Barbuda Blue Halo Initiative

Description and Work Plan
October 2013

Introduction & Background

The **vision** of the Waitt Institute is "to empower communities to restore their oceans to full productivity." The Institute endeavours to ensure ecologically, economically, and culturally sustainable use of ocean resources. The Institute forms deep collaborations with local governments and coastal communities to design comprehensive, data-driven ocean zoning and fisheries management strategies. Our approach deeply engages stakeholders, aims to maximize long-term financial benefits for coastal livelihoods, and conserves fish populations and habitats for this and future generations. The Institute provides technical expertise in marine ecology, policy, mapping, law, socioeconomics, and communications. We work with local organizations to build capacity, as needed, for implementation and long-term success.

With a **Blue Halo Initiative**, the Waitt Institute aims to provide a location with the technical, policymaking, and financial resources needed to develop and implement a comprehensive ocean or coastal management plan that is locally-appropriate, locally-supported, ecologically-sound, and has a high chance of restoring ocean ecosystems and fisheries.

The **rationale** for our comprehensive, stakeholder-driven approach is that, working to balance all uses of the ocean (instead of working to establish a single marine sanctuary or change a single fishery regulation), and engaging stakeholders heavily in the planning process, will result in management that is most likely to (1) result in restored ecosystems and sustainable use, and (2) receive the strong support of the community that is critical to successful implementation and durability or management changes.

The Waitt Institute works in places where there is political and societal concern about the status and trends of marine resources, and there is political and societal will to improve the sustainability of how those resources are managed, but resources to develop and implement new management are not available. From those criteria and the current regional focus on the Caribbean, Barbuda was selected, and the Barbuda Blue Halo Initiative was launched.

*The **goal** of the Barbuda Blue Halo Initiative is sustainable, profitable, and enjoyable use of coastal resources for this and future generations.* This goal will be achieved through the development and implementation of a "Sustainable Coastal Policy" that is based on scientific, social, and economic data; minimizes negative impact on fishing and coastal livelihoods; engages the community and all stakeholders in the planning process; and includes sanctuary zones to restore fish populations and habitats.

A **Sustainable Coastal Policy** has three main components: (1) coastal zoning, (2) new fisheries regulations, and (3) an implementation plan for monitoring, enforcement, and financing.

Work toward the Initiative's goal is highly collaborative by necessity and design. The Initiative is a presently (additional partners may be added) a collaboration between the Barbuda Council, Codrington Lagoon Park, Barbuda Fisheries Division, Office of the Prime Minister of Antigua and Barbuda, the people of Barbuda, and the Waitt Institute. The Waitt Institute's primary roles are to provide technical expertise, organize community outreach, build local capacity, and facilitate the policymaking process.

The long-and short-term **objectives**/potential benefits of this Initiative include:

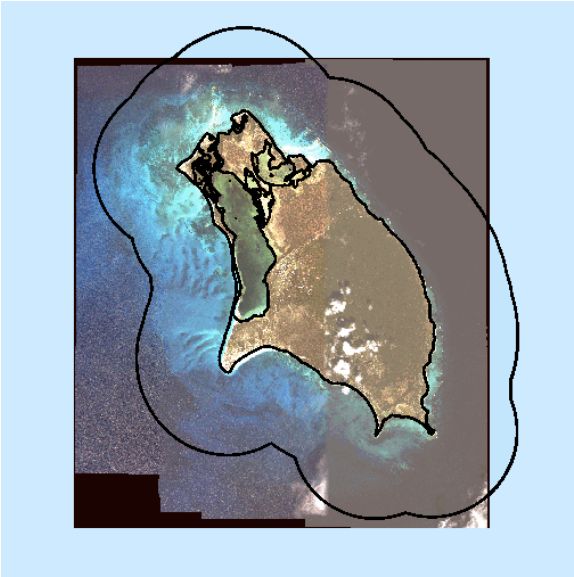
- Accommodate a variety of coastal activities, while supporting ecological restoration
- Improve fishing catches via increased populations of key fisheries species
- Build Barbuda an international reputation as a leader in coastal management
- Support tourism by establishing Barbuda as a premier eco-tourism destination
- Address problems of illegal fishing by foreign nations
- Cultivate young local resource managers and scientists
- Protect the strong local traditions and culture that are intertwined with the ocean
- Support sustainable fishing for this and future generations of Barbudans

The support provided by the Waitt Institute will be developed in line with the **Planning Principles** adopted by the Barbuda Council:

1. Plan with the goal of sustainable, profitable, and enjoyable use of coastal resources over the long- term – for next year and for future generations.
2. Plan with a focus on increasing fisheries' catches and preserving traditional uses of coastal areas.
3. Plan with the premise that a zoning plan well supported by the community will result in higher voluntary compliance.
4. Plan with consideration of maximizing ease of enforcement, including gear-based management and design of zone boundaries based on known landmarks, where possible.
5. Plan with an understanding of the necessity for strong legal support for enforcement, including prosecuting and penalizing infractions.
6. Plan with an aim of long-term financial independence and viability of implementation.
7. Plan with the awareness that revisions and adjustments may be needed over time to maximize effectiveness.

Geographic Scope

The term "**Blue Halo**" refers to sustainable management of waters surrounding an island. In the case of Barbuda, that area includes the coastal waters of Barbuda out to 1 league (3.45 miles) from the coast (see map at right) and the Codrington Lagoon. As such, the geographic scope of the Initiative is limited to the waters that are under the jurisdiction of the Barbuda Council. The Sustainable Coastal Policy will not affect any waters beyond 1 league from the coast of Barbuda.



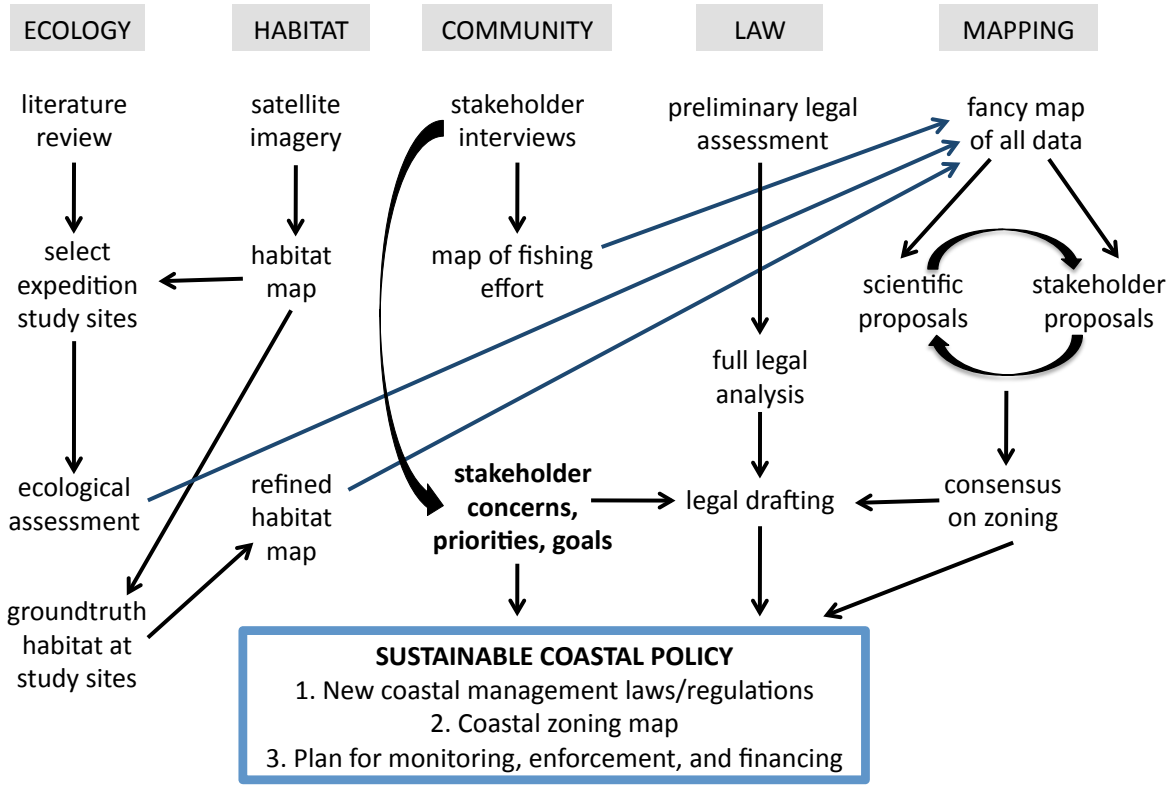
The focal **ecosystems** are the coral reefs (continuous reefs and patch reefs), seagrass beds, hard-bottom, sandy-bottom within 1 league of Barbuda's coast, and the Codrington Lagoon.

Initiative Components

The Waitt Institute will fully support the Initiative components listed below and described on the following pages:

1. Communications
2. Community Consultations
3. Community Survey
4. Habitat Mapping
5. Ecological Assessment
6. Zoning and Mapping Analysis
7. Legal Analysis
8. Local Capacity Building
9. Enforcement Analysis
10. Fisheries Certification
11. Sustainable Coastal Policy

HOW THE COMPONENTS FIT TOGETHER



In addition to the Waitt Institute's direct efforts, we have hired expert consultants to assist with various components. The Waitt Institute (WI) leads for each component are listed below, however all components will, to varying degrees, involve collaboration with local partners.

Additional components that complement the Initiative and are consistent with its goal could be added as the project progresses (e.g. a marine ecology curriculum/materials for use in schools), based on resource availability and local interest. We envision this project could also serve as a nucleus for locally-initiated related work (e.g., eco-tourism).

1. **Communications:** The results of each of the components described below will be communicated to the people of Barbuda through community meetings, paper documents, and online. Updates will be provided via newspaper, radio, a bulletin board in Madison Square, flyers, blog posts, a Facebook page, and on Twitter. Local media will be informed of key events and invited to cover them. The goal is to ensure all stakeholders are aware of the project, can follow its progress, and have access to the information they need and want in order to be informed participants in the planning process.
    - Products: website, social media and blog posts, paper and electronic materials, newspaper articles, TV and radio appearances
    - WI Lead: Ayana Elizabeth Johnson, Ph.D., Executive Director, Waitt Institute

2. **Community Consultations:** There will be a minimum of five community consultation meetings, which will be well advertised and open to the public. At meetings, the goal, concept, scope, outcomes, and potential benefit will be described and discussed. The results of all the components described below will be presented and discussed. Whenever feasible, the lead technical experts will present the results in-person and be available in Barbuda for several days to respond to questions and concerns. Additional consultations will take place with smaller groups, including fishermen, a Stakeholder Committee (with representatives of all key stakeholder groups who are chosen by the Barbuda Council), and other interested community members. When Council members are not available to be present at a consultation, the responses, ideas, and concerns voiced by stakeholders will be presented to the Council for their consideration. The goal is to provide both ample information and ample opportunities for all interested stakeholders to meaningfully and substantively participate in the planning process.
    - Products: Consensus on policy measures
    - WI Lead: Ayana Elizabeth Johnson, Ph.D., Executive Director, Waitt Institute

3. **Community Survey:** In order to understand how people are using coastal resources, their views on the state of coastal resources, where they fish, and what types of management they support, interviews will be conducted with a large cross-section of the Barbudan community. Emphasis will be placed on interviewing fishermen. The responses about the locations of coastal activities (e.g., important fishing areas), and ecological information (e.g., of spawning aggregations) will be integrated into the SeaSketch mapping program.
    - Product: Report summarizing stakeholder survey responses
    - WI Lead: Ayana Elizabeth Johnson, Ph.D., Executive Director, Waitt Institute

4. **Habitat Mapping:** High-resolution satellite imagery will be used to create a map showing the locations and extents of the following habitat types in the coastal zone of Barbuda: sand, seagrass, patch reef, continuous reef, hard bottom, and deep water. This map will be loaded into SeaSketch for use in the zoning process, and will be made publically available.
    - Products: Habitat map and high-resolution satellite image
    - WI Lead: Sam Purkis, Ph.D., Associate Professor, National Coral Reef Institute

5. **Ecological Assessment:** A scientific assessment will be conducted of Barbuda's marine resources. The assessment will prioritize Barbuda's key fishery species (i.e., lobster, conch, and fish), and the habitats on which they depend (i.e., coral reefs, seagrass, and Codrington Lagoon). The data generated from this effort will provide a comprehensive view of the status of key marine resources and habitats around the island of Barbuda and spatial information on the distribution of key resources. This information will be considered during of developing a Sustainable Coastal Policy and will provide a baseline for assessing effects of new management. The final report and all data collected will be made publically available.
    - Products: Report summarizing research findings, data set of all data collected
    - WI Lead: Benjamin Ruttenberg, Ph.D., Assistant Professor, California Polytechnic State University

6. **Zoning and Mapping Analysis:** SeaSketch is an online, collaborative tool for ocean zoning. SeaSketch will organize the ecological and habitat data (described above), as well as information on what areas are currently being used for fishing (from the community survey described above). It will enable stakeholders to view this data online, sketch and evaluate potential zoning plans, and discuss alternatives. SeaSketch is designed to be simple enough for non-technical users, and is designed to facilitate collaborative, expeditious, transparent, and data-driven coastal zoning. Members of the SeaSketch team will provide assistance to

stakeholders wishing to create and comment upon zoning proposals. A central, internet-accessible data repository and analytical tools will ensure that decision makers have access to all the information they need to understand how plans were developed and who supports them. Once plans are implemented, SeaSketch can be used for adaptive management, monitoring, and enforcement purposes.

- Products: Geospatial presentation of all data, analysis of zoning proposals, record of stakeholder rationale for/comments on proposals.
- WI Lead: Will McClintock, Ph.D., Director, SeaSketch, University of California Santa Barbara, www.seasketch.org.

7. **Legal Analysis:** This analysis of the laws of Antigua and Barbuda, focusing on fisheries management, will ensure there is clarity on the existing legal framework and the steps needed to create legally enforceable, comprehensive zoning and fisheries management plans. Legal analysts will support the zoning and fisheries management planning process, including the development of local laws, regulations, and/or policies (drawing on lessons from successful coastal zoning and fisheries management efforts elsewhere in the Caribbean and globally). The analysts will assist with drafting legal language for coastal management options the Barbuda Council is interested in pursuing. Throughout the process, the analysts will work with the Attorney General's office to ensure existing laws and policies are correctly interpreted and proper protocols followed in the development of new management measures.
    - Product: Legal framework report, draft legal language
    - WI Lead: Kathryn Mengerink, Ph.D., J.D., Director of Oceans Program at Environmental Law Institute, www.eli.org.

8. **Local Capacity Building:** This will include (1) SCUBA training and certifications for staff of the Barbuda Fisheries Division and Codrington Lagoon National Park, (2) training in scientific monitoring to assess the ecological affects of implementing the Initiative, (3) a potential revamp of the Sea Warden program (i.e., a framework for fishermen to participate in monitoring and enforcement), and (4) additional training within the Initiative's scope to be determined based on need, funding, and opportunity. The lead for the ecological assessment and his colleagues will provide the training for scientific monitoring. Training on enforcement may be done in collaboration with the Antigua & Barbuda Coast Guard.
    - Products: SCUBA certifications, and other TBD
    - WI Lead: Ayana Elizabeth Johnson, Ph.D., Executive Director, Waitt Institute

9. **Enforcement Assessment:** Based on (a) management priorities identified by the government and people of Barbuda, (b) knowledge of the range of technologies available for marine enforcement, and (c) an assessment of the applicability of each type of technology for Barbuda, a report will be developed with recommendations for how to enforce new coastal regulations and zones. These recommendations will be based on upfront and maintenance costs, local capacity for implementation, and legal requirements for acquiring data that is admissible in court.
    - Product: Enforcement recommendations report
    - WI Lead: Shah Selbe, M.S., Ocean Conservation Technologist, shahselbe.com

10. **Fishery Certification:** The goal of this component is to obtain Fair Trade certification for Barbuda's lobster fishery (the major export fishery), which will enable fishermen to get a good price for their product and access to new markets in exchange for their conservation efforts. The concept of Fair Trade USA's certification program is to provide market-based recognition and economic rewards for fishing communities through Fair Trade labeling. The certification program focuses on baseline social and environmental criteria with benchmarks for moving towards better stewardship practices, improved business capacity, community development programs and market access, benefitting both ecosystems and people. Assuming community interest, this process will begin and be completed in 2014.
    - Product: Fair Trade certification of lobster fishery
    - WI Lead: Maya Spaull, Director of Innovation, Fair Trade USA, fairtradeusa.org

11. A final **Sustainable Coastal Policy** will be developed collaboratively amongst Initiative partners based on the priorities and goals identified by the Barbuda Council, Codrington Lagoon National Park, Barbuda Fisheries Division, and the people of Barbuda. This policymaking work will led by the Barbuda Council, facilitated by the Waitt Institute, coordinated with the Government of Antigua & Barbuda, and be supported by the expertise of the leads for each Initiative component described in the preceding pages.
    - Products: Policy recommendations, ocean zoning map, new fishery regulations, and implementation plan (monitoring, enforcement, and financing)
    - WI Lead: Ayana Elizabeth Johnson, Ph.D., Executive Director, Waitt Institute

Methodologies

The Initiative draws from multiple academic fields using methodologies consistent with best practices in each. Methodologies are only provided below for the more technical components of the Initiative. Thus, *Communications* and *Community Consultations* components are not included in the below. The *Local Capacity Building* component will develop based on the needs associated with the management options that are implemented and the regional opportunities that arise – more information can be provided on that component as it develops.

Community Survey: A full list of fishers is not available, making methodologies ensuring proportional representation of all key stakeholders (e.g., stratified random sampling) impossible. Therefore, interviewees will be chosen based on recommendations from Initiative partners, and an effort will be made to interview fishers who represent a wide variety of fishing practices (i.e., all gear types, and full-time, part-time, and recreational fishers). Interviews will be conducted primarily with fishermen, but also with other key stakeholders (e.g., tourism operators, current and former Council members) and interested members of the community. Questions will be related to historic and current knowledge of fisheries, opinions of current management, and support for different management options. Demographic information will also be collected to provide a context for analysis of responses. Interviewees will be informed that participation is optional, all answers are anonymous, and they can skip questions and/or cease the interview at any time.

Habitat Mapping: Worldview-2 satellite imagery will be purchased to cover the ~1,000 sq. km shallow-water environment of Barbuda. A standard workflow of radiometric, atmospheric, water column correction, and orthorectification will be adopted to prepare the WorldView-2 data for mapping. Attribution of pixels to benthic classes will be conducted using the object-based image analysis software eCognition, which employs edge-detection algorithms to segment imagery into polygons. To ensure consistent and reliable digitization, the evolving Worldview-2 map will be continuously cross-checked against ground-truth data and high resolution imagery tendered by Google Earth. The map was ground-truthed during the ecological assessment and then revised accordingly.

Ecological Assessment: Lobster, conch, fish, coral, and algae will be surveyed at 200+ sites around Barbuda by a team of 12 scientists in collaboration with Barbudan fishermen and Barbuda Fisheries and Park staff. See report for detailed methods (http://bit.ly/BHI-report).

Legal Analysis: All relevant Antigua & Barbuda laws, policies, and institutions will be reviewed and analyzed to understand obstacles and opportunities for comprehensive coastal management development and implementation. In-depth interviews will be conducted with Antigua & Barbuda ocean management experts to understand implementation of laws and policies. Meetings among Initiative partners and Antigua & Barbuda legal experts will be arranged to strengthen the breadth, depth, and accuracy of the legal analysis. The legal analysts will support the planning process by answering law and policy questions, developing legal language based on an understanding of legal framework and goals of the policymakers, and providing examples of legal language that has successfully been used in coastal management efforts elsewhere.

Fisheries Certification: There are 5 steps in the process of fishery certification. (1) Fair Trade USA staff will visit Barbuda to gather data on socioeconomic factors (governance, labour conditions, pricing, challenges with sales and market linkage) and ocean/fishery management strategies (types of gear and equipment, species, their FIP status/MSC data gathering status). (2) On-site community trainings will be held to provide information about Fair Trade standards and benefits and to prepare the fishery for a successful Fair Trade audit. (3) Fair Trade USA's auditing partner will inspect fishery, landing sites and any local processing units and report their findings. (4) Once audit issues are resolved, the fishery will receive Fair Trade Certification. (5) Fair Trade USA staff will work with exporters and buyers to ensure application of Fair Trade pricing and premiums within the supply chain, and to explore options to develop new premium export markets. (6) Ongoing monitoring and evaluation of the certified fishery.

Timeline and Workplan

Overview

Year 1: Initiative development and planning (intensive WI involvement and financial support)

Years 2-3: Outreach, monitoring, enforcement, & education (moderate WI support)

Years 4-5: Outreach, monitoring, enforcement, & education (minimal WI support)

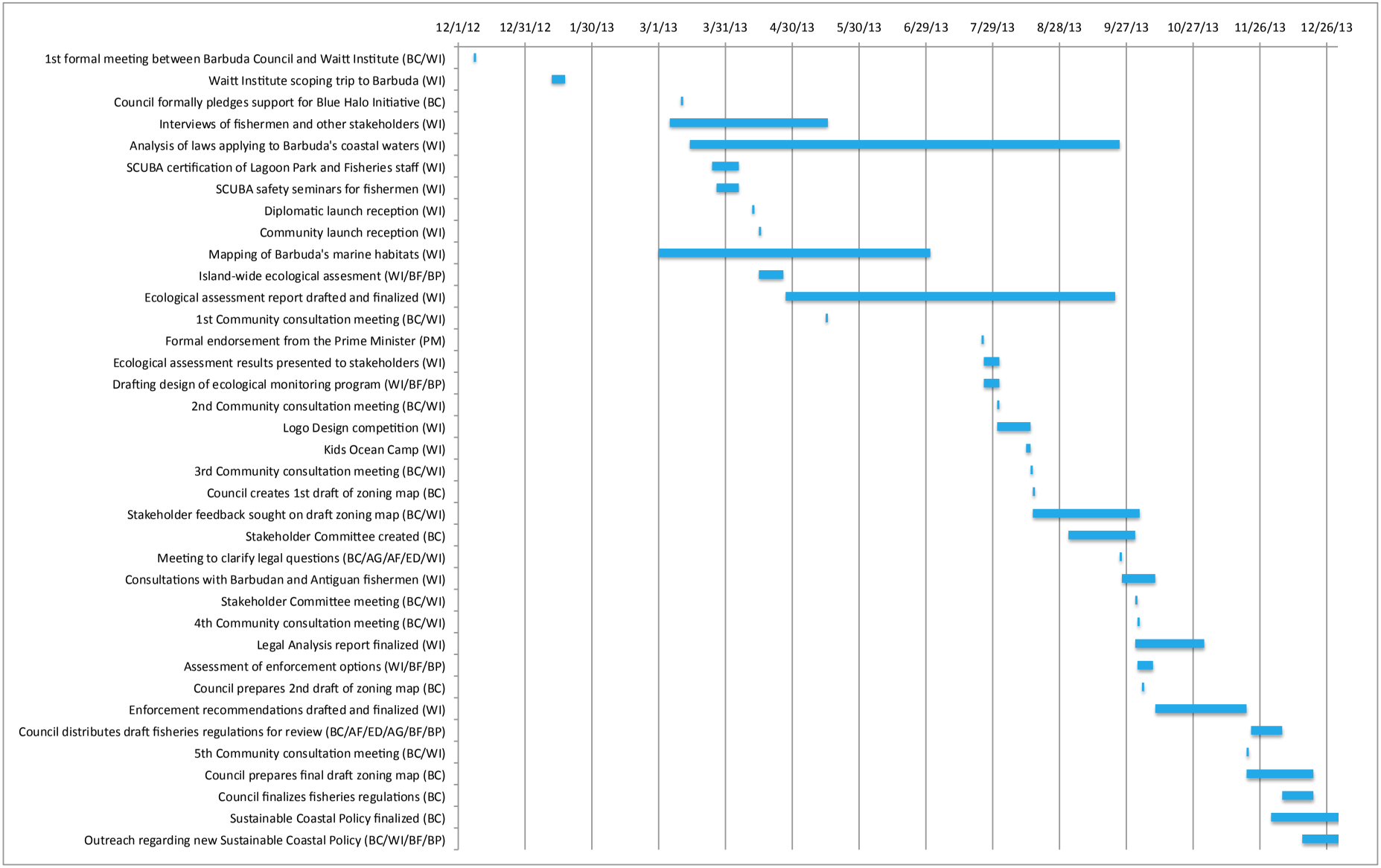
Year 6 and on: Barbuda ramped up to fully execute implementation (periodic WI check-ins)

Based on successful implementation:

- Year 6: Island-wide ecological assessment - 5-year follow-up study
- Year 11: Island-wide ecological assessment for 10-year follow-up study

2013 *(See Gantt chart below and attached)*

TASK	START	END	# DAYS
1st formal meeting of Barbuda Council and Waitt Institute (BC/WI)	12/8/12	12/8/12	1
Waitt Institute scoping trip to Barbuda (WI)	1/12/13	1/18/13	6
Council formally pledges support for Blue Halo Initiative (BC)	3/11/13	3/11/13	1
Interviews of fishermen and other stakeholders (WI)	3/6/13	5/16/13	71
Analysis of laws applying to Barbuda's coastal waters (WI)	3/15/13	9/24/13	193
SCUBA certification of Lagoon Park and Fisheries staff (WI)	3/25/13	4/6/13	12
SCUBA safety seminars for fishermen (WI)	3/27/13	4/6/13	10
Diplomatic launch reception (WI)	4/12/13	4/12/13	1
Community launch reception (WI)	4/15/13	4/15/13	1
Mapping of Barbuda's marine habitats (WI)	3/1/13	7/1/13	122
Island-wide ecological assessment (WI/BF/BP)	4/15/13	4/26/13	11
Ecological assessment report drafted and finalized (WI)	4/27/13	9/22/13	148
1st Community consultation meeting (BC/WI)	5/15/13	5/15/13	1
Formal endorsement from the Prime Minister (PM)	7/24/13	7/24/13	1
Ecological assessment results presented to stakeholders (WI)	7/25/13	8/1/13	7
Drafting design of ecological monitoring program (WI/BF/BP)	7/25/13	8/1/13	7
2nd Community consultation meeting (BC/WI)	7/31/13	7/31/13	1
Logo Design competition (WI)	7/31/13	8/15/13	15
Kids Ocean Camp (WI)	8/13/13	8/15/13	2
3rd Community consultation meeting (BC/WI)	8/15/13	8/15/13	1
Council creates 1st draft of zoning map (BC)	8/16/13	8/16/13	1
Stakeholder feedback sought on draft zoning map (BC/WI)	8/16/13	10/3/13	48
Stakeholder Committee created (BC)	9/1/13	9/31/13	30
Meeting to clarify legal questions (BC/AG/AF/ED/WI)	9/24/13	9/24/13	1
Consultations with Barbudan and Antiguan fishermen (WI)	9/25/13	10/10/13	15
Stakeholder Committee meeting (BC/WI)	10/1/13	10/1/13	1
4th Community consultation meeting (BC/WI)	10/2/13	10/2/13	1
Legal Analysis report finalized (WI)	10/1/13	11/1/13	31
Assessment of enforcement options (WI/BF/BP)	10/2/13	10/9/13	7
Council prepares 2nd draft of zoning map (BC)	10/4/13	10/4/13	1
Enforcement recommendations drafted and finalized (WI)	10/10/13	11/20/13	41
Council distributes draft fisheries regulations for review (BC/AF/ED/AG/BF/BP)	11/22/13	12/6/13	14
5th Community consultation meeting (BC/WI)	11/20/13	11/20/13	1
Council prepares final draft zoning map (BC)	11/20/13	12/20/13	30
Council finalizes fisheries regulations (BC)	12/6/13	12/20/13	14
Sustainable Coastal Policy finalized (BC)	12/1/13	1/1/14	31
Outreach regarding new Sustainable Coastal Policy (BC/WI/BF/BP)	12/15/13	3/1/14	76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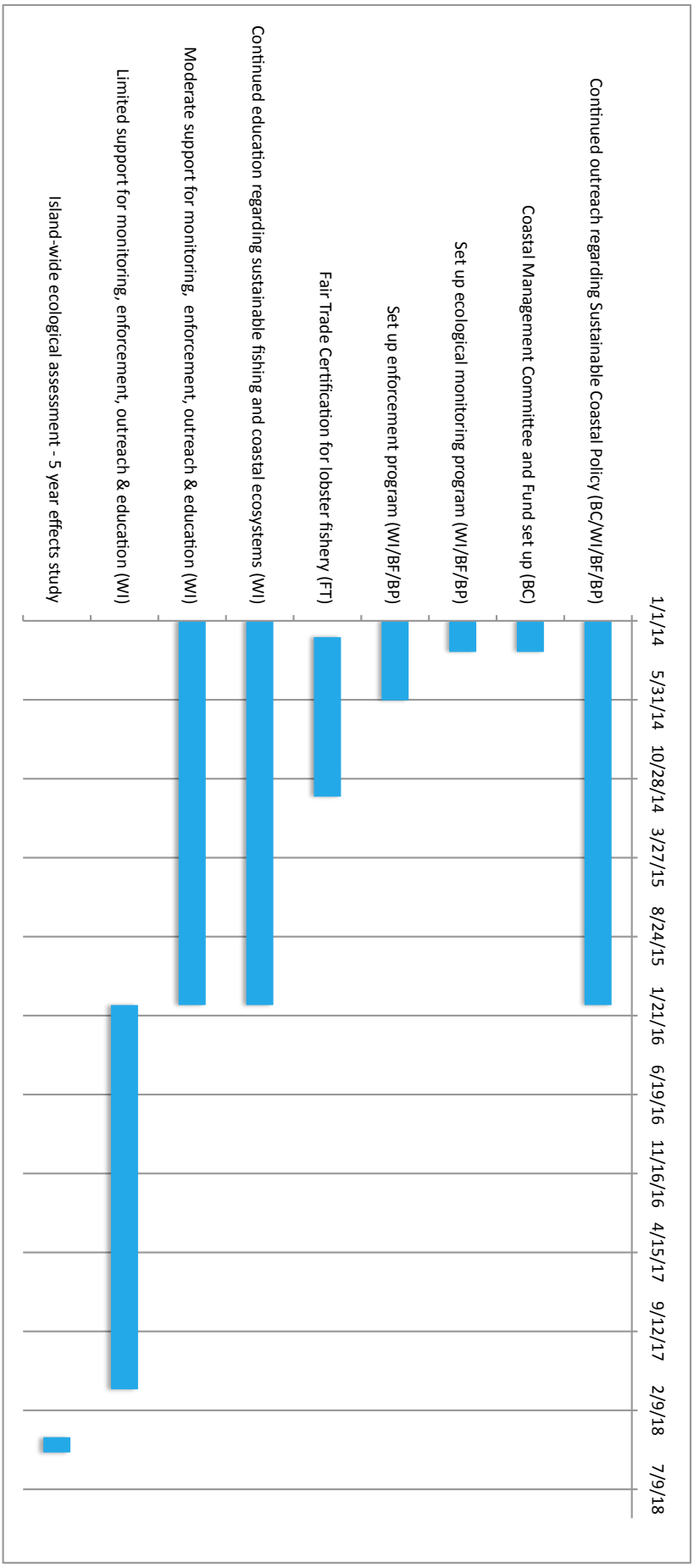
1st formal meeting between Barbuda Council and Waitt Institute (BC/WI)
Waitt Institute scoping trip to Barbuda (WI)
Council formally pledges support for Blue Halo Initiative (BC)
Interviews of fishermen and other stakeholders (WI)
Analysis of laws applying to Barbuda's coastal waters (WI)
SCUBA certification of Lagoon Park and Fisheries staff (WI)
SCUBA safety seminars for fishermen (WI)
Diplomatic launch reception (WI)
Community launch reception (WI)
Mapping of Barbuda's marine habitats (WI)
Island-wide ecological assesment (WI/BF/BP)
Ecological assessment report drafted and finalized (WI)
1st Community consultation meeting (BC/WI)
Formal endorsement from the Prime Minister (PM)
Ecological assessment results presented to stakeholders (WI)
Drafting design of ecological monitoring program (WI/BF/BP)
2nd Community consultation meeting (BC/WI)
Logo Design competition (WI)
Kids Ocean Camp (WI)
3rd Community consultation meeting (BC/WI)
Council creates 1st draft of zoning map (BC)
Stakeholder feedback sought on draft zoning map (BC/WI)
Stakeholder Committee created (BC)
Meeting to clarify legal questions (BC/AG/AF/ED/WI)
Consultations with Barbudan and Antiguan fishermen (WI)
Stakeholder Committee meeting (BC/WI)
4th Community consultation meeting (BC/WI)
Legal Analysis report finalized (WI)
Assessment of enforcement options (WI/BF/BP)
Council prepares 2nd draft of zoning map (BC)
Enforcement recommendations drafted and finalized (WI)
Council distributes draft fisheries regulations for review (BC/AF/ED/AG/BF/BP)
5th Community consultation meeting (BC/WI)
Council prepares final draft zoning map (BC)
Council finalizes fisheries regulations (BC)
Sustainable Coastal Policy finalized (BC)
Outreach regarding new Sustainable Coastal Policy (BC/WI/BF/BP)

2014-2018 *(See Gantt chart below and attached)*

TASK	START	END	# DAYS
Continued outreach regarding Sustainable Coastal Policy (BC/WI/BF/BP)	1/1/14	12/31/14	730
Coastal Management Committee and Fund set up (BC)	1/1/14	3/1/14	59
Set up ecological monitoring program (WI/BF/BP)	1/1/14	3/1/14	59
Set up enforcement program (WI/BF/BP)	1/1/14	6/1/14	151
Fair Trade Certification for lobster fishery (FT)	2/1/14	12/1/14	303
Continued education regarding sustainable fishing and coastal ecosystems (WI)	1/1/14	12/31/15	730
Support for monitoring, enforcement, outreach & education (WI)	1/1/14	12/31/15	730
Limited support for monitoring, enforcement, outreach & education (WI)	1/1/16	12/31/17	730
Island-wide ecological assessment – 5-year follow-up study	4/1/18	4/30/18	29
Island-wide ecological assessment – 10-year follow-up study	4/1/23	4/30/23	29

Note - The following abbreviations are used in the workplan tables above and attached Gantt charts: Barbuda Council (BC), Barbuda Fisheries (BF), Barbuda Parks (BP), Fair Trade USA (FT), Office of Prime Minister (PM), Attorney General (AG), Antigua Fisheries (AF), Environment Division (ED), and Waitt Institute (WI).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4/15/17
9/12/17
2/9/18
7/9/18
Continued outreach regarding Sustainable Coastal Policy (BC/WI/BF/BP)
Coastal Management Committee and Fund set up (BC)
Set up ecological monitoring program (WI/BF/BP)
Set up enforcement program (WI/BF/BP)
Fair Trade Certification for lobster fishery (FT)
Continued education regarding sustainable fishing and coastal ecosystems (WI)
Moderate support for monitoring, enforcement, outreach & education (WI)
Limited support for monitoring, enforcement, outreach & education (WI)
Island-wide ecological assessment - 5 year effects study

Outputs/Deliverables

The following products will be developed by Waitt Institute staff and consultants and will be made available to Initiative partners:

1. **Ecological Assessment**
    - **A.** Report**:** Analysis of the data collected during the April 2013 field research. Includes sections on conch, lobster, fish, coral and algae, water quality, and Codrington Lagoon. Management recommendations are provided in each section.
    - **B.** Data Set: All data collected will be made available.
2. **Community Survey Report:** Analysis of interview data, including identification of stakeholder concerns and priorities, and a preliminary gauge of support for potential management options.
3. **GIS Maps:** All maps will be viewable in SeaSketch (barbuda.seasketch.org).
    - **A.** High-resolution satellite image
    - **B.** Map of coastal habitats
    - **C.** Maps of data collected during the ecological assessment
    - **D.** Map of fishers surveyed fishers' most important fishing areas
    - **E.** Zoning maps created by stakeholders and the Barbuda Council
4. **Legal Analysis Report:** Details findings of legal research and describes potential legal pathways and actions for creating a Sustainable Ocean Policy
5. **Enforcement Recommendations:** Outlines best technology options for effective monitoring and enforcement of Barbuda's coastal waters.
6. **Policy Recommendations:** A list of regulatory options that could help achieve the goal of sustainable resource management. Recommendations will be presented to the Barbuda Council for their consideration, and based on their interest in pursing various options, additional information/policy support will be provided.
7. **Communications Materials:**
    - **A.** Website housing Initiative information and reports: barbuda.waittinstitute.org
    - **B.** Social Media: Facebook page and Twitter feed providing updates
    - **C.** Various handouts explaining the Initiative
    - **D.** Films: 3 short (1 minute) and 1 longer (3-5 minute) film describing the Initiative.
    - **E.** Posters and handouts describing new fishing regulations and costal zones