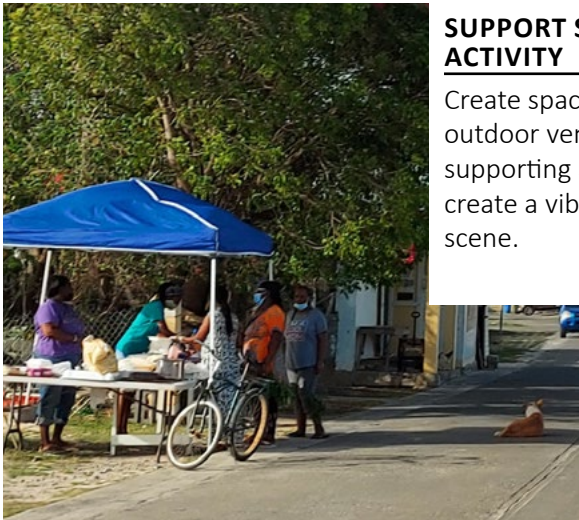
Need to reduce dust and provide shade and shelter for street vendors and pedestrians.



IMPROVE PUBLIC REALM

Consider enhancements, such as tree planting, incorporating swales, addressing dust, that will improve the quality of the street.

Lagoon Street - a secondary, through street



SUPPORT STREET ACTIVITY

Create spaces for outdoor vendor with supporting amenity to create a vibrant street scene.

Street vendors create an active street



Example of tertiary road / neighbourhood street

Critical and Retained Public
Infrastructure & Services

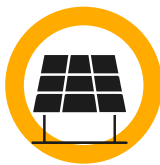
UTILITY & SERVICES

The concept design for Utility & Services is geared towards enhancing resilience and advancing sustainability. Please note that the presented locations are merely illustrative, and further comprehensive studies are imperative. In Volume 4, you'll find additional guidance on energy, waste, and recycling.

Of significant importance is the critical interplay between the airport and landfill; any disruptions could have repercussions on certification. Therefore, a comprehensive study is essential to address potential concerns.

Furthermore, the introduction of recycling practices at the port aligns with a comprehensive strategy for solid waste processing in Antigua, fostering sustainability and integrated waste management.

This holistic approach strives to ensure the seamless and sustainable operation of essential public infrastructure and services, benefiting both the community and the environment.



SOLAR PLANT

Ongoing improvement of the resilience of the electricity distribution network in Barbuda. Provide more inclusive access to modern electricity services. Underground transmission and distribution mains; provide backup power for key public buildings by installing hybrid solar systems; and provide reconnection support for customers who remain disconnected following the 2017 hurricane.



MICRO-GENERATION

Incorporate solar panels on public structures like government buildings, council facilities, community centres, and hospitals. Future plans include extending this initiative to schools, contributing to energy security for the Government of Antigua and Barbuda (GOAB). Additionally, there's a focus on encouraging private homeowners to join this sustainable energy movement.



COMMUNITY COMPOSTING

Locate green and food waste away from flight paths, enforcing strict disposal regulations, implementing bird deterrence, and conducting an environmental assessment.



RECYCLING FACILITY

Establish recycling in Barbuda to create opportunities for selling or shipping materials off the island or for local processing and up-cycling. This initiative aims to foster both economic growth and environmental sustainability. Recycling facility at port for ease of transport of baled recyclables by barge to Antigua.

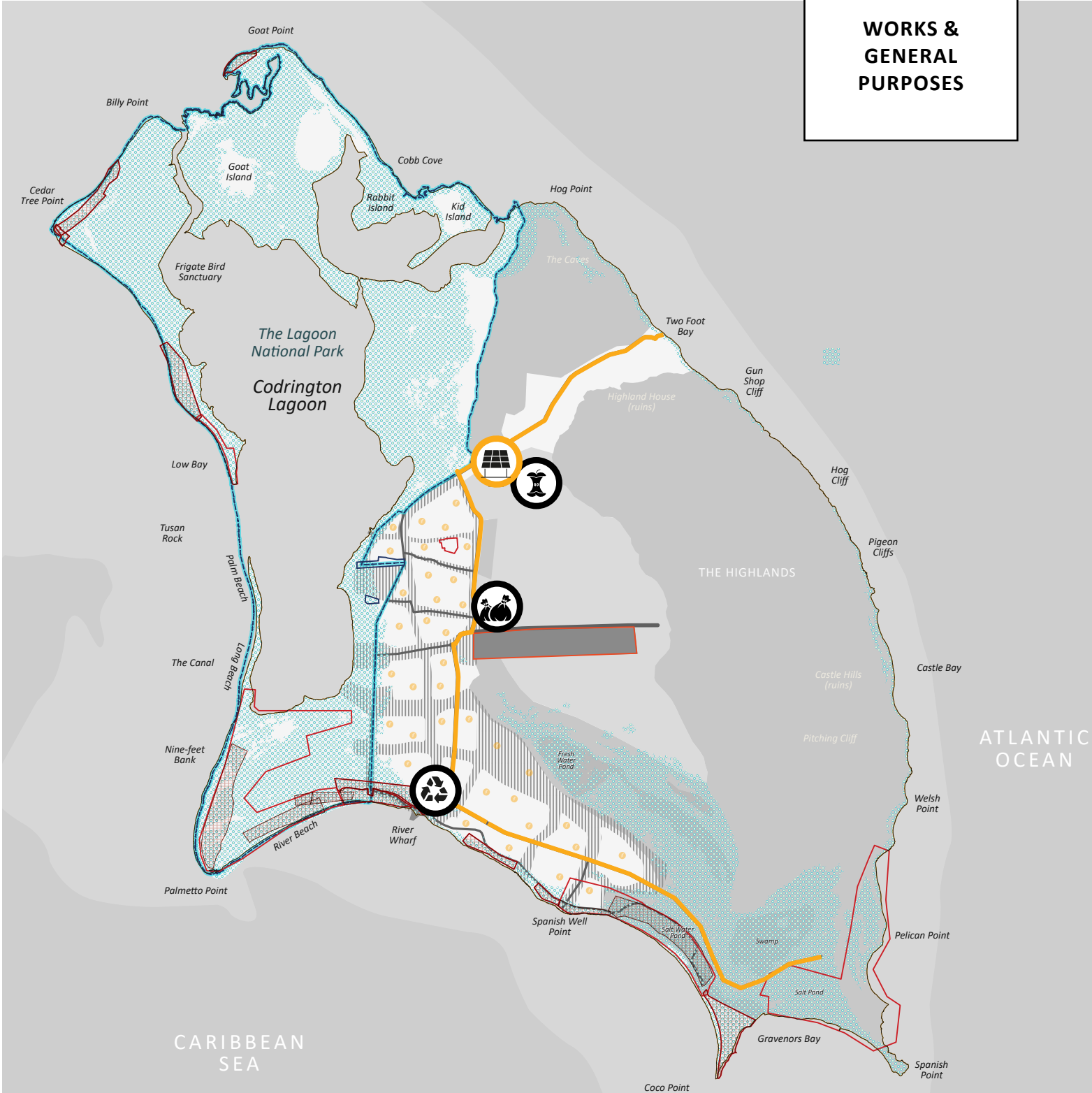


LAND FILL

Establish efficient waste management, including responsible collection and landfill practices. Carry out comprehensive study regarding relation of landfill and with airport to prevent potential certification issues.

UTILITIES

WORKS & GENERAL PURPOSES



Strategy for Utility & Services

Critical and Retained Public
Infrastructure & Services

EMERGENCY SERVICES

Improving Emergency Services within Barbuda needs to be considered as a critical part of the Development Plan. The plan adjacent shows a conceptual strategy for provision of emergency services. It emphasizes the importance of central, accessible locations while ensuring they are safeguarded from flooding risks to enhance their effectiveness and responsiveness.



RELOCATE HOSPITAL / HEALTH CENTRE

Develop a new Hospital / Health Centre in a flood-resistant location. Establish a mobile/periodic health clinic with a preference for a fixed service.



EMERGENCY CENTRES / COMMUNITY SHELTERS

Identify and prepare safe shelters and zones where people can seek refuge from the storm in close proximity to homes. These facilities should be designed to withstand extreme winds and flooding. Ensure they are well-stocked with essential supplies and provide adequate medical support.



PERMANENT POLICE STATION

Locate permanent space for Police Service in resilient location.



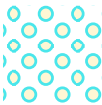
FIRE STATION

Locate Fire Station with welfare facilities in central location with assesses to primary island road located and in an area not at risk from flooding. Consider response time.



TENDER LOCATION

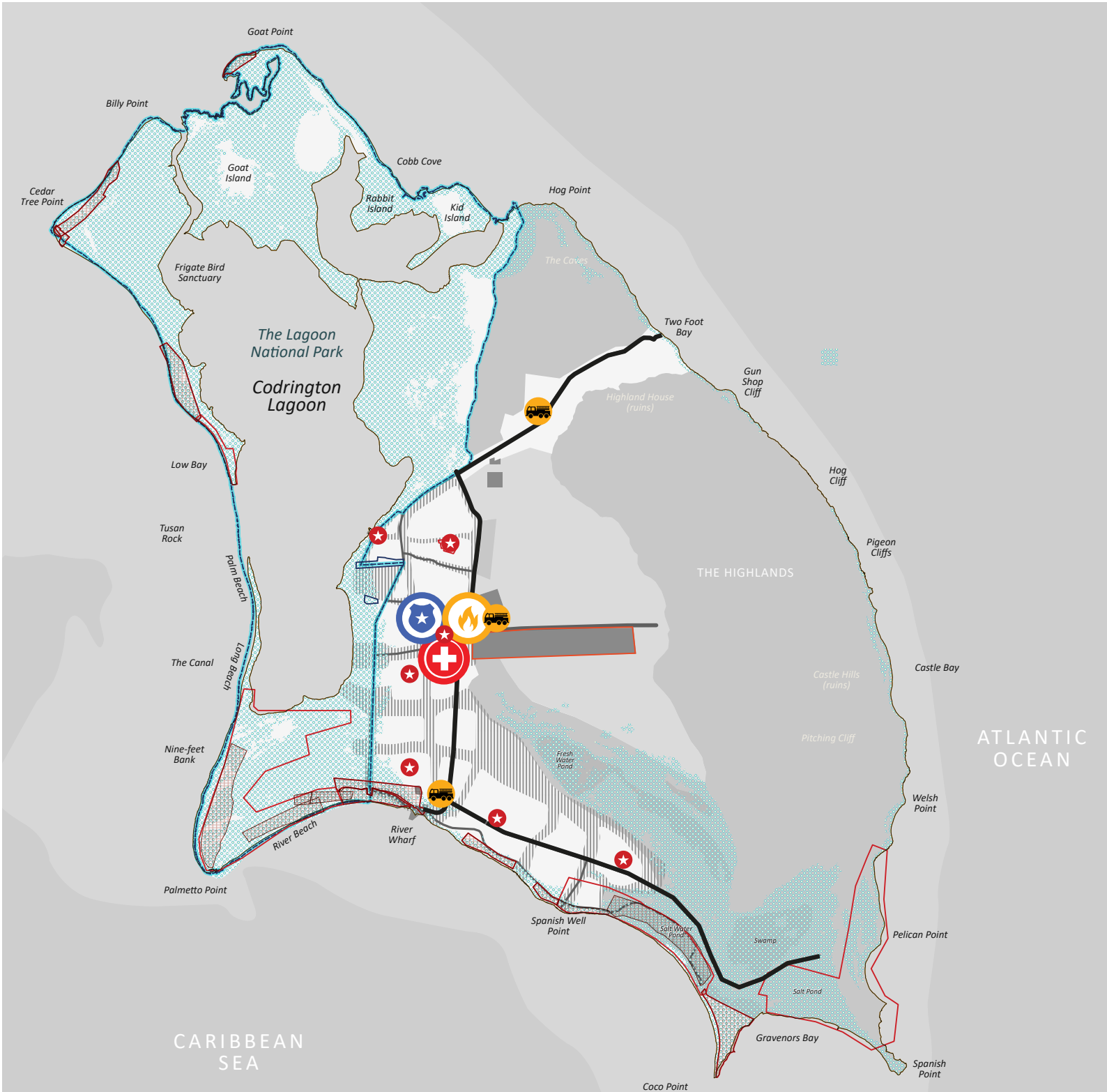
Ensure efficient service provision and accessibility, three distinct tender sites should be identified: one in the northeast, one in the east to facilitate airport-related operations, and one in the southwest near the port facilities, streamlining the flow of goods and services and catering to the respective needs of these crucial areas.



FLOOD RISK AREAS

Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.

HEALTH, SOCIAL
WELFARE &
DISASTER
PREPAREDNESS



Strategy for Emergency Services

Critical and Retained Public
Infrastructure & Services

EMERGENCY SERVICES

ENHANCE HEALTH AND WELL-BEING FACILITIES

Improve healthcare facilities, including the Hanna Thomas Hospital, by ensuring they are well-equipped, staffed, and maintained. Consider expanding healthcare services and facilities to meet the needs of the population.



Ambulances at Hanna Thomas Hospital



Hanna Thomas Hospital comprised of three (3) doctors, five (5) Registered Nurse and Midwives.

ESTABLISH EMERGENCY RESPONSE AND EVACUATION PLANS

Establish and regularly update emergency response and evacuation plans for flood-prone areas. Ensure that residents and local authorities are well-prepared to respond to flood events.

INVEST IN EARLY WARNING SYSTEMS

Invest in flood monitoring and early warning systems to provide residents and authorities with timely information about impending flood, fire or other events. This allows for evacuation and preparation.



UPGRADE PUBLIC SAFETY SERVICES

Rebuild the Police Station to enhance public safety and law enforcement services. Consider establishing a village Fire Station to improve emergency response capabilities.

Barbuda Police Station

CULTURAL SPACE & PLACE

Historic neighbourhoods, historic buildings, sites, wells, caves, camp sites, community buildings

'Living Heritage' is the ideal approach for Barbuda, as it places the Barbudan community and its rich history at the forefront. This approach not only highlights the island's unique cultural legacy but also underscores the significance of preserving and celebrating it. Within this framework, we emphasize the importance of safeguarding historic neighbourhoods, significant sites, hidden caves, valued camp sites, and community buildings.

HISTORIC BUILDINGS & MONUMENTS

1. Martello Tower (River Fort)
2. Taylor House
3. Spanish Point Castle Fort
4. The Village
5. Castle
6. Highland House
7. Wardens East Coast House
8. Wardens House (Old Government House)
9. The Ginnery
10. Holy Trinity Church
11. Lime Kilns
12. Gun Shop (Two Foot Bay)
13. Walled Wells
14. Village Wall
15. Old Bakery
16. Small-Scale Houses



HISTORIC CODRINGTON

Preserve heritage and historic sites. Establish series of cultural of events. resource



LAGOON ECOSYSTEM

Recognise Codrington Lagoon's cultural significance. Develop initiatives to celebrate traditional practices and storytelling. Create visitor experiences, including guided tours, cultural events, and eco-friendly activities.



AGRICULTURE

Preserve and promote traditional agriculture in Barbuda as an integral element of our cultural heritage and a key attraction for tourism, ensuring its sustainability and contributing to our cultural identity and economic growth.



SALT PONDS

Protect and harness the cultural and economic potential of Barbuda's salt pond by preserving its historical significance, sustaining traditional salt production.



TRADITIONAL PRODUCTS

Access to culturally significant sites that contain traditional materials so cultural traditions can be taught and preserved.



CAMP SITES

Designate traditional camp sites in Barbuda as protected land, recognising their cultural significance and tourism potential.



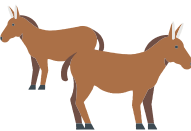
SPORTS

Invest in sport, such as cricket, horse racing, basketball and other spectator sports, as a unifying activity that bring the community together.



PUBLIC BEACHES

Protect public beach access including Princess Diana Beach.



ANIMAL MANAGEMENT

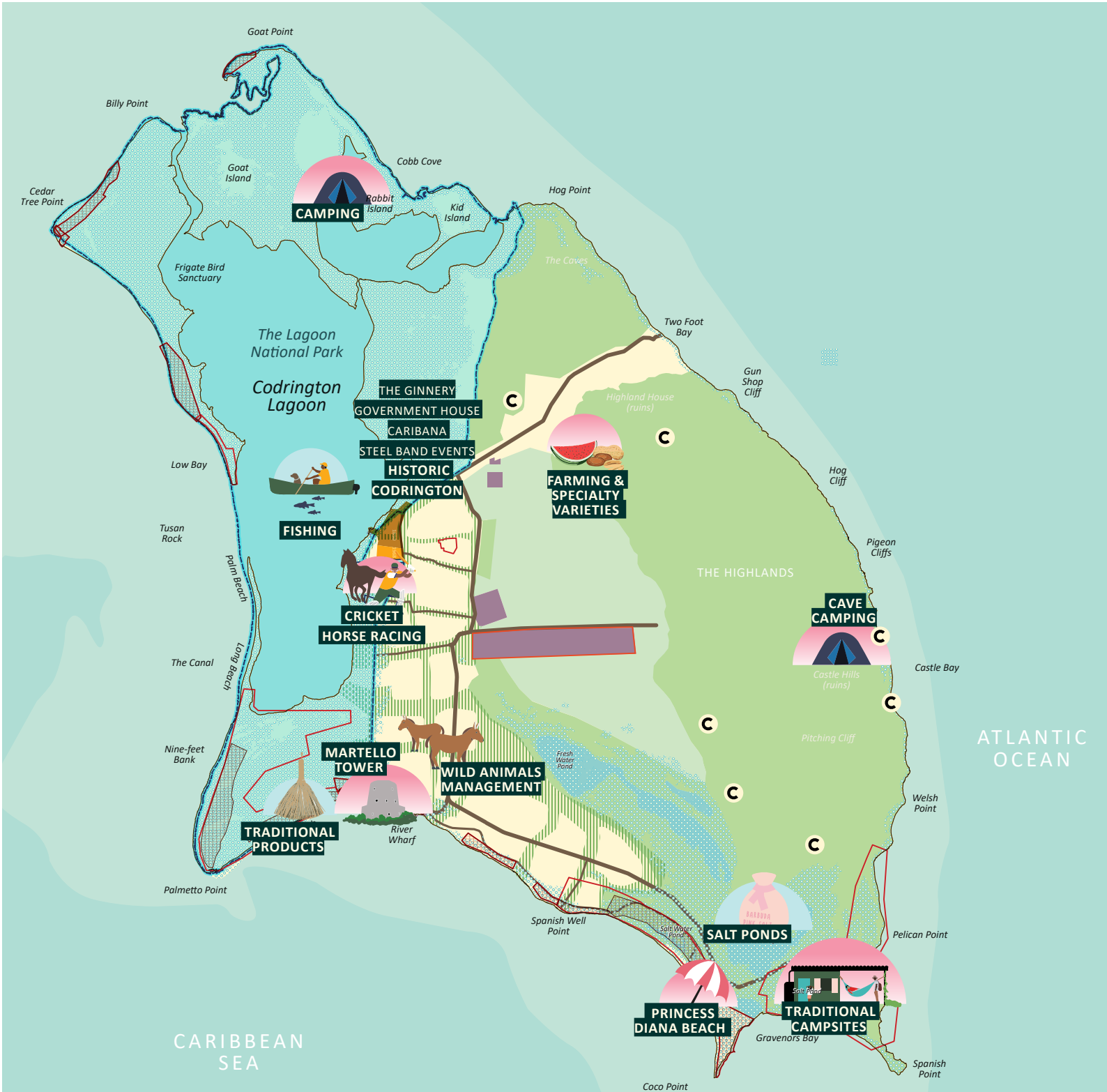
Address Barbuda's wild donkeys, goats and other livestock by ensuring their well-being and responsible management, contributing to our local culture and tourism economy and creating a safe and welcoming environment.



CAVES / GEOLOGICAL FORMATIONS

Create management plan for caves and other distinctive geological formations, such as Darby Sinkhole.

TOURISM & CULTURE



Cultural Space and Place

CULTURAL SPACE & PLACE

Historic neighbourhoods, historic buildings, sites, wells, caves, camp sites, community buildings

PROTECT CULTURAL SPACE

The intrinsic connection between the island of Barbuda and its rich cultural heritage cannot be overstated. From its pristine beaches to cherished campsites, the Highlands to Codrington Lagoon, these spaces hold immense value and are woven into the fabric of daily life for Barbudans.



Traditional camp-site near Spanish Point



Caves used for camping



Codrington Lagoon National Park protects a vast estuary.



Public beach access is important to Barbudans



Performance at the Fisheries



Lobster trapping is a vital part of the Barbudan economy



Darby Sink Hole - a miniature rainforest



Coco Palm used for making brooms



Coccoloba uvifera serves as a dune stabilizer and protective habitat for small animals such as sea turtles

PRESERVE UNIQUE LANDSCAPES

Barbuda's diverse and unique landscapes offer visitors the opportunity to become immersed in a multifaceted experience, extending far beyond the allure of its beaches.



Salt Ponds - a surreal space



Barbuda Horse Racing (Photo by Mohammad Walbrook)

MANAGE WILD ANIMALS

Promote the cultural significance of Barbuda's wild donkeys by ensuring their well-being and responsible management, contributing to our local culture and tourism economy.



Scope to establish donkey sanctuary

HERITAGE SPACE & PLACE

Historic sites and areas of archaeological interest

There are fundraising efforts to repair several historically significant buildings towards the establishment of a museum dedicated to the archaeology and heritage of Barbuda as well as facilitate the continued passing of tradition to future generations of Barbudans.

Most impressively, the River Fort (Martello tower), the Ginnery and the Warden’s House (Old Government House) are three such structures which remain in fairly good condition.

Other medium to large scale buildings across the island (Castle, Highland House, Taylor House to name a few) have been the subject of archaeological investigation, the results of which are published in a number of journals.



HISTORIC CODRINGTON

Preserve heritage and historic sites. The historic importance of Codrington village cannot be underestimated.



HISTORIC WELLS

Acknowledge that non-functional historic wells can still be culturally and historically significant.

Options include preservation, adaptive reuse, education, art, restoration, community use, and forming a management group.



THE RIVER FORT MARTELLO TOWER

Establish 40m+ buffer around site.

Protect panoramic views to sea to maintain feeling of watch tower and navigation aid.

Explore creation of a formal open space around Martello Tower.

Create a preservation plan and improving signage. Explore complementary uses like art gallery, nature centre, accommodation, restaurant, events space, or educational venue.



PRE COLUMBIAN

Designate protection with 40m buffer

Identify, protect, research, and conserve pre-Columbian heritage, involving local communities and promoting tourism.



POST COLUMBIAN SITES

Designate protection with 40m buffer

Document, safeguard, study, and restore post-Columbian sites, engaging communities, and supporting sustainable tourism.



Heritage and Archaeological Sites

HERITAGE SPACE & PLACE

Historic sites and areas of archaeological interest

ESTABLISH LIVING HERITAGE TOURISM

Develop plans to promote heritage tourism, showcasing these historic sites as part of Barbuda’s cultural heritage. Create guided tours and educational materials to attract visitors interested in the island’s history.



Holy Trinity Church



Highlands House was the highest building in Barbuda.

PLANNING GAIN

Prioritise cultural heritage projects of importance for local tourism and develop planning gain instruments to provide finance for restoration and management.



Wardens House (photo 2021) dates from 1694 and was built as the residence of the island ‘Wardens’

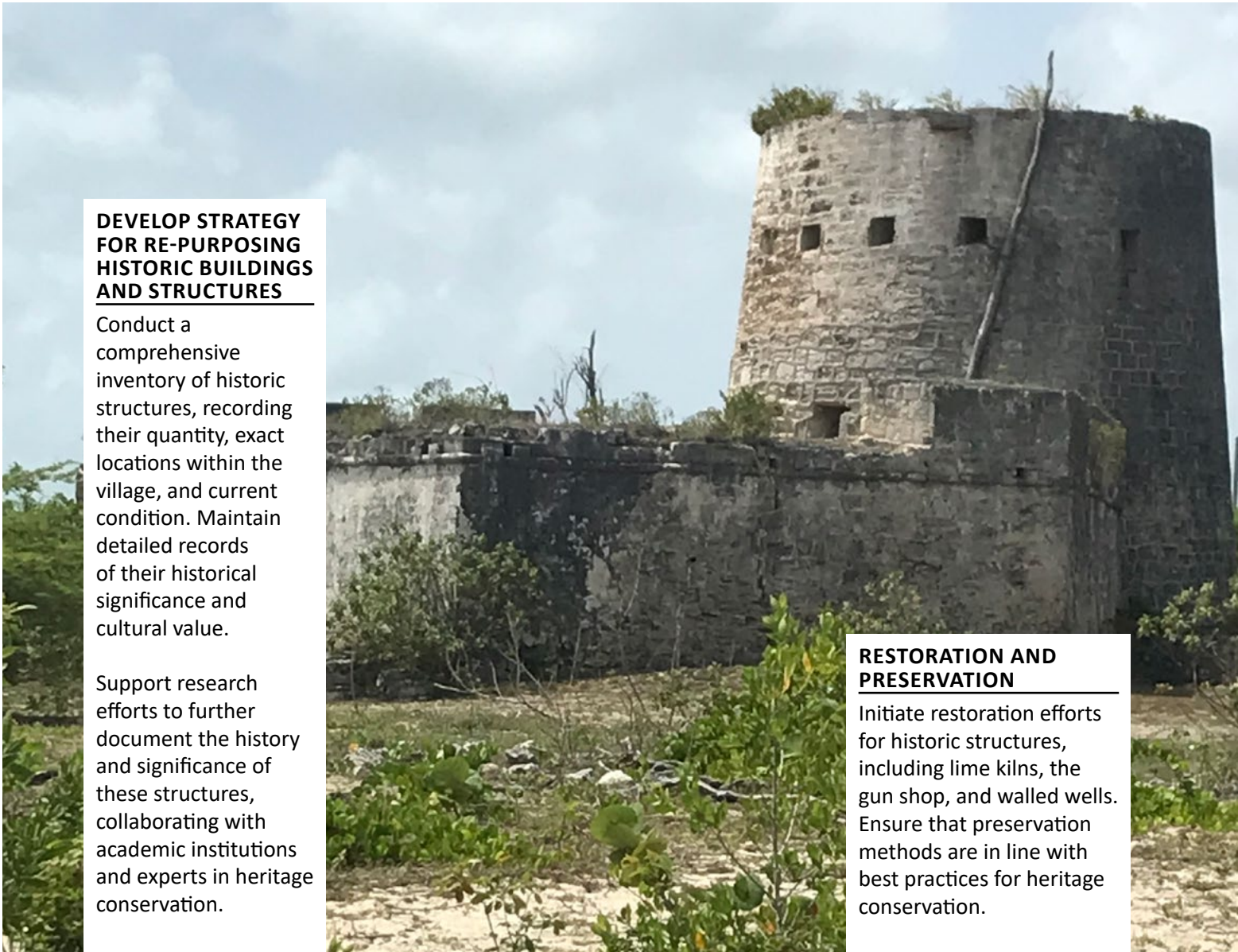


The Ginnery was built ~1906 from stones salvaged from the castle.

DEVELOP STRATEGY FOR RE-PURPOSING HISTORIC BUILDINGS AND STRUCTURES

Conduct a comprehensive inventory of historic structures, recording their quantity, exact locations within the village, and current condition. Maintain detailed records of their historical significance and cultural value.

Support research efforts to further document the history and significance of these structures, collaborating with academic institutions and experts in heritage conservation.



Martello Tower was built in 1745 by Sir William Codrington and was designed by Commodore Charles Knowles RN4 as a defence base for the British

RESTORATION AND PRESERVATION

Initiate restoration efforts for historic structures, including lime kilns, the gun shop, and walled wells. Ensure that preservation methods are in line with best practices for heritage conservation.

COMMUNITY ENGAGEMENT

Involve the local community in the restoration and maintenance of these structures. Encourage community members to contribute to the preservation efforts and raise awareness about the importance of Barbuda’s heritage.

ENSURE LONG-TERM SUSTAINABILITY

Create a strategy for the ongoing preservation and safeguarding of historical sites. Evaluate their potential for restoration or retrofitting. Maintain their significance in Barbuda's cultural heritage by implementing considerate improvements and appropriate utilization within the local culture.



(Photo by Mohammad Walbrook)

COMMUNITY INFRASTRUCTURE

Open Space, Amenities, Facilities, Recreation and Education



CODRINGTON THE ISLAND CENTRE

Consider re-purposing space and funding a multi-purpose, cultural centre with museum, library, arts centre, library of things (tools, equipment, toys, baby stuff, bikes)

- Communal space in front of Fisheries Complex
- Sports Complex
- Madison Square and Green Door Bar



POTENTIAL SECONDARY CENTRE



PARK / PLAY SPACE

Designate locations for future parks and open space. Evaluate position Consider potential for combining spaces with historic buildings

RUINS GARDENS

Evaluate and select “hurricane ruins” to be re-purposed as a system of green park systems transecting developed lands and could allow for village forestry, community farming, social gathering and commerce.



RECREATIONAL SPACES

Consider including the horse racing track, cricket pitch, school grounds as part of the open space system and incorporate planting and design to accommodate greater biodiversity and ecological benefits.

- Outdoor gym
- Solar powered shelter
- Designated park / playground
- DIY parks / Adventure playgrounds where locals can build forts, gardens, BMX track.
- Space for women and girls (gardens, shaded tables)
- Defined public events space



ECO-TONES / GREEN INFRASTRUCTURE ENHANCED GREENING

Incorporate green spaces, planting, drainage swales where possible along roadways, tracks, trails and alleys.

Provide green routes that connect to coastlines include parking, pubic facilities and alternative transportation modalities (bikes, electric tram, etc.)

Identify eco-tones that will transect built areas along open spaces, transportation corridors, roadways, trails, public parks, recreational spaces, drainage and utility corridors and outdoor civic spaces.



RIDGE TO REEF CORRIDORS DEFINING VILLAGES / CREATING ECOLOGICAL CORRIDORS

Identify ecological corridors that will define built areas and provide access to nature.



KNOWLEDGE INFRASTRUCTURE FROM EARLY YEARS TO LIFELONG LEARNING

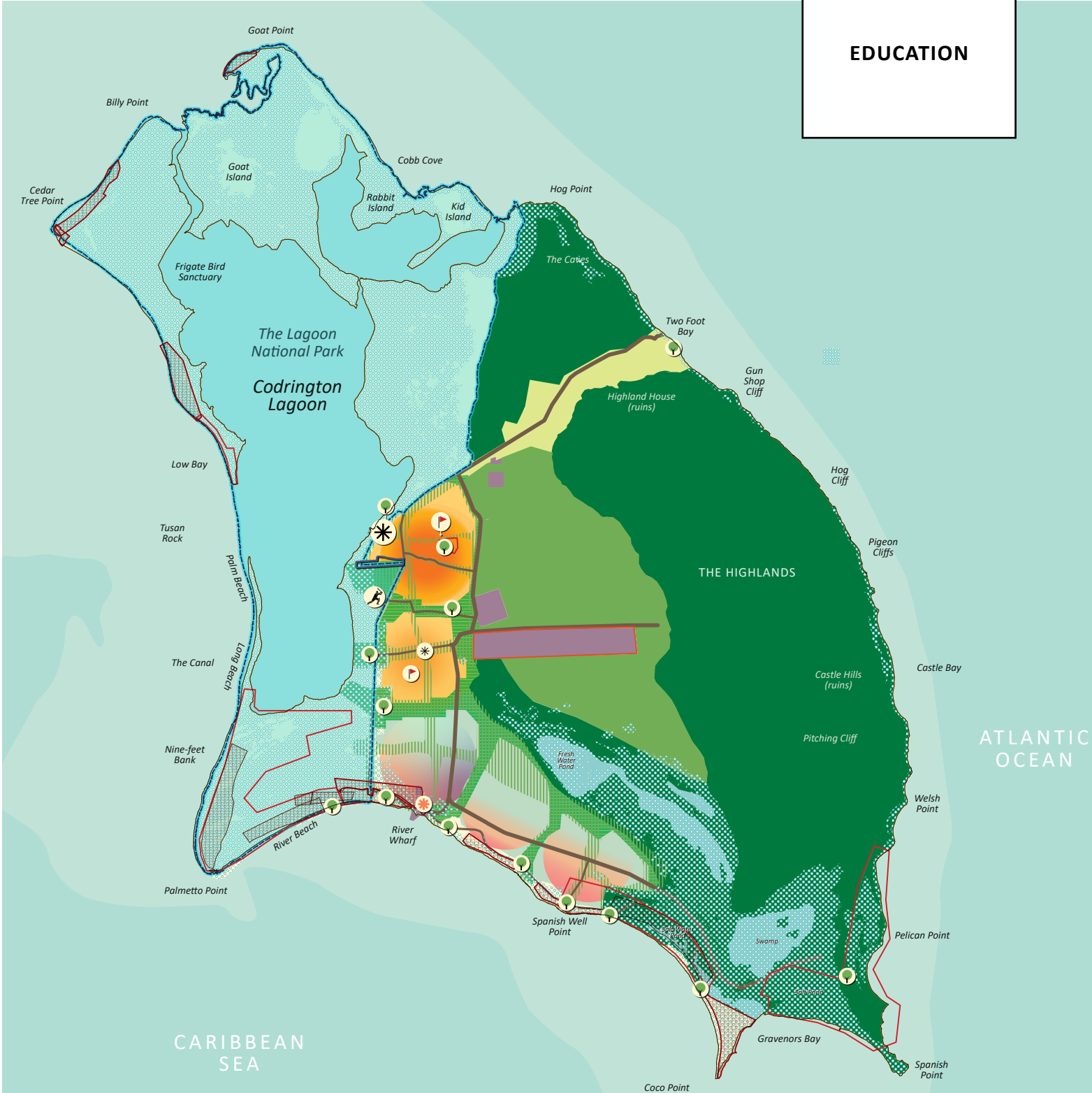
Develop provision of early childhood development centres, special education facilities, and creative/arts spaces.

Support extended learning and skills training programs.

Strengthen fishing industry education and agricultural development courses exploring a more collaborative and organised approach.

SPORTS, & YOUTH AFFAIRS

EDUCATION



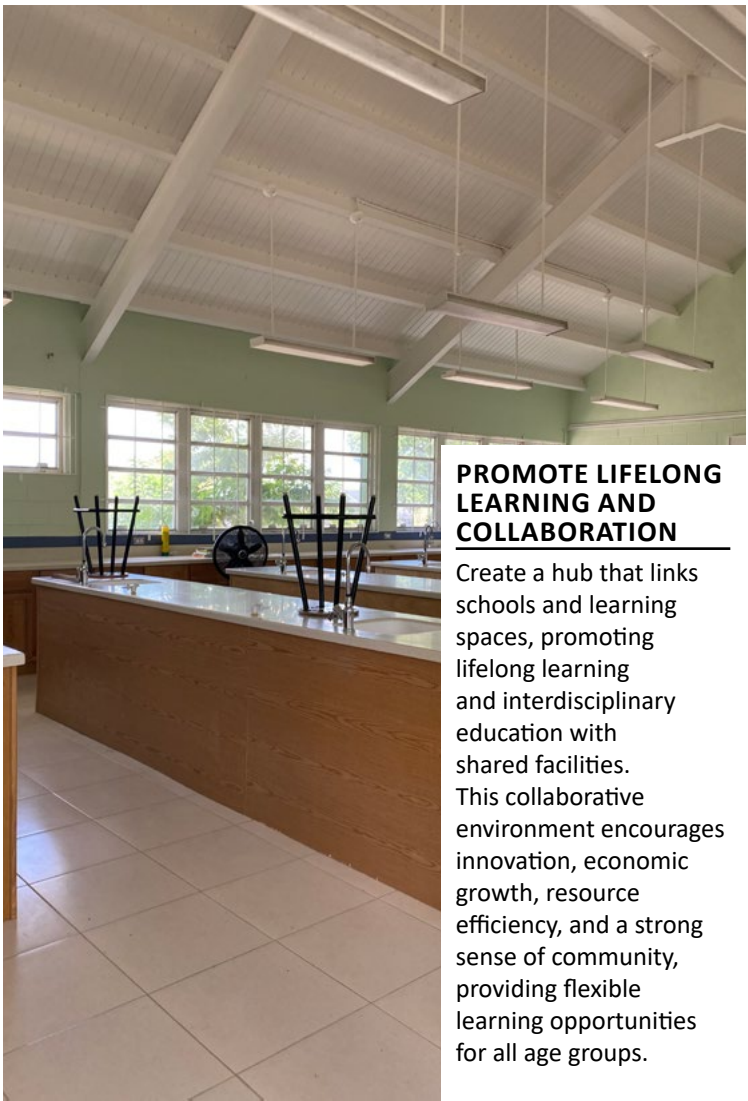
COMMUNITY INFRASTRUCTURE

*Open Space, Amenities, Facilities,
Recreation and Education*



ENHANCE CODRINGTON AS THE CULTURAL HEART

Promote the cultural significance and tourism potential of Barbuda’s wild donkeys by ensuring their well-being and responsible management, contributing to our local culture and tourism economy.



PROMOTE LIFELONG LEARNING AND COLLABORATION

Create a hub that links schools and learning spaces, promoting lifelong learning and interdisciplinary education with shared facilities. This collaborative environment encourages innovation, economic growth, resource efficiency, and a strong sense of community, providing flexible learning opportunities for all age groups.



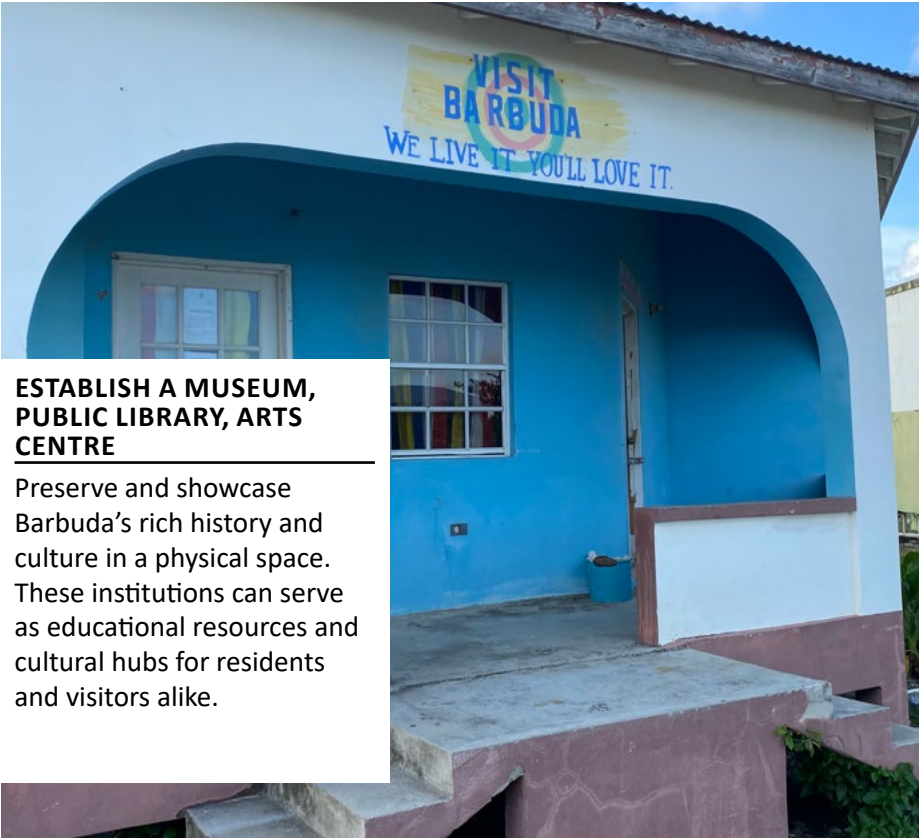
A GROWING COMMUNITY

Island Agriculture could include a system of homesteads, urban farms, public productive landscaping and marine aquaculture. Specialised products could also include high technology techniques of hydroponics and containerized farming.



REVITALIZE THE RIVER DOCK

Explore opportunities to revitalize the River Dock to improve transportation and trade connections with the mainland. Consider shelter structures and storage facilities to enhance its functionality.



ESTABLISH A MUSEUM, PUBLIC LIBRARY, ARTS CENTRE

Preserve and showcase Barbuda’s rich history and culture in a physical space. These institutions can serve as educational resources and cultural hubs for residents and visitors alike.



DEVELOP SPORTS AND RECREATION FACILITIES

Repair and upgrade the Sports Complex to provide a safe and functional space for sports and community events. Promote physical activity and community engagement through sports and recreation programs.

SUPPORT LOCAL BUSINESSES

Create a conducive environment for local businesses by providing commercial spaces and improving access to banking facilities. Develop a central business district to promote economic activity.



DEVELOPMENT PLAN


Designations



POTENTIAL REDEVELOPMENT SITES
BBQ Airstrip
Holy Trinity School


KNOWN DEVELOPMENT SITES


KNOWN LEASEHOLDINGS



HISTORIC AREA
Listed Buildings
Historic Conservation Areas


COMPACT SETTLEMENT
Supporting infill / brown-field development where possible
Targeting 10-20 du/acre


FUTURE GROWTH AREA
Once existing settlement areas are at capacity and need has been identified, these areas may be made available for development. This is provided that there is investment in essential infrastructure, the establishment of resilience measures, and the carrying capacity of island is not exceeded.


INDUSTRIAL USES
Transport, Manufacturing, Waste, Energy Infrastructure


SUSTAINABLE RURAL SETTLEMENT - AGRICULTURE / NURSERIES
Large Lot - 0 to 1 du/acre



COMMON LANDS ENVIRONMENTAL RESOURCE AREAS
Protection of environment, including watershed, ecology and biodiversity, as well as cultural traditions, including hunting lands and camping and communal land.

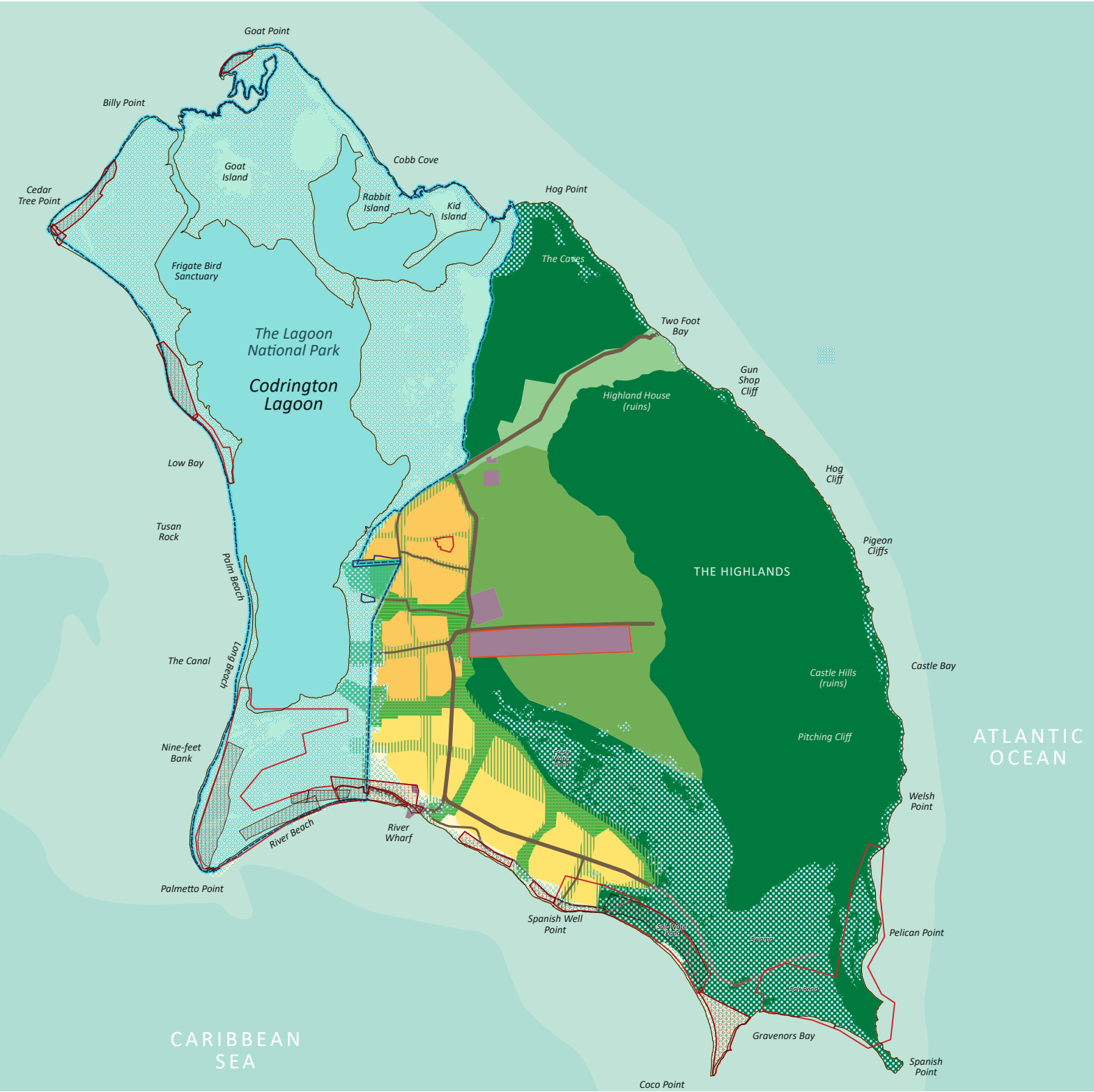

AGRICULTURE ENVIRONMENTAL RESOURCE AREAS
Protection of prime agricultural lands and watershed.


FLOOD RISK FROM EXTREME WEATHER CONDITIONS
Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.


ECO-TONES / GREEN INFRASTRUCTURE ENHANCED GREENING
Incorporate green spaces, planting, drainage swales where possible along roadways, tracks, trails and alleys.

Provide green routes that connect to coastlines include parking, pubic facilities and alternative transportation modalities (bikes, electric tram, etc.)
Identify eco-tones that will transect built areas along open spaces, transportation corridors, roadways, trails, public parks, recreational spaces, drainage and utility corridors and outdoor civic spaces.


RIDGE TO REEF CORRIDORS DEFINING VILLAGES / CREATING ECOLOGICAL CORRIDORS
Identify ecological corridors that will define built areas and provide access to nature.



DEVELOPMENT PLAN

Land Use and Designations



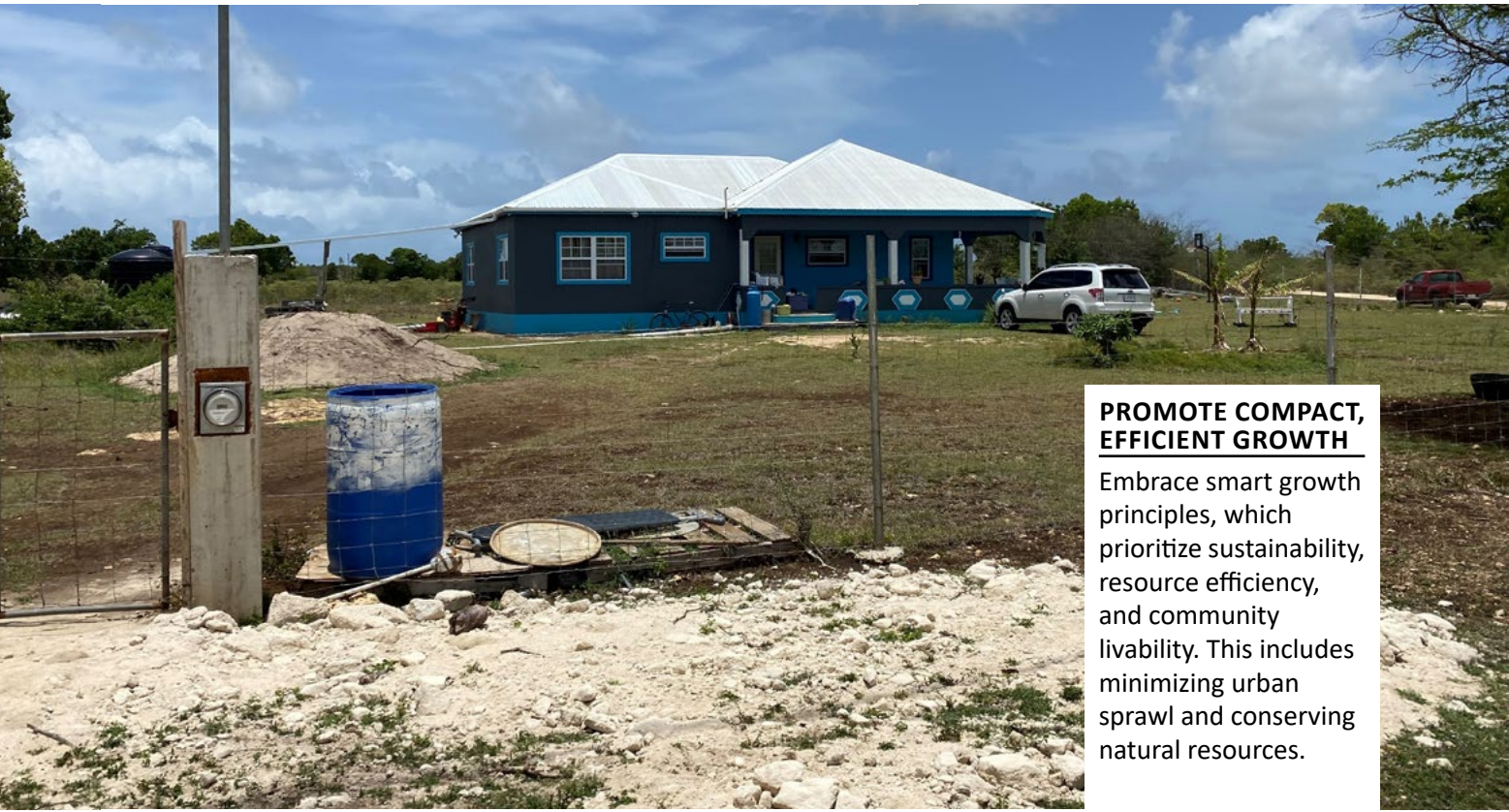
River Road

SUPPORT INFILL DEVELOPMENT
Encourage the responsible and sustainable utilization of existing urban areas to accommodate growth and development while preserving the island's natural environment and cultural heritage.

ESTABLISH HISTORIC NEIGHBOURHOODS
Improve historic neighbourhoods as an element of living heritage in Codrington; recognise housing density and walkable streets as a precedent for future development.



Older neighbourhoods support walking and a mix of uses



Larger lots, further from centre lead to increased car dependance and higher infrastructure costs

PROMOTE COMPACT, EFFICIENT GROWTH
Embrace smart growth principles, which prioritize sustainability, resource efficiency, and community livability. This includes minimizing urban sprawl and conserving natural resources.

SHORT TERM APPROACH

Encourage infill and brownfield sites first

BARBUDA TODAY

Newer neighbourhoods further apart on larger lots



INADEQUATE INFRASTRUCTURE

Homes further apart are more expensive to provide adequate roads and services

POOR SERVICES

Harder to provide robust electricity, water, phone network, emergency services

POOR ROADS

More road to build and maintain. Note that roads need to significant investment every 25-30 years

INCREASED CAR DEPENDENCY

Further distances to shops and services makes car ownership more necessary

‘STRONG’ BARBUDA

Need for policy and land use planning supporting efficient development on already serviced land



SUSTAINABLE MOVEMENT

Micro mobility / public transport become more viable

ACTIVE STREETS

More vibrant mix of uses and active streets with more people in the local area, businesses benefit

EFFICIENT INFRASTRUCTURE

Homes closer together requires fewer roads and therefore lower costs and better maintenance standard.

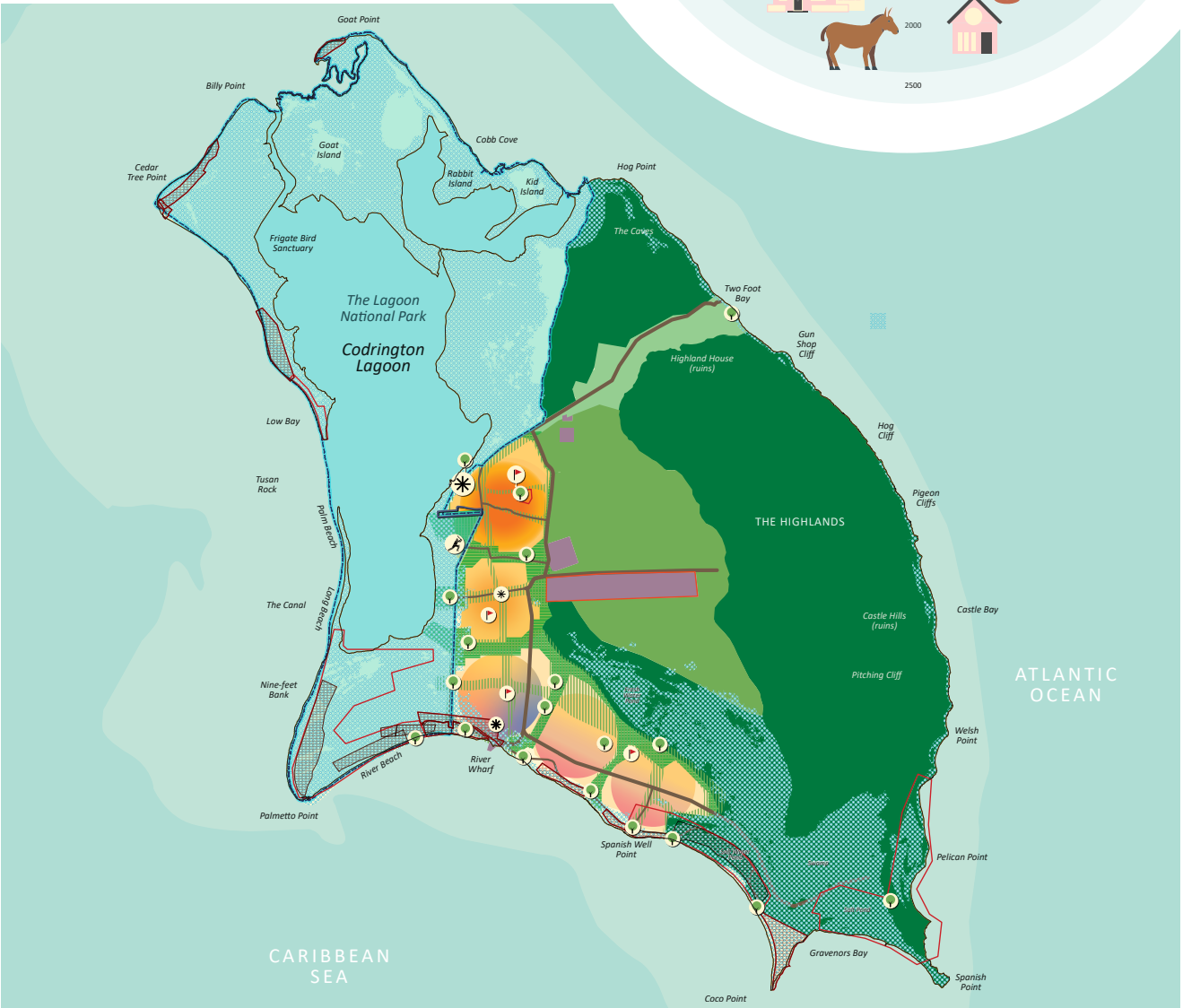
HOUSING DIVERSITY

Denser housing types such as apartments / townhomes allow for better use of land. Consider infill property for rental income.

LONG TERM PLANNING

Establish walkable, mixed use neighbourhoods as an objective for long term growth

Defining 15-minute neighbourhoods in Barbuda's future development policy offers numerous benefits. It enhances residents' quality of life by reducing the need for long commutes, promotes sustainable movement, stimulates local economic growth, preserves natural resources, and fosters community engagement. The potential for five such neighbourhoods presents a unique opportunity for a more sustainable and people-centred development approach.



Long term Planning - The potential for five 15-minute communities in a long term scenario with significant population increase connected by beautiful open spaces, walking and cycling routes

LAND USE / MAJOR SERVICES

Codrington - Draft Local Area Plan

HISTORIC AREA

Establish concept of Living Heritage; Develop guidelines and incentives for preservation. Implement compatible zoning and land use regulations; Upgrade infrastructure while preserving historic character; Create educational opportunities and promote local arts; Establish a fund for ongoing maintenance; Regularly assess the plan's effectiveness.

LISTED BUILDINGS / HISTORIC SITES

- *Wardens House (Old Government House)*
- *The Ginnery*
- *Holy Trinity Church*
- *Walled Wells*
- *Village Wall*
- *Old Bakery*
- *Small-Scale Houses*

FUTURE REDEVELOPMENT SITE

1. *Holy Trinity School site*
2. *BBQ Former airstrip*
3. *Hanna Thomas Hospital site*

LEASEHOLD SITES

4. *Wa'omoni Cottages*

SUSTAINABLE RURAL SETTLEMENT AGRICULTURE / NURSERIES

0 to 1 du/acre - Large Lot

OPEN SPACE

Scope for formal open space including square, playground, gardens

ECO-TONES / GREEN CORRIDORS PROTECTED NATURE CORRIDORS

Incorporate green spaces, planting, drainage swales where possible along roadways, tracks, trails and alleys.

COMPACT SETTLEMENT

10-20 du/acre

MIXED USE

Support mix of uses and more intense use of space along secondary routes

PUBLIC / QUASI PUBLIC

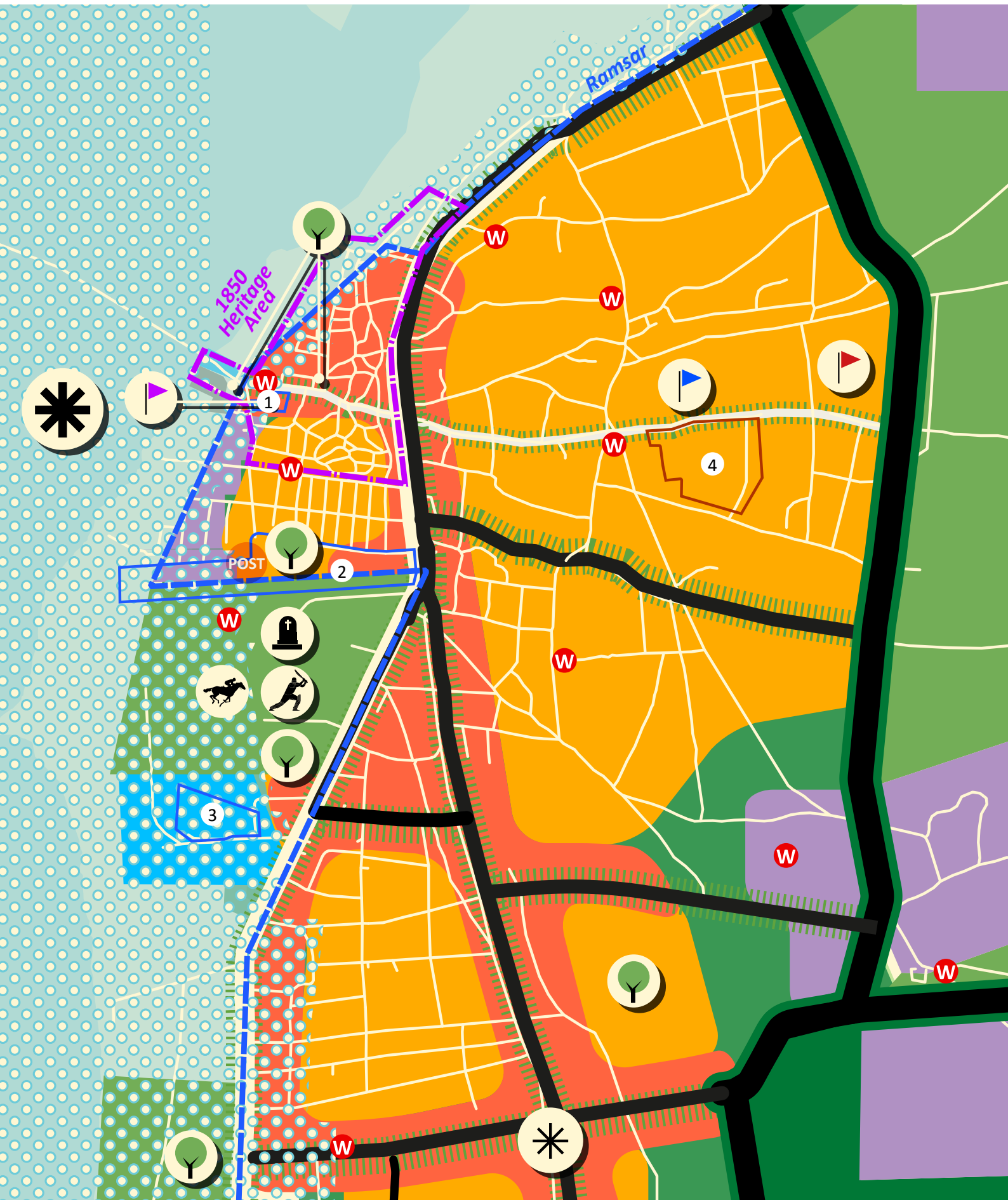
Includes new airport and waste disposal sites

MIXED USE WITH LIGHT INDUSTRIAL

Non-residential uses suitable for flood risk area

FLOOD RISK AREAS

Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.



Codrington - Land Use

APPEARANCE

Built Form, Character, Heritage, Massing and Height

To celebrate and preserve Barbuda’s cultural and architectural heritage.

To incorporate traditional architectural elements and materials into modern designs to maintain a connection to the island’s history and culture.

To preserve the Barbudan Residential Vernacular, which is characterized by single-storey concrete dwellings, verandas, raised slabs, hip roofs, specific window and shutter styles, and decorative motifs, it's essential to establish design guidelines that respect and promote this architectural heritage. These guidelines should aim to maintain the cultural identity and resilience of Barbudan architecture while ensuring the safety and longevity of these structures. Here are design guidelines for preserving the Barbudan Residential Vernacular:



- Respect the Dominant Style:**
- Acknowledge that the modern single-storey concrete dwelling is the dominant Barbudan residential vernacular.
 - Encourage the use of locally available materials and technologies in construction.
- Prioritize Structural Integrity:**
- Emphasize the importance of proper construction techniques, including bracing and reinforcement, to withstand extreme weather events and prevent disrepair.
- Verandas:**
- Promote the inclusion of verandas in residential designs.
 - Encourage both recessed and articulated veranda styles.
 - Highlight verandas as spaces for communal gatherings and relaxation.
- Raised Slabs & Accentuated Bases:**
- Advocate for raised slabs to create sturdy foundations.
 - Promote the visual distinction between the base of the wall and the foundation.
 - Encourage the use of materials that contrast with the rest of the house for the base.
- Hip Roofs:**
- Prioritize the use of hip roofs for residential buildings.
 - Explain the practical advantages of hip roofs, such as rainwater and debris prevention, ventilation, and wind resistance.
 - Allow variations like intersecting hip and hip-and-valley roofs for larger building footprints.
 - Use the recommended optimal roof slopes for hurricane resistance (25°-30°) as prescribed in the 'Antigua and Barbuda Building Guidelines.'

- Windows & Shutters:**
- Maintain the traditional window size of approximately three feet wide by four feet high.
 - Encourage the use of single-hung sash windows with mullions and small panes of glass, similar to the historical style.
 - Promote the inclusion of painted wooden shutters for privacy, protection, and aesthetics.
 - Highlight the importance of operable windows for ventilation and storm protection.
- Decorative Motifs & Colour Palettes:**
- Encourage the incorporation of decorative motifs in residential architecture.
 - Promote the use of decorative blockwork, sprayed concrete patterns, and gradated colors on surfaces.
 - Emphasize the cultural significance of decorative motifs in preserving Barbudan identity.
 - Establish a colour palette for buildings.
- Structural Assessments of Buildings:**
- Conduct regular structural assessments of existing buildings to ensure safety and longevity.
 - Encourage renovation and preservation of historical structures when feasible.
- Local Craftsmanship:**
- Support local artisans and builders who can replicate traditional construction techniques and decorative elements.
 - Promote the training of new generations in these skills to sustain the Barbudan architectural heritage.
- Massing:**
- Emphasizes maintaining a harmonious and sustainable height and massing of buildings.
 - Establish a general guideline set at two storey max for structures.
 - Consider exceptions to allow for additional height will be considered on a case-by-case basis for both public and private developments, ensuring responsible and context-aware construction.
 - Focuses on structural resilience to hurricanes and earthquakes, particularly in coastal areas.
 - Promote building designs that blend with the island's natural landscape, following land contours and minimizing disruption, especially in ecologically sensitive areas.
 - Balance development density to support vibrant communities while preserving open spaces and maintaining a sense of place. Encourages mixed-use developments to reduce transportation needs.
- Orientation:**
- Where possible encourage the siting of buildings (houses and schools in particular) to take maximum advantage of prevailing breezes.
 - Allow for adequate shading of internal spaces, eg. orienting long facades to the north or south which are easier to shade from sun.
- Regulatory Framework:**
- Establish and enforce building codes and regulations that align with the preservation of Barbudan architectural heritage.
 - Encourage developers and builders to adhere to these guidelines through incentives and penalties.
 - By implementing these design guidelines, Barbuda can maintain its unique architectural identity while ensuring that its buildings are resilient and safe in the face of extreme weather events and modern construction challenges.

LOT SIZE / DENSITY

Land use and Designations

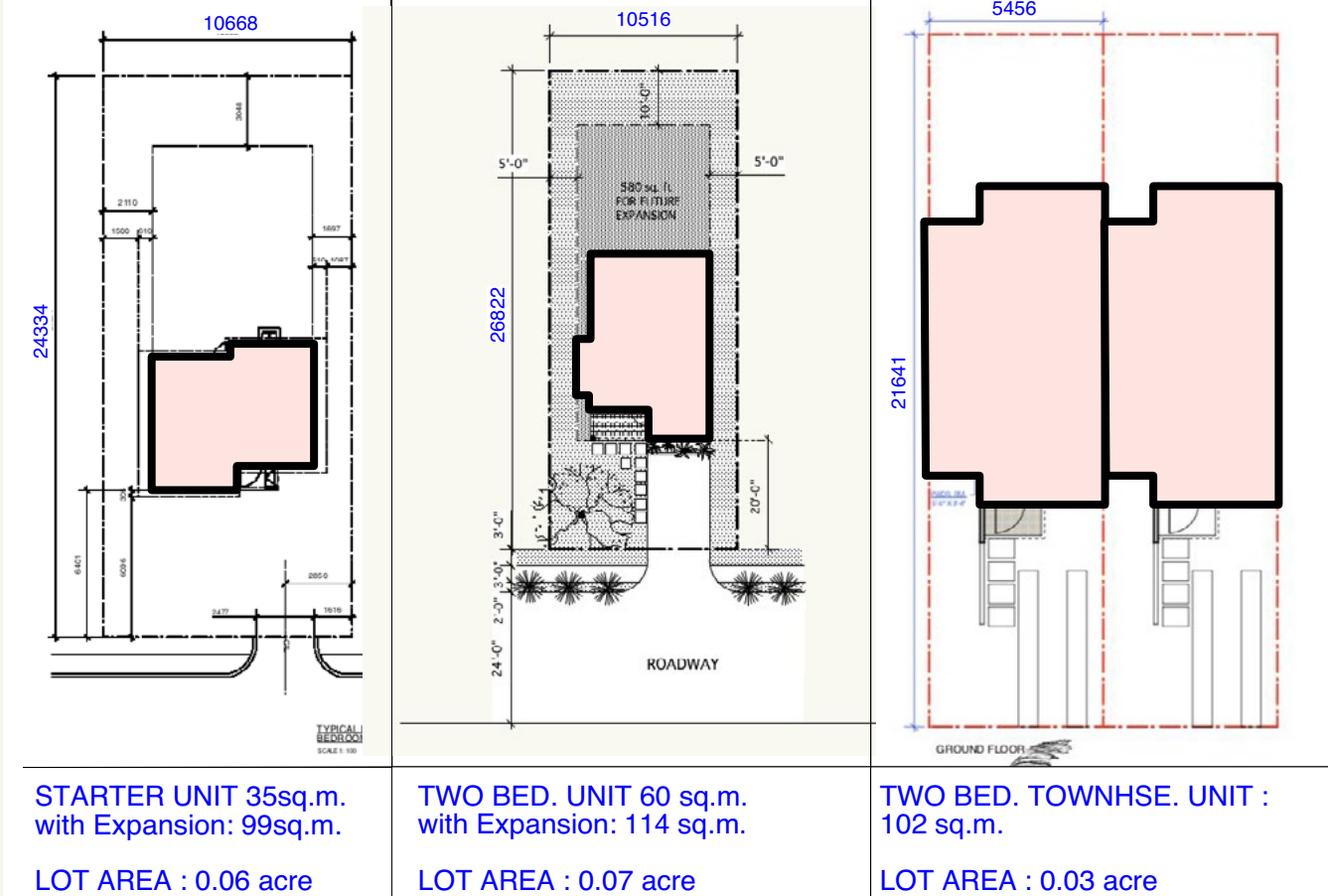
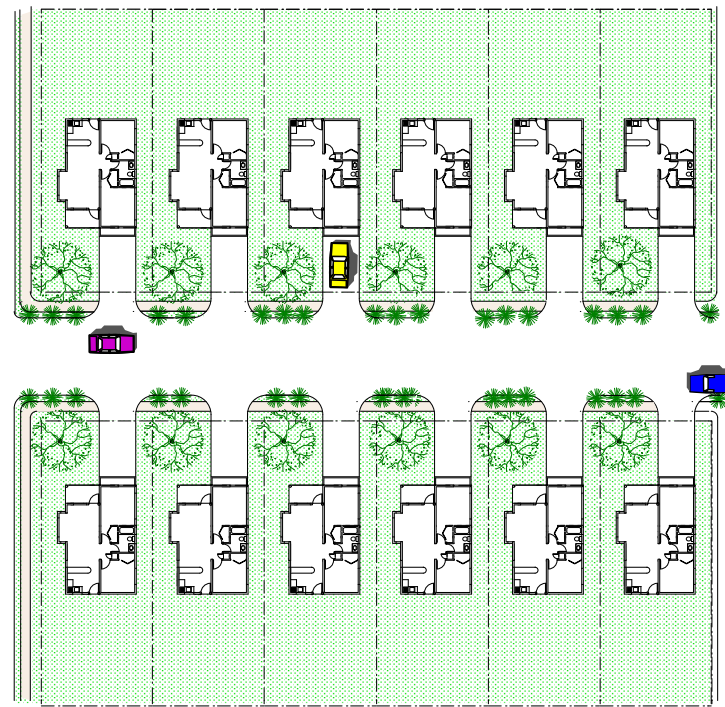


COMPACT SETTLEMENT

10-20 homes/acre

Compact development (10-20 homes/acre) in Barbuda offers numerous benefits. It optimises land use, allowing for more efficient, walkable and sustainable communities.

This approach fosters a sense of community by bringing residents closer together and promoting social interactions. Additionally, compact development reduces the need for extensive infrastructure, cutting costs and environmental impact. It also encourages walking and cycling, contributing to healthier lifestyles and reducing the reliance on automobiles. Overall, compact development in Barbuda not only maximizes land efficiency but also enhances the island's social cohesion, environmental sustainability, and residents' well-being.



ARCHITECTURAL HERITAGE

Restoring damaged historic buildings serves multiple valuable purposes. It preserves cultural heritage, fosters local pride and identity, attracts tourists, and bolsters local economies. Restoration showcases unique craftsmanship and architectural styles, making these structures relevant for contemporary needs and educational purposes.

Understanding the historical significance of these buildings underscores their cultural and economic importance, garnering support from various sources. The Climate Heritage Network, partially funded by UNESCO, provides invaluable guidance and collaboration opportunities in climate and heritage preservation. This network, now including major international heritage agencies like Historic England, Cadw, and Historic Scotland, offers vital resources for preserving cultural heritage in remote communities.

Furthermore, communities with heritage buildings can empower themselves through collaborative initiatives, such as a heritage 'airbnb' concept. [Doh Eain's Heritage Homes](#) program is a notable example of this approach, uniting community members to offer unique heritage experiences. Led by Dutch entrepreneur and conservationist Emilie Roell, Doh Eain's impact extends across several countries.

While recognising the cultural and historical value of heritage buildings, it's crucial to explore innovative and sustainable development approaches. [Yasmeen Lari's self-build ethos](#), while not hurricane-resistant like traditional Barbuda architecture, offers intriguing possibilities for the future development of the region.



The Ginnery, constructed around 1906, utilised stones salvaged from the castle in its building materials.



Holy Trinity Church



Wardens House (photo 2021) dates from 1694 and was built as the residence of the island 'Wardens'

REPURPOSED RUINS

Select "hurricane ruins" can be re-purposed as a system of green park systems transecting developed lands and could allow for urban forestry, urban farming, social gathering and commerce.



Northwest - DeSuza Street and Well Street

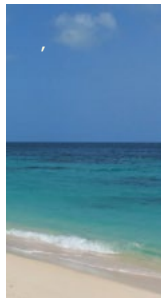
COLOUR PALLET

Establishing a standard paint palette for buildings on the island of Barbuda holds immense value. It enhances visual harmony, preserves cultural identity, and promotes sustainable construction practices. A unified palette contributes to the island’s unique charm while fostering a sense of community pride and long-term resilience.

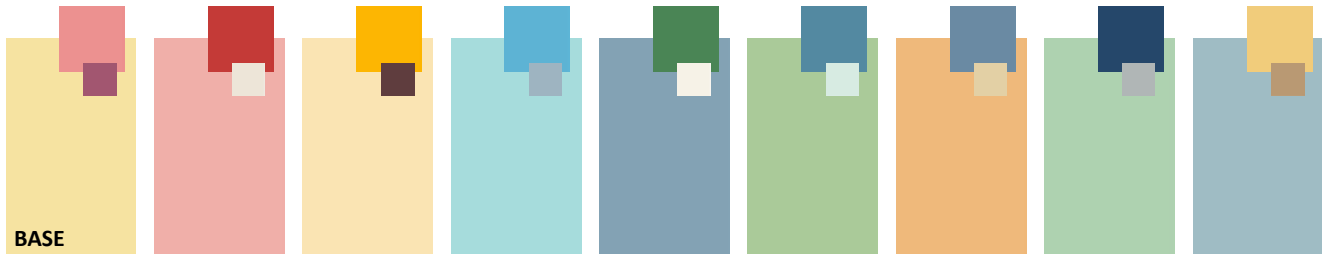
SAND



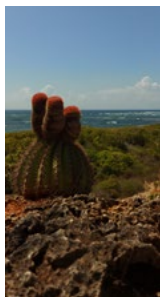
SEA & SKY



ACCENT



Bases are typically colours that are pastels or have white as a base which fare better in intense sunlight. Bright colours used to accent small surfaces like trims, frames, gates, shutters & patterned motifs, especially when shaded.



VEGETATION

ROCK & EARTH

PLANT PALLET

Creating a recommended plant palette for the island of Barbuda contributes to both its environmental sustainability and the overall well-being of the community.

Establishing a plant palette enables us to select and cultivate plant species that are well-suited to the island's unique climate, soil conditions, and ecosystem. This ensures that the flora not only thrives but also contributes to the preservation of local biodiversity. By planting native or adaptive species, we can reduce the risk of invasive plants and help restore the island's natural balance.

Additionally, a recommended plant palette can have a positive impact on the island's aesthetics and cultural identity. Carefully selected plants can enhance public spaces, beautify neighbourhoods, and celebrate Barbuda's natural heritage. The incorporation of native plants into urban landscaping can also foster a deeper connection between residents and their environment.

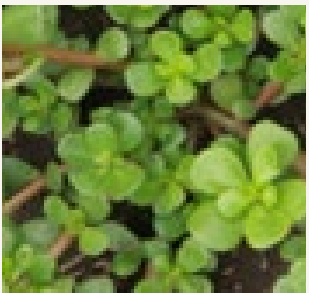
Furthermore, from an economic perspective, a well-thought-out plant palette can support local nurseries and create opportunities for horticultural education and entrepreneurship. By promoting sustainable landscaping practices, we can also reduce long-term maintenance costs and water consumption.

Developing a recommended plant palette for Barbuda is not merely a horticultural endeavour; it's a holistic approach to enhance the island's ecological resilience, cultural vibrancy, and economic vitality. It embodies the spirit of sustainable development, where nature and community thrive in harmony.

Appendix B presents a plant palette expertly produced by Kevel Lindsay of Wild Caribbean, Inc., and features in 'Landscaping Plants for Homes, Gardens and Development Projects - Barbuda: Recommendations for Improving Landscapes, Conservation, and Local Ecology' in August 27, 2023.



Sea Grape / Cocoloba uvifera



Seaside Pusley / Portulaca



Cordia Tree / Cordia sebestena



Seaside Mahoe / Thespesia



Seaside Mahoe / Thespesia populnea



Flamboyant Tree / Delonix regia



Tamarind Tree / Tamarindus Indica



Neem Tree / Azadirachta indica



Hog Plum Tree / Spondias mombin

STRATEGIES FOR FUTURE BARBUDA

1

CODRINGTON - A NATURAL 15 MINUTE NEIGHBOURHOOD

*Shaping resilient and sustainable
community*

- Enhancing liveability by shaping effect
- Improving accessibility and connecting Barbuda
- Creating a corridor for activity
- Efficient use of land and resource

2

CODRINGTON CENTRE

The Cultural and Community Centre

- Focusing on from Codrington Lagoon/ Fisheries to Madison Square
- Cultural and community centre
- Foster economic development and livelihood with better support for businesses and improving services at fisheries
- Providing a recognizable Centre for governance for Barbuda
- Creating space for all ages, genders and backgrounds to meet and collaborate

3

RE-IMAGING RIVER ROAD

A corridor connecting communities

- Enhancing liveability by supporting sustainable movement (walking, cycling, micro-mobility)
- Improving accessibility for all and better connecting Barbuda
- Creating a corridor for activity that supports prosperity in the community

4

RIVER DOCK

Planning for prosperity

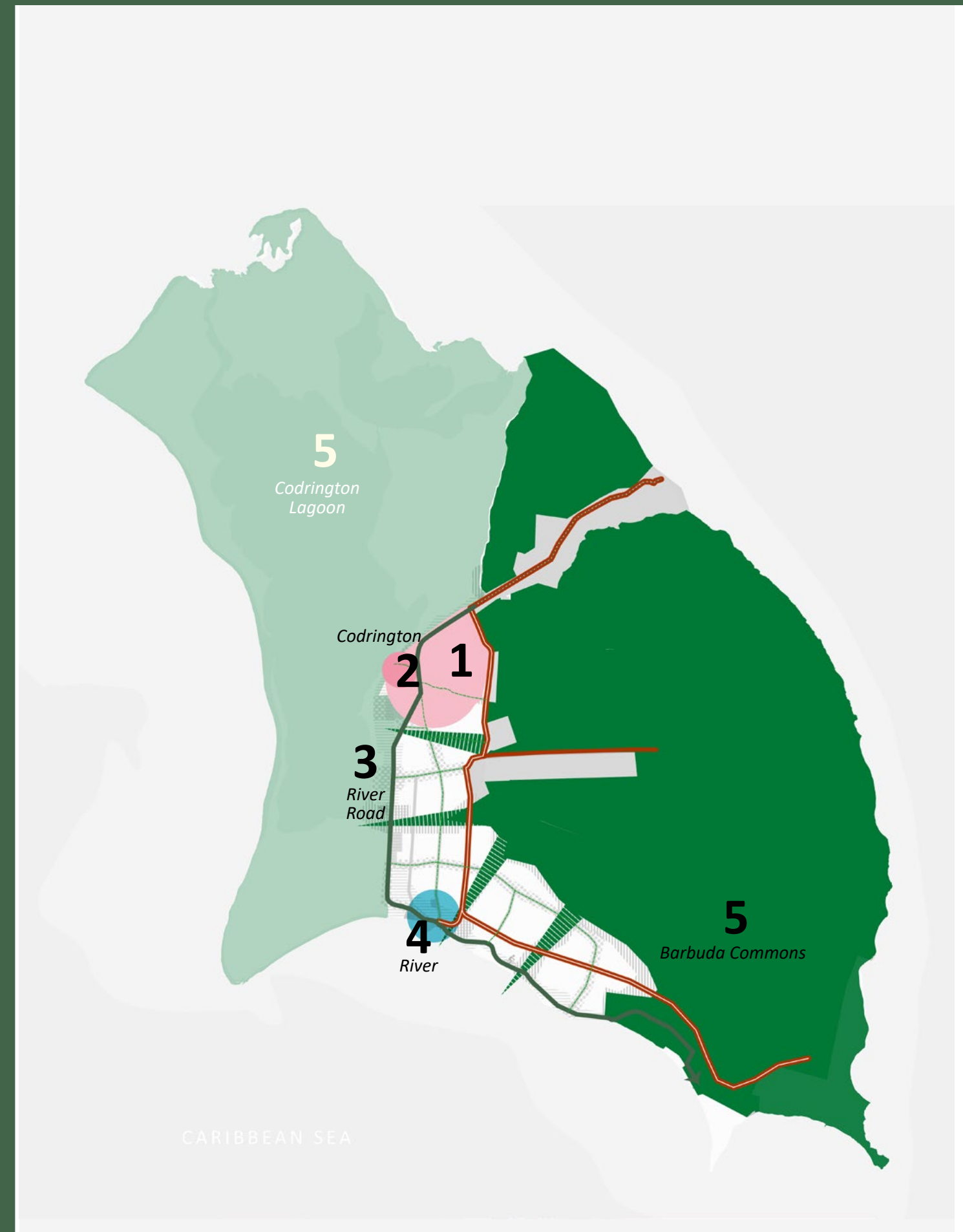
- Foster economic development and livelihood
- Create point for arrival and orientation
- Communicate sense of place
- Managing conflicting uses of fisherfolk, port activity and tourism

5

BARBUDA COMMONS

Protecting Barbuda's natural resource

- Foster economic development and livelihood
- Maintain and enhance ecosystem integrity
- Continue communal ethos on Barbuda with the management of the 'Barbuda Commons'



CODRINGTON: A NATURAL 15 MINUTE NEIGHBOURHOOD

Shaping resilient and sustainable community

1

Codrington's historical essence as a 15-minute neighbourhood.

Older neighbourhoods, with close-knit streets, fostered community bonds and shaped a well connected community. Low car ownership, communal heritage and organic growth all have been integral to its unique character.

Codrington's local shops and services, dispersed throughout the area, also aligns with this model; businesses are often integrated into homes or appear as pop-up stalls during busy times. River Road epitomizes this decentralized approach but will likely face future conflicts due to traffic and infrastructure limitations.

With newer homes located further from the centre and on larger plots, preserving Codrington's natural 15-minute neighbourhood character is vital. Recognising the value created by compact growth is essential. It reduces environmental impact by minimizing vehicle reliance, promotes resilience, and sustains community ties.

Meanwhile, amenities for tourists are intentionally placed away from the community, striking a harmonious balance between residents and visitors. By continuing this structure, Codrington can ensure a sustainable, community-driven future while honouring its heritage and culture.

Guiding Principles for 15-Minute Neighbourhood

EFFICIENT USE OF LAND & COMPACT SETTLEMENT

Create a plan for each 15-minute neighbourhood with the community. Identify the key features that should be included, such as amenities, services, and green spaces.

Promote sustainable development practices and efficient use of land as a part of Barbuda's character. Promote denser, more robust building typologies that also support renewable energy and greater efficiency.



ENCOURAGE DIVERSITY, DENSITY AND PROXIMITY - SIMILAR TO HISTORIC NEIGHBOURHOODS IN BARBUDA

Support local businesses to thrive as part of a neighbourhood. Support clustering complementary businesses and understand what amenity, such as a generous pavement for outdoor dining or a visible facade, will help businesses thrive.

Foster an inclusive environment and equity for all community members. This can help create a vibrant atmosphere and attract more people to the area.

Create spaces for social interaction and recreational activities, such as micro-parks, DIY playgrounds, areas for natural play, and community gardens.

PRIORITIZE BARBUDAN CULTURE, HEALTH AND HAPPINESS

Invest in public art and cultural events to create a sense of place and identity. Bring people together for celebration and community.

Engage the local community in planning and design. Through public meetings, surveys, or focus groups.

Develop a strategy to reduce car dependency and promote walking, cycling, and public transportation. This includes cycle routes, improving pedestrian infrastructure, and creating car-free zones.

Invest in green infrastructure, including planting, rain gardens, and permeable surfaces. This can reduce storm water runoff and dust, and improve air quality.



CODRINGTON: A NATURAL 15 MINUTE NEIGHBOURHOOD

Shaping resilient and sustainable community

ENHANCING LIVABILITY / SHAPING RESILIENCE



PUBLIC OPEN SPACES

Consider for new public park, civic space or playground in area. Open spaces could also incorporate historic feature, such as wells or ruins.



LIVING STREETS

Streets should include landscape spaces for scenic value, human comfort and to facilitate local commerce and social gathering (Caribbean cultural phenomena of socializing and carrying out commerce on roadways).



OUTDOOR RECREATION

The horse race track, cricket pitch, school grounds should be included in the major open space system.



KNOWLEDGE CLUSTER / JOURNEY

Develop east west walking and cycling route connecting schools and education centres. Provide additional planting, increased safety and environmental health.

GREEN INFRASTRUCTURE

Extend green spaces along all roadways, tracks, trails and alleys and provide park spaces that connect to all coastlines

PROMOTING COMPACT EFFICIENT DEVELOPMENT



OPPORTUNITY SITE

HOLY TRINITY SCHOOL

Re-development of the old airport site could include significant open space amenity and should extend to the coastline to encourage public access to the coastline.



OPPORTUNITY

BBQ AIRSTRIP

Re-development of the old airport site could include significant open space amenity and should extend to the coastline to encourage public access to the coastline.



OPPORTUNITY SITE

HANNA THOMAS HOSPITAL

Relocate to more resilient location.



LEASEHOLD SITES

Princes Foundation site



OPPORTUNITY

INFILL DEVELOPMENT

Opportunity for intensification

FOSTERING ECONOMIC DEVELOPMENT AND ENGAGING LIVELIHOODS



MARKET SPACE

Create a market place for food, crafts and general items on Barbuda / Stalls for local vendors, Food Court (restaurants, cafés, bars, etc.), Rest-room facilities.



FISHERIES COMPLEX

Improve fisheries complex (cold storage, water supply, etc.) and review need for fisher-folk near River Port.



WATER SPORTS CENTRE

Water sports administration outlet, Water sports product sales/rentals (diving glasses, goggles, life jackets, sea shoes, snorkelling gear, etc.)



TEACHERS HOSTEL

Provide space to accommodate visiting teachers and educators.



THE RACE TRACK IMPROVEMENT

Including a covered grandstand, event lawn, a cafe, ticket booth, and an announcer's tower. Additionally adding stables, a paddock, and a horse hose down area for the convenience of participants.

DEVELOPING LIVING HERITAGE



HERITAGE CONSERVATION AREA

Focus on maintaining and enhancing historic areas. Define as focal point for Living Heritage in Barbuda



OPPORTUNITY HISTORIC BUILDINGS

Re-development of the old airport site could include significant open space amenity and should extend to the coastline to encourage public access to the coast

- Wardens House (Old Government House)
- The Ginney
- Holy Trinity Church
- Walled Wells
- Old Bakery
- Small-Scale Houses

Historical Sites (Data from Watters et al archaeological structures)



RE-PURPOSED RUINS

Select "hurricane ruins" can be re-purposed as a system of green park systems transecting developed lands and could allow for urban forestry, urban farming, social gathering and commerce.



FLOOD RISK

Avoid building residential at ground floor in flood-risk areas; encourage development in safer locations.



THE CODRINGTON CENTRE

The Cultural and Community Centre

Codrington has long served as the heart of Barbuda's culture and community; it now has the opportunity to highlight this richness and develop this into a thriving hub of 'Living Heritage'.

This transformation involves a wide range of dynamic components designed to breathe new life into this beloved landmark and cultivate a strong sense of community pride:

- A centre for food encompassing permanent and pop-up restaurants, cafés, bars, and essential facilities.
- A versatile stage for entertainment purposes, including captivating steel band music, cultural dances, dramatic performances, and a venue for various fundraising events.
- A bustling marketplace comprised of vendor stalls, ideally suited for the sale of agricultural produce, with the flexibility to host flea markets, craft expos, souvenir shops, and special fundraising activities.
- A raised boardwalk for small boats, kayaks, and paddle boats.
- Serving as the epiCentre for water sports administration, this facility will also offer product sales and rentals, including diving equipment, life jackets, sea shoes, snorkeling gear, and more.
- An enhanced wharf shelter with an integrated sitting area, strategically positioned as a launch point to key destinations like the Bird Sanctuary, Palm Beach, and North Beach.
- The future redevelopment and integration of adjacent sites, such as the BBQ airstrip and Holy Trinity Primary School, and
- A commitment to restoring historic landmarks like the Warden's House, the Ginnery, and Holy Trinity Church.

In nurturing the Codrington Centre as a beacon of Living Heritage, we aspire to honour Barbuda's rich cultural tapestry while fostering progress and community unity.

2

Guiding Principles for the Codrington Centre

PROMOTE EFFICIENT AND EFFECTIVE GOVERNANCE GUIDED BY THE ONE PLANET

Create a focal point for Barbudan culture showcasing Barbudan products and enterprise. Provide more support for local businesses to operate. Including fisher-folk and farmers...

Create public space at Madison for community gathering and activities with an annual series of events.

Provide access to essential services such as training, education, and boat-- services.



EMBRACE CULTURE AS THE FOUNDATION FOR A 'LIVING HERITAGE' EXPERIENCE

Preserve the historic features, materials and scale that lend charm and atmosphere to the Codrington.

Consider potential for Government House to become a cultural centre, museum and art space that shares Barbudan culture and heritage

Incorporate distinctive dynamic elements, such as a market space, into the Fisheries for commerce and culture. Explore incorporating a range of dining and cooking experience.

Create designated open spaces that encourage a variety of social interaction for all ages and genders and support a range of community activities.



STRENGTHEN RESILIENCE TO CLIMATE CHANGE AND NATURAL DISASTERS

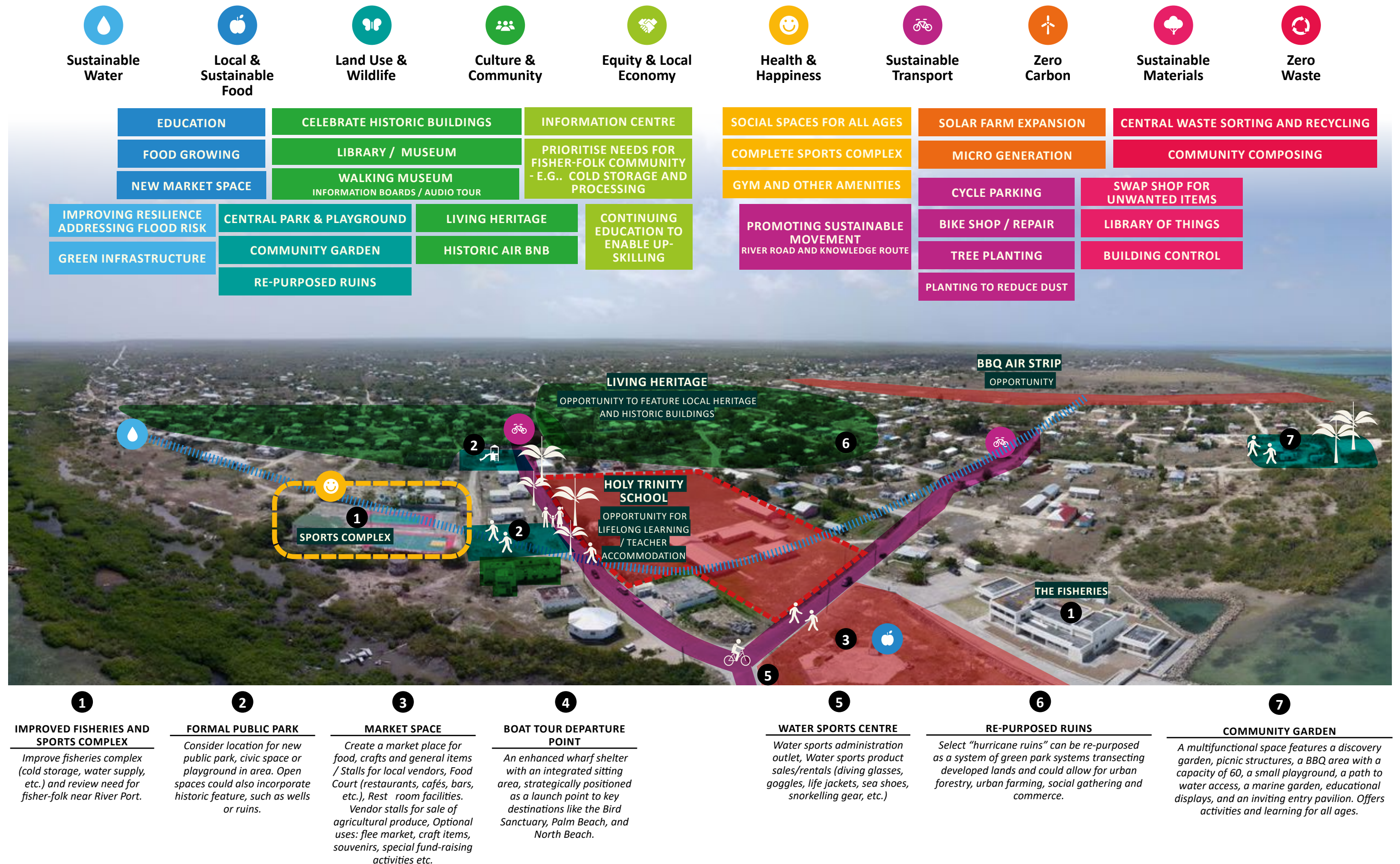
Design buildings and infrastructure to withstand flooding, high winds, and other extreme weather events.

Improve drainage systems and introduce green infrastructure to reduce flooding risks.

Incorporate renewable energy sources such as solar or wind power. Guidelines as to how this can seamlessly be incorporated into the built environment also.



The Cultural and Community Centre



A NEW ISLAND ROAD WITH A REDEFINED RIVER ROAD

Connecting Communities

River Road is the spine of Barbuda. It connects the island and accommodates everyday life. With the creation of an new bypass road, River Road has the potential to better connect the communities in Barbuda and promote sustainable movement.

Many islands in the Caribbean heavily depend on cars as a primary mode of transportation. Due to the dispersed nature of villages, limited public transportation infrastructure, and the desire for convenience and mobility, many residents and tourists in the Caribbean need to rely on expensive and polluting personal vehicles. While some islands have made efforts to improve public transportation and promote sustainable mobility, the car remains a dominant choice for getting around these picturesque but often geographically challenging destinations.

Maintaining roads for vehicles can be considerably expensive, especially in Barbuda. Factors such as harsh weather conditions, wear and tear, and the cost of asphalt contribute to ongoing high maintenance costs. In contrast, supporting sustainable movement options, such as well-developed public transportation, cycling lanes, and pedestrian infrastructure, can be more cost-effective in the long term. Not only do these alternatives reduce road maintenance expenses, but they also promote environmental sustainability, alleviate congestion, and improve the overall quality of life for residents and visitors. Investing in sustainable mobility is an economically prudent and environmentally responsible choice.

3

Guiding Principles for the Redefined River Road

CONTINUE TRADITIONS ON SUSTAINABLE MOVEMENT IN BARBUDA

Focus on culture: Incorporate public art and design elements that communicate Barbuda's rich culture. Highlight traditions of using horses and donkeys as transport.

Engage the community: Incorporate feedback from local stakeholders and residents to ensure that the design meets the needs of the community..

More intensive uses: Mix of residential, commercial, and public spaces to encourage walking and biking and supporting an active street.



ALLOW FOR A SUSTAINABLE FUTURE PUBLIC TRANSIT, ELECTRIC VEHICLES AND MICRO MOBILITY

Support active transportation: Provide bike lanes and other cycling infrastructure such as bicycle parking, bike-share stations, and servicing locations.

Allow for future public transit / electric micro mobility: Ensure that public transit and micro mobility can be accommodated within design in the future



PROVIDE A SAFE AND COMFORTABLE ROUTES FOR WALKING, CYCLING AND HORSE RIDING

Prioritize pedestrians: Provide sidewalks and other pedestrian amenities such as benches, cross-walks, and public art. Ensure adequate shade and lighting.

Design for safe and comfortable streets: Reduce speed limits to 20 mph or less and use traffic calming measures such as strategic planting and chicanes.

Provide green infrastructure: Plant trees and other vegetation to reduce dust, stormwater runoff and improve air quality. Also explore communal gardens and groves of fruit trees.



A NEW ISLAND ROAD WITH A REDEFINED RIVER ROAD

Connecting communities



A new island road



River Road at Codrington Centre



River Road



River Road from Martello Tower, Port and beyond

A New, Resilient Island Road

Strengthening Barbuda's Connectivity

A new, durable road is set to become the main artery on Barbuda, effectively diverting the bulk of traffic away from River Road and villages. This transformation will reposition River Road as a local thoroughfare, emphasising reduced vehicle speeds and prioritising active modes of mobility such as walking and biking.

River Road at Codrington Centre A Community Corridor

Create a vibrant corridor designed to serve the diverse needs of community from daily events to annual parades. Support a wide range of activities. Promote an active, inclusive atmosphere where residents and visitors alike can come together to celebrate, learn, and connect. Reflect the vitality and diversity of our community.

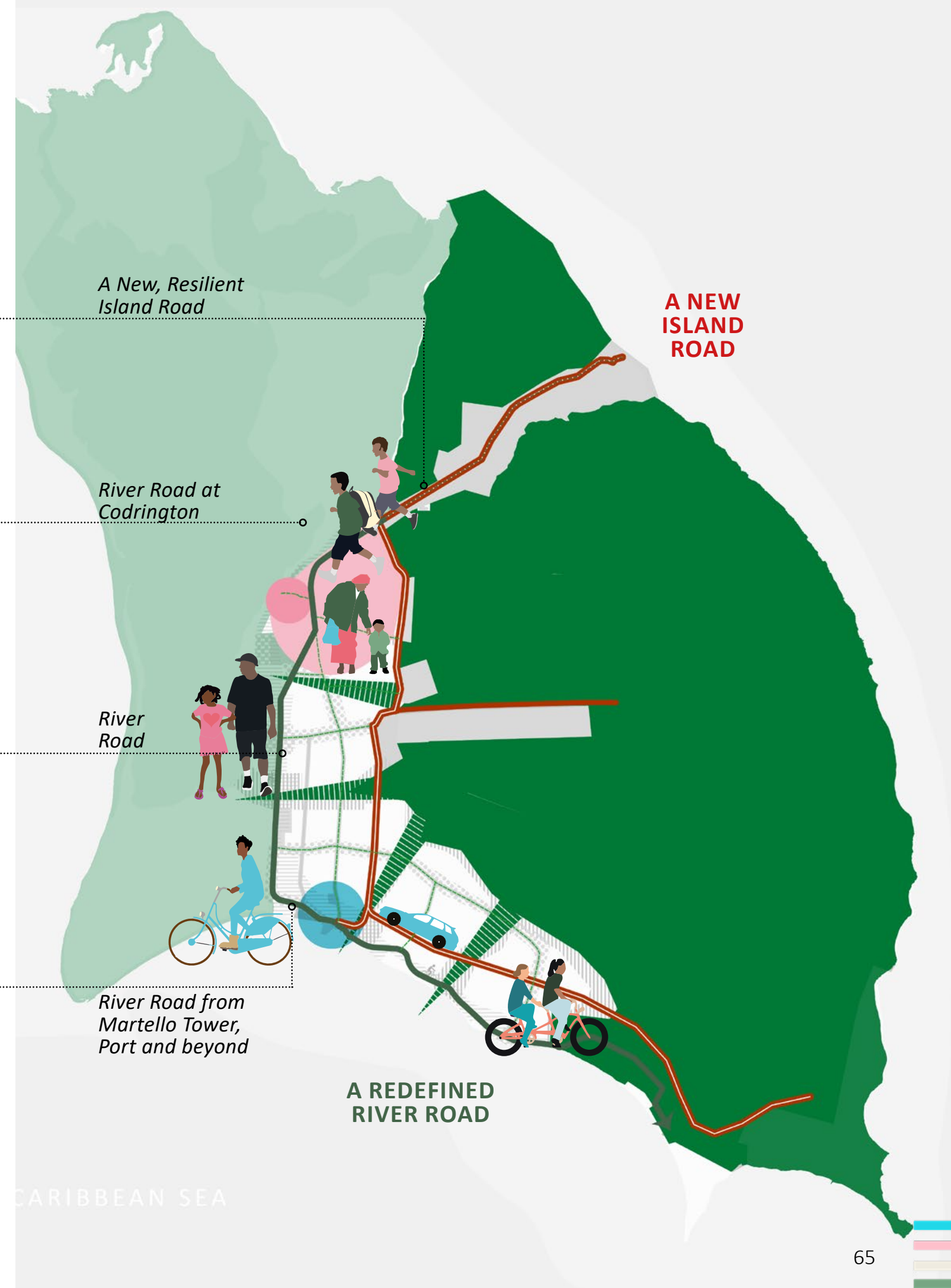
River Road

Creating a Tranquil Route Linking Neighbourhoods and Recreation

Forging connections between the 15-minute neighbourhoods by establishing a dedicated corridor tailored for walking, cycling, and horse riding. Enhancing safety and security, including the installation of solar lighting. Implement of Sustainable Urban Drainage Systems (SUDs) to mitigate flooding.

River Road from Martello Tower to East Enhancing Visitor Orientation and Sustainable Travel

Employ clear signage and modern digital navigation tool to simplify exploration for visitors. Promote safety and sustainable transportation methods through well-planned road layouts, transport hub (electronic micromobility, bike hire, taxi) and strategic design. Preserving Barbuda's unique ecosystem by using native plants and sustainable landscaping practices.



RIVER DOCK

Planning for Long Term Prosperity

The transformation of the River Dock area in Barbuda offers an opportunity to establish a thriving secondary Centre. This strategic evolution can be realized by thoughtfully developing the dock vicinity, leveraging its proximity to tourism ventures, and preserving invaluable heritage sites such as the Martello Tower. It is imperative to balance these endeavours with the preservation of essential industrial activities on Barbuda.

By advocating for controlled expansion around the River Dock, forging connections with nearby tourism developments, safeguarding the Martello Tower (River Fort), and accommodating vital industrial functions, we can envision the dock's metamorphosis into a vibrant and multifaceted hub. The potential for this revitalization encompasses a diverse range of elements, including:

- Establishing a transportation hub or station offering car, micromobility, and bicycle rental services.
- Creating space to support small businesses, encompassing restaurants, variety shops, cafés, rental housing, apartments, inns, and more.
- Designating light industrial and commercial lots to accommodate entities like Sandco Ltd., storage facilities, light manufacturing, and other essential activities.
- Supporting resilient design by addressing flood risk and other environmental considerations.
- Integrating the Dulcina Hotel Property.
- Preserving historic treasures like the Martello Tower and Bumpy Well.
- Facilitating residential development in a sustainable and harmonious manner.

This comprehensive vision seeks to revitalize the River Dock area, making it a dynamic and thriving secondary Centre that harmonizes with Codrington's unique character while driving economic growth and preserving the essence of Barbuda's heritage.

4

Guiding Principles for the Redefined River Road

ESTABLISH AS A GATEWAY AND ORIENTATION POINT FOR ARRIVAL

- Create a positive arrival sequence that addresses potential conflict of ferry users and port activity.
- Improve Ferry service to Barbuda will encourage 'day trips' from Antigua, while making it easier to access services off island.
- Create a welcoming point of arrival to Barbuda with outdoor seating, landscaping, and shade structures to welcome and orientate visitors.
- Improve availability of taxis, car, micromobility (e-bikes, moped, etc) and cycle hire to help get visitors around the island.

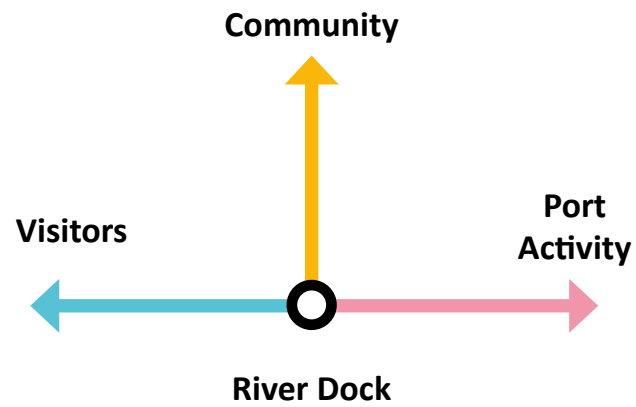


ADDRESS POTENTIAL FUTURE CONFLICTS BETWEEN USES

- Develop a long term strategy for the area
- Respond to overlap between industry, environmental risk, fisher-folk, port activity, heritage, tourism and, potentially in the long term, a new neighbourhood for Barbuda.
- Protect area around the Martello Tower (River Fort) and safeguard views to and from the tower.
- Screen and buffer unsightly light industrial and industrial uses.

NURTURING ECONOMIC GROWTH AND LIVELIHOOD

- Identify land requirements in short, medium and long term.
- Recognize the needs of fisher folk at River Dock - such as the need for enclosures for fishers to land and process catch at Pearl Harbour and River Dock.



RIVER DOCK

Planning for Long Term Prosperity

PLAN FOR PROSPERITY BY NURTURING ECONOMIC GROWTH AND LIVELIHOOD

1 SUPPORTING PROSPERITY FROM PORT

Designating light industrial and commercial sites to accommodate entities like Sandco Ltd., storage facilities, light manufacturing, and other uses allowing Barbuda to add value to products in Barbuda.

FLEXIBILITY TO GROW A NEW LOCAL CENTRE IN THE LONG TERM

Scope for business and residential uses

SUPPORTING MARINE ECONOMY AND FISHER FOLK AT RIVER DOCK

Sufficient ice supply, processing and cold storage

2 PRIMARY ISLAND ROAD ALTERNATIVE ROUTES FOR PORT TRAFFIC

Promote alternative routes for industrial traffic that minimize their presence near the River Dock, and reduce congestion and emissions in the area.

9 COCONUT GROVE

Create a diverse and productive area for both leisure and agriculture including a coconut palm grove, significant producing trees, and beehives. Site offers tool and vehicle storage, a 400-square-foot office and restroom area, landscape material storage bins, an 80-square-foot chemical storage/pump house and parking.

ESTABLISH AS A GATEWAY AND ORIENTATION POINT FOR ARRIVAL

3 A WELCOMING MIXED USE CENTRE

Creating space to support small businesses, encompassing restaurants, variety shops, cafés, rental housing, apartments, inns, and more.

4 ACCOMMODATING VISITORS

Establish transportation hub offering car, micro-mobility, and bicycle rental services.

PUBLIC OPEN SPACES

Consider for new public park, civic space or playground in area. Open spaces could also incorporate historic feature, such as wells or ruins.

5 PEDESTRIAN / CYCLE ROUTE - RIVER ROAD

Provide an anchor to the River Road recreational route with connection to Port, Martello Tower and the beach. .

ADDRESS POTENTIAL FUTURE CONFLICTS BETWEEN USES

6 MARTELLO TOWER

Develop and enforce regulations that restrict development within a designated buffer zone around the Martello Tower. Seek input and support for the protection and restoration efforts, emphasising its historical importance.

Explore establishing conservation easements to legally safeguard the views surrounding the Martello Tower.

7 BUMPY WELL SITE - PRAIRIE & CORRAL

Create a well-equipped space, featuring a 24' x 40' storage facility and an 80' x 40' shelter for various purposes. Additionally, the site includes main storage, a pump house, and a water tank for essential operations. An inviting entryway and a corral round out the program, providing a practical and functional environment for a variety of activities.

Restrict development around bumpy well - 40m

8 GREEN BUFFER ZONES

Create green buffer zones between the industrial areas and the River Dock. These buffer zones can consist of native vegetation, trees, or wetlands, not only acting as visual screens but also helping mitigate any potential environmental impacts.

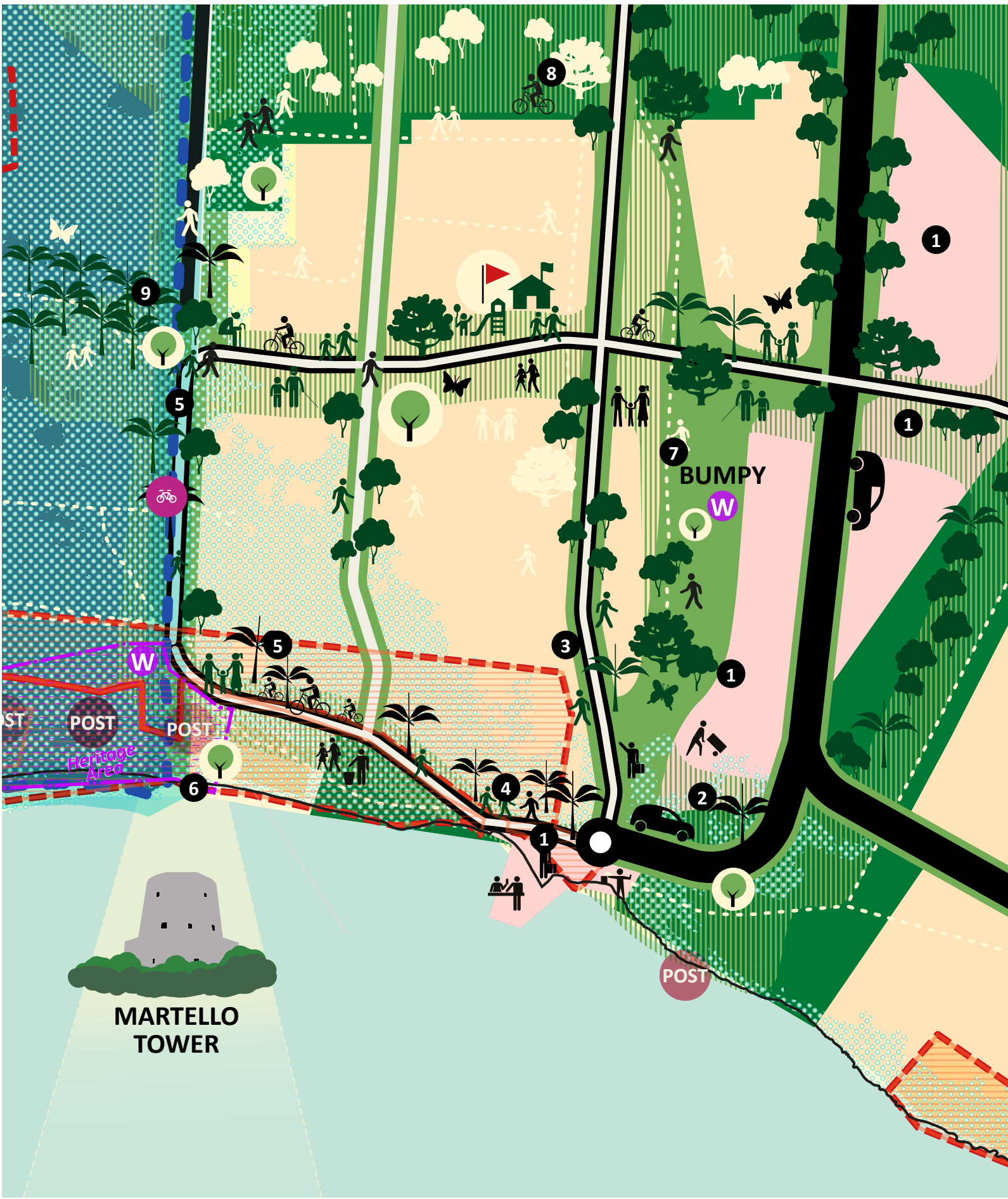
ENVIRONMENTAL IMPACT ASSESSMENT

Conduct regular environmental impact assessments of all significant proposals. Ensure any adverse effects on air quality, water quality, or noise pollution are identified and addressed.



FLOOD RISK

Avoid building residential at ground floor in flood-risk areas; encourage development in safer locations.



'BARBUDA COMMONS'

Continuing communal traditions while preserving the essence of Barbuda

Common land designation under Crown land, often known as "common land," is a concept primarily associated with the United Kingdom. Common land refers to areas of land that are owned by the Crown (the government) but are subject to certain rights and privileges granted to the public. These rights are typically related to activities like grazing, gathering firewood, or other forms of common use, and they may have been established for centuries.

Land use within the "Barbuda Commons" should be determined by Barbudans and the communities' traditions should be maintained. If there is to be tourism entry into the space the activity should be managed by Barbudans. Additional permitted uses outside of the traditional use for camping and hunting will require possible infrastructural improvements. Improvements could include:

- The development of an appropriate Visitors' Centre.
- Development of trails and trail heads with appropriate signage and information. This aspect can also be managed digitally.
- Built forms should be kept at a minimum to ensure authenticity to the traditional uses of the land and for site preservation.

To ensure the safeguarding of the national resource there will need to be a process to determine the compatibility of adjacent proposed developments to the space to ensure preservation of the "Barbuda Commons".

Barbudans to decide what level of tourism is permitted in the space as it relates to visitation and carrying capacities. Due to the flat elevations and dense forest cover the visitation by visitors will require local guides to ensure safety. Well managed tourism in the space provides Barbuda with unique and authentic experience to offer the market while providing income to the community and possible resources for site management. Tourism can be imagined as "traditional" visitors, schools, universities, researchers, and specialised nature site visitors.

5

Guiding Principles for Barbuda Commons

COMMUNITY-LED STEWARDSHIP

- Decisions regarding land use, tourism activities, and infrastructure should be made collectively by the community to ensure authenticity and cultural continuity.
- Requiring guides for trails, hunting guide, fishing guides required.
- Appointing park rangers to manage and enforce violations.
- Promoting excursions caves, hunting, fishing, farming, Barbuda's heritage, camping, pre-colonial/ colonial heritage.



SUSTAINABLE TOURISM & CONSERVATION

- Serving as a model for sustainable tourism, focusing on responsible visitor engagement, guided tours, and educational outreach.
- Collaborating with island communities, conservation organisations, and research institutions should be central to its mission, fostering ecological research, conservation, and economic opportunities.
- Utilise One Planet Action Plan to find potential partners to help protect, research, conserve the land, and respect wildlife and nature
- Connecting with universities, research institutions, charities, NGOs
- Establishing carbon offset.



ECO-CENTRIC DESIGN - PROTECTING CORE ASSETS FROM 'RIDGE TO REEF'

- Prioritising eco-centric design principles, with minimal built forms to maintain the area's traditional uses and preserve its natural beauty.
- Infrastructure improvements, such as a visitors' Centre, trails, and signage, should blend harmoniously with the landscape and ecosystems.
- Maintaining the tradition of communal management of land from 'ridge to reef'
- Looking to strengthen protection through policy and active enforcement



'BARBUDA COMMONS'

Continuing communal traditions while preserving the essence of Barbuda

The "Barbuda Commons" should be the foundation for a Barbuda national park system. The park system would ensure the conservation of the natural asset for generations of Antiguans and Barbudans. The Barbuda system of National Parks Should be an island wide system of protected areas with a key component being the "Barbuda Commons" conservation area but also to include coastal protection areas, public parks and open spaces, national attractions, and beach and shore access. The Commons would also protect watershed and groundwater sources that are essential for a resilient and sustainable future Barbuda.

SUSTAINABLE TOURISM & CONSERVATION



VIEW POINT / TRAIL HEAD

Well-maintained trails with informative signage to guide visitors through the diverse ecosystems and landscapes of the 'Barbuda Commons.'

1

VISITORS' CENTRE / EDUCATION AND OUTREACH FACILITIES

A welcoming centre providing information, educational resources, and guided tour bookings for visitors interested in exploring the area.

Facilities designed for environmental education and outreach programs, including spaces for schools and local community groups to engage in learning about the environment.



WILDLIFE VIEWING AREAS

Designated spots where visitors can safely observe and appreciate the diverse wildlife that inhabits the 'Barbuda Commons.'



ANIMAL SANCTUARY (GUAVA SITE)

Support program to ensure the welfare of animals. This includes a security booth, pastures, a spacious shelter, a service entrance, storage for trailers, trucks, and equipment, dry food storage, guest parking, corrals, a clinic/lab with apartment housing upstairs, a visitor center, multiple storage and shelter spaces, a solar pump house, a water well, and designated dumpster areas for medical and non-medical waste, all integrated into a secure and efficient service yard.

4

RESEARCH STATIONS

Facilities for scientific research and ecological studies, attracting researchers and students interested in studying tropical ecosystems.



MANGROVE ENHANCEMENT

Specific areas dedicated to the restoration and preservation of mangrove ecosystems, crucial for coastal protection and climate change mitigation.

COMMUNITY-LED STEWARDSHIP



BUMPY PRAIRIE & CORRAL-EQUESTRIAN HUB & TRAILHEAD

Establish a Trailhead and Equestrian Hub. Mobilize resources, construct corrals and stables, build trail access points, and hire experienced staff to bring this unique outdoor destination to fruition.



TRADITIONAL CAMPSITES

Designated areas where Barbudans and potentially visitors can experience traditional Barbudan camping practices while enjoying the natural surroundings.

7

COMMUNITY-MANAGED TOURISM HUBS

Centres managed by Barbudans for tourism-related activities, ensuring that local communities benefit from tourism income.



CULTURAL HERITAGE SITES

Preservation and celebration Pre and Post-Columbian sites of cultural heritage, especially as traditional Barbudan sites and structures, to connect visitors with the island's history. Consider network of information posts with QR code link to information.

7

SALT PONDS

Implement eco-friendly salt harvesting, preserving the ecosystem. Develop salt-themed tourism with educational tours. Engage the community in producing specialty salts. Promote Barbuda's specialty salts globally, focusing on sustainability.

ECO-CENTRIC DESIGN - PROTECTING CORE ASSETS FROM 'RIDGE TO REEF'



ECO-TONES / GREEN INFRASTRUCTURE / NATURAL FLOOD MANAGEMENT

Landscaped corridors designed to connect land preserves, fostering ecological connectivity from the ridges to the reef.

Implement nature-based solutions, such as wetland restoration and afforestation, to absorb excess water and reduce the impact of floods. These measures can also enhance ecosystem health and biodiversity.

C

CAVES

Protected caves within the "Barbuda Commons" for exploration, with guided tours available to educate visitors about their cultural and ecological significance.

8

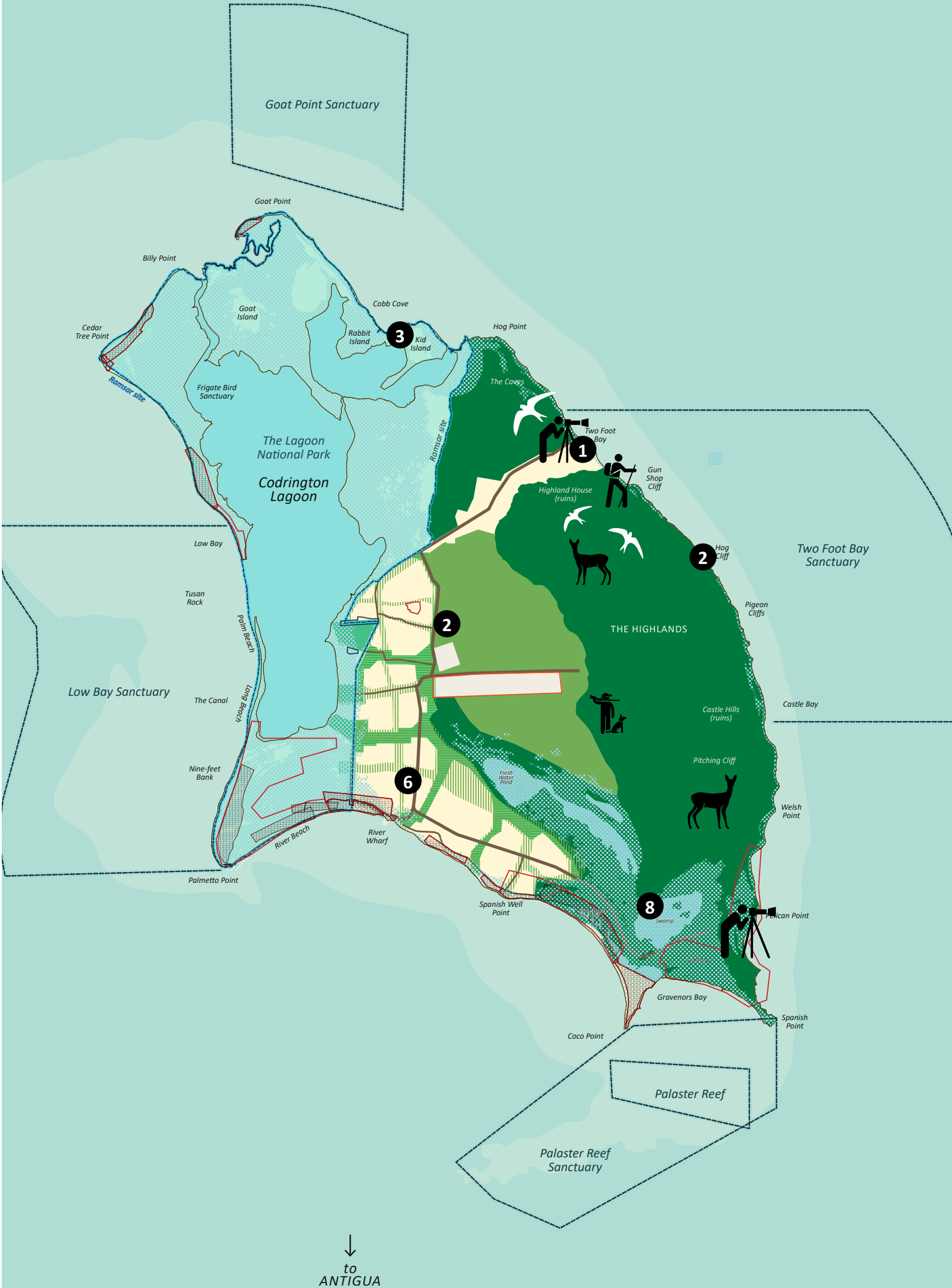
DARBY CAVE

Organise guided tours to Darby Cave sink hole during peak visitor season.



HUNTING

Establish a regulated hunting plan in Barbuda, including research, education, licensing, and monitoring. Collaborate with communities, protect habitats, and promote wildlife-based tourism. Regularly review and adapt the plan to ensure sustainable hunting practices and biodiversity preservation.



#FUTUREBARBUDA QUESTIONS

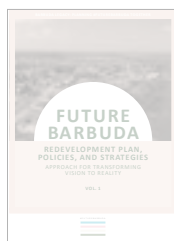
VOLUME 3
CONCEPT DESIGN & RESILIENT
APPROACH FOR LAND USE



#FUTUREBARBUDA

VOLUME 4 PUBLIC AND PRIVATE REALM GUIDANCE

The Draft Master Development Plan comprises the following Volumes:



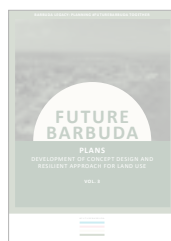
VOLUME 1: GOVERNING POLICY

Translating the vision into policies and strategies guided by principles of sustainability and resilience.



VOLUME 2: DRAFT DESIGN BRIEF

The emerging Design Brief for Codrington and defined local areas outlining the design goals and objectives, constraints, special analysis.



VOLUME 3: CONCEPT DESIGN & RESILIENT APPROACH FOR LAND USE

A series of plans presenting the concept design for Barbuda, Land Use, Built Form and strategies.



VOLUME 4: PUBLIC AND PRIVATE REALM GUIDANCE

Codes and policies governing the public and private realms, shaping the physical environment.



VOLUME 5: THE RESULTS FRAMEWORK / THE ONE PLANET ACTION PLAN

The implementation and institutional framework utilising One Planet as a providing objectives, actions and responsibilities.

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PUBLIC AND PRIVATE REALM GUIDANCE

DRAFT
NOVEMBER 2023

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HOW TO USE DESIGN GUIDELINES

DESCRIPTION

A brief overview of the subsection topic and its importance in the future of Barbuda

GOAL

One or two statements about what we aspire to achieve with respect to this topic

MEASURE FOR SUCCESS

These are the items we will use to measure progress towards achieving the goal. In many cases the listed items need refinement but should be considered a first step towards developing more quantifiable measures will help to elevate the level of conversation about the topic and add an element of accountability to the plan.

LAND USE AND DESIGN PRINCIPLES

The principles provide guidance on how development should take shape when addressing the topic. They will be used to elevate development proposals when using land use and design requests.

CENTRES AND CORRIDORS

Every community has a place where citizens may gather to meet and interact in a variety of ways. Each of the places can be organised into one of two categories – Centres and Corridors. These places offer a multitude of activities to draw people together and keep them engaged, from daily shopping to places of worship. These places have different needs influenced by their context and the communities that utilise the amenities available. Each place is unique, and policies must be flexible enough to foster and encourage the natural growth of all these places.

THE GOAL

Create a variety of active and accessible places to serve as a focal point for the community and orientate visitors.

MEASURE OF SUCCESS

Identify and establish place types for Centres and Corridors by 2025	Develop adopted local plans by 2027	Centres and corridors will have pedestrian and bicycle connections to the surrounding community.
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Land Use and Design Principles

DESIGN	Walking and cycling encouraged to local centres supporting healthy lives.
DESIGN	Encourage 'active frontages' from shops, cafes and businesses that accommodate Barbudan life with external spaces for cafe seating and external displays.
LAND USE	Shops and essential infrastructure, such as schools should be close proximity to the centre and corridors.
DESIGN	Attractive walking and cycling corridors and public spaces with shade trees, benches etc to promote active use of public realm.

Suggested Lead

WORKS & GENERAL PURPOSES

One Planet



Tools: Recommended Policies & Actions

PLANS

Define Centres & Corridors. Link to 15-min neighborhoods. Create tailored urban plans, reflecting each location's unique characteristics. Incorporate local input for alignment with residents' preferences.

CODES

Support Mixed-Use. Develop zoning rules for diverse activities in Centres & Corridors. Apply design guidelines for harmonious development.

GOVERNANCE

Improve local governance and policies for vibrant Centres & Corridors. Involve the community in decision-making.

FINANCING

Secure Funding. Obtain investment for infrastructure, beautification, and amenities. Explore public-private partnerships and grants.

PARTNERSHIPS

Collaborate for Activation. Engage government, businesses, nonprofits, and experts for joint investment and activation. Leverage urban planners' expertise.

KNOWLEDGE

Inform Decision with Data. Research usage patterns in Centres & Corridors. Use insights for future planning.

Raise Awareness. Organise programs on inclusive public spaces' significance for community interaction and cohesion.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)

TOOLS: RECOMMENDED POLICIES & ACTIONS

A list of items that utilise the categories from the Tools layer (plans, codes, One Planet Action Plan, governance, financing, partnerships, knowledge) that provide a summary of what will be done to help the goal.

EXISTING POLICY DOCUMENTS AND MAPS

Links to relevant information

SPOTLIGHT

The spotlight profile places in Barbuda that are already helping achieve the goal. They are meant to celebrate the many community assets that Barbuda already has in place and serves as an example that can be followed.



ENVIRONMENTAL PROTECTION AREAS

Environmental Protection Areas, which include the Codrington Lagoon RAMSAR and marine protected areas, stand as vital sanctuaries committed to preserving and safeguarding our planet’s ecosystems. These areas are dedicated to nurturing and conserving biodiversity and enhancing ecosystem health. One of their central principles is to retain and protect essential landscapes, reducing vulnerability to climate change and natural disasters. These sanctuaries serve as resilient havens, shielding against environmental challenges and ensuring the long-term well-being of both ecosystems and the communities that depend on them.

THE GOAL

To maintain and enhance ecosystem integrity, retaining and safeguarding vital marine and terrestrial landscapes to reduce the impact from climate change and natural disasters.

MEASURE OF SUCCESS

Measure the increase in the diversity and abundance of native plant and animal species within the protected area.	Area of sensitive and important Barbuda Environments from the marine to the terrestrial protected and actively manged.	Measured improvement in overall health of the ecosystem, including water quality, soil health, and invasive species management.
---	--	---

Land Use and Design Principles

- DESIGN

Develop an ecosystem catalogue plan to establish a baseline for planning and protection efforts. This plan should detail the various ecosystems present and their significance.
- DESIGN

Develop carrying capacity plans to determine sustainable levels of human activity in these ecosystems, ensuring their long-term viability.
- LAND USE

Implement land use and zoning plans that prioritise the protection of sensitive and significant watershed and ecosystems, ensuring that development activities are in harmony with the environment.
- LAND USE

Utilise local knowledge to guide planning efforts, recognising that the local community possesses valuable insights into the needs and requirements for environmental conservation.

Suggested Lead

LAND, AGRICULTURE & FISHERIES

One Planet

Sustainable Water

Local & Sustainable Food

Land Use & Wildlife

Culture & Community

Equity & Local Economy

Health & Happiness

Tools: Recommended Policies & Actions

KNOWLEDGE

Local knowledge to guide planning as local community is very clear in their needs and requirements for environmental conservation.

Launch educational campaigns and programs to raise awareness about the importance of environmental protection and sustainable living among visitors, residents, and stakeholders. Use signage, interpretive centres, and outreach initiatives to convey key messages.

PLANS

Island land use and development plans should recognise Barbuda’s natural ecosystems and social environmental resources.

GOVERNANCE

Create a Barbuda National Park System of protected and conservation lands.

Promote sustainable tourism practices that minimise the environmental footprint of visitors. Develop eco-friendly transportation options, enforce responsible visitor behaviour codes, and support businesses that adopt sustainable tourism practices.

CODES

Establish building codes to encourage ecosystem creation in new developments.

Establish enforceable codes specifically designed for ecosystem protection, outlining permissible activities and restrictions to preserve these areas.

PARTNERSHIPS

Forge partnerships with international organisations government agencies, NGOs, and research institutions to leverage expertise, funding, and support for conservation initiatives in the protected area.

FINANCING

Central Government Financing / Public gain financing from private development projects

ONE PLANET

Utilise One Planet Action Plan as a tool to gather international attention to the unique ecosystem in Barbuda and the need for protection.

Establish a robust monitoring and reporting system to track progress toward One Planet Living goals. Regularly assess the environmental, social, and economic impacts of conservation efforts and adjust strategies as needed.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Fisheries Act, 2006](#)

[Environmental Protection Levy Act, 2002](#)

[Forestry Act](#)

[National Parks Act](#)



ENVIRONMENTAL RESOURCE AREAS

Prioritising the preservation and responsible stewardship of Environmental Resource Areas, which include diverse landscapes like the Highlands, salt ponds, hunting grounds, grazing lands, and, notably, watersheds and groundwater, is of utmost importance for the betterment of both the environment and the local community.

THE GOAL

To safeguard and enhance these ‘common lands’ through the establishment of sound land and resource management practices, guided by the collective stewardship of the local community.

MEASURE OF SUCCESS

Amount of resource area actively protected and managed	Monitoring and managing feral domestic animals.	Monitoring and measuring quality and health of groundwater.
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Land Use and Design Principles

- DESIGN

Formulate policies that promote best agricultural practices within these areas, emphasising sustainable and responsible farming methods.
- DESIGN

Introduce and encourage alternative agricultural practices such as organic agriculture, permaculture, and emerging technological approaches that prioritise environmental sustainability.
- DESIGN

Develop comprehensive design guidelines for any new development within these resource areas, ensuring that such projects harmonise with the natural environment.
- DESIGN

Provide clear guidelines for managing the potential conflict between roaming animals and ongoing or planned landscape development and agricultural activities. Proposals may include designated areas for containing feral domestic animals.
- LAND USE

Implement land use and zoning plans that prioritise the protection of watersheds and groundwater.
- LAND USE

Designate specific “no development” zones within Environmental Resource Areas, safeguarding them from any form of construction or development that could harm the natural balance.
- LAND USE

Consider the designation of National Parks to provide robust protection for common hunting lands, wetlands, beaches, and the marine environment, preserving their ecological integrity.

Suggested Lead

LAND, AGRICULTURE & FISHERIES

One Planet


Sustainable Water


Local & Sustainable Food


Land Use & Wildlife


Culture & Community


Equity & Local Economy


Health & Happiness

Tools: Recommended Policies & Actions

KNOWLEDGE

Develop educational programs and awareness campaigns to educate local communities and stakeholders about the importance of responsible resource management and sustainable agricultural practices.

PLANS

Develop comprehensive land use plans that effectively control conflicting land uses within Environmental Resource Areas.

GOVERNANCE

Consider the designation of National Parks to provide robust protection for common hunting lands, wetlands, beaches, and the marine environment, preserving their ecological integrity.

Develop governance structures that enable the local community to actively participate in the management and stewardship of Environmental Resource Areas.

CODES

Formulate policies aimed at promoting best agricultural practices within these areas, emphasising sustainability and responsible farming methods.

PARTNERSHIPS

Collaborate with local and international conservation organisations, government agencies, and community groups to leverage expertise, funding, and support for the sustainable management of Environmental Resource Areas.

FINANCING

Explore financing options and incentives to support the adoption of sustainable and environmentally friendly agricultural practices within these areas.

ONE PLANET

Utilise One Planet Action Plan as a tool to gather international attention to the unique resources in Barbuda and how to develop products for both a local and international market.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Fisheries Act, 2006](#)

[Environmental Protection Levy Act, 2002](#)

[Forestry Act](#)

[National Parks Act](#)



The Salt Ponds in Barbuda.
Source: Future Barbuda

FARMING & AGRICULTURE

Future development of Barbuda should include food sovereignty and independence which could also include export of specialty products.

THE GOAL

To support the food and agricultural sector by the protection of the agricultural land base, preventing the fragmentation of good quality agricultural land and developing sustainable agricultural practices, all with the aim of increasing food security.

MEASURE OF SUCCESS

Increased level of self-sufficiency from local agricultural produce

Land Use and Design Principles

- LAND USE

Identify and protect prime arable lands.
- DESIGN

Promote research into and uptake of new agricultural practices.
- DESIGN

Emphasis on resilient crops.
- DESIGN

Promote organic farming.
- DESIGN

Support and develop livestock operations.
- DESIGN

Seek to link agriculture to tourism e.g., farm to table.
- LAND USE

Include the idea of back yard farming, community and urban farming in future development models.
- DESIGN

Promote high technology farming and development of new crops.
- DESIGN

Develop re-generative agriculture models that are suitable to Barbuda environment. E.g. Permaculture / Food Forestry / Aquaculture
- DESIGN

Agricultural development should also include plant and grass nursery industries to supply the local and adjacent markets. Products could be specialised for coastal tropical environments to service specialised environmental niche markets. E.g.. Endemic island plants for landscaping and environmentally appropriate grass species. Development of a unique horticulture industry which is forward thinking to regional and global issues.
- DESIGN

Agricultural development should include inclusion in public space landscapes.
- DESIGN

Agriculture development should include heritage plant species traditionally used for medicinal purposes.
- DESIGN

As part of island re-cycling encourage island composting as an input to an agricultural development strategy
- DESIGN

As part of a coastal environmental protection strategy encourage the development of aqua-cultural development.
- DESIGN

Sustainable agricultural development should include the development of farmer markets and agro-processing of produce for local and regional consumption.

Suggested Lead

LAND, AGRICULTURE & FISHERIES

One Planet

Sustainable Water

Local & Sustainable Food

Land Use & Wildlife

Culture & Community

Equity & Local Economy

Health & Happiness

Zero Waste

GOVERNANCE

- Tax incentives to allow for project development
- Skills training and business development support for existing producers and new start-ups

PARTNERSHIPS

Sourcing of international funding as it relates to sustainable agriculture and climate change.

CODES

Land use ordinances that protect agricultural productive lands and promotes integration of agriculture into development

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Fisheries Act, 2006](#)

[Environmental Protection Levy Act, 2002](#)

[Forestry Act](#)

[National Parks Act](#)



Local farm
Source: Future Barbuda

ENVIRONMENTAL AND FLOOD RISK

The ever-present risk of flooding from rising sea levels, tropical storms, and hurricanes poses a significant environmental challenge. These environmental risk areas demand a proactive approach to minimise the impact on ecosystems and communities while ensuring resilience and adaptability. The goal is to effectively manage and mitigate flood risks while preserving the ecological integrity of these vulnerable zones.

THE GOAL
To mitigate exposure to flood risk and natural disasters on Barbuda

MEASURE OF SUCCESS
Reduced exposure levels on the CRVA Risk and Vulnerability charts.

Land Use and Design Principles

- DESIGN

Incorporate an adaptive framework into Barbuda’s development, recognising flood and other environmental risks, and shaping development in a responsive and complementary manner. Ensure that new construction and critical infrastructure within Environmental Risk Areas are designed to be resilient against flooding. This includes elevated foundations, flood-resistant building materials, and sustainable stormwater management systems.
- DESIGN

Promote ecosystem-based design principles. Include the preservation and restoration of natural flood buffers like mangroves, wetlands, and dunes. Integrate nature-based solutions into infrastructure planning.
- LAND USE

Restrict residential, economic, and critical uses within flood-risk areas. Develop comprehensive land use plans that strictly control development in high-risk flood areas. Designate specific “no development” zones in these areas to prevent construction that could exacerbate flood risks.

Suggested Lead

HEALTH , SOCIAL
WELFARE & DISASTER
PREPAREDNESS

One Planet

- Sustainable Water
- Local & Sustainable Food
- Land Use & Wildlife
- Culture & Community
- Equity & Local Economy
- Health & Happiness

Tools: Recommended Policies & Actions

CODES

Enact purpose-specific zoning for the flood risk areas and illustrate them on legal maps.

Enact area-specific zoning overlays that restricts certain sensitive land uses in the flood-risk areas. These may include:

- Residential uses
- Institutional Uses (schools, health, public services)

Enact policies requiring re-examination of flood risk areas on a recurring basis (5-10 years) to ensure continued validity of flood mapping.

PLANS

Recognize flood risk and adopt planning policies restricting new development in these areas and requiring engineered adaptation measures where applicable.

GOVERNANCE

Establish a centralized authority or committee responsible for coordinating flood response and management efforts across Environmental Risk Areas. Ensure effective communication, resource allocation, and disaster response coordination.

FINANCING

Allocate dedicated funding for flood risk reduction projects, infrastructure improvements, and community resilience programs within Environmental Risk Areas. Explore partnerships with international organisations for financing support.

PARTNERSHIPS

Foster partnerships with local communities to actively engage them in flood resilience initiatives. Involve residents in planning, decision-making, and the implementation of flood risk reduction strategies.

KNOWLEDGE

Launch educational campaigns to raise awareness among residents about flood risks, preparedness, and evacuation procedures. Promote a culture of resilience within communities.

ONE PLANET

Align flood risk reduction efforts with sustainability principles, emphasising resource efficiency and minimal environmental impact. Consider eco-friendly building materials, renewable energy sources, and sustainable land use practices in flood mitigation projects.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Physical Planning Act, 2003](#)

[Environmental Protection Levy Act, 2002](#)



Flooding at Harry's after heavy rain in Autumn 2022

WATER SUPPLY

Drinking water, natural water, resource management

Barbuda maintains a high quality freshwater supply in the island aquifers. Development of the island is managed to protect the islands water supply.

THE GOAL

To preserve Barbuda’s freshwater resources and sustainably manage water resources for a high quality and reliable natural water supply.

MEASURE OF SUCCESS

Future water supply is based on the available natural resources and reduces the island’s reliance on unsustainable solutions such as high-cost desalination plants.

New infrastructure is developed that provides a cost-effective water supply which meets current and future water demand and is resilient against the impacts of climate change.

Water quality meets or exceeds water quality targets monitored by the Department of Environment.

Land Use and Design Principles

- DESIGN

Water efficient building design is mandated for all new infrastructure to reduce water demand, reduce the need for additional water infrastructure and reduce operating costs.
- DESIGN

Improve the water efficiency of residential, commercial and public buildings when redeveloped or retro-fitted.
- DESIGN

Use drought tolerant native and endemic vegetation for all landscaping.
- DESIGN

Utilise green infrastructure to manage surface water runoff to aquifer recharge areas and holding ponds.
- LAND USE

Development of land which overlies freshwater aquifers and land which contains surface water features is significantly controlled or prohibited, to protect the island’s natural water supply.

Suggested Lead

HEALTH , SOCIAL WELFARE & DISASTER PREPAREDNESS

One Planet

Sustainable Water

Local & Sustainable Food

Equity & Local Economy

Health & Happiness

Tools: Recommended Policies & Actions

KNOWLEDGE

Identification of freshwater features (surface water and groundwater) that need protecting on Barbuda, with the support of data from a Water Resource Management Plan for the island.

PLANS

A Water Resource Management Plan (strategy) supported by a high-quality assessment of the island’s water resources should be given the highest priority to protect freshwater resources on Barbuda. This information is urgently needed to support the sustainable development of zones identified in the Masterplan.

GOVERNANCE

”The Highlands” should be designated a protected watershed under Section 59, Schedule V of the Environmental Protection and Management Act 2019. The Highlands are the principal area for groundwater recharge on the island and should be protected to ensure the security of the island’s fresh water supply.

Barbuda Council should establish a working relationship with APUA Water Business Unit and the Department of Environment to align water supply, wastewater management and water protection duties and activities.

The Department of the Environment, APUA and Barbuda Council need to define a water resource management and protection hierarchy on Barbuda and identify standards for water quality (drinking water and discharged wastewater).

Ensure delivery of the following necessary conditions identified within the 2016-2020 Medium-Term Development Strategy (2015):

NC1.4.2 - Action 8: Improve access to and generation of water for irrigation.

NC1.4.5 - Action 5: Green Standards for the use of solar power and water storage.

NC1.6 - Action 8: Intensify efforts to improve efficiency in the provision of utilities – electricity, water and telecommunication.

NC1.6 - Action 9: Expand water generation capacity.

NC3.1.1 - Ecosystems management.

NC3.1.2 - Water resource management.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Public Utilities Act](#)



Cape Hatteras sink hole, North Barbuda
Source: Future Barbuda

WATER RESOURCE REGULATION

Drinking water, natural water resource management

Development of the island is regulated to protect the aquifers, dolines, ponds and historic wells of the island to ensure a low cost, sustainable water supply for drinking water, agricultural and commercial use.

THE GOAL

To enforce existing nationally recognised standards for drinking water and agricultural water on Barbuda by the Department of Environment through the regular testing of fresh water and regulated/unregulated discharges of wastewater and unauthorised pollutants.

MEASURE OF SUCCESS

Develop and implement management plans and regulations to protect the island’s freshwater supplies and safeguard the water supply from the impacts of climate change.

Land Use and Design Principles

- LAND USE

Development of land which overlies freshwater aquifers and land which contains surface water features is significantly controlled or prohibited, to protect the islands natural water supply.
- DESIGN

Water efficient building design is mandated for all new infrastructure to reduce water demand, reduce the need for additional water infrastructure and reduce operating costs.
- DESIGN

Improve the water efficiency of residential, commercial and public buildings when redeveloped or retro-fitted.
- DESIGN

Use drought tolerant native and endemic vegetation for all landscaping.

Suggested Lead

HEALTH , SOCIAL
WELFARE & DISASTER
PREPAREDNESS

One Planet

Sustainable Water

Local & Sustainable Food

Equity & Local Economy

Health & Happiness

Tools: Recommended Policies & Actions

PLANS

The 2011 Sustainable Island Resource Management Zoning Plan (SIRMZP) identified water resources as a central part of the vision for the situation on Barbuda in 2030:

“The concept of sustainable development underlies all development activities and ensures that the integrity of environmental systems is maintained. Consequently, sensitive environmental areas, such as wetlands, mangrove forests, sea grass beds, and coral reefs are protected from development while resource-based activities, such as water extraction, agriculture, fishing, quarrying and waste management are controlled. Innovative technologies are used to ensure an adequate supply of water for agriculture and other uses.”

GOVERNANCE

Barbuda Council should establish mechanisms to work with APUA Water Business Unit and the Department of Environment to align water supply, wastewater management and water protection duties and activities.

The Department of the Environment, APUA and Barbuda Council need to define a water resource management and protection hierarchy on Barbuda and identify standards for water quality (drinking water and discharged wastewater).

Ensure delivery of the following necessary conditions identified within the 2016-2020 Medium-Term Development Strategy (2015):

- NC1.4.2 - Action 8: Improve access to and generation of water for irrigation.
- NC1.4.5 - Action 5: Green Standards for the use of solar power and water storage.
- NC1.6 - Action 8: Intensify efforts to improve efficiency in the provision of utilities – electricity, water and telecommunication.
- NC1.6 - Action 9: Expand water generation capacity.
- NC3.1.1 - Ecosystems management.
- NC3.1.2 - Water resource management.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Public Utilities Act](#)



Water well with solar pump, Codrington
Source: Future Barbuda

WASTEWATER DISCHARGES AND POLLUTION

The island’s freshwater aquifers and surface water features need to be protected from residential, agricultural and commercial sources of pollution.

THE GOAL

Treat, manage and use wastewater and related infrastructure efficiently and economically and formulate a Wastewater Management Plan to control sewage and commercial/industrial discharges.

MEASURE OF SUCCESS

Collect, treat and discharge wastewater that meets or exceeds national water quality standards in a manner which protects public health and the natural water environment.	Maximise the beneficial use of grey water and treated wastewater to reduce the amount of water treated for potable use and preserve fresh water supplies for drinking water.	Develop new wastewater infrastructure that efficiently and economically accommodates the needs of the island residents and safeguards the water supply from the impacts of climate change.
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Land Use and Design Principles

DESIGN	Identify and select options to treat wastewater using techniques which prevent the contamination and degradation of the island’s natural freshwater resources.
DESIGN	Collect rainfall runoff from all building roofs to reduce the volume of treated water used for grey water purposes e.g. toilet flushing, washing, irrigation, vehicle washing etc.
DESIGN	Water efficient building design is mandated for all new infrastructure to reduce wastewater volumes, reduce the need for additional water infrastructure and reduce operating costs.
DESIGN	All new buildings must incorporate wastewater treatment systems, either on-site or connected to a larger neighborhood or broader municipal system, contingent upon the chosen option. Consideration of development incentives for the construction of centralised wastewater treatment systems should be explored explored, potentially as planning gain in commercial development

Suggested Lead

HEALTH , SOCIAL
WELFARE & DISASTER
PREPAREDNESS

One Planet



Tools: Recommended Policies & Actions

GOVERNANCE

Barbuda Council should establish a working relationship with APUA Water Business Unit and the Department of Environment to align water supply, wastewater management and water protection duties and activities.

The Department of the Environment, APUA and Barbuda Council need to define a water resource management and protection hierarchy on Barbuda and identify standards for water quality (drinking water and discharged wastewater).

Ensure delivery of the following necessary condition identified within the 2016-2020 Medium-Term Development Strategy (2015):

- NC3.3 – Waste management and pollution control.

CODES

Where possible use enforcement through the development planning legislation to reduce the risk of pollution to water resources from wastewater discharge.

Introduce standards for industrial wastewater discharges associated with the discharge of highly saline brine from reverse osmosis water treatment plants.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)



APUA River Reverse Osmosis Water Storage Tank for treated water
Source: Future Barbuda

CENTRES AND CORRIDORS

Every community has a place where citizens may gather to meet and interact in a variety of ways. Each of the places can be organised into one of two categories – Centres and Corridors. These places offer a multitude of activities to draw people together and keep them engaged, from daily shopping to places of worship. These places have different needs influenced by their context and the communities that utilise the amenities available. Each place is unique, and policies must be flexible enough to foster and encourage the natural growth of all these places.

THE GOAL

Create a variety of active and accessible places to serve as a focal point for the community and orientate visitors.

MEASURE OF SUCCESS

Identify and establish place types for Centres and Corridors by 2025	Develop adopted local plans by 2027	Centres and corridors will have pedestrian and bicycle connections to the surrounding community.
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Land Use and Design Principles

- DESIGN

Walking and cycling encouraged to local centres supporting healthy lives.
- DESIGN

Encourage ‘active frontages’ from shops, cafes and businesses that accomadate Barbudan life with external spaces for cafe seating and external displays.
- LAND USE

Shops and essential infrastructure, such as schools should be close proximity to the centre and corridors.
- DESIGN

Attractive walking and cycling corridors and public spaces with shade trees, benches etc to promote active use of public realm.

- Tools: Recommended Policies & Actions

PLANS

Define Centres & Corridors. Link to 15-min neighborhoods. Create tailored urban plans, reflecting each location’s unique characteristics. Incorporate local input for alignment with residents’ preferences.

CODES

Support Mixed-Use. Develop zoning rules for diverse activities in Centres & Corridors. Apply design guidelines for harmonious development.

GOVERNANCE

Improve local governance and policies for vibrant Centres & Corridors. Involve the community in decision-making.
- FINANCING

Secure Funding. Obtain investment for infrastructure, beautification, and amenities. Explore public-private partnerships and grants.

PARTNERSHIPS

Collaborate for Activation. Engage government, businesses, nonprofits, and experts for joint investment and activation. Leverage urban planners’ expertise.

KNOWLEDGE

Inform Decision with Data. Research usage patterns in Centres & Corridors. Use insights for future planning.

Raise Awareness. Organise programs on inclusive public spaces’ significance for community interaction and cohesion.

Existing Policy Documents and Maps

- [Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)
- [Public Works and Road Act](#)
- [Public Utilities Act](#)



Performance at the Fisheries in 2021
Source: Future Barbuda

OPPORTUNITY SITES

The ‘Opportunity Sites’ designated in Plans - Volume 3 have the potential to bring about a significant transformation in the well-being of the community and the functioning of Barbuda’s future. These sites unlock a future where Barbuda’s history converges with a promising and sustainable tomorrow.

By forging a collaborative framework involving local stakeholders and the community, we can nurture the evolution of these Opportunity Sites under a unified vision, enhancing their contribution to the betterment of Barbuda. These sites should pinpoint not only infrastructure requirements but also lay out objectives and actions encompassed by the One Planet Action Plan.

THE GOAL

To promote investment in strategic areas that promote realisation of the vision, driven by a community-driven and collectively shaped plan.

MEASURE OF SUCCESS

Number of actions realised under the One Planet Action Plan

Number of partners identified in the One Planet Action Plan to help deliver Opportunity Areas

Land Use and Design Principles

- DESIGN

Identify and develop a plan for opportunity sites in land use plans with local stakeholders and the Barbudan community.
- LAND USE

Support a reasonable level of increased intensity, respectful of local conditions and surrounding neighbourhoods and designate in land use plans.
- LAND USE

Promote and encourage compatible development and in-fill development with a mix of housing types in neighbourhoods close to employment centres, commercial areas, and where local centres are near a 15 minutes walk or cycle.

KNOWLEDGE INFRASTRUCTURE

Schools and resources, such as libraries and museums provide a foundation for learning in the community. These facilities need to be easily accessible to the community and provide multifunctional spaces that allow for lifelong learning.

Technology is vital to the way we learn and gather knowledge and essential to how we communicate with the world. We need to plan for our future technology needs by being flexible enough to allow for new technology which has not yet been discovered, while still embracing the technology we have today.

THE GOAL

To establish a policy framework that seeks to enhance and develop existing knowledge infrastructure and identify gaps in provision, all while securing funding for crucial upgrades.

MEASURE OF SUCCESS

Number of residents participating in lifelong learning.

Access to Internet and on-line education.

Land Use and Design Principles

- DESIGN

Establish a library on Barbuda.
- DESIGN

Identify how best to support improved broadband technology and if this could be incorporated into new road design.
- LAND USE

Identify future school sites, including spaces for continuing education and potentially space for universities to set up a remote education site.
- DESIGN

Provide space for training and skills development for government, businesses, employees, links to higher education providers in Antigua.
- DESIGN

Develop a Barbudan museum as a feature for local knowledge and identity and as a visitor attraction and awareness raising facility.

Suggested Lead

EDUCATION

One Planet



Culture & Community



Equity & Local Economy



Health & Happiness

Tools: Recommended Policies & Actions

PLANS

Develop comprehensive educational plans considering location placement for libraries and museums, and multifunctional spaces for lifelong learning.

Consider strategy for The Holy Trinity Primary School, relocation and reuse of existing school site for alternative education site.

CODES

Establish sustainable building codes to accommodate innovative learning environments. For instance, a building code could mandate the inclusion of solar panels, efficient HVAC systems, and smart metering systems in new constructions.

GOVERNANCE

Create a policy framework for knowledge infrastructure development, addressing gaps and upgrades.

Include professional development training for public and private employees and enterprises linking into training and skills development on Antigua

FINANCING

Source funding from government and private sector partners for life long learning and establishing new institutions, such as a museum and/or library.

Consider need for stand alone facilities or where sharing spaces and staff provide better value.

Explore public-private partnerships and grants to support technology integration and educational facility improvements.

PARTNERSHIPS

Foster collaborations between educational institutions including universities, technology companies, and community organisations utilising the **One Planet Action Plan**.

Partner with telecom providers to leverage ‘right of way’ for broadband infrastructure placement.

KNOWLEDGE

Conduct research on evolving educational technology trends and their potential applications and provide ongoing training for educators to effectively integrate technology in teaching.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



The Sir McChesney George Secondary School
Source: Future Barbuda

CRITICAL INFRASTRUCTURE

Barbuda faces challenges in maintaining and enhancing critical infrastructure, including public works, healthcare, banking services, broadband connectivity, and insurance access. The lack of collaboration and communication between the Barbuda Council and the GOAB Ministry of Public Works has resulted in poor infrastructure maintenance. Additionally, healthcare services, dental care, welfare services, and banking options require improvement. Broadband connectivity and access to insurance products are also essential for future resilience.

THE GOAL
To strengthen critical infrastructure and services on Barbuda for an equitable and sustainable future.

MEASURE OF SUCCESS		
Number of / percentage of completed maintenance projects.	Availability of medical services measured by the number of days qualified healthcare professionals are on Barbuda.	Number of new banking institutions or services introduced on the island.

Land Use and Design Principles

- DESIGN

Conduct a feasibility study to identify the need for a new health facility or phased decant of existing healthcare Centres to area more resilient to flooding and natural disaster.
- DESIGN

Establish healthcare facilities with state-of-the-art equipment and sufficient capacity to meet the growing healthcare demands of the community.
- LAND USE

Identify sites for future critical infrastructure requirements, including energy, water and waste water, communications, emergency services, government services, heathcare, food and agriculture and information technology.
- LAND USE

Establish a model for sustainable development that mitigates the impacts of climate change and enhance the resilience of critical infrastructure through land use planning.

Suggested Lead

WORKS & GENERAL PURPOSES

One Planet



Tools: Recommended Policies & Actions

PLANS

Agree a comprehensive infrastructure plan including maintenance with regular inspections and repairs, as well as future needs.

Conduct a thorough review of welfare services to identify areas for improvement.

GOVERNANCE

Ensure regular meetings and consultations for improved coordination in infrastructure development.

Establish local diagnostic testing capabilities to reduce need for off-island travel for medical tests.

Provide comprehensive dental services or increase the frequency of dental visits.

Develop targeted welfare programs for vulnerable groups.

Promote community well-being and inclusivity through social services and support structures.

FINANCING

Allocate sufficient resources for infrastructure maintenance and timely repairs.

Secure funding for medical diagnostic equipment.

PARTNERSHIPS

Foster collaboration utilising the **One Planet Action Plan**.

Collaborate with local contractors and skilled workers for infrastructure upkeep.

Establish partnerships with regional medical institutions for specialised care.

Collaborate with dental professionals and organisations for regular visits and accessibility to dental care.

Partner with telecommunication providers for high-speed broadband connection.

Foster partnerships with local and regional insurers for tailored insurance products.

KNOWLEDGE

Promote financial literacy and education for Credit Union services.

Raise awareness about the importance of insurance coverage and accessible options.

Conduct oral health awareness campaigns and preventive dental care programs.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Physical Planning Act, 2003](#)

[Environmental Protection Levy Act, 2002](#)

[National Parks Act](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Hanna Thomas Hospital
Source: Future Barbuda

CIVIC, CULTURE & ART SPACES

Barbuda has a **rich history which needs to be preserved** despite recent upheaval.

The main objective for Barbuda’s future civic, cultural, and art spaces should be to create inclusive and vibrant **hubs that foster community engagement, celebrate local heritage, encourage artistic expression, and contribute to the overall well-being and identity of the residents.**

THE GOAL
To create an environment that celebrates Barbuda’s cultural heritage and embraces contemporary culture, bringing together traditional identities and modern aspirations

MEASURE OF SUCCESS
Resurgence of traditions (song, dance, festivals, hunting etc) | Emergence of contemporary/ neo-artforms.

Land Use and Design Principles

- DESIGN** Utilisation of existing, spontaneous nodes for culture/art centres.
- DESIGN** Consider alternatives to the massive structure/gymnasium types to help decentralise arts spaces.
- LAND USE** Preservation of traditional camping and hunting grounds.
- LAND USE** Protection and maintenance of cultural heritage sites
- DESIGN** Create design guidance that accommodates traditional activities, such as horse riding, in Barbuda.

Suggested Lead
TOURISM & CULTURE

One Planet



Tools: Recommended Policies & Actions

FINANCING

Allocate a percentage of the budget of new development to support local cultural and arts spaces and projects.

Implement planning gain measures and potential tourism-related charges to support the maintenance of cultural heritage sites and to support local culture and arts activities, projects and spaces

PARTNERSHIPS

Foster collaboration utilising the **One Planet Action Plan** and encourage visiting researchers to engage with the Action Plan so that their observations can be beneficial to the local community.

Develop partnerships with investors and major enterprise on the island to support and develop the cultural heritage and artistic expression on Barbuda.

KNOWLEDGE

Civic halls for sports and refuge also to be used as arts spaces, multipurpose space.

Establish a virtual and / or physical museum to share Barbuda’s story to a wider audience.

GOVERNANCE

Implement planning gain measures and potential tourism-related charges to support the maintenance of cultural heritage sites and to support local culture and arts activities, projects and spaces

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Fisheries Pavilion at the centre of Barbuda’s nautical culture
Source: Future Barbuda

ENTREPRENEURS & SMALL BUSINESS

Local and small businesses are the fabric of our community. Barbuda’s success depends on these enterprises and the plan should work hard to support them.

Barbudans are seeking **opportunities for creative outlets and economic sustenance**. To assist entrepreneurs, access to other small businesses, suppliers and support facilities are crucial to their success. New businesses need support to increase the likelihood of their sustained success.

THE GOAL

To promote small business and entrepreneurship to foster economic development and engaging livelihoods

MEASURE OF SUCCESS

Availability of relevant support mechanisms for small businesses on Barbuda.

Number of new businesses started and spaces for commerce and testing enterprise.

Number of successful local businesses with varied products and services.

Land Use and Design Principles

- LAND USE

Identify location for training and support, such as a local college, to support business development and entrepreneurship, small business development, customer service, marketing etc.
- LAND USE

Create centres for commerce.
- DESIGN

Improve and expand telecommunications to enable small businesses and support tourism initiatives.
- DESIGN

Expand local banking services to enable small businesses and support tourism initiatives.
- DESIGN

Accessible entrepreneurial hubs should be designated and created close to settlements.
- DESIGN

Consider use of existing vacant buildings for ‘pop up’ businesses if located in central areas.

Tools: Recommended Policies & Actions

PLANS

Develop plans that support entrepreneurship and small business development in Barbuda, outlining specific measures to promote economic diversification and job creation.

Ensure that the built infrastructure is readily available to encourage entrepreneurs & small businesses.

Designate locations for testing and experimental uses by entrepreneurs.

CODES

Establish business-friendly codes and regulations that streamline the process of starting and operating small businesses in Barbuda.

Implement flexible zoning codes that allow for mixed-use spaces and adaptive reuse of existing structures, fostering a vibrant entrepreneurial ecosystem.

GOVERNANCE

Enhance Barbuda Council to provide a conducive environment for entrepreneurs and small businesses to thrive.

Establish a dedicated small business support unit within the government to provide resources, training, and assistance to aspiring entrepreneurs.

FINANCING

Create financing opportunities for entrepreneurs, such as micro-loans, grants, and incentives, to help them access the capital needed to launch and grow their businesses.

Attract private sector investment by offering tax incentives or matching funds to support small business initiatives.

Encourage financial institutions to establish branches or shared banking facilities.

PARTNERSHIPS

Utilise One Planet to create partnerships among government, local groups, and international agencies for mentorship, workshops, and networking for entrepreneurs.

Collaborate through One Planet with tourism entities to enhance connections between small businesses and tourism, capitalising on the island’s attractions.

Working with BarbudaGo or establishing a new local business partnership for coordinated marketing and events.

KNOWLEDGE

Promote knowledge sharing through workshops and training sessions focused on entrepreneurship and small business management.

Facilitate knowledge exchange between successful entrepreneurs and aspiring business owners to inspire innovation.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Island Chalet Guest House
Source: Future Barbuda



Central Market in Grenada
Source: Sailing Vessel

FISHERIES

Barbuda’s fisheries are governed by the Antigua and Barbuda Fisheries Act of 2006, with the Fisheries Division, led by the Chief Fisheries Officer, overseeing management and development. Simultaneously, the Barbuda Council, under the Barbuda Local Government Act of 1976, manages fisheries aligned with the Fisheries Act. A shift towards participatory management engages fishers and aims to improve compliance, mitigate conflicts, and enhance governance effectiveness. Collaboratively, the Fisheries Division and the Veterinary and Livestock Division address safety measures for seafood products. Challenges include limited marketing services, diversification, technical support, and the absence of local boat building. Integrated marine governance strategies, including Marine Protected Areas, present opportunities for sustainable development. Efforts are ongoing to integrate blue economy knowledge and community participation into decision-making.

THE GOAL
To preserve and develop sustainable fishing and provide adequate support infrastructure for fisher folk

MEASURE OF SUCCESS
Provision of adequate landing, processing and storage facilities. | Number of linkages with hotels and resorts e.g., boat to table

Land Use and Design Principles

- LAND USE

Diversify Fishing Infrastructure: Allocate space for a local marketing facility and boatyard to enhance the fishing industry, promoting fresh fish availability and income opportunities.
- LAND USE

Central Fish Market: Explore the creation of a central fish market/farm market near the Fisheries Complex to support sustainable fishery practices and marketing.
- DESIGN

Develop Marketing Services: Establish marketing services (entrepreneurship, equipment, and facilities) for efficient post-harvest processing and distribution to international and domestic markets.
- LAND USE

Promote Aquaculture: Allow land uses associated with aquaculture around River Dock and potentially in the Codrington Lagoon, alongside the Fisheries Complex, including land-side processing facilities and marine pens.
- DESIGN

Aquaculture Feasibility Study: Initiate a study to introduce saltwater aquaculture, drawing inspiration from successful models in Cuba and Jamaica for a vibrant and sustainable industry.
- DESIGN

Develop initial designs for saltwater aquaculture systems.
- DESIGN

Market Analysis: Focus on assessing viable fisheries stocks suitable for local growth and local markets.
- DESIGN

Expand Regionally: After establishing initial aquaculture businesses, explore expansion opportunities for regional and international markets.

Suggested Lead

LAND, AGRICULTURE & FISHERIES

One Planet



Tools: Recommended Policies & Actions

KNOWLEDGE

Enhance Local Capacity: Provide fisher training in data collection, storage, and analysis for fishery management.

Public Education: Involve fishers and educate the public to promote knowledge and sustainable practices.

Entrepreneurship Promotion: Support fishers with opportunities, equipment, and post-harvest processing facilities.

Technical Support: Provide assistance for vessel and equipment maintenance, reducing reliance on external services.

PLANS

Professionalize Fisheries: Implement skill development programs to enhance employment standards in the fishery sector, fostering sustainability.

Market Diversification: Promote diversified markets to reduce economic dependence and enhance resilience.

PARTNERSHIPS

Monitoring & Control Collaboration: Strengthen cooperation between the Fisheries Division and local fishers to enhance monitoring systems.

Business Partnerships: Foster collaborations with local businesses and entrepreneurs to support the fisheries sector.

Boat Building Collaboration: Collaborate with local boat builders to enhance self-reliance.

Governance Partnerships: Establish strong partnerships with governmental and non-governmental entities to improve governance.

GOVERNANCE

Address Fisher Dissatisfaction: Tackle fishers’ dissatisfaction and suspicion by promoting trust and transparency in fisheries governance activities. Foster community participation.

Foster Fisher Involvement: Consider establishing local advisory bodies for direct fisher participation in decision-making.

Administrative Silos: Address administrative silos in marine use governance, especially concerning the relationship between the Fisheries Division and the Ministry of Social Transformation and the Blue Economy.

CODES

Quality Control Systems: Develop comprehensive plans for quality control systems and safe fish and seafood handling. This includes regulatory measures, ice machine maintenance, and infrastructure for storage and marketing.

Code Enforcement: Establish and enforce regulations and codes for the fishing industry, focusing on sustainability, safe practices, and quality assurance.

Environmental Impact Reduction: Implement measures to reduce the environmental impact of fishing activities.

ONE PLANET

Aquaculture Development: Collaborate with stakeholders to explore artisan-scale aquaculture and aquaponics to meet local market demand, including non-traditional species and potential commercial-scale aquaculture for export.

FINANCING

Explore Financing Options: Investigate financing opportunities to support local marketing facilities and technical support services.

Sustainable Financing: Align financing strategies with One Planet Living principles, emphasizing ecological and social sustainability.

Circular Economy Promotion: Encourage a circular economy approach where fisheries revenues circulate within Barbuda, reducing the need for protein imports.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Fisheries Act, 2006](#)



Thriving Aquaculture: Sustainable fish farming practices supporting local communities and environmental conservation.

NEIGHBOURHOODS

Compact, efficient communities

Older neighborhoods in Barbuda demonstrate the value of compact, efficient communities where people can easily reach daily destinations by walking and cycling. The concept of a 15 minute neighbourhood is based in establishing policies that support compact, efficient communities similar to Mulatto Quarter and Park (Bell Village) areas.

Reducing car use and encouraging active travel are central to delivering the 15-minute vision. The 15-minute neighborhood serves as an organising principle for development and daily life that makes life more livable for residents, by making neighborhoods safer, quieter, more diverse, inclusive, liveable and affordable

THE GOAL

To strengthen the communal experience of close-knit Barbuda and make way for their aspirations to flourish and establish a network of 15-minute neighbourhoods.

MEASURE OF SUCCESS

Number of infill schemes in existing settlement that will reduced sprawl, variety in activity, efficient services, more usable green space.	Proportion of daily journeys made through active travel (walking, cycling, etc.)	Variety of activity and efficient services in settlements.
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Land Use and Design Principles

- DESIGN

Seek to maintain and improve pedestrian connections within neighbourhoods.
- DESIGN

Establish density standards.
- DESIGN

Establish setback and building height standards.
- DESIGN

Establish minimal infrastructural standards and design criteria for new development.
- DESIGN

Seek to apply above standard where practicable in existing communities through the identification of development parcels and application of standards to new developments within these areas.
- LAND USE

Assess planning applications on their ability to meet the 15-minute neighbourhood criteria.
- LAND USE

Identify and designate areas within a 15-minute neighbourhood for community facilities.

Suggested Lead

LAND, AGRICULTURE & FISHERIES

One Planet

Sustainable Water

Local & Sustainable Food

Land Use & Wildlife

Culture & Community

Equity & Local Economy

Health & Happiness

Sustainable Transport

Zero Carbon

Sustainable Materials

Zero Waste

Tools: Recommended Policies & Actions

PLANS

Develop comprehensive plans that focus on creating self-sustaining neighborhoods where residents can access essential services, amenities, and recreational facilities within a 15-minute walk or bike ride from their homes.

Identify suitable locations for mixed-use developments to ensure a diverse range of services and facilities are available within each neighborhood.

CODES

Establish zoning and building codes that encourage mixed-use development, promoting a balance of residential, commercial, and recreational spaces in each neighborhood.

Encourage sustainable and innovative designs that facilitate walkability, build resilience, prioritise green spaces, and minimize environmental impact.

GOVERNANCE

Empower Barbuda Council and community leaders to actively participate in the planning and decision-making process.

FINANCING

Secure funding from government budgets, grants, and public-private partnerships to support the development and maintenance of infrastructure.

Explore potential financing mechanisms like impact fees, tax incentives, or green bonds to fund sustainable development projects.

PARTNERSHIPS

Use One Planet Action Plan to foster collaborations between government agencies, local businesses, non-profit organisations, and community groups for the successful establishment of 15-minute neighborhoods.

Engage private developers and investors to ensure alignment with the vision and objectives of the One Planet Action Plan.

KNOWLEDGE

Conduct research and data collection to understand the current urban landscape and identify the specific needs of communities in Barbuda.

Promote knowledge sharing and awareness campaigns to educate residents about the benefits of 15-minute neighborhoods.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Teague Street features narrow, walkable streets with alleys.
Source: Future Barbuda

INTENSIFICATION

Brownfield Redevelopment, Infill, and Permitted Development

Efficiently utilise and re-purpose vacant lots, abandoned building ruins, and brownfield sites within developed areas to optimise land use, enhance utility and service provision, and foster community growth.

THE GOAL

To encourage compact, efficient, secure and close-knit neighbourhoods and communities similar to historic neighbourhoods in Barbuda.

MEASURE OF SUCCESS

Reduce amount of underutilised land in existing neighbourhoods that are not in risk areas.

Reduced sprawl, efficient land-use, affordable infrastructure, walkability

Reduction in the number of newly demarcated plots

Land Use and Design Principles

- LAND USE

Identify significant brownfield (previous developed) sites and indicate possible development with regard to mix and typology.
- LAND USE

Encourage mixed-use developments that blend residential, commercial, and public spaces to promote vibrant and walkable neighborhoods.
- DESIGN

Emphasize compact building design with an emphasis on two-story structures to maximize land use efficiency.
- DESIGN

Ensure that redevelopment plans respect and preserve the cultural heritage and architectural aesthetics of the area drawing on density of historical Codrington
- DESIGN

Develop comprehensive design guidelines for infill typologies, specifying considerations for building massing, heights, and architectural character.

Suggested Lead

LAND, AGRICULTURE & FISHERIES

One Planet

Sustainable Water

Local & Sustainable Food

Land Use & Wildlife

Culture & Community

Equity & Local Economy

Health & Happiness

Sustainable Transport

Zero Carbon

Sustainable Materials

Zero Waste

Tools: Recommended Policies & Actions

PLANS

Implement non-traditional subdivision practices in Barbuda, starting with the transformation of vacant, underutilised, or overgrown lots to exemplify mixed land use and dense living.

CODES

Implement zoning and land use codes that support mixed-use development and allow for additional builings or intensification of existing sites.

Establish building and property maintenance codes to address abandoned sites containing ruined buildings. Explore issuing citations, fines, or orders for property owners to repair, renovate, or demolish the ruined buildings to bring them into compliance.

Assess the structural integrity and safety of the ruined buildings to determine if they pose any immediate risks to public safety. If necessary, implement safety measures like fencing, boarding up, or demolition to mitigate hazards.

GOVERNANCE

Establish governance structures ensuring regulation adherence, transparency, and community engagement.

If necessary, consider eminent domain for abandoned properties that pose significant hazards.

Acquire abandoned properties for future development or hold them in a land bank until suitable opportunities arise.

FINANCING

Explore financing options like public-private partnerships and grants to support brownfield redevelopment and infill projects.

Promote rehabilitation and redevelopment through incentives such as tax breaks, grants, or partnerships with developers.

KNOWLEDGE

Foster community engagement through knowledge sharing and awareness campaigns.

Investigate ownership status to determine legal responsibilities and collaborate with private owners as needed.

ONE PLANET

Align intensification efforts with the One Planet framework to enhance sustainability, resource efficiency, and community well-being.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)



RESILIENT CONSTRUCTION

Building control including site & foundation, roofs, walls and openings

Following natural disaster, a stronger Barbuda is one where housing for its people is safe, accessible and familiar. Construction that adheres to existing and accepted building codes, which will ensure that the erected buildings are structurally sound and able to withstand natural disasters.

THE GOAL

To ensure that housing in Barbuda is structurally robust, capable of withstanding natural disasters, and responsive to changing climate conditions, providing Barbudan people with safe and secure homes.

MEASURE OF SUCCESS

Safer housing, characterised by structural soundness and adaptability to the environment.	Number of buildings in poor condition adaptively reused for housing purposes.	Visible and sustained character of the island’s built environment.
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Land Use and Design Principles

- LAND USE

Selection of land parcels that are outside of the pre-determined flood zones and that are not overly exposed to potential high wind speeds.
- LAND USE

Encourage community living / close knit neighbourhood for interdependency of on times of need.
- DESIGN

Ensure in the building process that the main construction components (foundations, walls / beams and columns, roofs) are adequately connected to one another , as it is the junctions that provide the weakest links when not constructed according to accepted building codes.

Suggested Lead

HEALTH , SOCIAL WELFARE & DISASTER PREPAREDNESS

One Planet

Sustainable Water

Local & Sustainable Food

Land Use & Wildlife

Culture & Community

Equity & Local Economy

Health & Happiness

Sustainable Transport

Zero Carbon

Sustainable Materials

Zero Waste

Tools: Recommended Policies & Actions

CODES

Strengthen the enforcement of existing and proposed building codes to ensure that construction adheres to established safety and resilience standards.

GOVERNANCE

Implement a mandatory building approval system to ensure that all construction projects meet safety and resilience requirements.

FINANCING

Access to loans with built-in conditions for the observance of resilient building practices.

PARTNERSHIPS

Partner with known community builders who have established good and safe building practices, referring residents to these trusted sources for construction projects.

KNOWLEDGE

Develop pre-approved design kits that incorporate resilient building practices, making it easier for builders and self-builders to construct safer homes.

Organise construction workshops to educate builders and residents on best practices for resilient construction.

Launch a public campaign focused on safer building practices, providing summarized strategies and information for self-builders.

Provide access to vocational training programs related to the construction industry, enhancing the skills of builders and ensuring the adoption of resilient construction techniques.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Physical Planning Act, 2003](#)

[Fisheries Act, 2006](#)

[Environmental Protection Levy Act, 2002](#)

[Forestry Act](#)

[National Parks Act](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Barbuda Coastal Resort Vernacular showcasing climatic adaptation techniques for emulation (source: Future Barbuda)

PUBLIC OPEN SPACES

Parks, gardens and play spaces

The draft Barbuda Development Plan envisions the thoughtful development and maintenance of public open spaces, encompassing public parks, civic squares, recreational areas, trails, bike trails, streetscapes, hunting preserves, coastal landscapes, and beaches. This plan seeks to create a network of open spaces that enhances the quality of life for all residents.

THE GOAL
The provision of safe, accessible and functional open space in each neighbourhood that can be enjoyed by all.

MEASURE OF SUCCESS
Island development that celebrates and enjoys the amenity of access to quality open space environments, both built and natural

Land Use and Design Principles

- LAND USE

Allocate land for open space within existing communities.
- DESIGN

Develop the accessibility and quality of the environments around all heritage sites. Heritage site are to be developed with sensitivity to the heritage component and the natural environment in which it is sited with further design attention to how these sites are integrated into an island wide open space network.
- DESIGN

Prioritise beaches and beach access as part of the Barbuda open space network
- DESIGN

Public access areas to include adequate parking, restroom amenities, access for the disabled and should include significant environmental and sensitive architectural development.
- DESIGN

Ensure all planning is community driven to ensure facilities and spaces are relevant to the Barbuda community and therefore will thrive. Planning should avoid prescribing open space developments that may not be culturally relevant and inclusive of all segments of the society (gender, age, race and sexuality).
- DESIGN

Plan to include quality open space amenity on all new public service facilities eg. Proposed new port, proposed new airport, proposed new roads and to include public space integration with new tourism developments to ensure open space connectivity throughout the island.
- DESIGN

Allocate land for open space within existing communities while simultaneously setting standards for open space layout and design. Establish funding mechanisms for the development, maintenance, and upkeep of these open spaces, ensuring that the design aligns seamlessly with the character of the Barbuda community, both in the built and natural environment.
- DESIGN

Require new residential developments to incorporate provisions for open spaces.

Suggested Lead

LAND, AGRICULTURE & FISHERIES

One Planet



Tools: Recommended Policies & Actions

KNOWLEDGE

Promote community awareness and advocacy for open spaces through educational campaigns and initiatives.

PLANS

Integrate open space master plan as integral components of the Barbuda Development Plan to guide and prioritise development efforts.

GOVERNANCE

Secure partial funding for open space initiatives from public gain financing generated by private development projects.

CODES

Implement and enforce development codes that prioritise open space provision within new residential and commercial projects.

PARTNERSHIPS

Foster collaborations with private stakeholders, tourism developers, and local businesses to invest in and maintain open spaces.

Ensure that all planning is community-driven, guaranteeing that open space developments are culturally relevant and thrive within the Barbuda community.

FINANCING

Partial funding from public gain financing from private development initiatives

Community activities to raise funds and informal development initiatives

ONE PLANET

Utilise One Planet Action Plan as a tool to engage the community and stakeholders to build ‘DIY’ parks, gardens and play spaces.

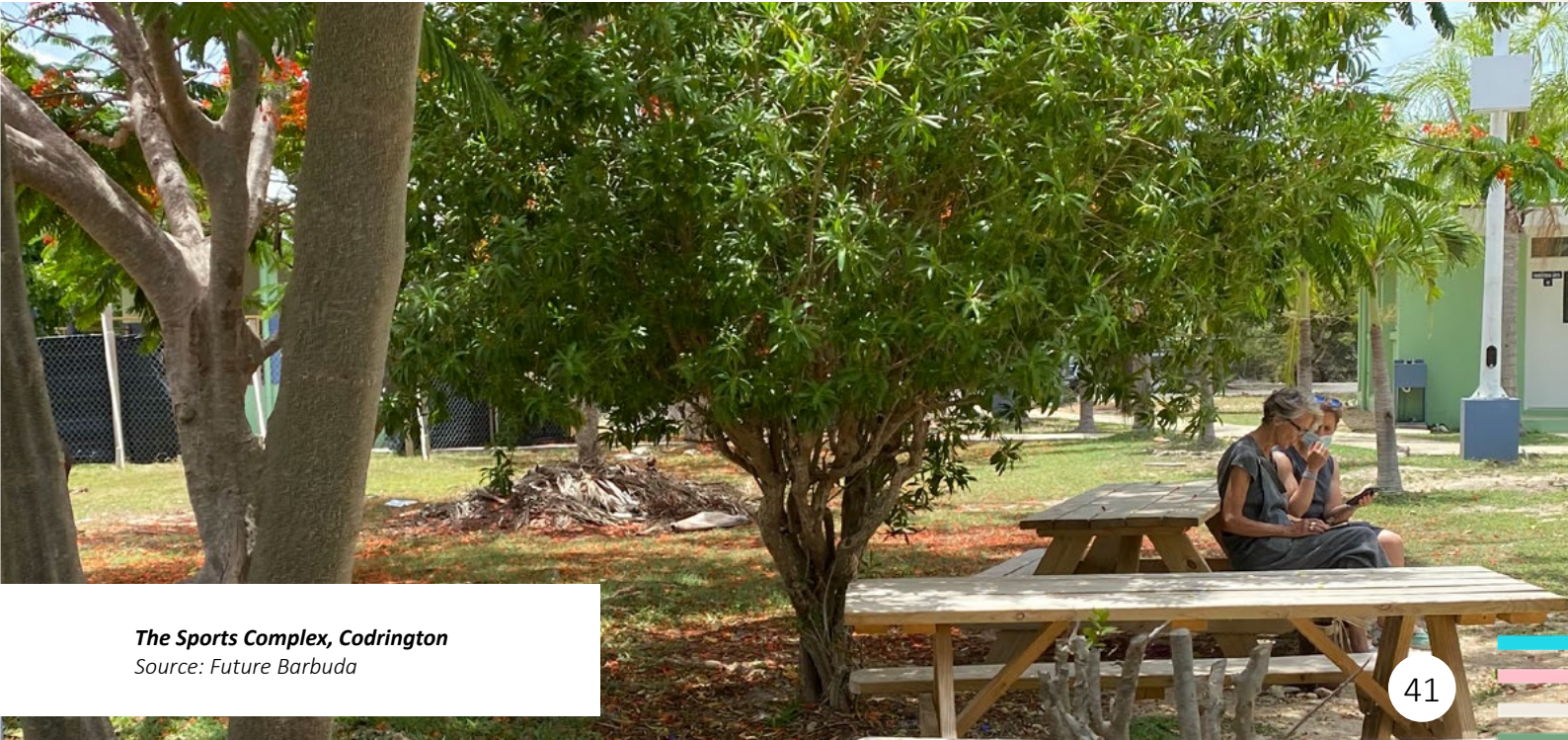
Align open space development efforts with sustainability principles, emphasising resource efficiency and minimal environmental impact, while promoting a balanced coexistence with nature.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[National Parks Act](#)



The Sports Complex, Codrington
Source: Future Barbuda

RECREATIONAL SPACES AND SPORTS

Barbuda aims to develop a range of recreational spaces for the enjoyment of residents and visitors alike. These spaces encompass both centralised and decentralised facilities to cater to the diverse needs and interests of the community.

THE GOAL

To create recreational spaces that contain facilities and amenities tailored to meet the unique needs of each community on the island, fostering a healthy and active lifestyle.

MEASURE OF SUCCESS

Ability of Barbuda residents to access a variety of recreational facilities, both natural and developed, within their communities.

Land Use and Design Principles

- LAND USE

Locate recreational spaces throughout villages to accessible to all residents and ensuring equitable distribution.
- DESIGN

Formulate a design approach that allows for the multi-purpose use of recreational spaces, accommodating a wide range of activities and interests.
- DESIGN

Include the old airport as part of an open space development plan, re-purposing it for community and recreational use.
- DESIGN

Include the natural environment in sports development. Develop sports initiatives that do not require major infrastructural development Eg. Marine and beach orientated sports. This initiative does not usually have infrastructural costs. Terrestrial sports development could include off road cycling, hiking and trail running.
- DESIGN

Prioritise the upgrade and develop existing facilities where possible eg. Cricket field, horse racing track and school facilities
- DESIGN

Incorporate walking and cycling trails into island circulation development, promoting environmentally friendly and active modes of transportation.

Suggested Lead

SPORTS & YOUTH AFFAIRS

One Planet



Tools: Recommended Policies & Actions

KNOWLEDGE

Promote community awareness and education about the importance of sports and recreation for health and well-being through campaigns and initiatives.

PLANS

Develop a National Sports Policy to support the development of local sports and recreational programs, ensuring alignment with community needs.

GOVERNANCE

Develop National Sports policy to develop local sports.

Engage with Antigua and Barbuda Government to access national coaching for desired sports.

Encourage community engagement in sports and recreation initiatives to raise funds, organise events, and support informal development efforts.

CODES

Engage with the Antigua and Barbuda Government to access national coaching for desired sports, fostering talent development.

Partner with international diaspora and universities to access guest coaching and scholarship opportunities, enhancing Barbuda’s sports capabilities.

PARTNERSHIPS

Engage with international diaspora to access guest coaching.

Engage with international universities to request assistance and scholarship opportunities.

FINANCING

Establish sustainable funding mechanisms for the development, maintenance, and upkeep of recreational spaces, drawing from both public and private sources.

Foster collaborations with private stakeholders, tourism developers, and local businesses to invest in and maintain sports and recreation facilities.

ONE PLANET

Align green infrastructure development with sustainability principles, emphasising resource efficiency, minimal environmental impact, and a harmonious coexistence with nature, in line with the One Planet framework.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[National Parks Act](#)



The Sports Complex, Codrington
Source: Future Barbuda

GREEN INFRASTRUCTURE

Eco-tones / Enhanced Greening, Sustainable Urban Drainage Systems

The vision is to transform Barbuda’s green infrastructure to meet the developmental needs of its residents while fostering environmental natural systems’ interconnectivity across the island. This comprehensive system plays a pivotal role in realising a “ridge to reef” approach for environmental management.

THE GOAL

To establish a uniform set of island-wide standards for the provision of green infrastructure to enhance sustainability, resilience, and environmental integrity across Barbuda.

MEASURE OF SUCCESS

Integration of green infrastructure into Barbuda’s overall infrastructural framework, safeguarding both maritime and terrestrial environments.

Land Use and Design Principles

- DESIGN

Incorporate green infrastructure elements into the island’s drainage system, including drains, swales, bio-swales, rain gardens, green roofs, and permeable pavements. These strategies conserve water, reduce runoff, and enhance runoff quality, primarily for marine environment protection (Ridge to Reefs). Additionally, they can be employed to direct and capture runoff for terrestrial re-use.
- LAND USE

Develop terrestrial catchment areas, including ponds and lakes, and designate water table recharge areas to safeguard freshwater resources.
- DESIGN

Secure green infrastructure provisions through the permitting process for new developments, ensuring their incorporation into the island’s fabric.
- DESIGN

Develop a comprehensive policy framework related to sustainable drainage requirements and green building design, drawing guidance from established standards like USGBC LEED and SITES.
- DESIGN

Establish robust monitoring mechanisms to ensure consistent compliance with green infrastructure provisions and standards.
- DESIGN

Design landscape and environmental corridors throughout the island that connect land preserves with urban development to the coastal environment, facilitating biodiversity and ecosystem health.
- DESIGN

Promote tree planting as a key strategy for enhancing environmental connectivity, mitigating the heat island effect, and improving overall environmental quality.
- DESIGN

Design ecotones and environmental corridors with endemic and native plant species organised in appropriate plant communities, fostering ecosystem restoration.

Suggested Lead

HEALTH , SOCIAL WELFARE & DISASTER PREPAREDNESS

One Planet

- Sustainable Water

Local & Sustainable Food

Land Use & Wildlife

Culture & Community

Equity & Local Economy

Health & Happiness

Sustainable Transport

Zero Carbon

Sustainable Materials

Zero Waste

Tools: Recommended Policies & Actions

PLANS

Incorporate green infrastructure principles into plans that strategically connecting the island’s upland ridges to its coastal reefs through villages, to safeguard critical ecological corridors.

CODES

Green Building Programs: Reference established green building programs such as Green Globe, BREAM, USGBC LEED, WELL, and SITE programs to inform green infrastructure development and design.

Third-Party Verification: Encourage the adoption of third-party verification programs in new developments and refurbishment work to ensure compliance with green infrastructure standards.

GOVERNANCE

Engage local communities in the planning and development of green infrastructure, fostering a sense of ownership and responsibility for its success.

FINANCING

Foster partnerships between public and private stakeholders to secure financing for green infrastructure projects, leveraging diverse funding sources.

KNOWLEDGE

Encourage the development of native and endemic plant species for island development and potential export businesses. This initiative can stimulate micro-businesses that may eventually scale up or operate as community collectives. All planting materials should be sourced locally or from seed imports to prevent the importation of diseases into Barbuda.

Promote awareness campaigns and training programs to educate residents about the benefits of green infrastructure and sustainable landscaping practices.

ONE PLANET

Incorporate green infrastructure planning within the framework of One Planet Living (OPL) principles, aligning development with sustainability and resource efficiency goals.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Physical Planning Act, 2003](#)

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[Public Utilities Act](#)



Cave near Two Foot Bay
Source: Future Barbuda

TREES & SHADE

Provision of trees and shade has a multi-faceted impact, benefiting both the environment and community. Beyond providing relief from the sun, strategic tree planting cools the environment, reduces heatwave impacts, and combats soil erosion. This aligns with Barbuda’s commitment to sustainability by sequestering carbon and fostering a healthier ecosystem. Shaded areas also promote outdoor activities, community gatherings, and tourism, fostering social interactions and boosting the local economy. By creating a greener landscape, Barbuda addresses environmental concerns, enhances its environment, and reinforces its cultural identity as a sustainable and vibrant island community.

THE GOAL

To strategically plant trees and create shaded spaces that enhance natural cooling and contribute to the island’s overall well-being.

MEASURE OF SUCCESS

Measure success by tracking the increase in tree canopy coverage across different areas of Barbuda.

This includes assessing the variety of tree species planted to promote ecological diversity and resilience.

Monitoring temperature reductions in shaded areas compared to non-shaded spaces.

Utilise temperature sensors to quantify the cooling effect provided by the trees and shade.

Measure success by observing increased community utilization of shaded spaces.

Collect feedback from residents and visitors to understand how the presence of trees and shaded areas positively impacts their experiences on the island.

Land Use and Design Principles

- LAND USE

Strategic Planting. Plan and execute tree planting in locations that maximise cooling effects, mitigate heatwaves, and combat soil erosion, considering community needs and environmental benefits.
- DESIGN

Ecosystem Integration. Integrate trees and shaded areas into urban planning and development to mimic natural ecosystems, promoting biodiversity and enhancing ecological resilience.
- DESIGN

Multi-Functional Design. Create shaded spaces that serve multiple functions, such as supporting outdoor activities, community gatherings, and local tourism, fostering social interactions and economic vibrancy.
- DESIGN

Develop local endemic and fruit tree nursery. Nursery could be private or state run. Nursery will support development and conservation efforts on the island by providing easy access to plant materials that are not typically heavily invested on in most nursery operations because of the longer wait for return on investment. Ornamental varieties can be utilised based on local and historical tastes
- DESIGN

Government should provide a island dendrologist or similar expert to manage the islands tree stock. This specialist could work through either the Ministry of the Environment or the Ministry of Agriculture.
- DESIGN

Research and local knowledge should be used to determine suitable species for Barbuda as it relates to suitability to local plant quantities, fruit production and resilience to tropical storm conditions.

Tools: Recommended Policies & Actions

PLANS

Conduct a comprehensive assessment of existing tree canopies to inform planning and tree planting initiatives.

Develop a strategic plan that outlines specific tree planting locations, species selection, and maintenance schedules.

Integrate trees and shaded areas into urban development plans to enhance the quality of life for residents and visitors.

CODES

Building codes and development permissions can address loss of trees by mandating replacement tree planting as part of the development permission process.

Tree Preservation Ordinance: Implement regulations that require the preservation of mature trees during construction and development projects.

Establish guidelines for the selection of tree species that are well-suited to Barbuda’s climate and environmental conditions.

Shade Requirement in Public Spaces: Mandate shade provision in public spaces and outdoor recreational areas to enhance comfort and safety.

GOVERNANCE

Organise workshops and public forums to involve residents in decision-making regarding tree planting and shaded space design.

KNOWLEDGE

Develop educational programs and materials to increase public awareness about the importance of trees and shaded areas in Barbuda.

Offer training programs for municipal staff and volunteers on tree care and maintenance best practices.

PARTNERSHIPS

Collaborate with local businesses and organisations to fund and support tree planting and shaded space development.

Partner with environmental non-governmental organisations for expertise and resources to promote tree preservation and reforestation efforts.

ONE PLANET

Sustainability Certification: Pursue One Planet Partnership certification to demonstrate commitment to sustainable practices and integration of trees and shaded spaces into Barbuda’s cultural identity.

Consider a carbon offset program, where the carbon sequestration benefits of trees are quantified and used to offset emissions elsewhere on the island.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Planting at Island Chalet
Source: Future Barbuda

TRAILS

An environmentally sensitive and progressive Barbuda should offer resident and visitors options for circulation and recreation on the island.

THE GOAL

To provide a system for walking and cycling that will connect environmental, cultural and historical sites on the island.

MEASURE OF SUCCESS

The ability to circulate around the island as a pedestrian and a cyclist

Land Use and Design Principles

LAND USE	Integrate land use and growth with trail networks.
DESIGN	Design of multi-modal transportation routes to allow for safe pedestrian and cycling trails on major vehicular roads and circulation routes.
DESIGN	Design of dedicated pedestrian and cycling routes to access natural, environmentally sensitive and heritage sites on the island.
DESIGN	Select sensitive and dangerous sites should be catalogued and assessed to determine if suitable for general and visitor use. In some case trails should be utilised by local guides only to protect the environment and for visitor safety. This potential trail component will assist in further development of potential micro-business.
DESIGN	Educational modules should be developed for tour guides to provide visitor access with guides to sensitive and dangerous trails.
DESIGN	Barbuda to develop local construction details for a range of trail types. Construction could range from concrete, compacted loose aggregate to man cleared routes through the environment.
DESIGN	A developed Barbuda trail system should include interpretative, directional and safety signage.
DESIGN	There will be opportunities for landscape redevelopment of developing trails. Landscape re-development should include endemic and specific site appropriate plant community arrangements. An exception could be the use of fruit bearing plants.
DESIGN	Trail system should be a loop and interconnected. development of potential micro-business.
DESIGN	Educational modules should be developed for tour guides to provide visitor access with guides to sensitive and dangerous trails.
DESIGN	Barbuda to develop local construction details for a range of trail types. Construction could range from concrete, compacted loose aggregate to man cleared routes through the environment.
DESIGN	A developed Barbuda trail system should include interpretative, directional and safety signage.
DESIGN	There will be opportunities for landscape redevelopment of developing trails. Landscape re-development should include endemic and specific site appropriate plant community arrangements. An exception could be the use of fruit bearing plants.
DESIGN	Trail system should be a loop and interconnected.

Suggested Lead

One Planet

WORKS & GENERAL PURPOSES



Tools: Recommended Policies & Actions

PLANS

Develop plan for formal trail network.

GOVERNANCE

Secure partial funding for trail network from public gain financing generated by private development projects.

CODES

Implement and enforce development codes that prioritise walking and cycling routes connecting new residential and commercial projects.

PARTNERSHIPS

Foster collaborations with private stakeholders, tourism developers, and local businesses to invest in and maintain trail network.

Ensure that all planning is community-driven, guaranteeing that trail network serves the community.

FINANCING

Partial funding from public gain financing from private development initiatives

Community activities to raise funds and informal development initiatives

ONE PLANET

Utilise One Planet Action Plan as a tool to engage the community and stakeholders to build trail networks.

Align formal walking and cycling trails with sustainability principles, emphasising sustainable movement and minimal environmental impact, while promoting a balanced coexistence with nature.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Physical Planning Act, 2003](#)

[Environmental Protection Levy Act, 2002](#)

[Forestry Act](#)

[National Parks Act](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Unmarked trail in Barbuda
Source: Future Barbuda

CONNECTIVITY

Pedestrian, cycle and road network

Barbuda needs to develop a rational, well-connected road network with clear hierarchy, providing connectivity and access through Codrington and all settlement areas on Barbuda. The approach needs to integrate with the concept of creating 15-minute neighbourhood communities.

THE GOAL
To create a standard mobility network providing equitable access to all users, both motorised and active, that supports and sustains the social and economic fabric of Barbuda.

MEASURE OF SUCCESS		
Mobility network coverage of the island’s settled area.	Connectivity between residential areas and key points of interest for economic, leisurely, educational and institutional uses.	Travel time between key activity generators and major residential areas is minimised, while congestion levels are optimised across the road network.

Land Use and Design Principles

- LAND USE** Integrate land use and growth with transportation and mobility networks and services.
- DESIGN** Locate key activities along major mobility corridors and prioritise transit-oriented development. Coordinate parking enforcement and traffic control approaches with the sustainability and liveability goals stated above.

Suggested Lead One Planet

WORKS & GENERAL PURPOSES


Culture & Community


Equity & Local Economy


Health & Happiness


Sustainable Transport


Zero Carbon

Tools: Recommended Policies & Actions

PLANS

Adopt the transportation and mobility network outline in the Master Plan .

Define transportation and mobility policies to serve as planning framework for transportation and mobility services.

Define road network and trail system.

Adopt a road classification system denoting River Road, Two-Foot Bay Road and Coco Point Road as arterial roads, Lagoon Street, Lagoon Drive, Low Mission Street and Warbler Drive as collector roads, and all other roads as local roads. Road classes stipulate operating speeds, access restrictions, and the general focus of road legislation.

Develop Asset Management Programme that incorporates the inventory and condition of road assets, allowing their monitoring, tracking, maintenance and replacement costs, and works planning:

- Repair existing roads and re-align where possible to complete a continuous grid.
- Replace missing street signs.
- Introduce intersection controls – stop signs on local roads and at key major intersections on arterial and collector roads.
- Upgrade Spanish Well Road to collector standard, to function as bypass for River Road in the event of flooding.

CODES

Adopt design standards for each road classification, according to similar standards in Caribbean nations, or adopting the FHWA/AASHTO standards.

Adopt policing standards and signage strategy.

GOVERNANCE

Adopt Policy stipulating Barbuda Council responsibilities with maintenance and operation of the island road network.

Set clear road rights-of-way to delineate areas of responsibility for the Ministry of Public Works and Barbuda Council, and to specifically outline space dedicated to transportation and mobility facilities.

FINANCING

Develop Capital Road Infrastructure Plan and corresponding budgets to allow for construction of new roads.

Develop Road operating budgets to cover ongoing operating and maintenance cost of the island’s road network.

PARTNERSHIPS

Coordinate road network expansion with private developers and tourism facilities, to optimise connectivity and efficient investment.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



River Road
Source: Future Barbuda

PUBLIC TRANSPORT & TAXIS

Barbuda currently faces a transportation challenge due to the absence of a comprehensive public transport system. Recognizing this need, there is a growing call to develop an island-wide Public Transport or Community Mobility Strategy. While a bus shuttle service, once connecting Codrington, is no longer operational, private development endeavors like PLH have hinted at introducing shuttle services for their workers. As Barbuda’s outlying areas are developed, there is a unique opportunity to establish fixed bus routes to enhance mobility on the island, where public transport, walking, cycling, and shared vehicles could be preferable to private car ownership. Neighboring islands’ successful adoption of electric bus services also provides inspiration for future transit options, contingent on Barbuda’s electrical grid development.

THE GOAL

To create an integrated mobility system based around a public transport service and micro-mobility nodes for access to shared vehicles, cars, e-bikes etc.

MEASURE OF SUCCESS

Increase coverage across Barbuda.	Reduce island carbon footprint through reduction of community GHG emissions.	Connect all major activity generators with residential areas	Increase modal share of non-auto modes of transport.
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Land Use and Design Principles

- LAND USE

Coordinate land use planning with public/community transport plans.
- DESIGN

Focus higher densities with optimal public transport service.
- DESIGN

Integrate mobility hubs in existing and new communities

Suggested Lead

One Planet

WORKS & GENERAL PURPOSES



Culture & Community



Equity & Local Economy



Health & Happiness



Sustainable Transport



Zero Carbon

Tools: Recommended Policies & Actions

PLANS

Explore the feasibility of reintroducing a bus shuttle service for public use, considering routes to and from Codrington.

Prepare and adopt a Public Mobility Transport Strategy and Service Plan outlining a core route system, defining PT as a core service provided by Barbuda Council.

Consider establishing a local Transport Board or Authority with by-laws, code of conduct, institutional and governance structure, and service plan in longer term.

Determine optimal service delivery structure as either a public system or private service provider.

GOVERNANCE

Lay out a PT service committee within Barbuda Council, with assigned board.

Adopt by-laws and code of conduct for new PT service.

Employ PT Service general manager and administrative staff, acquire vehicle fleet, and employee full-time operators/drivers.

Conduct regular assessments and adjustments to the mobility strategy to address changing transportation needs and opportunities on the island.

FINANCING

Develop yearly capital and operating plan to identify fleet and equipment acquisition, and ongoing operating and maintenance costs.

Interface with GOAB, regional and international funding mechanisms to jump-start the service, assist with initial fleet acquisition, and supplement operating revenue streams.

PARTNERSHIPS

Coordinate with major employers and tourism sector and leverage synergies.

Investigate potential private-sector partnerships, like PLH, to provide shuttle services for employees and workers.

Learn from neighboring islands’ experiences with electric bus services, with a focus on potential implementation based on the development of Barbuda’s electrical grid.

ONE PLANET

Engage the local community and gather their input to ensure the mobility system aligns with their needs and preferences.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Bus Shelter
Source: Future Barbuda

MICRO-MOBILITY

Micromobility at tourist destinations is considered an addition to the existing transport options, which allows for better accessibility to main tourist attractions and, on a macroscale, helps to combat congestion and adverse environmental effects. The first wave of micromobility could be attributed to the development of bike-sharing. The next wave is connected to the development of e-scooters, monowheels, and similar. Often overlooked, on-foot movement is also increasingly welcome by promoting pedestrianization. Car sharing and car pooling should also be explored.

THE GOAL

To establish a comprehensive micromobility network, promoting accessible, eco-friendly transportation options that enhance community connectivity, reduce carbon emissions while ensuring safe and equitable access for all.

MEASURE OF SUCCESS

The number of people regularly using micromobility options, such as bicycles, electric scooters, or other small vehicles.

Trend to lower levels of car ownership despite increase in income, compared with trends on Antigua

Tracking safety records, including the number of accidents, injuries, or safety incidents involving micromobility users.

Land Use and Design Principles

LAND USE	Mixed-Use Development: Encouraging mixed-use development that integrates residential, commercial, and recreational spaces can reduce the need for long-distance travel, making micromobility options more feasible for short trips within communities.
DESIGN	Pedestrian-Friendly Infrastructure: Designing streets and urban spaces with a focus on pedestrian safety and comfort benefits micromobility users as well. Wider sidewalks, pedestrian crossings, and traffic calming measures contribute to a more pleasant experience for micromobility commuters.
DESIGN	Bicycle Parking and Charging Stations: Providing ample and secure parking facilities for e-scooters, e-bikes, and electric vehicles encourages people to adopt these modes of transport. Additionally, strategically located charging stations for electric vehicles will alleviate range anxiety and make EV usage more convenient.
DESIGN	Dedicated Micromobility Lanes: Designing separate lanes or pathways specifically for micromobility vehicles, such as e-scooters and e-bikes, can enhance safety and encourage their use. These lanes should be physically separated from vehicular traffic and be of a high quality to minimise conflicts and promote use.
DESIGN	Traffic Calming Measures: Implementing traffic calming measures, like speed humps and roundabouts, can reduce vehicle speeds and make roads safer for micromobility users, promoting a bike-friendly and walkable environment.

Suggested LeadOne Planet

WORKS & GENERAL PURPOSES



Tools: Recommended Policies & Actions

PLANS

Integrate public and private micromobility devices with Barbuda’s PT strategy. Make micro-mobility an extension of the PT service, allowing convenient “last-mile” connectivity between PT facilities and points of origin/destination.

CODES

Develop policies and by-laws regulating and legislating the use of micromobility devices, their acceptable use on-road and off-road, parking requirements, maintenance standards, and safety requirements.

Integrating sustainable transportation solutions into planning and zoning regulations to promote compact, development that supports the use of micromobility.

GOVERNANCE

Incentives and Policy Support: Governments can offer incentives, such as tax benefits or subsidies, to promote the use of micromobility vehicles. Additionally, policies like low-speed zones and traffic restrictions can prioritise micromobility in certain areas.

financing

Consider financing by road taxes for conventional vehicles or fuel tax on fossil fuels

PARTNERSHIPS

Cycle Hire Schemes: Exploring partnering with or learning from established cycle hire firm to provide bike / e-bike / e-scooter rental on island.

Accessibility and Inclusivity: Ensuring that micromobility infrastructure is accessible to people of all ages and abilities is crucial for promoting widespread adoption. Considerations for those with disabilities and older adults should be incorporated into the design process.

KNOWLEDGE

Public Awareness and Education: Conducting public awareness campaigns and educational programs about the benefits of micromobility and proper road usage can increase acceptance and encourage people to adopt these sustainable transportation options.

ONE PLANET

Encourage car sharing and carpooling in Barbuda through awareness campaigns, incentives, and local

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



Skootel provide e-bikes and e-scooters in Puerto Rico
Source: Skootel



AIRPORT

The construction of a new airport in Barbuda represents a significant step toward advancing the island’s international connectivity, fostering economic growth, and expanding its tourism industry. This development aims to not only improve transportation access but also uphold aviation safety standards and environmental considerations. The new airport will play a vital role in Barbuda’s development, benefiting both residents and visitors alike.

THE GOAL

To enhance international connectivity, boost economic development, and promote tourism while ensuring aviation safety and environmental responsibility.

MEASURE OF SUCCESS

Achieving international aviation certification

The new airport’s positive contribution to Barbuda’s economy

Addressing bird strike risks

Land Use and Design Principles

- LAND USE

Implement habitat management measures to deter bird activity around the landfill and airport.
- LAND USE

Explore options for relocating or improving waste management facilities in the area.
- LAND USE

Assess and adjust the airport’s layout to minimize potential conflicts with wildlife and the landfill.
- DESIGN

Conduct a comprehensive risk assessment for bird strikes and visibility concerns at the new airport site in Barbuda, considering its proximity to the landfill. Ensure this assessment addresses potential wildlife interference with aircraft operations and the impact on flight safety.
- DESIGN

Collaborate with environmental experts and aviation authorities to develop and implement measures to mitigate bird strike risks, such as habitat management, bird deterrent systems, and waste management practices at the landfill to reduce attraction for birds.
- DESIGN

Prioritize safety and environmental compliance in the design and construction of the new airport. Ensure facilities and infrastructure are in place to meet international aviation standards.
- DESIGN

Consider the findings of previous Environmental Assessments in 2018 and 2019 to guide the airport’s layout and infrastructure design, taking into account environmental, ecological, and socio-economic impacts.

Tools: Recommended Policies & Actions

PLANS

Collaborate with aviation experts to create a detailed airport development plan that includes bird strike risk mitigation strategies.

Incorporate findings from previous Environmental Assessments (2018 and 2019) into the airport’s layout and infrastructure design.

CODES

Develop and implement strict waste management guidelines, emphasizing responsible disposal practices to minimize bird strike risks.

Monitor and enforce compliance with these codes, and impose penalties for non-compliance when necessary.

GOVERNANCE

Form a dedicated task force or committee responsible for airport safety, environmental compliance, and bird strike risk management.

Collaborate with international aviation authorities to stay informed of best practices and safety standards.

Establish a reporting and accountability structure to maintain transparency in the decision-making process.

PARTNERSHIPS

Engage in partnerships with environmental experts, aviation authorities, and local organizations to implement effective mitigation measures.

Share knowledge and research findings on bird strike risks with international aviation partners for collective risk management.

KNOWLEDGE

Conduct a comprehensive bird strike risk assessment, incorporating wildlife interference with aircraft operations, and environmental factors.

Regularly update knowledge and data on bird activity around the landfill and airport.

Existing Policy Documents and Maps

- [Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)
- [Environmental Protection & Management Act, 2019](#)
- [Physical Planning Act, 2003](#)
- [Environmental Protection Levy Act, 2002](#)
- [Public Works and Road Act](#)
- [Public Utilities Act](#)



SEAPORT / FERRY

Marine transport in Barbuda is undergoing significant transformations to enhance accessibility and expand its services. Commercial operators, such as the Barbuda Express and Typhoon Express, currently facilitate marine travel to and from the island. The GOAB Port Authority is taking steps to elevate the River Dock into a fully-fledged seaport, equipped to accommodate larger vessels and offer comprehensive services, including international customs clearance. While these developments hold the potential for progress, it’s essential to address challenges like sea level rise and security concerns, particularly regarding private marine vessels and passport requirements for travelers between Barbuda and Antigua.

THE GOAL

To expand and enhance marine transportation infrastructure and services, transforming the River Dock into a fully functional seaport and improve accessibility, logistics, and security, ultimately bolstering the island’s connectivity.

MEASURE OF SUCCESS

Barbuda recognised as a regional and international port, with adequate facilities and systems to support local and regional trade and travel.

Land Use and Design Principles

- LAND USE

Develop a comprehensive land use plan for the area surrounding the expanded seaport. This plan should consider zoning regulations, green spaces, and infrastructure to create a well organised and aesthetically pleasing environment.
- DESIGN

Environmental Considerations: Prioritize sustainable design practices that minimize environmental impacts. This includes designing the seaport to withstand sea level rise and storm surges, using environmentally friendly construction materials, and implementing waste management systems.
- DESIGN

Accessibility: Ensure the seaport is designed to be accessible to all passengers, including those with mobility challenges. This involves constructing ramps, walkways, and facilities that are compliant with accessibility standards.
- DESIGN

Safety and Security: Integrate security measures into the design, including surveillance cameras, secure entry and exit points, and clear emergency evacuation plans.
- DESIGN

Efficiency and Flow: Design the seaport layout to optimize passenger and cargo flow, reducing congestion and wait times. Consider features like well-Organised waiting areas and efficient customs and immigration processing facilities.
- DESIGN

Aesthetics: Strive for a visually appealing design that reflects the local culture and environment, creating an attractive gateway to Barbuda.
- DESIGN

Resilience: Incorporate resilient design features to mitigate the impacts of natural disasters and climate change. This may include elevated structures, flood barriers, and hurricane-resistant building materials.
- DESIGN

Inter-modal Integration: Plan for seamless connections between the seaport and other modes of transportation, such as road networks, to facilitate passenger and freight movements.

Suggested LeadOne Planet

HEALTH , SOCIAL
WELFARE & DISASTER
PREPAREDNESS



Health &
Happiness



Sustainable
Transport



Zero
Waste

Tools: Recommended Policies & Actions

PLANS

Develop Marine Services Strategy

Delineate Barbudan vs GOAB service boundaries and infra-structure responsibilities.

Expand the River Dock to accommodate larger passenger and freight vessels, prioritizing safety and efficiency and delineate wharf space for small crafts, government wharf for commercial-industrial and private wharf

Develop a comprehensive seaport expansion plan that considers sea level rise and storm surge impacts to ensure the long-term resilience of the infrastructure.

Introduce effective customs and immigration procedures for international arrivals and departures, enhancing security and regulatory compliance.

CODES

Establish and enforce maritime regulations and codes that govern ferry and seaport operations, focusing on safety, environmental protection, and quality standards.

Implement strict adherence to passenger identification and verification requirements for all travelers to enhance security and immigration control.

GOVERNANCE:

Strengthen the governance of marine transport by coordinating efforts between the GOAB Port Authority, Barbuda Council, and other relevant authorities to ensure a unified approach.

Enhance surveillance and enforcement of marine activities, particularly at the River Dock, to curb unauthorized arrivals and departures.

PARTNERSHIPS:

Foster collaborations with experienced marine transport operators and industry experts to gain insights and best practices for seaport and ferry service management.

Seek partnerships with international agencies or organizations to improve customs and immigration processes and security.

KNOWLEDGE

Conduct thorough risk assessments, including bird strike risk assessments, to understand potential hazards and inform safety measures.

Provide training and capacity-building for staff involved in seaport and ferry service to ensure efficient operations, safety, and compliance.

These recommendations and actions aim to facilitate the growth and improvement of the seaport and ferry services in Barbuda, promoting safety, efficiency, and connectivity.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Physical Planning Act, 2003](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)



River Dock today
Source: Future Barbuda

WASTE, RECYCLING AND REUSE

The island of Barbuda currently grapples with a fragmented waste management system that falls under the purview of various authorities, primarily the Barbuda Council. The island faces substantial challenges related to legislation, economics, society, and institutions. This complex issue is exacerbated by the absence of a structured waste management strategy and inadequate waste collection services. Consequently, waste, including hazardous materials, is often indiscriminately disposed of on open land near the locked landfill. This practice is further complicated by administrative uncertainties regarding responsibilities and a lack of cost recovery mechanisms. Collaboration between various entities, including the government of Antigua and private contractors, is fraught with funding issues, hindering effective waste management. The situation underscores the urgent need for comprehensive and sustainable waste management solutions.

THE GOAL

To reduce the reliance on solid waste landfills to manage the island’s domestic and commercial waste an transition towards more sustainable waste management practices and to work towards One Planet goal of achieving zero waste.

MEASURE OF SUCCESS

The existing solid waste management facility is repaired and maintained, allowing adequate management of leachate.	Waste streams are separated, with different waste types transferred to the most appropriate processing methods.	The volume of commercial and industrial waste generated on island is reduced.	Maximize the circular economy whereby reusable material is identified and re-directed to local or off-island end points.
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Land Use and Design Principles

- DESIGN

Establish a clear waste management framework to define responsibilities between Barbuda Council and GOAB.
- DESIGN

Investigate modern waste treatment technologies for suitability in Barbuda.
- LAND USE

Explore potential relocation sites for the landfill, ensuring compliance with airport safety standards.
- LAND USE

Determine possible locations for composting food and green waste.
- LAND USE

Identify areas for sorting recyclable waste and efficient storage.
- LAND USE

Define Waste Management Land Use zones to restrict solid waste activities in sensitive areas.
- LAND USE

Implement buffer setbacks of at least 200m (up to 400m) from sensitive land uses around waste management areas.
- DESIGN

Set land use controls and standards for solid waste facility design, maintenance, and operation.
- DESIGN

Adopt international standards for storage cells, leachate collection, site security, and recyclable waste separation.
- DESIGN

Create a solid waste management hub to separate waste streams, potentially at the source.

Suggested LeadOne Planet

WORKS & GENERAL PURPOSES



Tools: Recommended Policies & Actions

PLANS

Develop and implement a comprehensive waste management strategy for Barbuda.

Establish an ongoing waste management plan covering production, collection, and processing.

Introduce a user fee system to inform customers about their waste generation.

Incentivize waste diversion through reuse and recycling.

Consider landfill relocation, adhering to airport safety standards.

Promote source separation of waste for reduced environmental impact.

CODES

Adopt by-laws regulating commercial and industrial waste generation.

Mandate localized waste collection and separation before transferring to centralized facilities.

GOVERNANCE

Commit to local responsibility for solid waste management.

Allocate annual budgets for waste collection and reduction programs.

Monitor and evaluate performance against set goals and success measures.

Collaborate with local and central government entities to strengthen waste management.

Establish a clear regulatory framework for fly tipping, pollution control, and waste collection.

FINANCING

Develop adequate budgets for waste collection and management.

Identify local and regional funding mechanisms.

Implement a user-fee program to inform residents and businesses about their waste generation’s impact on the island’s waste management program.

PARTNERSHIPS

Identify regional and international nodes in the circular economy.

Collaborate with other jurisdictions to consolidate reusable waste streams, such as plastics, metals, and glass.

Explore partnership opportunities for managing special waste, like paints and chemicals, with other jurisdictions and private-sector clients.

KNOWLEDGE

Develop local expertise in waste management.

Allocate funding to permanent waste diversion programs to nurture knowledgeable individuals capable of educating the community.

Support local initiatives in the circular economy to repurpose reusable waste materials.

Organise community workshops and webinars to educate residents on home composting’s benefits and practical guidance.

Provide training for waste management personnel in efficient collection and disposal methods.

ONE PLANET

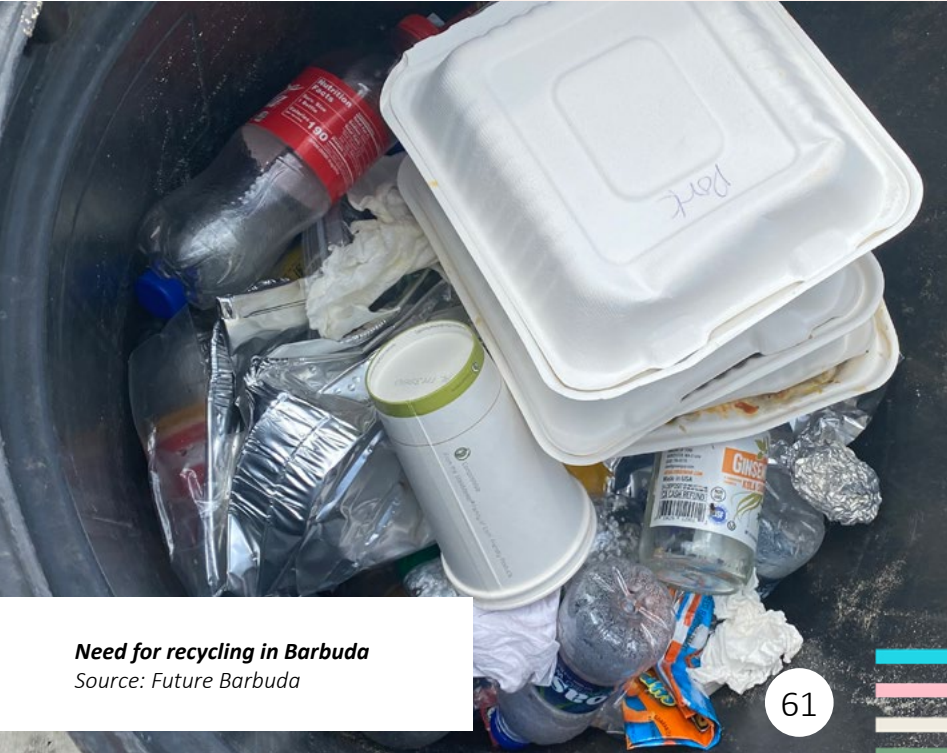
Investigate sustainable island-wide waste reduction and recycling initiatives.

Explore a circular economy approach to minimize waste generation and maximize resource recovery.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Public Utilities Act](#)



Need for recycling in Barbuda
Source: Future Barbuda

ENERGY INFRASTRUCTURE

Barbuda capitalized on its extensive solar coverage with an expansion of solar photo-voltaic electricity generation. Barbuda has the potential to become a leader in renewable energy by expanding its large-scale photovoltaic generation capacity, installing energy storage, supporting community investment in microgrids and supporting electrification to replace fossil fuels for vehicles and boats.

THE GOAL

To become a net zero community generating its own renewable electricity, and decreasing reliance on imports of expensive fossil fuels to the island.

MEASURE OF SUCCESS

Proportion of Barbuda’s energy uses satisfied through renewable electrical generation.

Levels of electricity production through renewable energy systems.

Land Use and Design Principles

- LAND USE

Co-locate district energy facilities with other infrastructure systems like packaged wastewater treatment plants to reduce overall impact on surrounding developments.
- LAND USE

Identify district energy micro-grid facilities on maps.
- LAND USE

Reserve land for expansion of solar energy production and storage
- DESIGN

Plan for and support the introduction of localised microgrids servicing local developments. Plan new 15-minute village around a local district energy or microgrid system capable of satisfying local needs most of the time, with reduced loads on the central grid.
- DESIGN

Encourage the adoption of roof photovoltaic systems to offset grid loading.
- DESIGN

Plan for capacity for vehicle charging points for private electric vehicles and mobility hubs

Tools: Recommended Policies & Actions

PLANS

- Update land use designations, zoning and by-laws to permit select energy systems as ancillary to other uses.
- Plan for capacity for vehicle charging points for private electric vehicles and mobility hubs

CODES

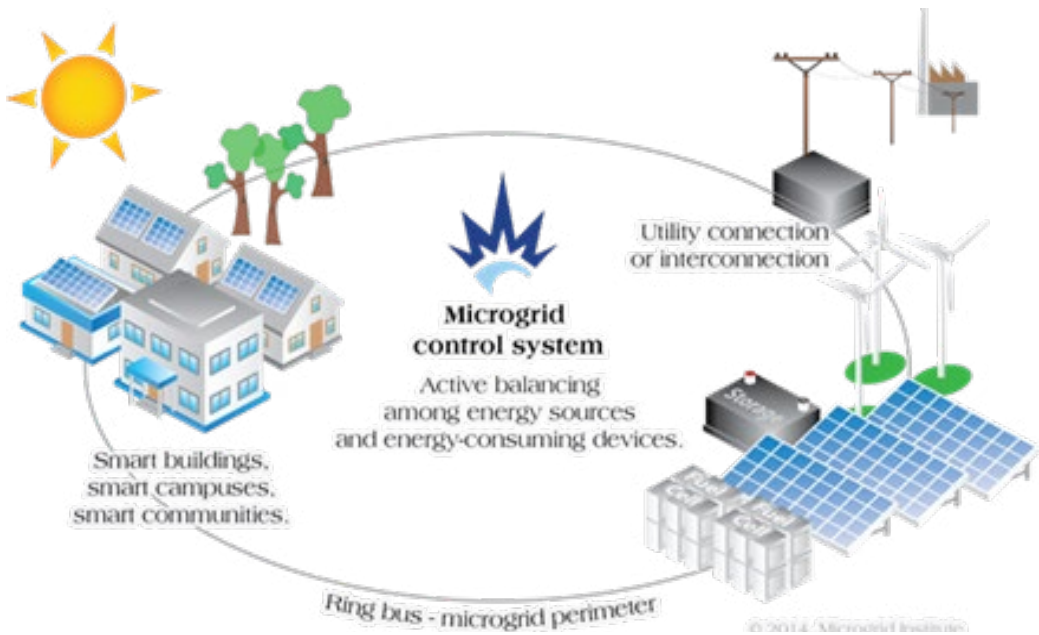
- Mandate the inclusion of local micro-grid systems with all major new developments such as hotels, resorts and residential subdivisions.
- Establish thresholds governing the sizes and complexity of micro-grid systems to ensure their safe operation and compatibility with surrounding land uses.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Public Utilities Act](#)

[Public Works and Road Act](#)



Microgrid Control System



Solar Plant in Barbuda
Source: Future Barbuda

HERITAGE BUILDINGS

Vernacular character / Adaptive reuse

The rich history of Barbuda is also present in structures which have survived (to some extent) the test of time.

Preserving and/or re-purposing historical structures and those in ruin but of structural integrity to be of use to a contemporary Barbudan society, whilst maintaining a link to their shared history should be a priority.

THE GOAL

To preserve and/or re-purpose historical structures and those in ruin but of structural integrity to be of use to a contemporary Barbudan society.

Established Museum and other civic/educational space, for the sharing of history and tradition.

Reduced number of dilapidated unused structure.

Historical buildings / structures playing a part in the active day to day living of all Barbudans.

Land Use and Design Principles

- DESIGN

Creation of pathways connecting historical sites and centres.
- LAND USE

Identification of and preservation of Historical Core(s) with clusters of historically significant sites and structures.
- LAND USE

Integrate heritage preservation into zoning and land use codes, allowing for flexible land use that encourages the adaptive reuse of heritage buildings.
- DESIGN

Where appropriate allow for signage with historical data on designated buildings.
- DESIGN

Encourage where possible re-use of past, but proven building practices when refurbishing existing historical structures.
- DESIGN

Seek innovative ways in re-using structures that may not be re-built but that hold their own in contemporary Barbudan way of life.

Tools: Recommended Policies & Actions

PLANS

Heritage Building Inventory: Establish an inventory of heritage buildings, documenting their historical and architectural significance to form the foundation for preservation efforts.

Historic Centre Designation: Develop a comprehensive heritage preservation plan, prioritising historical structures and strategies for preservation and adaptive reuse.

Design Guidelines: Adopt heritage-specific design guidelines to ensure renovations maintain historical significance

GOVERNANCE

Heritage Authority: Establish a dedicated authority for overseeing heritage preservation, restoration, and adaptive reuse, integrating heritage considerations into decision-making.

Regulatory Framework: Enforce regulations for heritage building protection, including permitting requirements.

CODES

Implement specialised codes governing heritage preservation, emphasising historical integrity while accommodating modern needs.

ONE PLANET

Align heritage preservation with the One Planet framework, emphasising sustainability and resource efficiency while preserving historical authenticity.

KNOWLEDGE

Foster community awareness campaigns, educating residents and builders on heritage building significance and adaptive reuse benefits.

Provide training for local artisans to preserve traditional construction techniques required for heritage restoration.

FINANCING

Secure funding from diverse sources, including heritage agencies, international organisations, and community initiatives for successful historic building restoration in Barbuda.

PARTNERSHIP

Partner with heritage preservation organisations locally and internationally to access expertise and resources for restoration.

Actively participate in the Climate Heritage Network for guidance and collaboration in climate-resilient heritage preservation.

Promote community involvement, such as the heritage ‘airbnb’ concept, in heritage building restoration.

Facilitate knowledge sharing, exploring sustainable development approaches for heritage buildings with programs like Doh Eain’s Heritage Homes.

Investigate self-build ethos models for tailored, sustainable solutions considering Barbuda’s heritage and climate context.

Existing Policy Documents and Maps

[Sustainable and Circular Reuse of Spaces & Buildings Handbook \(EU urban agenda partnership on circular economy, sustainable use of land and nature based solutions\) Dec 2019](#)

Documentation by Andrew Sluyter, John Mussington, David Watters etc



Wardens House (photo 2021) dates from 1694 and was built as the residence of the island ‘Wardens’

ADAPTIVE REUSE

The rich history of Barbuda is also present in structures which have survived (to some extent) the test of time. Some of these structures may not be able to be fully refurbished to their original function but can provide the basis for creative reuse and adaptation to current practices / ways of living.

THE GOAL
Preserving and/or re-purposing significant structures in ruin (but of structural integrity) to be of use to a contemporary Barbudan society

MEASURE OF SUCCESS

Reduced number of dilapidated unused structures	A new sense of cohesiveness to the Village
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Land Use and Design Principles

- DESIGN** Encourage creative ideas via design competitions (local population and diaspora)
- DESIGN** Creating of parks and gathering/recreational areas on site of ruins.
- LAND USE** Identify ‘needs’ in the urban fabric that could be met by means of adaptive reuse.

Tools: Recommended Policies & Actions

POLICY
Establishment of Historic Centre Ordinances

POLICY
UNESCO world heritage site listing and preservation
Building code enforcement.

CODES
Building code enforcement (existing and proposed).

PARTNERSHIPS
Mapping/inventory and assessment of unused spaces and relevant structures across the island.
Entrepreneurs / Builders

KNOWLEDGE
Sensitization through public presentations of possible adaptive reuse examples and the role they could play in the village’s built fabric.

Existing Policy Documents and Maps

[Sustainable and Circular Reuse of Spaces & Buildings Handbook \(EU urban agenda partnership on circular economy, sustainable use of land and nature based solutions\) Dec 2019](#)



Image2: Historic Hotel in Codrington which could be repurposed into apartments, commercial or civic space (source: Future Barbuda)



Image: Historic house in ruin which might be repurposed (source: Future Barbuda)

INCREMENTAL (ADAPTABLE) HOUSING

Provision of flexible structures capable of controlled extension over time. Given economic constraints, a stronger Barbuda is one where housing for its people is safe, accessible, familiar and adaptable.

THE GOAL

To establish an method for building affordable, sustainable, high quality, local construction based on need for incremental homes in Barbuda.

MEASURE OF SUCCESS

Reduced instances of new plot demarcation.

Protecting a village ‘skyline’ with a coherent and connected built environment.

Denser more active (village) centres.

Land Use and Design Principles

- DESIGN

Encourage mixed use as part of incremental approach to site development and housing.
- LAND USE

Maintain lot sizes and character with some intensification.
- DESIGN

Encourage multifamily and multi-generational living.

Suggested Lead

WORKS & GENERAL PURPOSES

One Planet



Tools: Recommended Policies & Actions

KNOWLEDGE
Possible development of a pre-approved design kit and/or construction workshop(s).

FINANCING
Grants and loans for refurbishing and extending the home rather than for ‘new-builds’.

PARTNERSHIPS
Expedited planning approval for extensions and secondary flats.

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

Case Studies

[Elemental’s four downloadable Incremental housing plans](#)

Image1: Expandable House by Urban Rural Systems (source: ArchDaily)



Image2: Incremental Housing by ELEMENTAL Chile (source: ArchDaily)



CHARACTER

The modern single-storey concrete dwelling with hip roof can be defined as the Barbudan residential vernacular (dominant style which utilises the materials and technologies at hand and materialises from communal traditions). Opportunities exist for vernacular architecture of other building types to emerge directly from the industrial, nautical, materials available and practical traditions of Barbuda.

THE GOAL

To maintain the island’s unique character for residents and tourists, embracing local customs and community values in the design of structures that harmonize with the island’s social, economic, environmental, and cultural context.

MEASURE OF SUCCESS

- Proliferation of vernacular construction elements across the island: verandahs, hipped roofs, shuttered windows, raised/accentuated bases and decorative motifs.

Emerging craftspeople and industry for the above.

Development of contemporary architectural styles.

Land Use and Design Principles

- DESIGN

Encourage smaller lot sizes and character similar to historic neighbourhoods in Codrington.
- DESIGN

Main scale/proportions of existing buildings.
- LAND USE

Encourage further adherence to an emerging vernacular in new construction.
- DESIGN

Adopt a paint colour palette that is both practicable (withstands the harsh sun exposure) and cultural (reflects a collective affinity routed in the historical practices / reflects the surrounding natural environment)
- DESIGN

Encourage use of patterns, textures, motifs as decorative elements to the built form.

Suggested Lead

TOURISM & CULTURE

One Planet



Culture & Community



Health & Happiness

Tools: Recommended Policies & Actions

PLANS

Code: enforcement of existing and proposed codes.

KNOWLEDGE

Safer building campaign with summarised strategies for self-builders.

KNOWLEDGE / PARTNERSHIPS

Referral to known community builders with established good/safe building practices.

KNOWLEDGE

Possible development of a pre-approved design kit and/or construction workshop(s).

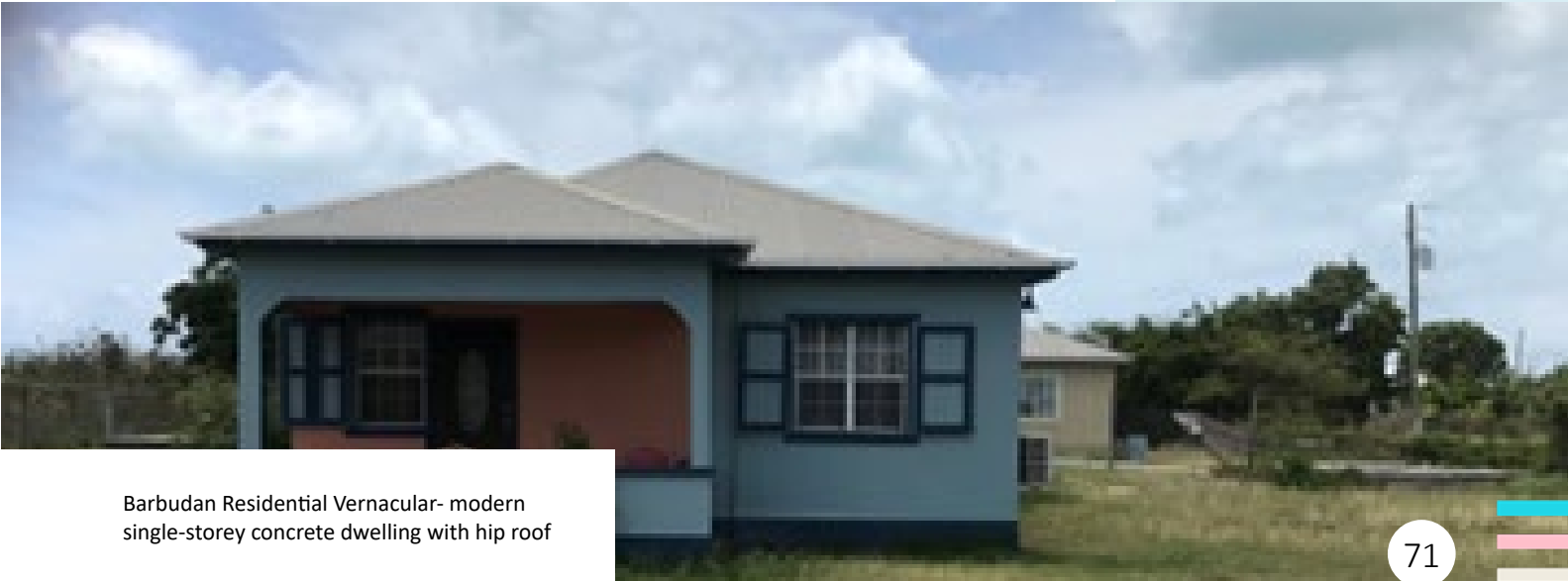
PARTNERSHIPS

Historical society (local) creating a synergy between traditional practices and modern day Barbuda.

Existing Policy Documents and Maps

[OECS Building Guidelines for Antigua & Barbuda \(for buildings >2500ft2\)](#)

Colour Palette reference document identifying colours and colour combination typically used across the island - Volume 3.



Barbudan Residential Vernacular- modern single-storey concrete dwelling with hip roof

MANUFACTURING / INDUSTRIAL DEVELOPMENT

Manufacturing and processing is a key point in creating value in the life of a product. As Barbuda grows, pressures can be placed on existing industries, such as sand mining, and potential future industrial development. Supporting potential industrial and manufacturing on the island is a part of ensuring Barbuda has a well rounded economy and diverse set of employment opportunities.

THE GOAL
To establish sustainable, high quality, local industry as a source of Barbudan pride

MEASURE OF SUCCESS		
Increased self-sufficiency.	Reduced extractive industry on-island.	Number of approaches linking on waste streams on the island to create business opportunities. <i>For example construction materials made from crushed glass, local production from remoulded plastics waste etc</i>

Land Use and Design Principles

- DESIGN

Cross Programme with ‘green’/social activities and make publicly accessible to reduce dead corridors and ‘grey blocks’
- LAND USE

Incentivise light industrial mixed use (eg. with civic, historical or tourism) on village extremities.

Suggested LeadOne Planet

WORKS & GENERAL PURPOSES



Culture & Community



Equity & Local Economy



Zero Carbon



Sustainable Materials



Zero Waste

Tools: Recommended Policies & Actions

CODES

Address solve an environmental problem through building/site design/ clever integration (eg. Beach-side sites to implement groins to reduce potential erosion)

Cross-programme with commercial (design workshops, co-working spaces, gym, movies) for more efficient use of structure (day/night use, passive surveillance)

PARTNERSHIPS

Accommodate civic/infrastructural need where possible (eg. If factory generating energy for its own use could dedicate battery storage/sell at a reduced rate to APUA for supply to Codrington etc)

Addressed under Equity & Local Economy, Zero Carbonin One Planet Action Plan

New business development, especially those focused on circular economy solutions

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)

[Environmental Protection & Management Act, 2019](#)

[Physical Planning Act, 2003](#)

[Fisheries Act, 2006](#)

[Environmental Protection Levy Act, 2002](#)

[Forestry Act](#)

[National Parks Act](#)

[Public Works and Road Act](#)

[Public Utilities Act](#)

Light Industrial Building with workspaces (Aemulus at the Runway by Design Unit Architects, Malaysia. source: ArchDaily)

TOURISM

The beauty of Barbuda should be shared with the world but not to the detriment of the local community, traditions and landscape.

Tourism is a significant part of Barbuda’s future economy and growth. Barbuda’s natural beauty, remote and character is a key attraction. Barbuda has many tourist attractions from natural features like the Frigate Bird Sanctuary and Highland Cliffs and Caves, to cultural and heritage sites, including the Martello Tower and historic Codrington.

THE GOAL

To develop tourism that is sensitive to the natural and cultural heritage and provides income for the local community and finance to support the protection and development of the heritage of the island.

MEASURE OF SUCCESS

Number of resorts, hotels, and tour operators supporting and signing up for the One Planet Action Plan.	Job creation in the tourism sector and its contribution to the local economy in terms of income generation.	Number of tourism business owned by member of the local community.
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Land Use and Design Principles

- LAND USE**

Preserve Natural Areas and Communal Lands: Establish protected zones for biodiversity, ecosystems, heritages and agricultural lands. Regulate tourism activity in sensitive environmental and cultural areas.
- DESIGN**

Intersperse small scale tourism offerings within the locale (see mixed used approach)
- DESIGN**

Apply green practices to tourism facilities like hotels and transport. Embrace renewables and low-impact materials to cut carbon footprint.
- DESIGN**

Manage visitor numbers and set sustainable limits per area to avoid overcrowding. Protect natural and cultural sites’ integrity through a tourism levy on visitors / businesses.
- DESIGN**

Involve Communities: Engage locals in planning and decisions. Enable them to benefit economically and culturally from tourism, ensuring their say in impact management.
- LAND USE**

Safeguard sites critical to Barbuda’s heritage and practices.
- DESIGN**

Educate tourists about local customs, history, and significance though signage, museums, walking tours.
- DESIGN**

Green Transportation: Promote eco-friendly travel options for tourists, like EVs, bikes, and walking tours. Reduce emissions and traffic congestion.

- Tools: Recommended Policies & Actions**

PLANS

Develop a comprehensive tourism plan that outlines sustainable tourism practices, identifies key attractions, and establishes guidelines for responsible tourism development.

GOVERNANCE

Establish a dedicated tourism authority responsible for overseeing tourism-related activities, ensuring adherence to sustainability principles, and involving local communities in decision-making.

Evaluate inward investment proposals based on their contribution to the One Planet Living goals of Barbuda

CODE

No part of Barbuda can be restricted for use by Barbudans (eg. Clear and generous access to the coast, lagoon and highlands)

Implement codes and regulations that promote sustainable tourism practices, including guidelines for responsible visitor behavior and eco-friendly operations for tourism facilities.
- FINANCING**

Create a fund to support sustainable tourism initiatives, providing financial incentives for businesses that adopt eco-friendly practices and contribute to the One Planet Action Plan.

PARTNERSHIPS

Collaborate with local communities, involving them in tourism planning and development, and ensuring that they benefit economically and culturally from tourism while having a say in impact management.

Promote community involvement, such as the heritage ‘airbnb’ concept, in heritage building restoration and for programs like Doh Eain’s Heritage Homes.

KNOWLEDGE

Develop educational programs and materials to inform tourists about local customs, history, and the significance of heritage sites through signage, museums, and guided tours.

ONE PLANET

Ensure that tourism development aligns with the One Planet framework, emphasising sustainability, resource efficiency, and minimal environmental impact. This includes promoting eco-friendly transportation options and the use of renewable energy sources within

Existing Policy Documents and Maps

[Sustainable Island Resource Management Zoning Plan for Antigua and Barbuda \(including Redonda\) SIRMZP](#)



Outpost at Two-Foot Bay (source: Future Barbuda)

#FUTUREBARBUDA QUESTIONS

VOLUME 4
PUBLIC AND PRIVATE REALM
GUIDANCE



#FUTUREBARBUDA



VOLUME 5 RESULTS FRAMEWORK



VOLUME 1: GOVERNING POLICY

Translating the vision into policies and strategies guided by principles of sustainability and resilience.



VOLUME 2: DRAFT DESIGN BRIEF

The emerging Design Brief for Codrington and defined local areas outlining the design goals and objectives, constraints, special analysis.



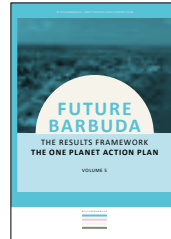
VOLUME 3: CONCEPT DESIGN & RESILIENT APPROACH FOR LAND USE

A series of plans presenting the concept design for Barbuda, Land Use, Built Form and strategies.



VOLUME 4: PUBLIC AND PRIVATE REALM GUIDANCE

Codes and policies governing the public and private realms, shaping the physical environment.



VOLUME 5: THE RESULTS FRAMEWORK / THE ONE PLANET ACTION PLAN

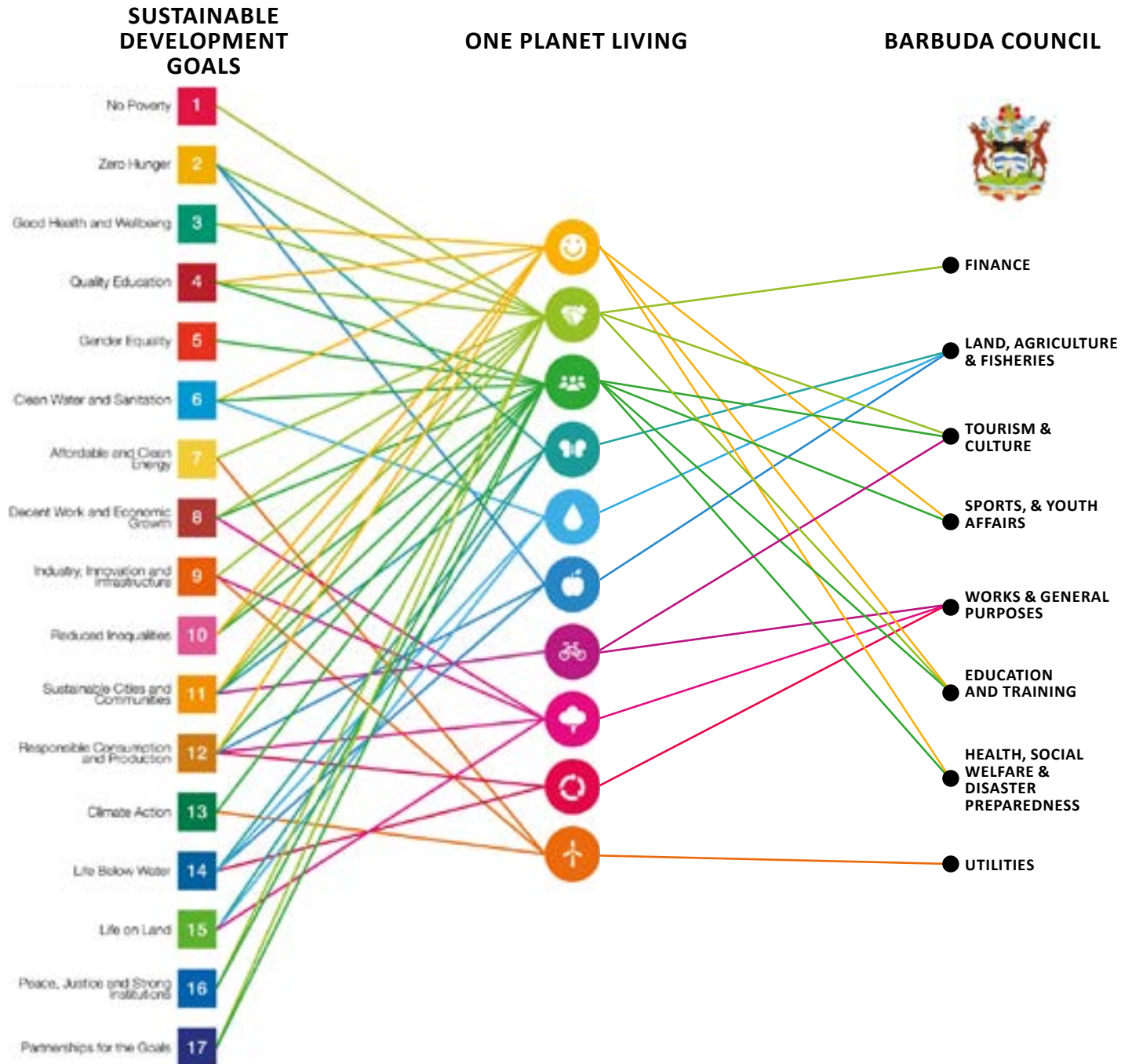
The implementation and institutional framework utilising One Planet as a providing objectives, actions and responsibilities.

CONTENTS VOLUME 5 RESULTS FRAMEWORK

6	Health and Happiness
7	Equity and Local Economy
8	Equity and Local Economy
9	Culture and Community
10	Land and Nature
11	Sustainable Water
12	Local and Sustainable Food
13	Travel and Transport
14	Materials and Products
15	Zero Waste
16	Zero Carbon Energy

ONE PLANET LIVING





INSTITUTIONAL STRENGTHENING: ENABLING THE PLAN

ISLAND STRATEGIES

*Island wide
strategic plans*



ENVIRONMENT



**CULTURE &
COMMUNITY**



LAND USE



MOVEMENT



**UTILITY &
SERVICES**

GOVERNMENT OF ANTIGUA AND BARBUDA (GOAB)

*Government
Departments*

FINANCE

Trevor Walker (MP)

LAND, AGRICULTURE

& FISHERIES

John Mussington

HEALTH , SOCIAL

WELFARE & DISASTER PREPAREDNESS

Wayde Burton

SPORTS, & YOUTH

AFFAIRS

Sharima Myers

WORKS & GENERAL

PURPOSES

Nico Antonio

TOURISM & CULTURE

Nadia George

EDUCATION

Melanie Beazer

UTILITIES

Fitzroy Warner

*One Planet
- Guidelines
and Results
Framework*

ONE PLANET



**Sustainable
Water**



**Local &
Sustainable
Food**



**Land Use &
Wildlife**



**Culture &
Community**



**Equity & Local
Economy**



**Health &
Happiness**



**Sustainable
Transport**



**Zero
Carbon**



**Sustainable
Materials**

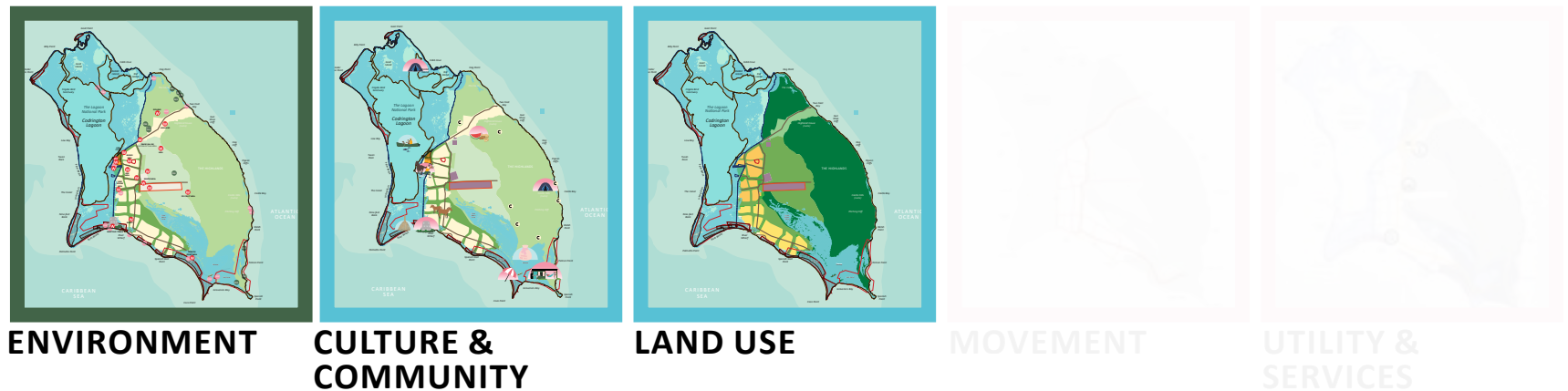


**Zero
Waste**

PLANS AND GOVERNANCE

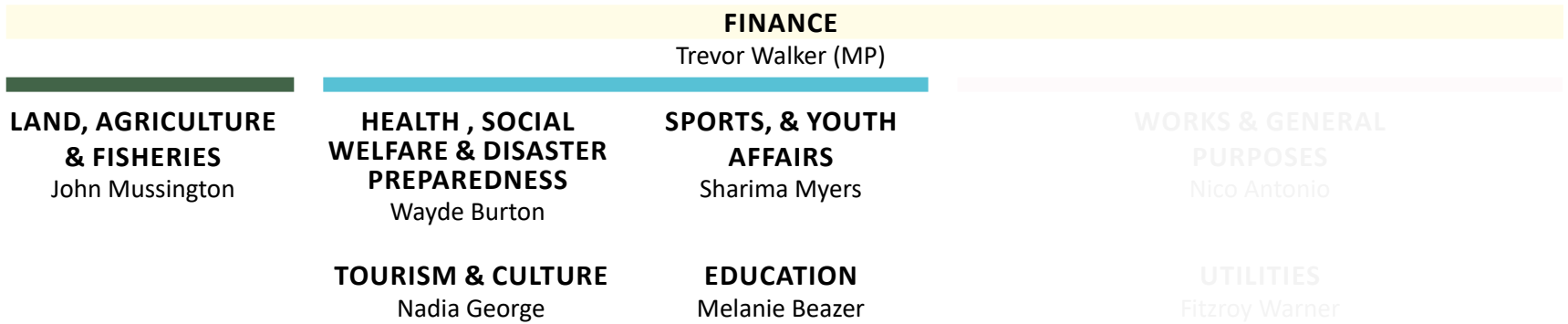
ISLAND STRATEGIES

Island wide strategic plans



GOVERNMENT OF ANTIGUA AND BARBUDA (GOAB)

Government Departments



One Planet - Guidelines and Results Framework

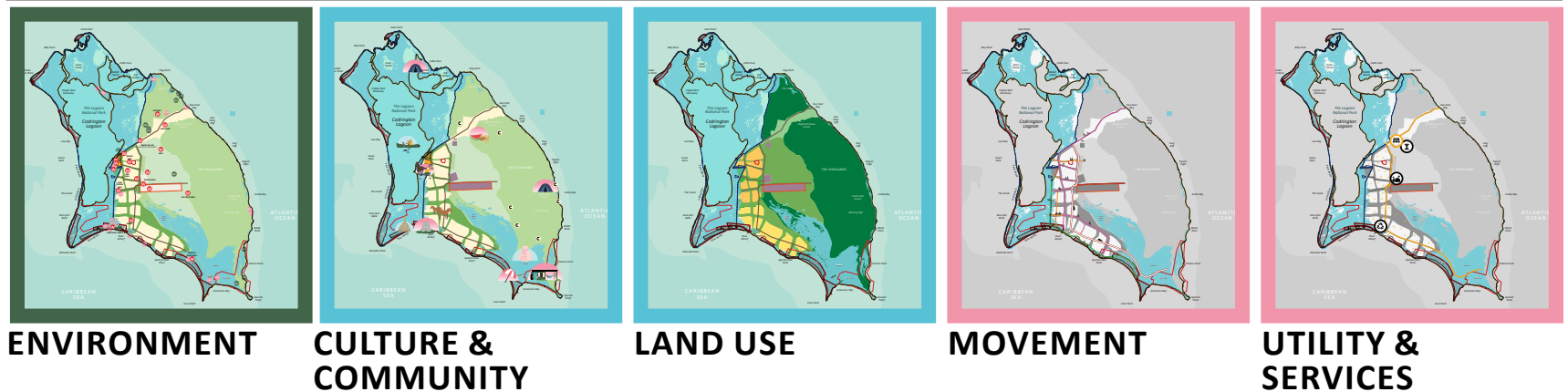
ONE PLANET



PLANS AND GOVERNANCE

ISLAND STRATEGIES

Island wide strategic plans



GOVERNMENT OF ANTIGUA AND BARBUDA (GOAB)

Government Departments



One Planet - Guidelines and Results Framework

ONE PLANET



RESULTS FRAMEWORK

ONE PLANET ACTION PLAN



HEALTH AND HAPPINESS

Encouraging active, social, meaningful lives and promote good health and wellbeing

GOAL

Increase or support high levels of physical, social, mental and emotional health and to increase or support high levels of happiness and wellbeing.



HEALTH AND HAPPINESS

HEALTH AND HAPPINESS

Outcomes/ Impact		Action + Intervention		Indicators of Success		
Title	Description	Title	Description	Output	Description	Impact
CARE FOR ELDERS	<i>Enhance the quality of life for elders in Barbuda through improved care facilities and services.</i>	Implement an Elder Day-Care Programme that includes rebuilding the care facility and enhancing elder engagement programs.	<i>Re-build Elder day care facility structure and create engaging services to enable a space that they can feel connected and valued. Develop a programme of connection with children to improve intergenerational connectivity, transfer of cultural knowledge, to sustain fabric of the community</i>	Completion of the Elder day-care facility rebuild and launch of new elder engagement programs with an increased enrollment or participation	<i>Increasing visibility, connectivity and value</i> VERIFICATION: Monitor enrollment numbers and program participation rates, conduct satisfaction surveys among elders and caregivers, and track the usage rates of the rebuilt facility.	Demonstrable improvements in the social engagement, physical health, and emotional well-being of participating elders, aiming for an improvement as measured by health and wellness surveys.
HEALTH INSURANCE	<i>Increase the enrollment of eligible Barbudans in the medical benefits scheme, ensuring comprehensive health insurance coverage.</i>	Ensure that all self employed Barbudans are registered as self employed and are also registered for the medical benefits scheme; all have access to a medical benefits smart card and that travel to Antigua for critical care is included for Barbudans.	<i>Launch an awareness and registration campaign targeted at self-employed Barbudans to educate them on the benefits of health insurance and the registration process.</i>	Enhanced registration rates with more Barbudans enrolled in the medical benefits scheme.	<i>Enable more Barbudans to be participatory in the national health scheme; raise awareness of the critical need for transportation to be included in the scheme for emergency and acute healthcare</i> VERIFICATION: Analyze enrollment data, conduct periodic awareness campaign effectiveness surveys, and review insurance coverage statistics.	Broader health insurance coverage leading to an increase in preventative care visits and a reduction in out-of-pocket medical expenses for the community.
HEALTHY DIET	<i>Promote and increase the consumption of traditional, healthy Barbudan diets while reducing reliance on imported, processed foods.</i>	Support local farmers and local produce	<i>Support local agriculture to enhance the availability of locally-produced, nutritious foods and implement educational programs about the benefits of healthy eating.</i>	Increase in local food production and consumption and a decrease in the importation of processed foods	<i>Revitalisation of local, sustainable health-driven food security strategy</i> VERIFICATION: Conduct food consumption surveys, track local agricultural outputs, and monitor import data to assess changes in eating habits and food sourcing.	Reduced importation of processed foods; increase in locally sourced food stock in supermarkets; Improved health and wellbeing from less process foods

DEVELOPMENT PLAN SUCCESS

- Clarity of Vision
- Stakeholder Involvement
- Comprehensive Analysis
- Perspective
- Flexibility and Adaptability
- Integration of Components
- Sustainability and Resilience
- Urban Design and Aesthetics
- Legal and Regulatory Compliance



#FUTUREBARBUDA

INSTITUTIONAL STRENGTHENING

There is need for considerable institutional strengthening both from a capacity and relational level.

Goal: To ensure that the Barbuda Council can effectively address the needs and aspirations of Barbudans and promote sustainable development on the island.

Areas of focus: function, roles, responsibilities, and relationships

These need to be clearly understood and respected for effective governance.



#FUTUREBARBUDA

RECOMMENDATIONS TO BUILD GOVERNANCE RESILIENCE

The Plan recommends key points for consideration for each relational and functional level:

1. Government of Antigua and Barbuda
2. Barbuda Council
3. Council Departments
4. District Leaders
5. District Youth Representative
6. Community



#FUTUREBARBUDA

#FUTUREBARBUDA QUESTIONS

VOLUME 5
RESULTS FRAMEWORK



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THANK YOU!



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