UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

DEVELOPMENT OF A PROJECT MANAGEMENT METHODOLOGY FOR WILDLIFE CONSERVATION SOCIETY-BELIZE PROGRAM

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DEDICATION

I dedicate this final graduation project to my daughter, as a symbol to her that anything is possible with dedication and hard work. I also dedication this to my father, mother, and husband as they have been my utmost strength and support in achieving this final work. They have been my constant rock and motivation despite the many challenges while completing this document.

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ABSTRACT

The Final Graduation Project document provides an overview of the planning and pilot implementation of the proposed project management methodology for the conservation organization, Wildlife Conservation Society (WCS). WCS is one of the leading international NGOs in Belize providing management, enforcement, sound research, new technology, legislation and policy, and capacity building, for the government and people of Belize. The organization has recognized the need to implement a project management methodology and tools to ensure effective and successful implementation of conservation projects for Belize. This document provides background on the organization, the Project Management plans; the methodology framework; the justification of its sustainability plan, project charter for the plans of the project; and the work packages details.

Keywords: Project management methodology, WCS, NGO

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ABBREVIATIONS AND ACRONYMS

CBO	Community Based Organization
FGP	Final Graduation Project
FY	Financial Year
Inc	Incorporated
INGO	International Non-Governmental Organization
IWT	Illegal Wildlife Trafficking and Trade
MFC	Maya Forest Corridor
NGO	Non-Governmental Organization
PERT	Program Evaluation and Review Technique
PMI	Project Management Institute
PMBOK®	Project Management Book of Knowledge
RD	Regenerative Development
SMART	Spatial Monitoring and Reporting Tool
WBS	Work Breakdown Structure
WCS	Wildlife Conservation Society

EXECUTIVE SUMMARY

The Wildlife Conservation Society Belize has operated for over 30 years in Belize; working in the conservation of marine and terrestrial fields. The organization works on various local and regional projects obtaining funds from global organizations and from multiple project grants. WCS-Belize manages multiple projects yearly to complete its organizational strategic goals. The organization has grown in the last 5 years by taking on additional projects and management roles of approximately 30,000 acres of private protected areas. The organization implementation of projects has followed the requirements of donor and grant agencies, without any formal project management methodology in place. The continued growth of the organization, however, has led to issues in efficiently implementing and managing the various projects. The issue of keeping projects and deliverables organized and tracked has been greatly hindered, leading to many other issues such as delays in deliverables, budgetary shortage, and pressures from the internal implementation team.

This Final Graduation Project (FGP) seeks to use this opportunity to propose and implement project methodology principles with software tools for WCS-Belize to implement in the management of the organization's multiple projects. The objective of the FGP is *to propose a project management methodology principles and guidelines to implement within the organization to improve project effectiveness and success*. The project specific objectives are:

(i) Create a project charter which authorizes and approves the WCS Belize project and grants the project manager authority to apply organizational resources to the project.
(ii) To develop a Scope management plan to ensure that the project includes all the tasks required to complete the project satisfactorily for WCS.
(iii) To develop a Schedule management plan to outline all the project activities to be completed.
(iv) To develop a Quality Management plan to manage and control the project and quality requirements for the project.
(v) To develop a Cost management plan to create a budget and controls to implement the proposed project methodology.
(vi) To develop a Human resource management plan to manage the resources required for implementation.
(vii) To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.
(viii) To develop a Regenerative/sustainable procurement management plan that identifies and assign contracts to suppliers.
(ix) To Pilot the use of the project management software and methodology guides within the organization.

The remaining Knowledge areas, Risk Management plan, and Communication Management plan form the PMBOK® Guide was not integrated into this project. The project is initiated by the organization and due to the small scale and internal capacity building for

WCS, the risks are minimal, and communication are with the internal staff. It was found by the student to integrate portions of these plans into the Quality Management plans and Stakeholder Management Plans. e creation of the FGP will use methodology, tools and techniques acquired throughout the Project Management Master's program and integrate the knowledge from the PMBOK® Guide sixth and seventh edition. Additional sources from study cases and journal articles on the implementation of project management methodology in organizations and specifically conservation organizations through literature reviews will also be used for this FGP.

In conclusion, the WCS project plan for the FEP seeks to provide the organization with a comprehensive document which act as a guide for the organization. The adoption of these guiding principles is better the organization project management methodologies, tools and software to improves its effectiveness in project implementation. The WCS Team is experienced in implementing various sectoral project across the region and the project implementation is an internal capacity building for the organization. The plan contains the necessary guidelines and relating plans for successful adoption and implementation of tools.

The recommendation outlined within this project plan serves as valuable suggestion the organization should consider. It ensures the plan and project follow the necessary guidelines described and the need to prioritizing the project implementation to improve the effectiveness of the organization.

1 INTRODUCTION

1.1. Background

The Wildlife Conservation Society (WCS) is an international organization with over 60 programs worldwide. The WCS Belize program officially began operations in the early 1980's and was then known as the New York Zoological Society. The society at that time was primarily foreign researchers like Alan Robiniowitz, who came to Belize to research on Belize's abundant wildlife and resources countrywide. The organization later formulated a local program and an office within the country, establishing a marine research station on Belize's southern atoll, Glover's Reef. The organization for many years focused on marine work in Belize; researched on sea turtles, corals, conch, lobster, and major fin fish; and researched markets such as grouper and shark.

In 2016 the organization expanded and re-establish its terrestrial work and focused on Illegal Wildlife Trafficking and Trade (IWT). The organization's efforts went into combating IWT within the country and the region, partnering with other Central and Latin American countries, to build local and regional capacities in fighting the cause. The program also built partnerships with the local government departments (Forestry and Fisheries Department), local non-governmental organizations, community organizations, this partnership led to capacity building of the organizations in IWT, timber identification, etc., the use of data collection application, the Spatial Monitoring and Reporting Tool (SMART), to assist in improved and effective protected areas management of both marine and terrestrial areas. The organization's program continues to expand now including the

management of 12,000 hectares of private protected areas, which includes fire management, biodiversity monitoring, compliance and enforcement, and education and outreach.

The expansion of the organization program speaks to its capacity in accomplishing its many projects with international, regional, and local partners. WCS is considered one of the best conservation organizations with a great reputation in sound science and dedication to policy and legislation change for better conservation management that includes the communities and the people greatly affected. The organization continues its work "*to save wildlife in wild places"* across the globe and Belize to ensure we protect our resources that are needed for our own survival.

1.2. Statement of the problem

Belize is a country rich with wildlife and natural resources; the country boasts of having approximately 60% forest covered, the world renowned "Great Barrier Reef," and the best population of many endangered species. The country host a small population of these endangered flora and fauna species dispersed throughout the country. As with every country, we face constant threat to our wildlife and wild places due to continued unchecked development and over-hunting of species.

WCS has worked over the last 35 plus years to ensure that sound science provides decision makers with the information necessary to create policies to guide conservation work. The organization primarily works on grant funding obtained regionally and internationally to fund its many projects in country; and from the global WCS from the 5

zoos and aquarium it owns. WCS Belize constant growth and increased projects in the last 5 years have been more exponential than expected. The organization previously functioned without the use of implementing any project management methodology, tools, and techniques. WCS followed the various guidelines from funders and donors, unfortunately, the expansion has led to unmet deliverables for multiple projects. This has resulted in multiple requests for an increase in time to complete projects, increase in project budgets, increase pressure on teams and many other project issues. The organization seeks to gain assistance in implementing project management methodology guides, principles, several tools and techniques that will allow for the organization to improve its project implementation success and effectiveness.

1.2.1 Current situation of the problem or opportunity in study

It is indicated in the WCS strategic plan of 2018 that the organization uses an adaptive management approach to currently implement projects. However, there is no indicated formal plans, policies, or procedures to ensure the organization implements any of its projects using an adaptive management approach. Furthermore, WCS organizational structure as noted in the organography in Figure 1 is very complex, this has caused tremendous communication breakdown throughout the organization. This has resulted in projects being handled in an ad-hoc manner, where more responsive management takes place. This means project activities are completed to check off deliverables outlined in project proposals, rather than ensuring a full project management plan, identification of team and responsibilities and assignment of tasks. There is no clear management of projects to ensure proper procedure, monitoring, control, quality, and evaluation taking place within

these projects. The goal is to complete the deliverables by any means possible by anyone available.

The result of mis-managed projects has resulted in an unknown cost to the organization because this cost is not being tracked. Additional issues that have arisen are project scope change, scheduled delayed, budget (over or under budget), human resource stretched thin, and ultimately the completion of project without knowledge if its impact on initial targeted goals.

This project hopes to implement project management methodologies guides and software that targets the organization needs 1. Organize its projects to reflect its strategies, and 2. Develop the necessary plans to implement software, that allows the project managers and teams to track their projects, and deliverables to ensure their projects remain organized, and tasks and deliverables are being met. The major task is to determine the best software that can handle the organization of multiple projects and incorporate existing procedures and policies (procurement and company policies) while incorporating best project management guides and principles.

1.2.2 Previous research done for the topic in study.

Preliminary research has focused on project management methods, their application, and characteristics of how they are integrated in projects, process, and operations in completing projects. The various methods described are the agile methodology, waterfall methodology, hybrid applications, Scrum, Kanban and other frameworks commonly used. Research provided comparison of methodologies, types of projects they are applicable to, benefits and challenges.

Research also included looking at the general application of project management, its processes, knowledge areas, planning and control. While the PMBOK® Guide sixth and seventh edition were the primary document to provide this information. Additional literature was also reviewed to provide further literature and information on the application of Project management and application in the conservation field whereby this is relevant for this specific project. Research also looked at one software relevant for Project management, Asana, Microsoft Suite which included Teams, Task Planner etc. as tools to assist project managers to manage and track projects across the organization. This literature provides relevant information for the implementation of project methodology guides and software for WCS.

1.3. Purpose

The purpose of the study is to implement project management methodologies guides with complimentary software tools for WCS to organize, manage, and track all the projects that are implemented locally. This study aims to find the most suitable method guides and tools for the organization improving project implementation and project impact resulting in larger conservation and management impact for Belize.

1.4. General Objective

To propose project management methodology guides and software tool to implement within the organization to improve project effectiveness and success.

1.5. Specific Objectives

1. To Create a Project Charter which authorize and approve the WCS Belize project.

2. To develop a Scope management plan to ensure that the project includes all the task required to complete the project satisfactory to WCS.

3. To develop a Schedule management plan which to outlines all the project activities to be completed.

4. To develop a Quality management plan to manage and control the project and quality requirements for the project.

5. To develop a Cost management plan to create a budget and controls to implement the proposed project methodology.

6. To develop a Resource management plan to manage the resources required for implementation.

7. To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.

8. To develop a Regenerative/sustainable procurement management plan that identifies and assigns contracts to suppliers.

9. Pilot and implementation of recommended project management software and project methodology guide in compatibility with the organization current use of software.

2 THEORETICAL FRAMEWORK

2.1 Wildlife Conservation Society-Belize

2.1.1 Wildlife Conservation Society-Belize background

The Wildlife Conservation Society Belize has been in operation over 35 years in the country focusing on marine and terrestrial conservation. The organization uses sound science to assist in policy, management, and conservation action. WCS was a part of some group's work for the protection of two major protected areas in Belize, which led to many other marine reserves being designated. The organization was instrumental in the pilot and roll out of the Manage access program in Belize, the use of Spatial Monitoring and Reporting Tool (SMART) by marine protected areas for conservation and of recent terrestrial protected areas. Additionally, the long term research and monitoring on major species such as sea turtles, sharks, rays, conch, lobster, Nassau Groupers and corals in the Glover's Reef Marine Atoll.

WCS expanded to management of protected areas in 2021 with its added responsibility for the management and protection of 30,00 acres within the Maya Forest Corridor (MFC). The organization recognizes the importance of people and collaborates with fishing communities, and rural communities to understand their needs and dependence on the natural resources to better understand how WCS can assist to find a balance, Education and outreach is an extension of WCS work, with school visits in target areas, and presentation to the wider public spreading awareness throughout the country, region and at international meetings. The organization uses its capacity and tenure to find a

balance between people, the environment and the economy to ensure sustainable development and use of resources in Belize.

2.1.2 Mission and Vision statements

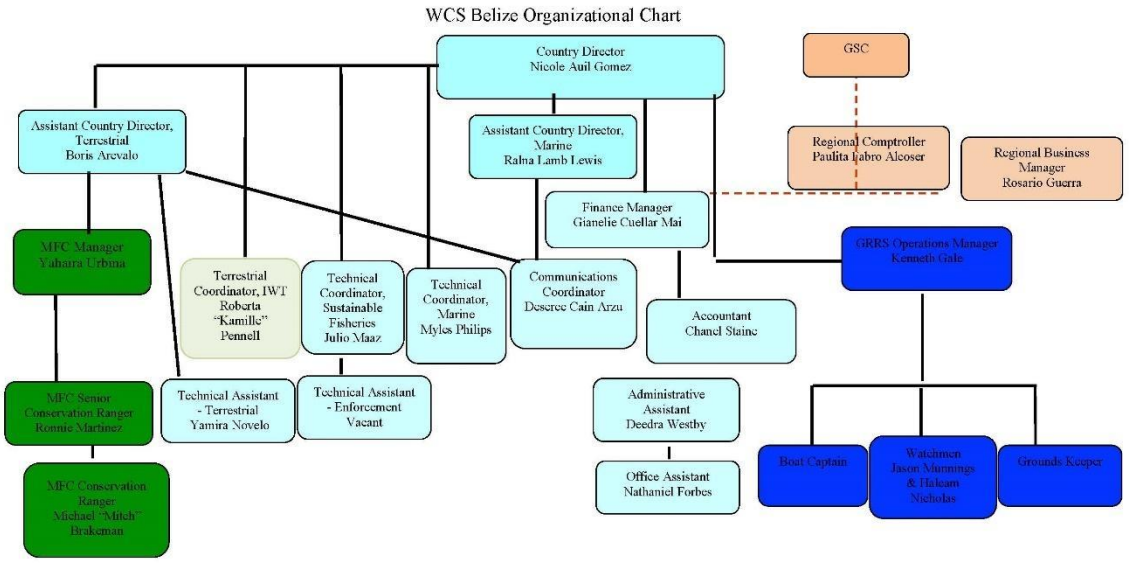
WCS Mission: “WCS Belize conserves and protects the interconnected lands and waters of Belize through science, conservation action, education and inspiring people to value nature.”

WCS vision: “WCS Belize envision a country where diverse marine and terrestrial wildlife thrives in healthy lands and waters, is managed sustainably and provides value for people.” (WCS strategic plan, 2018)

2.1.3 Organizational structure

The Wildlife Conservation Society is led by the Country Director (CD) overseeing the two programmatic areas of Marine and Terrestrial. Each programmatic area is over seen by an Assistant Country Director (ACD). The Director also oversees the Technical Coordinators for Marine, Sustainable Fisheries, and Illegal Wildlife Trade. The Finance Manager also falls under the Director, and below the finance manager is the two Accountant, the Administrative Assistant, and the Office Assistant. The Director also oversees the Glovers Reef Operation manager, who oversees his staff at the station. The Assistant Country Director Marine oversees the Communication Coordinator. The Assistant Country Director Terrestrial oversees the Technical Assistant Terrestrial and Maya Forest Corridor (MFC) Manager. The MFC Manager oversees a station staff of three rangers. (See Figure 1)

Figure 1: WCS Belize Organizational Structure 2023.



Source: WCS Belize Program,WCS FY 2022 organizational structure, N.Auil-Gomez, WCS Director. 2022.

2.1.4 Products offered

The Wildlife Conservation Society is an International Non-Governmental organization (INGO) that works in the field of conservation. As such the organization works to:

1. Assist in the development of science-based policies to protect natural resources and the livelihood of resource users.

2. Assist in the improved protected areas management through scientific understanding, collaborations among co-managers and increased protected area management capacity to lead improvements in design and expansion of protected areas.
3. Collaborate and assist in reducing Wildlife trafficking using intelligence -based enforcement efforts and compliance to decrease the threat of illegal harvesting and trade of marine and terrestrial resources.
4. Facilitate and collaborate with local and international organizations to scientifically understand land and sea management approaches that consider interconnected local impacts, climate change, and resilience; resulting in stronger ridge to reef management for key sites.
5. Coordinate and collaborate program activities with other WCS country programs and other organizations in the Mesoamerican and Western Caribbean region to lead and streamline activities and shared lessons and approaches.
6. Collaborate and help build capacity with local government departments, non-governmental organizations (NGOs), Community based organizations (CBOs), and local communities for the protection and management of natural resources with the use of technology, science, and education.

2.2 Project Management concepts

The Project Management Institute developed and established the “A Guide to the Project Management Body of Knowledge (PMBOK® Guide, 2017). This guide is the

foundation and essentials that provides project managers with the methodologies, policies, procedure, rules, tools, techniques, and life cycle phases needed to practice project management. The PMBOK Guide six and seventh edition is the primary guide used in the development of this project and the guides in developing Wildlife Conservation Society - Belize Project Management implementation of methodology guided and complimentary software.

2.2.1 Project management principles

The Project Management principles based on the PMBOK® Guide seventh edition (2021) describe its principles as "foundational guidelines for strategy, decision making and problem solving". The Project Management Institute (PMI) identifies twelve (12) Project Management principles that are aligned with the values in the *PMI code of Ethics and professional conduct*. The project management principles are:

- Be a diligent, respectful and caring steward;
- Create a collaborative project team environment;
- Effectively engage with stakeholders;
- Focus on value;
- Recognize, evaluate and respond to system interaction;
- Demonstrate leadership behaviors;
- Tailor based on context;
- Build quality into processes and deliverable;
- Navigate Complexity;

- Optimize risks responses;
- Embrace adaptability and resiliency;
- Enable change to achieve the envisioned future state.

WCS Belize is an organization that shares similar principles and core values when developing and implementing projects across the country. These principles will guide the project management methodology developed for the organization.

2.2.2 Project management domains

Project performance domain is a group of related activities that are critical for the effective delivery of project outcomes. They are interactive, interrelated, and interdependent areas of focus that work in unison to achieve project outcomes (PMI, 2021). The eight project performance domains are:

- Stakeholders
- Team
- Development approach and life cycles
- Planning
- Project work,
- Delivery,
- Measurement
- Uncertainty

The Performance domains run concurrently, the applicable domains for the WCS projects that will be incorporated are planning, team, development approach and life cycles,

measurement, and uncertainty. The remaining domain may be applicable, and during development of the project may also be integrated.

2.2.3 Predictive, adaptative and hybrid projects

In a predictive life cycle, also called a fully plan-driven cycle, the project scope, and the time and cost required to deliver that scope, are determined as early in the life cycle as possible.

Adaptive is when the scope of work and requirements for the project are difficult to define, therefore creating a rapidly changing environment. Requirements are clarified in short iterations (cycles) and therefore require an Agile approach.

Hybrid project management is taking two or more different project management methodologies and combining them to create an entirely new method. This requires one to identify which methods can be combined to create or use a hybrid method.

The development of WCS project management methodology will utilize a predictive management approach and life cycle. Predictive management refers to when the scope of the work and requirements for the project are clear and justified in the detailed upfront planning. Any required changes to the scope are progressively managed. (Project Management Institute, 2017).

2.2.4 Project management

Project Management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements (Project Management Institute, 2017).

The project management skills, knowledge and tools will assist in the development of the methodology to guide WCS implementation of projects within the organization.

2.2.5 Project management knowledge areas and processes

2.2.5.1 Project Management Knowledge Areas

The PMBOK® Guide sixth edition and the Practice Guide 2023 details (10) knowledge areas of project management. These ten knowledge areas serve as guidelines to Project Managers and teams in the implementation process of any project. The knowledge areas are best suited to work together for best success, however dependent on the Project managers and team may eliminate the use of one or more areas and supplement with additional guidelines, tools, or process to complete a project. The WCS project for the FGP will use only 8 of the knowledge areas in order to use to effectively develop, guide and implement a project management methodology and software tools for the organization. The following describes the 10 Knowledge areas.

1. Project Charter: The Project Charter is a formal short document, which summarize the project goals, objective, resource requirement, preliminary schedule, cost, risk and assumptions. It authorizes the commencement of the project. A project charter will be created to authorize and approve the WCS Belize project and grants the project manager authority to apply organizational resources to the project.
2. Scope Management: The Scope Management details the project objectives and ensure they are achieved within the constraints of the resources available and the timeframe.

The Scope management in this project is to ensure that the project includes all tasks required to complete the project satisfactorily to WCS.

3. Schedule Management: The Schedule Management uses much of the information from the Scope Management plan to create the necessary timelines, milestones, scheduling resources, planning activities, and allocating the necessary time for its completion. This projects Schedule management plan will outline, plan, and manage the schedule completion of the project successful completion.
4. Quality Management: The quality management ensures the integrity of the project; this essentially ensures the deliverables associated with the project meets the predetermined standard of the organization or client. The Quality management plan will ensure to manage and control the project and quality requirements to meet WCS objectives and provide monitoring criteria to determine effectiveness of implementation.
5. Cost Management: The cost management details the cost associated with the project and specifically breaks down cost per activity or task, tracking expenditure and identifying ways to reduce cost or maximize the resources. The Cost management plan within this project will create a budget and controls for WCS to implement the proposed project. Additionally, will include the organization procurement process as it relates to the cost management.
6. Resource Management: The Resource management details the management of people, teams and other resources requires to complete the project successful. This include assessing the team, building the team, understanding skills, and assigning task to

match those skills. An essential portion is also managing the integration and interation of the teams and motivation throughout the project life cycle. The Human resource management plan to identify the resources required for implementation, recommended suppliers, and management of those resources for the project success. A large portion of the WCS project will require Human Resources more so than equipment or material resources.

7. Stakeholder Management: The Stakeholder management identifies the project stakeholders, their interest, engagement needed, and addressing concerns and maintaining updated as necessary. This is to ensure stakeholders concerns, suggestion are integrated into the project and managing stakeholders and company interaction for project success. The Stakeholder management plan identifies the persons and groups in the project and strategies for engagement. The WCS project stakeholders will be its staff and their engagement and concerns are highly essential for the success of the project.
8. Communication Management: The Communication management objective is to ensure all stakeholders are updated with the progress of the project. This involves the creation of a communication plan, outlining and establishing channels for communication and managing the necessary conflicts. This project has combined some of the communication management with the Stakeholder management plan as the project encompass only the internal staff of WCS and not outside stakeholders. The creation of a separated communication plan was not deemed necessary.

9. Risk Management: The Risk Management identifies the potential risks and issues within the project and details and develop necessary contingencies to address risk throughout the project lifecycle.
10. Procurement Management: The Procurement Management involves acquiring the goods and services necessary to complete the project. This plan identifies the potential vendors, evaluating offers from suppliers, negotiation contracts, term and managing the processes to ensure there is compliance with legal and company requirements. The WCS project require little services and good, the organization additionally follows its own procurement policy. Therefore, it has been combined with the requirements to develop a Regenerative/sustainable procurement management plan. The Regenerative/sustainable procurement plan identifies and assigns contracts to suppliers who can produce goods and services that are both environmentally friendly and economically viable.

The knowledge areas that are not included in this project are Communication management and Risk management. As this project is the implementation of project methodology principles and software tools for WCS the stakeholders are the staff of the organization and therefore the stakeholder management plan will incorporate many aspects of communication management with the staff. The risk with the implementation of the methodology relies on the cooperation of the organization. This project was developed as a request from WCS and therefore the risks are low and therefore a full risk management plan is not necessary but can be encompassed in the organization Quality management plan.

2.2.5.2 Project Management Processes

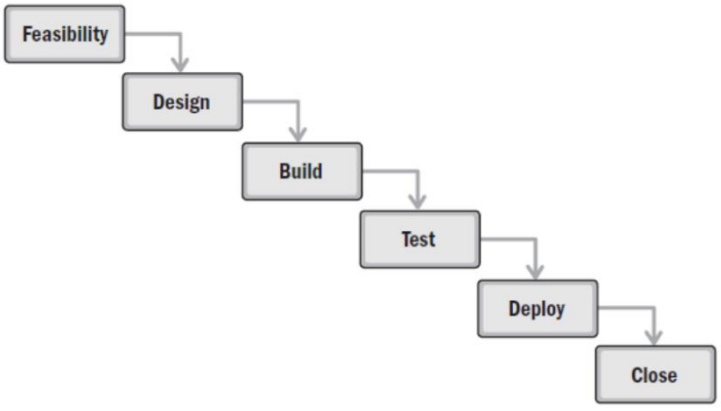
The project management process identifies a series of activities directed at achieving a specific result in which inputs are developed to produce outputs. These processes have been grouped into 5 areas. These 5 areas are Initiating, planning, executing, monitoring & control and closing. The project management knowledge areas categorize these processes and for each, describe the component process, practices, inputs, output, tools and techniques.

2.2.6 Project life cycle

Predictive Life Cycle

The PMBOK® Guide seventh edition (2021) states “Predictive life cycle undertake the bulk of the planning up front and then continue to replan by using rolling wave and progressive elaboration (PMI, 2021).

Figure 2: Predictive Project Life Cycle

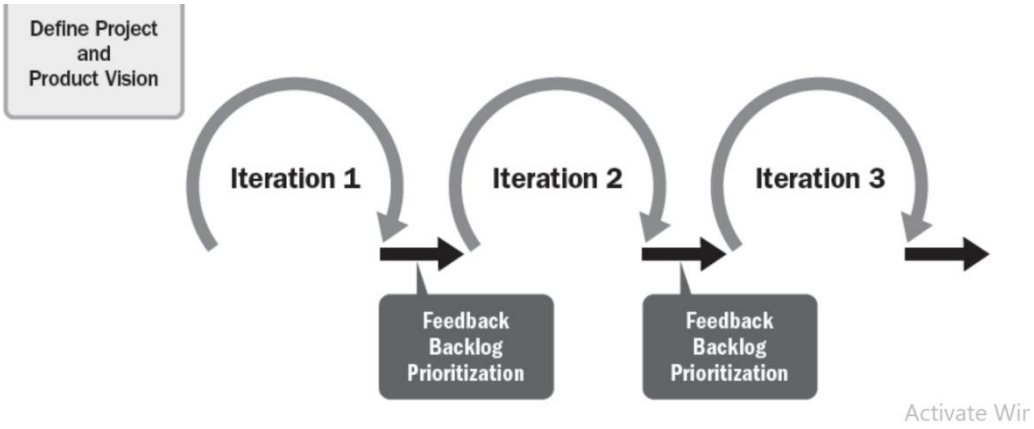


Source: Project Management Institute, A Guide to the Project Management Body of Knowledge (PMBOK® Guide) seventh edition, Project Management Institute, Inc., 2021, Figure 2-9, Page 43.

Adaptive Project life Cycle

The PMBOK® Guide seventh edition (2021) describes the adaptive development approach as “iteration (sometimes known as sprints), the customer reviews a functional deliverable at the end of each iteration. At the review the key stakeholders provide feedback, and the project team updates the project backlog of features and functions to prioritize the next iteration.” (PMI, 2021) This can be seen in the life cycle below:

Figure 3: Adaptive Project Cycle



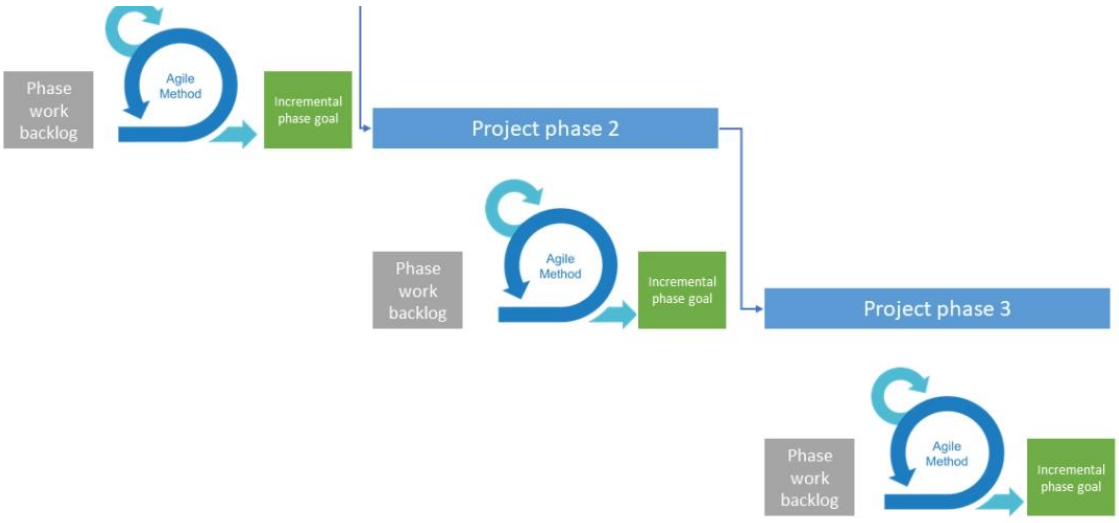
Source: Project Management Institute, A Guide to the Project Management Body of Knowledge (PMBOK® Guide) seventh edition, Project Management Institute, Inc., 2021, Figure 2-11, Page 45.

Hybrid Project Life Cycle

There is no define Hybrid life Cycle as Hybrid approach define by the PMBOK® Guide seventh edition (2021) “A combination of two or more agile and nonagile elements,

having a nonagile end results." As described in section 2.2.3 it iterates the definition of Hybrid project management which is the combination of management methodology. Below we provide an example of a Hybrid Life Cycle which combines an Agile and traditional waterfall (Adaptive and Predictive) method.

Figure 4: Hybrid Project Life Cycle



Source: Teamhood website, 2023. Hybrid Project management.

2.2.7 Company strategy, portfolios, programs and projects

WCS Belize have two programs: the Marine Program and Terrestrial program. Each program has related projects which are guided by the organization's three strategies. These Strategies are incorporation of the larger Global WCS organization and are *Discover, Protect, and Inspire.*

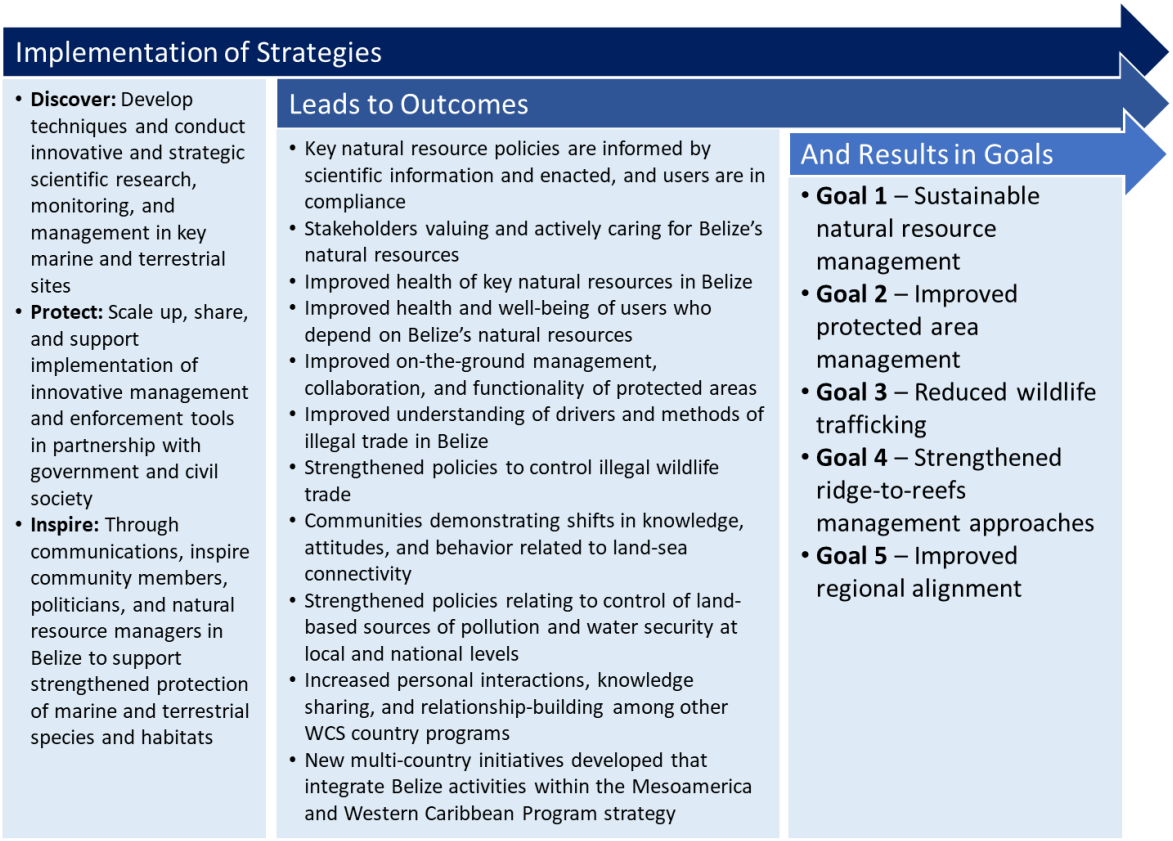
WCS Strategy

Discover: Develop techniques and conduct innovative and strategic scientific research, monitoring, and management in key marine and terrestrial sites.

Protect: Scale up, share, and support implementation of innovative management and enforcement tools in partnership with government and civil society.

Inspire: Through communications, inspire community members, politicians, and natural resource managers in Belize to support strengthened protection of marine and terrestrial species and habitats.

Figure 5: WCS Implementation Strategy



Source: WCS Belize. Strategy Plan. 2018

2.3 Other applicable theory/concepts related to the project topic and context.

2.3.1 Non-Governmental Organization

A non-governmental organization is defined as “a group that functions independently of any government”. It is usually non-profit and sometimes called civil society organizations, and can be established on community, national and international levels to serve a social or political goal such as a humanitarian cause or the protection of the environment (Folger, 2022).

2.3.2 Project Management Methodology

Project management methodologies are a set of guiding principles and processes used to plan, manage, and execute projects (Adobe Coms Team, 2022). The project management methodology is chosen to determine how work is prioritized and completed. Examples of Project management methodologies are agile, waterfall, Kanban, Scrum etc. WCS strategic plan of 2018 briefly describes the organization’s use of an Adaptive management style to implement the organization strategy. With this concept a Hybrid methodology can provide the ability to incorporate WCS existing project management strategy.

2.3.3 Other theory related to the topic in study.

2.3.3.1 Regenerative Development

Regenerative Development (RD) is an approach that encourages communities to support and create positive relationships that will benefit society and our environments by

allowing the system to evolve and adapt to changing circumstances. The paradigm emerges from an ecological mindset by embracing uncertainty and change (Hernandez, 2019). The RD approach and aspects will be incorporated within the development of the project specifically with the procurement procedures for WCS and determination and evaluation of how much RD is already incorporated and where additional incorporation can take place.

3 METHODOLOGICAL FRAMEWORK

3.1 Information sources

An information source is a source of information for someone, it is anything that might inform a person about something or provide knowledge. Information sources may be observations, people speeches, documents, pictures, organizations etc. (Varshney 2011). Information sources are vital in the creation and completion of this project. The use of information sources both primary and secondary will be used and analysed in the development of the project management methodology and complimentary software for WCS implementation. These information sources will be used to understand the best method to use for the organization and case studies that can provide lessons learnt and challenges to be faced.

3.1.1 Primary sources

Primary sources of information are the first published records of original research and development or description of new application or new interpretation of an old theme or idea. These are original documents representing unfiltered original ideas. Examples of

primary sources are books, periodicals, conference papers, etc. (Varshney, 2011). The primary sources expected to be consulted are technical documents and reports created by the organization, interviews and information gathered from WCS staff to develop or customize a project management methodology suitable for the organization. The collection of this information will occur throughout the process of this project, initial collection will focus on information providing background of WCS and operational structure, vision, mission, and goals.

3.1.2 Secondary sources

Secondary sources of information are those which are either compiled from or refer to primary sources of information. Secondary sources of information include bibliography, reviews, handbooks, manuals, critical tables etc. (Varshney, 2011). Secondary sources of information will be used to substantiate the tools and techniques used to develop the project management methodology. These sources include the use of the PMBOK® Guide sixth and seventh edition, journals and articles on project management, project management methodologies, project management software and regenerative development.

Table 1: Information Sources

Objectives	**Information sources**	
	Primary	**Secondary**
Create a project charter which authorizes and approves the WCS Belize project and grants the project manager authority	WCS Strategic Plans, interviews, emails, and project proposals.	PMBOK® Guide Sixth (2017) and Seventh edition (2021).

Objectives	Information sources	
	Primary	**Secondary**
to apply organizational resources to the project.		
To develop a Scope management plan to ensure that the project includes all the work required to complete the project satisfactory to WCS.	Interviews, Technical reports, WCS Strategic Plans	PMBOK® Guide Sixth (2017) and Seventh edition (2021).
To develop a Schedule management plan which outlines all the project activities to be completed.	WCS Strategic Plans, interviews, emails, and project proposals	PMBOK® Guide Sixth (2017) and Seventh edition (2021).
To develop a Quality management plan to manage and control the project and quality requirements for the project.	WCS Strategic Plans, interviews, emails, and project proposals, WCS policies and procedure documents	PMBOK® Guide Sixth (2017) and Seventh edition (2021). Journals, articles, and case studies
To develop a Cost management plan to create a budget and controls to implement the proposed project methodology.	WCS Strategic Plans, interviews, emails, and project proposals, procurement policies document	PMBOK® Guide Sixth (2017) and Seventh edition (2021).

Objectives	Information sources	
	Primary	**Secondary**
To develop a Human resource management plan to manage the resources required for implementation.	WCS Strategic Plans, interviews, emails, and project proposals	PMBOK® Guide Sixth (2017) and Seventh edition (2021).
To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.	WCS Strategic Plans, interviews, emails, and project proposals	PMBOK® Guide Sixth (2017) and Seventh edition (2021).
To develop a Regenerative/sustainable procurement management plan that identifies and assigns contracts to suppliers.	WCS Strategic Plans, interviews, emails, and project proposals	PMBOK® Guide Sixth (2017) and Seventh edition (2021).
To identify and propose the necessary tools (Software)which complements the proposed method	WCS Strategic Plans, interviews, emails, and project proposals, and software development websites	PMBOK® Guide Sixth (2017) and Seventh edition (2021). Journals, and Articles
To pilot the method and selected tools using a suitable project to determine effectiveness.	WCS Strategic Plans, interviews, emails, and project proposals	PMBOK® Guide Sixth (2017) and Seventh edition (2021). Journals, Articles, and case studies

Note: Table elaborate by Y.Novelo, Author, 2022. Own work.

3.2 Research Methods

Research methods are the design of a particular research study: a set of procedures according to which it is undertaken, including techniques of data gathering and data analysis (this may involve quantitative research and/or qualitative research) (Oxford Reference, 2023). In this project the student will make use of Analytic methods, experimental methods through pilot testing, and descriptive research method to develop WCS proposed project methodology.

3.2.1 Analytical method

The Analytic method uses techniques to analyze problems, fact or status in order to accurately forecast potential outcomes while factoring in project variables. In the Analytic method the use of Pilot testing will be done to analyze if the proposed project method and software meets WCS requirements and improve project management within the organization. The Pilot method will be implemented for 1 month within one defined project to organize, track and manage the deliverables for the project. The use of qualitative and quantitative data and descriptive statistics to describe and understand the features and specifics of the data set by short summaries about the procedures and samples. The development of additional graphs, charts and tables as needed will be done to further develop the evaluation of the project and processes.

3.2.2 Descriptive method

Descriptive research aims to describe a population, situation, or phenomenon accurately and systematically. (McCombes, 2022). This type of method does not control or

manipulate any of the variables but uses observation and measures them. Descriptive methods that will be used in the creation and implementation of this projects are focused groups, and case studies.

Table 2: Research Methods for WCS proposed Project Methodology Plan

Objectives	**Research methods**	
	Analytic Research Method	**Descriptive Research Method**
Create a project charter which authorizes and approves the WCS Belize project and grants the project manager authority to apply organizational resources to the project.	Critical thinking to develop the charter analysing information provided from WCS.	Summarizing information collected from policies, procedures, management plans and company strategic plans.
To develop a scope management to ensure that the project includes all the work required to complete the project satisfactorily to WCS.	Analysis using critical thinking and expert judgment to develop the scope of the project.	Summarizing and providing descriptive explanation of the process and components of the objective.
To develop a schedule management plan which outlines all the project activities to be completed.	Analysis of WBS and CPM to develop the plan.	Summarizing and providing descriptive explanation of the process and components of the objective.
To develop a Quality Management plan to manage and control the project and quality requirements for the project.	Analysis of quality and monitoring procedure to develop the plan.	Summarizing and providing descriptive explanation of the process and components of the objective.

Objectives	Research methods	
	Analytic Research Method	**Descriptive Research Method**
To develop a Cost management plan to create a budget and controls to implement the proposed project methodology.	Analysing using expert judgement and critical thinking cost analysis to develop the plan.	Summarizing and providing descriptive explanation of the process and components of the objective
To develop a Human resource management plan to manage the resources required for implementation.	Analyzing through critical thinking and expert judgement how to organize the best use of resources to develop the plan.	Summarizing and providing descriptive explanation of the process and components of the objective.
To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.	Analysing through critical thinking and expert judgement the interest influence matrix to determine stakeholders' roles and influence and impact to project to develop the plan.	Summarizing and providing descriptive explanation of the process and components of the objective.
To develop a Regenerative/sustainable procurement management plan that identifies and assigns contracts to suppliers.	The analysing of various vendors to determine best to use and that are environmentally sound using criteria.	Summarizing and providing descriptive explanation of the process and components of the objective.

Objectives	Research methods	
	Analytic Research Method	Descriptive Research Method
To pilot the method and selected tools using a suitable project to determine effectiveness.	The use of Pilot testing results and analyze the progress if beneficial in an experimentation with one project implementation.	Summarizing and providing descriptive explanation the process and components of the objective

Note: Table elaborated by Y.Novelo, Author, 2022. Own work.

3.3 Tools

In Project management Tools are specially designed to assist individuals or teams in planning, organizing, tracking, and managing their projects and tasks effectively and to achieve their project objectives. Tools in PM are referred to project management software, planning/ scheduling, communicating tools etc. Some of these tools include work breakdown structure, Gantt charts, Jira etc. The table below will list the tools intended to be used to develop WCS proposed project method and implementation of complimentary software.

Table 3: Tools proposed use in WCS proposed Project

Objectives	Tools
Create a project charter which authorizes and approves the WCS Belize project and grants the project manager authority to apply organizational resources to the	Interviews, Brainstorming, Meetings, Expert Judgement

Objectives	Tools
project.	
To develop a scope management to ensure that the project includes all the task required to complete the project satisfactorily to WCS.	Meetings, Brainstorming, Expert Judgement
To develop a schedule management plan which outline all the project activities to be completed.	WBS, Gantt Chart, Meetings, Interviews, Expert Judgement, Critical Path Method, PERT
To develop a Quality Management plan to manage and control the project and quality requirements for the project.	Flow charts, Brainstorming, Expert judgement
To develop a Cost management plan to create a budget and controls to implement the proposed project methodology.	Analogous estimation, Parametric estimation, Group decision making technique, Expert Judgement, Vendor analysis
To develop a Human resource management plan to manage the resources required for implementation.	Resource Breakdown structure, Responsibility assignment matrix, Expert Judgement
To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.	Influence/Interest matrix, Expert Judgement
To develop a Regenerative/sustainable procurement management plan that identifies and assigns contracts to suppliers.	Expert Judgement, Vendor Analysis
To pilot the methodology guides and	Personal developed criteria, expert

Objectives	Tools
selected tools using a suitable project to determine effectiveness.	judgement

Note: Table elaborated by Y.Novelo, Author, 2022. Own work.

3.4 Assumptions and Constraints

The PMBOK® Guide seventh edition (2017) describes an assumption as a factor in the planning process that is true, real or certain, without proof or demonstration. It describes a constraint to be a limiting factor that affects the execution of a project, program, portfolio, or process. The table below summarizes the constraints and assumptions in the development of the WCS project management methodology.

Table 4:Assumptions and Constraints for WCS Project Plan

Objectives	Assumptions	Constraints
Create a project charter which authorizes and approves the WCS Belize project and grants the project manager authority to apply organizational resources to the project.	The Charter will be created based on the objectives of the FGP	WCS must agree to the Project Charter and approve.
To develop a scope management to ensure that the project includes all the task required to complete the project satisfactorily to WCS.	The development of the Scope will rely on the primary and secondary source of information and WCS objectives.	WCS may require a change in the Scope of the project and insufficient information.
To develop a schedule management plan which outlines all the project activities to be completed.	Schedule will be created in line with the deadline of FGP schedule	Timeline to complete the FGP.

Objectives	Assumptions	Constraints
To develop a Quality Management plan to manage and control the project and quality requirements for the project.	The quality management plan will be created in line with WCS quality policy and procedure.	WCS quality and monitoring plans are outdated.
To develop a Cost management plan to create a budget and controls to implement the proposed project methodology.	WCS and the student will finance the project based on the budget outlined.	Inflation in cost of supplies, resources, and tools to implement
To develop a Human resource management plan to manage the resources required for implementation.	Resources will be identified and used during the development of the project.	Insufficient resources to complete the project
To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.	Stakeholders will be willing to participate in the creation of the project.	Stakeholders' availability throughout the project is unknown and therefore participation may be limited and biased.
To develop a Regenerative/sustainable procurement management plan that identifies and assigns contracts to suppliers.	A feasible regenerative plan will be able to incorporate into the organization	Regenerative plan is restricting supplier and vendors' access.
To pilot the methodology guides and selected tools using a suitable project to determine effectiveness.	The pilot will be able to be completed within the timeframe and provide the necessary information to implement the project.	Prioritization of piloting and Time schedule will be limiting to fully determine if the method can be successfully

Objectives	Assumptions	Constraints
		rolled out throughout WCS.

Note: Table elaborated by Y.Novelo, Author, 2023. Own Work

3.5 Deliverables

The PMBOK® Guide seventh edition (2017) defines Deliverable as any unique and verifiable product, result or capability to perform a service required to complete a process, phase or project. The deliverables for this project are listed in the tables below based on the specific objectives to accomplish in the development of WCS proposed project methodology for the implementation of projects.

Table 5: Deliverables for WCS proposed Project Methodology

Objectives	Deliverables
Create a project charter which authorizes and approves the WCS Belize project and grants the project manager authority to apply organizational resources to the project.	Project Charter.
To develop a scope management to ensure that the project includes all the task required to complete the project satisfactorily to WCS.	Scope Management Plan
To develop a schedule management plan	Schedule Management Plan

Objectives	Deliverables
which outlines all the project activities to be completed.	
To develop a Quality Management plan to manage and control the project and quality requirements for the project.	Quality Management Plan
To develop a Cost management plan to create a budget and controls to implement the proposed project methodology.	Cost Management Plan
To develop a Human resource management plan to manage the resources required for implementation.	Human Resource Management Plan
To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.	Stakeholder Management Plan
To develop a Regenerative/sustainable procurement management plan that identifies and assigns contracts to suppliers.	Regenerative/Sustainable Plan
To implement Pilot of methodology guides and software for a period no less than 6 months	Pilot, assessment of pilot implementation

Note: Table elaborated by Y.Novelo, Author, 2023. Own work

4 RESULTS

Introduction

The Project Management Methodology Plan for the Wildlife Conservation Society (WCS) project management methodology implementation is the result of the Final Graduation Project. The Plan includes a project and eight management plans that will guide the project in initiating, planning, executing, monitoring, and controlling the project implementation. In this section of the plan the details of the project are described in its full capacity. The Development of the Project Charter, Scope Management plan, Schedule Management plan, Cost Management Plan, Quality Management plan, Human resource Management plan, Stakeholder Management plan, the recommended software and pilot implementation plans and guidelines. In each of these plans the necessary templates and implementation guides will be detailed for effective implementation of this project. The Result section of this document seeks to provide all the necessary information for WCS Directors, Project Coordinators, managers, and officers to use to undertake the project successful execution.

4.1 WCS Project Charter

The following is the Project Charter created for the WCS project titled "Implementation Plan for Project Management Methodology and Tools for WCS". The Charter was reviewed and approved by the organization's Country Director, Nicole Auil-Gomez.

Table 6: WCS Project Charter

Applicant Name	Wildlife Conservation Society-Belize
Contact/Name:	Nicole Auil-Gomez Country Director
Address	1755 Coney Drive Belize City, Belize
Telephone Numbers:	(501)223-3271
E-mail	nauilgomez@wcs.org copy: ynovelo@wcs.org
Organization	Wildlife Conservation Society
Project Description	
Name	Implementation Plan for Project Management Methodology and tools for WCS
Application Area	Project management, conservation, project methodology
Project Timeframe	12 months
Amount	BZ 15,000
Objectives	The objective of the project is to improve the management of WCS project implementation by adopting Project management methodologies guides and software to increase effectiveness and efficiency of project deliverables. Specific Objectives:

	1. Develop and customize project management methodology guide and tools with a phased implementation plan over a 1 year period. 2. Research and pilot 3 complementary project management software to increase organization, tracking, and team building.
Purpose	Project Management methodology is used across all faucets of professions across the world. It is essential in the successful implementation of projects within the business or organization. WCS's aim is to develop a project management methodology and implementation of complimentary software to improve its efficiency and effectiveness of projects implemented within the organization across the country and region. The organization has recognized its constraints in its current strategy and needs to improve its strategy and modernize its project management techniques to achieve its goal to ensure the greatest impact in the conservation field.

Justification	WCS Belize conservation work and management focus on Belize's natural resources and wildlife that are at risk. The organization focuses on sound science, technology, management, policy, and capacity strengthening of government and NGO partners. A great source of funding is provided through various regional and international grants and projects to accomplish WCS goals. The development and implementation of this project is in response to the growth WCS country program has experienced within the last 3 years. The need to revamp the organization project management methodology and implement project management tools has become vital to ensure continued successful project impacts within the conservation and natural resource management in Belize.
Deliverables & Outputs	Project Plan Completion ● Project management templates (Scope, schedule, and change control) ● Cost management yearly operational budget ● Human resource requirements ● Quality management ● Stakeholder identification and management

	● Regernative/Sustainable procurement management Training ● WCS staff training of guides and software Pilot ● Recommended software tools and techniques to incorporate. ● Implementation plans and schedule. ● Pilot implementation of a short-term small project within the organization. ● Pilot the software on the same short-term project. Assessment and Evaluation pilots, WCS users' feedback.
Assumptions & Constraints	Assumptions: ● WCS staff willingness to uptake change ● Participation from staff to Pilot methodology and tools. ● WCS high motivation to implement methodology. ● Software and tools are easy to incorporate into WCS already project management operating system. Constraints ● The cost of implementation may not be favorable to the organization budget. ● Insufficient human resources available to fully implement the plan. ● Software unable to meet the needs of the organization.
Risks	1. WCS Belize having competing priorities leading to delays in implementation. 2. Staff availability for training is based on staff time and therefore can delay project implementation. 3. WCS staff unwilling to incorporate project management tools within daily operational management.

<table>
<tr><td></td><td>4. WCS project methodology and tools requirements may exceed the proposed budget.</td></tr>
<tr><td>Budget</td><td>
<table>
<tr><th>Expense</th><th>Unit</th><th>Total</th></tr>
<tr><td>Project Management Software Licenses (3 software package)</td><td>Per Year</td><td>$12,200</td></tr>
<tr><td>Trainings (Office Staff)</td><td>4</td><td>$2, 800</td></tr>
<tr><td>Budget</td><td></td><td>$15,000</td></tr>
</table>
</td></tr>
<tr><td>Milestones</td><td>
<table>
<tr><th>Milestones</th><th>Start Date</th><th>End Date</th></tr>
<tr><td>Plan completion</td><td>March 13th 2024</td><td>August 31st 2024</td></tr>
<tr><td>Trainings</td><td>December 1st 2024</td><td>February 28th 2025</td></tr>
<tr><td>Pilot</td><td>January 1st 2025</td><td>June 30th 2025</td></tr>
<tr><td>Implementation</td><td>January 1st 2025</td><td>June 30th 2025</td></tr>
<tr><td>Project Management</td><td>March 13th 2024</td><td>June 30th 2025</td></tr>
</table>
</td></tr>
<tr><td>Main Stakeholders</td><td>WCS Belize Staff</td></tr>
<tr><td>Country Director WCS</td><td>Signature:
Nicole Auil Gomez</td></tr>
</table>

4.2 Scope Management Plan

4.2.1 Introduction

The Scope Management Plan provides the approach and guideline on the expected deliverables and outcomes the project is to achieve in line with the objectives of the project and organization. Additionally, it will provide the necessary timeline, work breakdown structure, the stakeholders' roles and responsibilities and the change control process for the project. The purpose of the Scope Management plan is to ensure the project manager and team remain aligned to the project objectives, deliverables, schedule, budget and deter the possibility of scope creep.

A Project Charter (4.1) was created and used to provide details to the Scope Management Plan. In the development of the Scope management plan, the Project Manager held meetings with WCS Country Directors to understand the organization needs and request for this project.

4.2.2 Scope Management Approach

The project relies on a hybrid life cycle, which will incorporate both the predictive and adaptive management method in iterative cycles. The creation of the project method and phased implementation will occur in a predictive life cycle; however, the pilot of the complementary software will occur in an adaptive life cycle, overall, a hybrid cycle for the entire project will be adapted for the completion of this project, whereby feedback will provide insight into the phases of the project that progress to completion. This is done to reflect WCS realities in project implementation and to allow the staff and directors to be a

part of the process. The Processes used for this Project Management Methodology Plan were Pan scope management, Define scope, Create WBS, and Scope change control.

4.2.3 Plan Scope Management

The scope baseline within this project methodology plan includes the project's Scope Statement, Work Breakdown Structure (WBS) and WBS Dictionary. WCS shall amend this baseline only through the Perform Integrated Change Control process. WCS will validate and confirm scope and control scope of the project with each deliverable or phase review.

The Project Manager of this project will be solely responsible for scope management and will provide updates to the Country Director and Assistant Country Directors on project progress. The following individuals (Table 7) will be responsible for scope management roles and responsibilities.

Table 7: Scope Roles and Responsibilities

Name	Organization	Responsibility
Country Director	WCS	● Provides high-level approvals. ● Signs official agreements. ● Approves the final project charter. ● Receives monthly monitoring and evaluation reports. ● Provides approval of Scope Plan ● Reviews major scope change requests and makes final decisions/ recommendations.

Name	Organization	Responsibility
		● Approves and signs off the acceptance criteria of all deliverables.
Assistant Country Director, Marine	WCS	● Provides recommendations to develop services needed. ● Participates in project deliverables. ● Benefits from and impacts project outcome. ● Provides feedback on implemented services to record in lessons learnt. ● Provides recommendations to develop services needed.
Assistant Country Director, Terrestrial	WCS	● Provides recommendations to develop services needed. ● Participates in project deliverables. ● Benefits from and impacts project outcome. ● Provides feedback on implemented services to record in lessons learnt. ● Provides recommendations to develop services needed.
Project Coordinator	WCS	● Responsible for the scope management process. ● Ensures that all required task is delivered on time and within budget. Reports monthly to WCS Directors deliverables, timeline, and budget status.

Name	Organization	Responsibility
Project Officers/Managers	WCS	• Provides recommendations to develop services needed. • Participates in project deliverables. • Benefits from and impacts project outcome. • Provides feedback on implemented services to record in lessons learnt.

Note: Table elaborated by Y. Novelo, Author, 2023. Own Work

4.2.4 Collect Requirement

A questionnaire (See appendix 5) was developed to obtain the perspectives of WCS staff who were identified as project leads, project managers, implementation and technical staff and support staff who participate in the organization project implementation. The questionnaire serves as a platform to obtain the staff perspective of project implementation within the organization, improvements, needs and requirements to reflect into the process of creating the Project Management Methodology for the organization. Table 8 provides a requirement list that is necessary to meet WCS objectives and goals of developing and implementing a project management methodology.

Table 8: Scope Requirements List

#	Requirement Description	Needs, Goals and Objectives	Project Objectives	WBS Deliverable	Stakeholder
1	Recommend project	Improved implementation	Sustainable project,	Plan Completion	WCS

#	Requirement Description	Needs, Goals and Objectives	Project Objectives	WBS Deliverable	Stakeholder
	management methodology with implementation guidelines.	for long term sustainability	effective, and impactful projects		
2	Develop Project management templates for Scope, schedule, and Change control.	Provide guidelines to streamline projects	Quality monitoring and control of projects	Plan completion	WCS
3	Create a yearly operational budget for the continued existence of the methodology.	Sustainability of project cost and objectives	Financial Sustainability	Plan completion	WCS
4	Develop Human resource requirements guide necessary to	Sustainability of project objectives, effectiveness, and efficiency	Human resource sustainability	Plan completion	WCS

#	Requirement Description	Needs, Goals and Objectives	Project Objectives	WBS Deliverable	Stakeholder
	undertake the projects.				
5	Develop a Quality control management guide to ensure quality, monitoring and control of all projects implemented.	Quality assurance for effective and impactful projects in civil society	Quality control and monitoring	Plan completion	WCS
6	Develop a Stakeholder identification and management system to be implemented for all projects.	Inclusion of civil society and stakeholders	Social responsibility and inclusion of stakeholders	Plan completion	WCS
7	Software Pilot for short term project of 3- 6 months	Testing before implementation	Monitoring, control, and project effectiveness	Pilot	WCS
8	Create phased implementation plan and	Ensure outcomes	Project sustainability	Pilot	WCS

#	Requirement Description	Needs, Goals and Objectives	Project Objectives	WBS Deliverable	Stakeholder
	schedule to expand to all projects	benefit stakeholders	and effectiveness		
9	Plan and execute Staff training of relevant individual operating Project management software	To improve staff capacity in project management	Staff development and capacity	Training	WCS
10	Feedback and operational report of implementation to assess success and satisfaction of users and organization.	Quality Assurance	Quality control, monitoring, and assurance	Pilot	WCS

Note: Table elaborated by Y. Novelo, Author, 2023. Own work

4.2.5 Define Scope / Scope Statement

The Project Scope Statement for the WCS project consist of the description of the project scope, major deliverables, acceptance criteria, project assumptions and constraints.

Scope Description: The aim of the project is to improve the management of WCS project implementation methods to increase effectiveness and efficiency of project deliverables through the implementation of a hybrid project methodology and software within 1 year.

Deliverables:

Plan Completion

- Recommend project management methodology with implementation guidelines, this including the necessary templates, operational budget.
- Develop Human resource requirements guide necessary to undertake the projects.
- Develop a Quality control management guide to ensure quality, monitoring and control of all projects implemented.
- Develop a Stakeholder identification and management system to be implemented for all projects.

Pilot

- Create a phased implementation plan and schedule for project methodology to expand to all projects in 1 year.

Create an implementation plan for project management software use to expand to all staff in 1 year.

- Conduct Software Pilot for short term project of 3- 6 months with a team of 5 from within the WCS staff.

Assessment and Evaluation

- Develop Feedback and operational report of implementation to assess success and satisfaction of methodology from users and organization.
- Assess the effectiveness and feasibility of implemented project management software.

Training

- Plan and execute four Staff training for relevant individual operating the Project management software.

Acceptance Criteria: The project is complete when all tasks within the scope baselined are completed and within budget and schedule.

Project exclusions: The scope of this project excludes the participation of temporary staff, and outside organizations who are not partners or full-time employees of WCS.

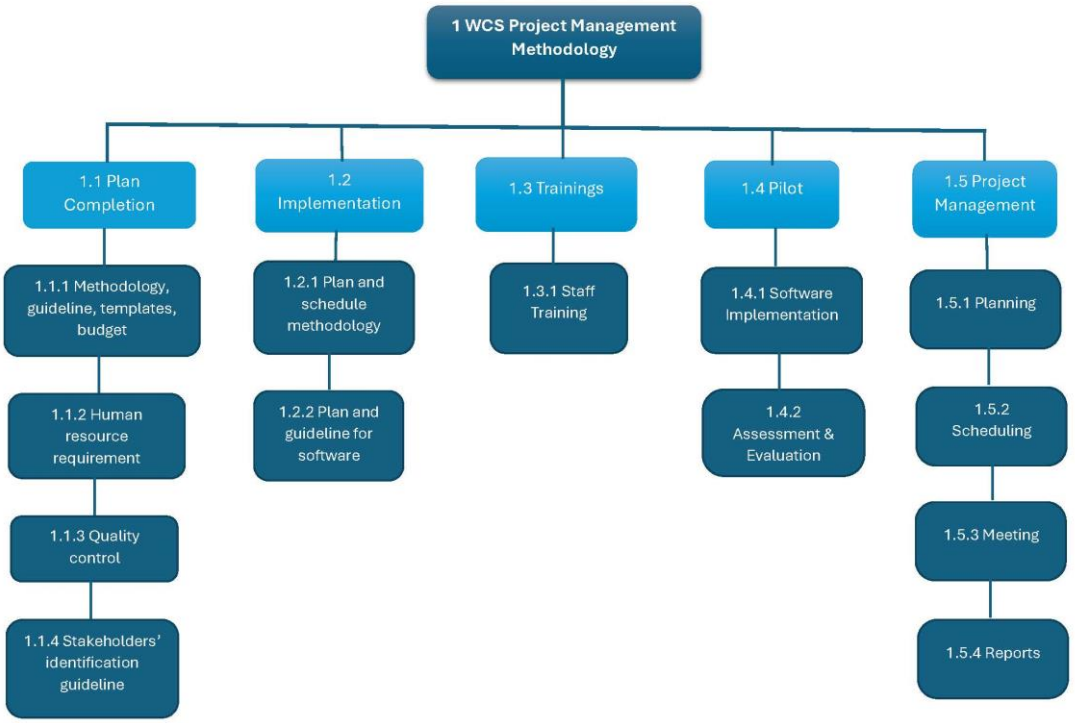
Assumptions: The funding for this project will be provided by WCS-Belize with assistance from WCS global New York on recommended IT software. Additionally, the participation of all staff will be available for the completion of this project. The project will allow WCS to improve their project management methodology.

Constraints: The WCS project will conclude in 12 months' timeline with the allotted estimated budget of BZ$15,000.

4.2.6 WBS

The WBS is a hierarchical decomposition of the total scope of work by the project team to accomplish the project objectives and create the required deliverables (Project Management Institute, 2017). The WCS Work Breakdown Structure seen in Figure 6 shows how project deliverables broken down into work packages. The WBS shows the three levels of WBS, the second level shows the 5 main project deliverables, while the third level shows the project work packages that will yield the deliverables of the project.

Figure 6: WCS Work Breakdown Structure



Source: Y. Novelo, Author, 2024. Own work.

The WBS Dictionary details deliverables, activities, and schedule information about each component in the WBS (Project Management Institute, 2017). The following is the WBS Dictionary in Table 9 which provides the key needs for each work package, to completes the milestones, resources, and quality expectations.

Table 9:WBS for Scope

ID	Description	Owner	Milestone	Assumption/Constraints	Quality Metrics	Resource	Schedule
1.1 Plan Completion							
1.1.1	Methodology, guideline, templates, and budget	Project Coordinator	Execution	The methodology, guidelines, templates, and budget meet the needs and requirements of the project/ There is currently no baseline foundation of project management implementation to provide guidance.	Completed Methodology plan, relevant guidelines, template, and yearly operational budget	Computer, internet, PMBOK Guide 6th and 7th edition	August-September 2023
1.1.2	Human resource requirement	Project Coordinator	Execution	WCS have the number of individuals necessary to conduct projects/ WCS staff are limited and overextended for the number of projects	Completed human resource matrix, roles, and responsibilities	Computer, staff Terms of Reference documents	August-September 2023

ID	Description	Owner	Milestone	Assumption/Constraints	Quality Metrics	Resource	Schedule
1.1.3	Quality Control	Project Coordinator	Execution	Templates can be created internally to conduct quality control and monitoring/ There are no standard process or guidelines to assist this process	Completed templates and guidelines for monitoring and control	Computer, internet, established protocol or monitoring system documents	August-September 2023
1.1.4	Stakeholders' Identification guideline	Project Coordinator	Execution	WCS is aware of their main stakeholders/ There is no list identifying the several stakeholders of various projects and must be created	Stakeholder's matrix (power, influence impact), and Stakeholders List	Computer, list of projects, and donors	August-September 2023
				1.2 Implementation			
1.2.1	Plan & Schedule implementation methodology	Implementing Team	Execution	Implementation will follow schedule and budget/ Competing priority may delay the schedule of implementation	Implementation plan and timeline	Computer, staff participation	October-January 2024

ID	Description	Owner	Milestone	Assumption/Constraints	Quality Metrics	Resource	Schedule
1.2.2	Plan and guideline software	Implementing Team	Execution	Implementation will follow schedule and budget/ Competing priority may delay the schedule of implementation	Implementation plan and timeline	Computer, staff participation, software licenses	October-January 2024
1.3 Trainings							
1.3.1	Staff Trainings	Implementing Team	Execution	Staff will be trained in 4 workshop session/ Training may require multiple session to fit everyone schedule.	Completed 4 staff training of all project officers, and teams	Computer, staff, venue, catering	February 2024
1.4 Pilot							
1.4.1	Software Implementation	Implementing Team	Execution	Implementation will follow schedule and budget/ Competing priority may delay the schedule of implementation	Complete implementation and use of project management software	Computer, software licenses	February - June 2024

ID	Description	Owner	Milestone	Assumption/Constraints	Quality Metrics	Resource	Schedule
1.4,2	Assessment & Evaluation	Project Coordinator	Execution	Evaluation provides the relevant and true feedback from the staff/ Staff competing priorities to participate in this process limiting the evaluation and assessment details Software suite the needs of staff/ Software is limiting and additional add on applications may be necessary that can increase yearly budgetary cost	Assessment and evaluation document on pilot software	Computer, internet	July-August 2024
1.5 Project Management							
1.5.1	Planning	Implementing Team	Execution	Planning will outline task, activities and resources for the project in detail to ensure project success/Timeframe for	Scope and schedule plan	Computer, staff participation	August - September 2023

ID	Description	Owner	Milestone	Assumption/Constraints	Quality Metrics	Resource	Schedule
				project life cycle may limit activities			
1.5.2	Scheduling	Implementing Team	Execution	Scheduling project activities within staff schedule/ conflicting schedule for staff	Scope and schedule plan	Computer, staff participation	August 2023- February 2024
1.5.3	Meeting	Implementing Team	Execution	Frequent meeting with stakeholders to update project progress and address feedback or concerns	Meetings	Computer, staff participation,	August 2023- August 2024
1.5.4	Reports	Project Coordinator	Execution	Providing project reports and updated frequently and evaluation after project duration.	Development of Reports	Computer	August 2023- August 2024

Approved by: Nicole Auil-Gomez, Country Director_____

Date:

Note: Table elaborated by Y. Novelo, Author, 2023. Own work.

4.2.7 Scope Control

The Project Coordinator and the Project officers/managers will work together to ensure the work performed is only the work described in WBS and WBS Dictionary. The Project Coordinator and WCS Country Director will oversee the scope validation and control processes, while the Coordinator, Officers/Managers and Assistant Directors will collaborate with its necessary teams to produce the deliverables described in the WBS Dictionary.

Any changes to the project scope may only be requested in writing by the project implementation team (Project Coordinator, Officers, Assistant Directors). The Project Coordinator along with WCS Country Director will evaluate these changes based on cost, schedule, resources, and risk analysis. The Project Coordinator will approve changes that will provide minimal impact requests, recorded, and documented. The Country Director will evaluate changes that may provide great impact and only on final decision on the change request.

4.2.8 Scope Change Control Process

The request for changes in the Scope can be from any team member, Project Coordinator, officer, or manager. Scope Change requested by the client/ WCS Country Director, will be reviewed by the implementation team and Project Coordinator. The requested changes approval will be evaluated against the objective of the project, funding availability, and

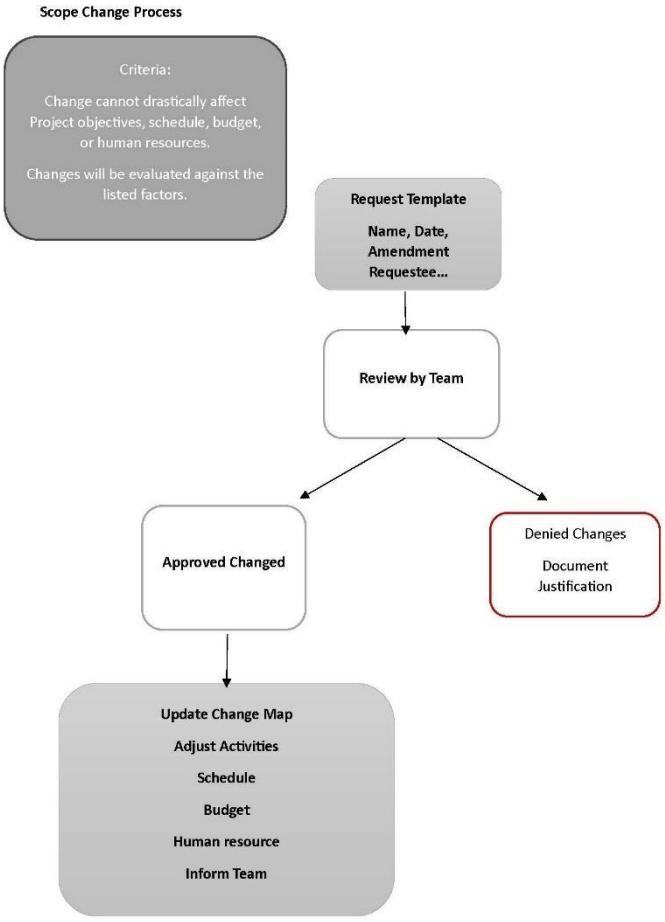
risk. If the scope is determined by the team, coordinator, or client to be beyond any of the factors listed the request will be denied with justification for no approval.

The request must be submitted using the template provided in Appendix 6, which documents which objective within the project the change will affect or address, what is the amendment, what document needs to be amended, and date requested. The change will be reviewed by the team, coordinator, and client. The Status of approved or denial changes will be documented within the same template along with the date the change was approved/denied.

Requests that have been approved will be documented using the template in Appendix 6.1 Change Map. The Change Map documents all the changes over the project period timeline and lists status and personnel who approved changes. It will also list the activities that have been affected by the change and the resolution, adjustment needed to timeline, updated timeline for completion and financial needs or identification of finance.

These changes must then update the WBS, Activity schedule, and financial budget. The team is to be informed of the changes and who is responsible for carrying out the new tasks.

Figure 7: Scope Change Process



Source: Y. Novelo, Author, 2024. Own work.

4.3 Schedule Management Plan

4.3.1 Introduction

The Schedule Management Plan is the organization and detailing of the project activities and task that is to be conducted to meet the timeframe of the project. It outlines the start and end dates of tasks and milestones that are to be accomplished for project

completion. The main purpose of the plan is to develop the schedule to ensure that the project can be monitored, controlled and completed successfully guided by the created Schedule Management Plan.

4.3.2 Schedule Management Approach

The Schedule Management Plan for WCS project implementation used the PMBOK Guide 6th edition processes of plan schedule, define activities, sequence activities, estimate activity duration, develop schedule, and control schedule to detail the implementation of the project from conception to completion. The main input to develop this project plan was the Scope Management plan, which provides the essential information on the required deliverables to complete the project. Additionally, the project charter and organizational process assets assisted in determining the order of each task. The assistance of WCS Director and Project management team and technical team were also consulted in the formulation of this plan. The Schedule Management Plan details the processes required to manage the timely completion of WCS implementation of Project Management methodology and complementary software.

4.3.3 Plan Schedule

Plan schedule management is the process of detailing the schedule of the project throughout the project cycle. The schedule management plan was primarily planned using expert judgement and guidance from the knowledge area and lessons learnt during the Project Management course. The project schedule used the scheduling method of Gantt chart, critical path, and specific data such as activities, milestones, dates, durations,

resources, and dependencies. Time was measured in days, weeks, or months, depending on the activity.

The principal stakeholders (Table 10) involved in this project shall benefit from this schedule as it will provide them with an overview of both projects' progress at a given point in time and what is expected in the project.

Table 10: Roles and Responsibility for WCS Project Management Methodology

Role	Responsibility	Organization
Country Director	Reviews and approves final schedule baseline and schedule progress and reports	WCS
Assistant Country Director, Terrestrial & Marine	Reviews and approves time estimates for staff reporting to them. Notifies the Project Lead of workload changes that can affect the schedule.	WCS
Finance Manager	Determine if finance is available to fit within the schedule and assist in planning schedule within the organization fiscal year	WCS
Project Manager	Leads the team in developing the plan, schedule and related activities.	WCS

Role	Responsibility	Organization
	Communicates the schedule status and maintains the project schedule and provides updates to all parties. Make schedule risk issues and change recommendations to the Country Director and Assistant Country Director.	
Project Team	Notifies the Project manager about schedule risk and issues. Assist with scheduling and estimating and activities. Assist in the implementation of the scheduled activities and progress updates.	WCS

Note: Table elaborated by Y. Novelo, Author, 2024, Own work.

4.3.4 Define Activities

Implementing different methodologies and using pilots in projects have been conducted before by the WCS technical team with the use of innovative technology. Using those organizational process assets of lessons learnt assisted in the development of this project activities. The author also used case studies and literature review from Project management institute and web-based research on implementing project methodologies within an organization. The Table below lists the activities for the proposed project.

Table 11: Activity List for WCS Project Methodology Project Schedule

WBS Code	Work Package	Code	Activity
1.1	Plan Completion	1.1.1	Define methodology and software
		1.1.2	Develop guideline for the use of the methodology
		1.1.3	Develop and structure the templates associated with the methodology implemented
		1.1.4	Create the Human resource requirement guideline
		1.1.5	Develop the quality control and criteria parameters
		1.1.6	Develop stakeholders list, plan, and matrix
1.2	Implementation of methodology and Software	1.2.1	Plan and schedule methodology implementation in phases within a year
		1.2.2	Phase 1 Implementation of methodology within 1 project across WCS Terrestrial program
		1.2.3	Plan software guideline implementation and develop pilot test
		1.2.3	Access Phase 1 Implementation, adjust to needed changes and begin Phase 2 Implementation with

WBS Code	Work Package	Code	Activity
			implementation to 35% of the projects within the organization
		1.2.4	Access Phase 2 Implementation, adjust to needed changes and begin Phase 3 implementation to 70% of the projects within the organization
		1.2.5	Access Phase 3 Implementation, adjust to needed changes and begin Phase 4 implementation to 100% of the projects within the organization
1.3	Trainings	1.3.1	Training 1: Methodology-4 Project Lead on the project methodology in 2-day session
		1.3.2	Training 2: Methodology- All staff on the methodology use and guidelines.
		1.3.3	Training 3: Software- All staff on the use of Software
		1.3.4	Training 4: Software- Project Leads on the use of the Software for project leads. Creation of Gantt Charts, tracking progress, assigning tasks and resources etc.
1.4	Pilot	1.4.1	Software Pilot testing for 6 months
		1.4.2	Access software implementation monthly and conduct change or adjustments as necessary

WBS Code	Work Package	Code	Activity
		1.4.3	Access organization satisfactory on the use of the software and implement across the entire organization
		1.5.1	Assess and evaluate the implementation of methodology after 1 year use
		1.5.2	Assess and evaluate the implementation of software after 1 year use
1.5	Project Management	1.5.1	Planning
		1.5.2	Scheduling
		1.5.3	Meeting
		1.5.4	Reporting

Note: Table elaborate by Y.Novelo, Author, 2024. Own work

4.3.5 Sequencing Activities

The sequencing of activities were done from the activity list, WBS and milestones listed in the above WBS and activity tables. A Gannt Chart tool from MS project was used to assist in sequencing the activities and milestones from the list previously developed. The Gantt Chart model assisted in calculating the critical path inputting the predecessor and successor activities, with the outcome as the schedule for the WCS project. Activities were linked to their predecessors and successors, most of the activities were linked, some were

able to be accomplished independently or simultaneously with other activities. This can be further seen in 4.3.7 in the Developed Schedule.

4.3.6 Estimate Activity Durations

Estimating the activity duration is the process of using the information from the activity list, project scope and resources and developing the duration expected to complete each individual activity. The development of the estimation for this project was done using the student's expert judgment, knowledge gained throughout the Project Management course, and previous experience in implementing software use within the organization.

Table 12: Estimation of duration of activities

ID	Activity	Duration	Resources
1.1.1	Define methodology and software	5 days	Computer, internet
1.1.2	Develop guideline for the use of the methodology	7 days	Computer, internet
1.1.3	Develop and structure the templates associated with the methodology implemented	7 days	Computer, internet
1.1.4	Create the Human resource requirement guideline	10 days	Computer, internet

ID	Activity	Duration	Resources
1.1.5	Develop the quality control and criteria parameters	10 days	Computer, internet
1.1.6	Develop stakeholders list, plan, and matrix	10 days	Computer, internet
1.2.1	Plan and schedule methodology implementation in phases within a year	7 days	Computer, internet
1.2.2	Phase 1 Implementation of methodology within 1 project across WCS Terrestrial program	3 months	Computer, internet
1.2.3	Plan software guideline implementation and develop pilot test	10 days	Computer, internet
1.2.3	Access Phase 1 Implementation, adjust to needed changes and begin Phase 2 Implementation with implementation to 35% of the projects within the organization	3 months	Computer, internet

ID	Activity	Duration	Resources
1.2.4	Access Phase 2 Implementation, adjust to needed changes and begin Phase 3 implementation to 70% of the projects within the organization	3 months	Computer, internet
1.2.5	Access Phase 3 Implementation, adjust to needed changes and begin Phase 4 implementation to 100% of the projects within the organization	3 months	Computer, internet
1.3.1	Training 1: Methodology-4 Project Lead on the project methodology in 2-day session	2- 2 day session	Computer, internet, venue, catering, software licenses, training materials
1.3.2	Training 2: Methodology- All staff on the methodology use and guidelines.	2-2 day session	Computer, internet, venue, catering, software licenses, training materials
1.3.3	Training 3: Software- All staff on the use of Software	2- 2 day session	Computer, internet, venue, catering,

ID	Activity	Duration	Resources
			software licenses, training materials
1.3.4	Training 4: Software- Project Leads on the use of the Software for project leads. Creation of Gantt Charts, tracking progress, assigning tasks and resources etc.	2- 2 day session	Computer, internet, venue, catering, software licenses, training materials
1.4.1	Software Pilot testing for 6 months	6 months	Computer, internet, software licenses
1.4.2	Access software implementation monthly and conduct change or adjustments as necessary	6 months	Computer, internet, software licenses
1.4.3	Access organization satisfaction on the use of the software and implement across the entire organization	10 days	Computer, internet

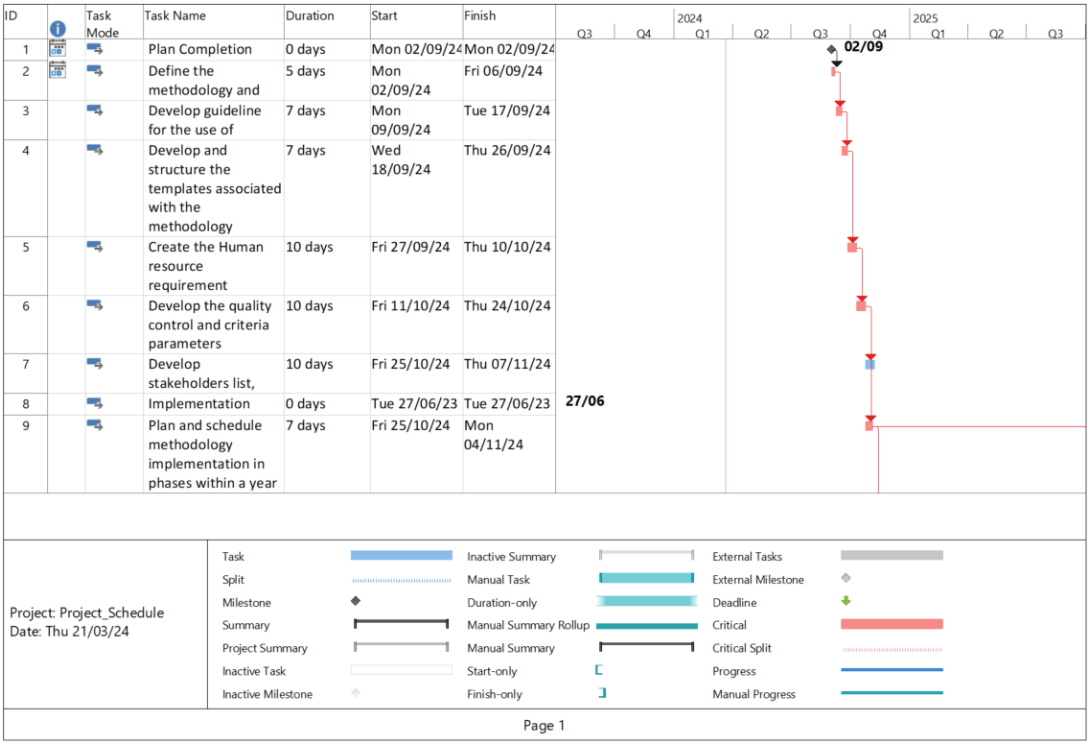
ID	Activity	Duration	Resources
1.4.4	Assess and evaluate the implementation of methodology after 1 year use	15 days	Computer, internet
1.4.5	Assess and evaluate the implementation of software after 1 year use	15 days	Computer, internet

Note: Table elaborate by Y.Novelo, Author, 2024. Own work

4.3.7 Develop Schedule

The schedule provides the activity list along with its schedule duration on a quarterly year basis. It distinguishes the milestones from activities and provides start and end dates for every activity. It additionally displays the predecessors of each activity. linking those activities to demonstrate which activity is dependent on the other activity.

Figure 8: Baseline schedule for WCS project



ID	Task Mode	Task Name	Duration	Start	Finish
1		Plan Completion	0 days	Mon 02/09/24	Mon 02/09/24
2		Define the methodology and	5 days	Mon 02/09/24	Fri 06/09/24
3		Develop guideline for the use of	7 days	Mon 09/09/24	Tue 17/09/24
4		Develop and structure the templates associated with the methodology	7 days	Wed 18/09/24	Thu 26/09/24
5		Create the Human resource requirement	10 days	Fri 27/09/24	Thu 10/10/24
6		Develop the quality control and criteria parameters	10 days	Fri 11/10/24	Thu 24/10/24
7		Develop stakeholders list,	10 days	Fri 25/10/24	Thu 07/11/24
8		Implementation	0 days	Tue 27/06/23	Tue 27/06/23
9		Plan and schedule methodology implementation in phases within a year	7 days	Fri 25/10/24	Mon 04/11/24

Project: Project_Schedule
Date: Thu 21/03/24

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Critical
Project Summary	Manual Summary	Critical Split
Inactive Task	Start-only	Progress
Inactive Milestone	Finish-only	Manual Progress

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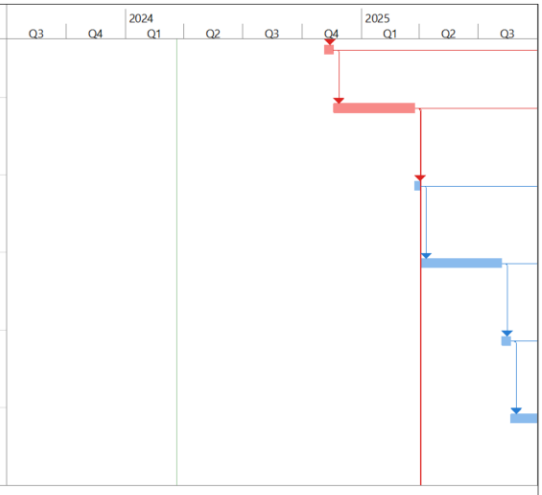
ID	Task Mode	Task Name	Duration	Start	Finish
10		Plan software guideline implementation and	10 days	Tue 05/11/24	Mon 18/11/24
11		Phase 1 implementation of methodology within 1 project across WCS	90 days	Tue 19/11/24	Mon 24/03/25
12		Access Phase 1 Implementation and adjust to needed changes	7 days	Tue 25/03/25	Wed 02/04/25
13		Begin phase 2 Implementation 20% of the projects within the	90 days	Thu 03/04/25	Wed 06/08/25
14		Access phase 2 Implementation and adjust to needed changes	10 days	Thu 07/08/25	Wed 20/08/25
15		Begin phase 3 implementation 70% of the project within the organization	90 days	Thu 21/08/25	Wed 24/12/25



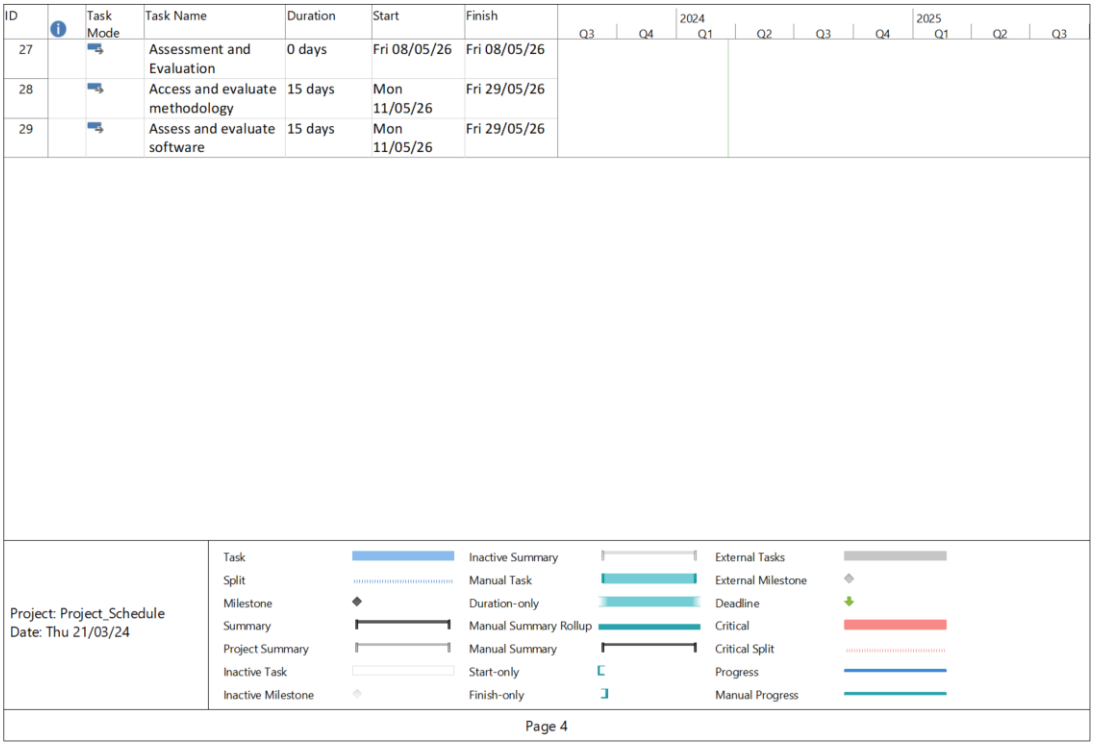
Project: Project_Schedule
Date: Thu 21/03/24

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Critical
Project Summary	Manual Summary	Critical Split
Inactive Task	Start-only	Progress
Inactive Milestone	Finish-only	Manual Progress

ID	Task Mode	Task Name	Duration	Start	Finish
16		Access phase 3 implementation and adjust to needed changes	7 days	Thu 25/12/25	Fri 02/01/26
17		Begin phase 4 implementation 100% of the projects within the	90 days	Mon 05/01/26	Fri 08/05/26
18		Training	0 days	Tue 27/06/23	Tue 27/06/23
19		Training 1: Methodol	2 days	Tue 25/03/25	Wed 26/03/25
20		Training 2: Methodol	2 days	Thu 27/03/25	Fri 28/03/25
21		Training 3: Software All staff	2 days	Mon 31/03/25	Tue 01/04/25
22		Training 4: Software Project Lead	2 days	Wed 02/04/25	Thu 03/04/25
23		Pilot	0 days	Thu 03/04/25	Thu 03/04/25
24		Software Pilot testing	180 days	Fri 04/04/25	Thu 11/12/25
25		Access software implmentation	180 days	Fri 12/12/25	Thu 20/08/26
26		Access organization satisfactory of the software and implement across the entire	10 days	Fri 21/08/26	Thu 03/09/26

Project: Project_Schedule
Date: Thu 21/03/24

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Critical
Project Summary	Manual Summary	Critical Split
Inactive Task	Start-only	Progress
Inactive Milestone	Finish-only	Manual Progress



Source: Y.Novelo, Author, 2024. Own work

4.3.8 Control Schedule

The PMBOK® Guide (2017), defines controlling schedule as the monitoring of the project status to update the schedule and manage changes through the Perform Integrated Change Control Process. The Control schedule also determines the status of the project schedule, identifies, and manages any changes by comparing the total work completed with the preliminary accepted deadlines. This project schedule used various tools and techniques (Table 13) to verify which activities have started, the actual duration of each activity, the remaining duration of the activities, and determining the percentage of completion. This

also assisted in identifying which changes to the schedule can impact the scope and budget of the project negatively or positively.

Table 13: Tools and techniques to control schedule of WCS project

Controlling Project Schedule	Techniques	Tools
Determine Project Status	Critical Path Method to determine how long the project will take by analyzing the sequence of activities to deliver the project successfully.	Gantt Chart
Variances Analysis	Determine variances between the actual dates and finish dates.	Gannt Chart Calendar
Lagging Project activities to alignment with the plan	Lead-Adjust the logical relationship that can allow to accelerate the successor activity. Lag-Adjust the logical relationship that directs a	Gantt Chart Calendar

Controlling Project Schedule	Techniques	Tools
	delay in the successor activity	
Change Control process	The use of change requests submitted for approval to the respective individuals.	Change Request form. Risk Register Resource requirement. Duration estimate
Schedule Compression	Adjust delayed activities into alignment with the schedule plan by shortening and accelerating the schedule duration without reducing the project scope	Critical path document Schedule in Gantt Chart
Adjust progress and project reports	Adjust reports to inform and engage stakeholders, based on interest and influence	Progress and Project reports
Control Critical Path	Determines the most extended sequence of task	Gantt Chart

Controlling Project Schedule	Techniques	Tools
	that must be accomplished to ensure the completion of the entire project. Essentially monitoring the schedule using the Gantt Chart. This include understanding the Critical Path itself, identifying the task dependencies, estimating the activity durations, and considering slack and float to monitor and address potential risk. Continuous updating the schedule as means to track and monitor the CP	Sequencing Activity and monitoring. Outline predecessors, dependencies, calculating activity duration, and calculating slack and float.
Schedule Performance Index	The use of Schedule Performance Index (SPI) in an effort to measure the	Gantt Chart Sequencing Activities Activity Duration

Controlling Project Schedule	Techniques	Tools
	performance of the actual progress to the planned performance. This allows managers to identify issues to address and manage the schedule.	

Note: Table elaborated by Y. Novelo, Author, 2023. Own work.

An essential part of controlling the schedule is calculating and identifying the Critical path to understand the task that requires completion on time to not affect the project. It is also necessary to control and monitor the critical path activities to address issues within the project schedule. This is mostly done through updating the schedule frequently and readjusting the schedule as necessary. In the cases where activities in the CP have been delayed additional techniques such as schedule compression may be used to recalculate a new CP and adjusting the schedule.

Any changes to the project schedule may only be requested in writing by the project implementation team (Project Coordinator, Officers, Assistant Directors). The Project Coordinator along with WCS Country Director will evaluate these changes based on cost, scope, resources, and risk analysis. The Project Coordinator will approve changes that will provide minimal impact requests, record, and document. The Country Director will

evaluate changes that may provide great impact and make final decision on the change request. A formal change request using the Change Request Form in the appendix must be submitted within an agreed timeframe. The changes will then be modified within the schedule according to the approved change and communicated with the change and impacts to the project team and its other stakeholders.

4.3.9 Quality Schedule

Quality management provides a standard for which the project is to operate, additionally to ensure the service or product provided is best and up to the expectations of the client or stakeholders. In quality schedule, a quality metrics, which assess the performance of the schedule is Schedule Performance Index (SPI). SPI is one quality metric that can be used to access progress of the project, it calculates and allow manager to assess if actual work completed align falters or is ahead of the planned schedule. This allows manager to address issues in a timely fashion. The SPI should be calculated monthly and or quarterly. The project schedule is required to be updated to almost real time to ensure issues are addressed in a timely manner.

4.4 Cost Management Plan

4.4.1 Introduction

The Cost Management Plan assists in mapping and controlling the budget for any given project. All projects require a Cost Management Plan to allow managers to estimate their costs, allocate resources throughout the project and control the overall spending. This project requires a Cost Management Plan as financial resources are necessary to execute

some of the activities, although the project is an internal project for the development of the organization, cost relating to staff time and added software program requires expenses that must be allocated from the organization's fiscal budget of yearly operation. The cost budget will also provide the WCS with the cost of operation required to maintain the operation of license software used to input into the yearly fiscal budget. The plan provides an overview of who will manage implementation, expenses relating to activities, and final budget for each activity. It also provides a mechanism to control the budget of the project, in the event of any scope or schedule changes throughout the project.

4.4.2 Cost Management Approach

This Cost Management plan serves as a guide to manage the budget for WCS project management methodology implementation. The plan outlines the Plan cost management, Estimate Cost, Determine Budget, and Control cost. The student used expert judgement, data analysis, web-based research to develop the plan for the project. It additionally measures for monitoring and controlling the costs to ensure cost overruns and WCS projects remain within budget and on schedule.

4.4.3 Plan Cost Management

The WCS organizational structure, the project charter, Finance Manager, IT expertise were used to estimate, budget, manage and control project cost. Table 14 lists the stakeholder that will develop, monitor, and control the activities for planning and controlling all costs.

Table 14: Roles and Responsibilities for Cost Management

Stakeholder	Responsibility	Organization
Country Director	Approves Budget and purchase request. Review Project status. Approve Change request.	WCS
Finance Manager	Assist in the development of the project budget. Monitor and control project budget spending. Approve project purchases. Disburse project funding	WCS
IT Expert	Provide input on software license purchases. Provide input on software to be used. Determine cost of software licenses and duration. Assist in development of budget. Approve software for purchase.	WCS Belize WCS Global-New York
Project Lead	Request purchases and supplies. Assist in development of budget.	WCS

Stakeholder	Responsibility	Organization
	Manage, monitor, and the control budget. Request and review change control.	
Project Team	Assist in developing cost reports. Request Change control based on needs.	WCS

Note: Table elaborated by Y. Novelo, Author, 2023. Own work.

The Project Lead will collaborate with IT experts and Finance manager to procure and pay for supplies and suppliers as well as disbursing funding where necessary.

4.4.4 Estimate Costs

The Estimate cost method primarily used to develop and define the budget is analogous estimating, parametric estimating, and expert judgement. Analogous Estimating is a technique that uses information from a similar past project to estimate the cost and duration of a planned project. WCS have previous training experience in the implementation of software and practical implementation which can be used to determine the cost of training, implementation, and pilot.

Parametric estimating is a technique which uses quantitative and statistics to calculate the expected number of resources needed to complete a project. Parametric estimating will be used in calculating the time for staff implementing the project, additionally the cost of software licenses and piloting for the first year and operational cost for yearly fiscal budgeting. Cost presented in this budget is represented in Belize dollars and the exchange rate used for US Dollar is $1 BZ dollar to $2 US Dollars

Table 15: Cost Estimate for WCS Project

Work-Package	Expense Item Description	Quantity	Units Cost (BZD)	Activity Cost	WCS Project	WCS Global Funding
Plan Completion	Staff time $90 per day	50	$ 90.00	$ 4,500.00	$ 2,250.00	$ 2,250.00
Implementation of Methodology and Software	Staff time $90 per day	120	$ 90.00	$ 10,800.00	$ 5,400.00	$ 5,400.00
Trainings	Facilitator time- 1 facilitator per training	4	$ 200.00	$ 800.00	$ 800.00	
	Rental of Venue	4	$ 100.00	$ 400.00	$ 400.00	
	Catering for Training 1 and 4: 8 participant (Lunch and Snacks)	8	$ 40.00	$ 320.00	$ 320.00	
	Catering for Training 2 and 3: 24 participant for both session (Lunch and Snacks)	24	$ 40.00	$ 960.00	$ 960.00	

Work-Package	Expense Item Description	Quantity	Units Cost (BZD)	Activity Cost	WCS Project	WCS Global Funding
	Training supplies	4	$ 100.00	$ 400.00	$ 400.00	
Pilot	Software Licensing Packages administrative access (1 software to track and monitor projects) for the year	4	$ 168.00	$ 672.00	$ 672.00	
	Software Licences for Project Technical staff level (1 Software Package) for the year	8	$ 168.00	$ 1,344.00	$ 1,344.00	
	Software license for MS Project for the year	12	$ 60.00	$ 720.00	$ 720.00	
		Cost			**$ 13,266.00**	**$ 7,650.00**
		Total				**$ 20,916.00**

Note: Table elaborated by Y.Novelo, Author, 2023. Own work

4.4.5 Determine Budget

The budget below establishes a cost baseline for measuring and controlling project performance. Table 16 lists the cost per activities, a contingency reserve based on identified risk and management reserves for unknown costs.

Table 16: Budget for WCS

Code	Activity Name	Cost
1.1.1	Define methodology and software	$ 750.00
1.1.2	Develop guideline for the use of the methodology	$ 750.00
1.1.3	Develop and structure the templates associated with the methodology implemented	$ 750.00
1.1.4	Create the Human resource requirement guideline	$ 750.00
1.1.5	Develop the quality control and criteria parameters	$ 750.00
1.1.6	Develop stakeholders list, plan, and matrix	$ 750.00
1.2.1	Plan and schedule methodology implementation in phases within a year	$ 1,542.86
1.2.2	Phase 1 Implementation of methodology within 1 project across WCS Terrestrial program	$ 1,542.86
1.2.3	Plan software guideline implementation and develop pilot test	$ 1,542.86

Code	Activity Name	Cost
1.2.3	Access Phase 1 Implementation, adjust to needed changes and begin Phase 2 Implementation with implementation to 30% of the projects within the organization	$ 1,542.86
1.2.4	Access Phase 2 Implementation, adjust to needed changes and begin Phase 3 implementation to 70% of the projects within the organization	$ 1,542.86
1.2.5	Access Phase 3 Implementation, adjust to needed changes and begin Phase 4 implementation to 100% of the projects within the organization	$ 1,542.86
1.3.1	Training 1: Methodology-4 Project Lead on the project methodology in 2-day session	$ 560.00
1.3.2	Training 2: Methodology- All staff on the methodology use and guidelines.	$ 880.00
1.3.3	Training 3: Software- All staff on the use of Software	$ 880.00
1.3.4	Training 4: Software- Project Leads on the use of the Software for project leads. Creation of Gantt Charts, tracking progress, assigning tasks and resources etc.	$ 560.00
1.4.1	Software Pilot testing for 6 months	$ 912.00
1.4.2	Access software implementation monthly and conduct change or adjustments as necessary	$ 912.00

Code	Activity Name	Cost
1.4.3	Access organization satisfactory on the use of the software and implement across the entire organization	$ 912.00
1.4.4	Assess and evaluate the implementation of methodology after 1 year use	$ 771.42
1.4.5	Assess and evaluate the implementation of software after 1 year use	$ 771.43
Total Cost		**$ 20,916.00**
Contingency 10%		**$ 2,091.60**
Management Reserve 5%		**$ 1,045.80**
Total		**$ 24,053.40**

Note: Table elaborated by Y.Novelo, Author, 2023. Own work.

4.4.6 Procurement Plan

Project Procurement management according to PMI (2017) "includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team. Project Procurement Management includes the management and control process required to develop and administer agreements such as contracts, purchase, orders, Memoranda of Agreements (MOAs), or internal Service Level Agreements (SLAs)". The procurement plan for the WCS project call the need for catering services, training facilitators, supplies for the trainings. The purchase of project management software will

also be necessary, but this will be purchased through WCS global, who retains separate procurement process.

The attainment for catering service, in WCS process, three individuals from the list of approved vendors is selected to provide the necessary service. The vendors are contacted for a quotation request and the vendor who can provide the services within the project budget. Similarly for the purchase of supplies for the training, three vendors of the approve list will be contacted for quotations and the vendor with cost within the budget is selected. The selection process for the hire of training facilitator requires service contract agreement. The selection of individual is based on resume, knowledge of required service and cost within the budget. A Service Contract will be created to describe the necessary service and compensation signed by the provider and WCS. WCS maintains a standard Service Contracts, which are modified to service and provider.

4.4.7 Cost Control and monitoring

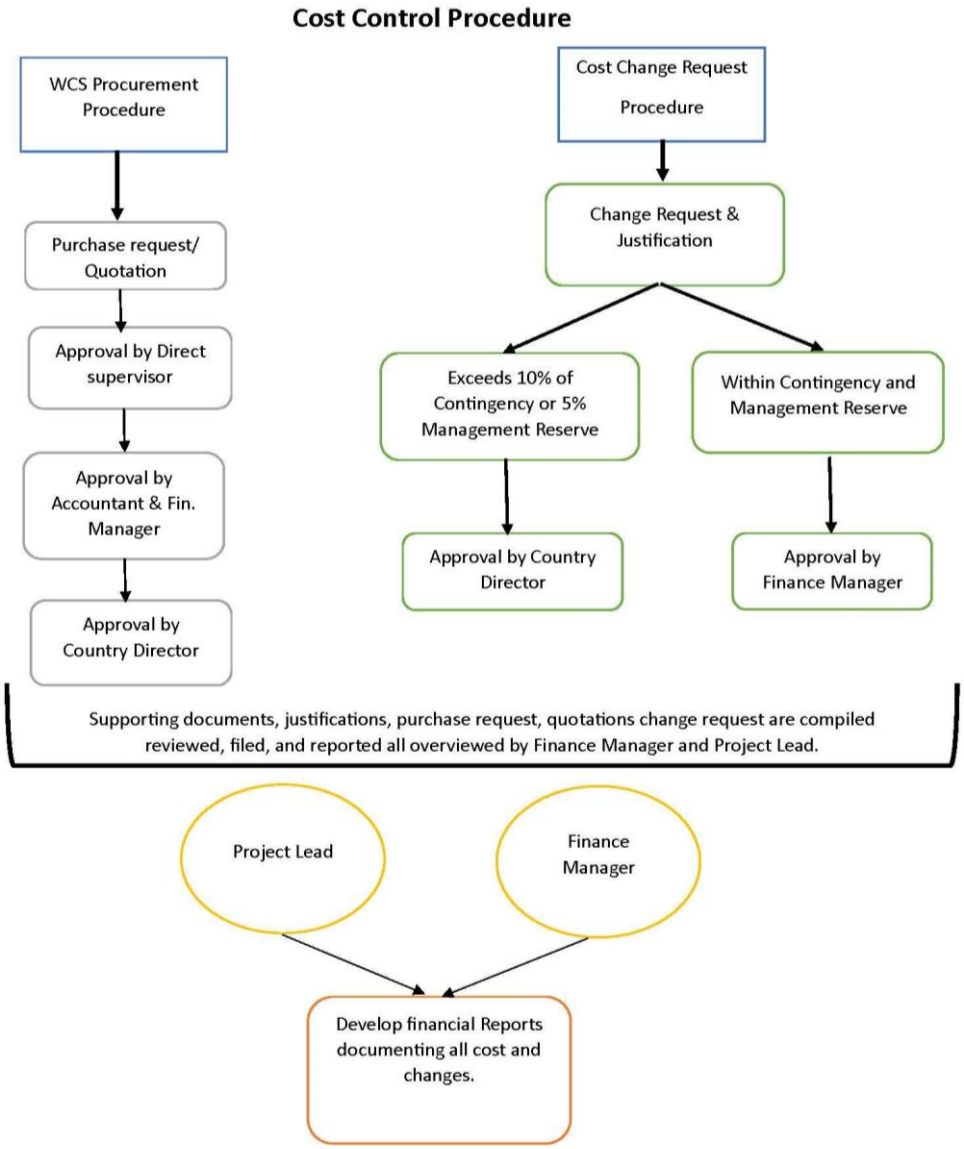
Cost control and monitoring oversees and manages the project expenses, schedule and preparing for potential financial risks, by monitoring progress and any changes to the cost baseline during the project through the Perform Integrated change control process. WCS project will follow a cost control procedure throughout the duration of the project lifetime to manage its baseline cost, manage work types that can results in excessive cost, forecast the final cost and update cost record to reflect actual cost. Additionally, communicate with stakeholders about authorized changes and necessary corrective actions.

The monitor of the cost performance for the project will use Earned Value indices-Cost Performance index. Earned value indices are used to measure the current project performance alignment to the baseline. This provides information of project progress to make necessary adjustments as the project proceeds. Additionally, can give indication of how the future performance might be. In this project the specified Earned value indices to be used will the Cost Performance Index (CPI). The CPI calculates how much value is generated for the money being spent. It therefore assists in understanding whether efficiency and effort are occurring with the current spending and investment in the project. This allows it to be a tool to monitor not just the spending but also the efficiency and effort of the project that can be calculated monthly, quarterly, and whole project basis to understand not just the monthly or quarterly but overall project assessment.

The control process will use the following procedure: the Country director will approve procurements which follow WCS procurement procedure, after reviewing that resources are within the scope of the project. In the absence of the Country Director, the Assistant country directors along with the Finance manager will approve procurements. The budget allocations for WCS project will be determined based on cost variances which compares the difference between the budget at completion and the actual amount spent. The Project Lead in collaboration with the Finance manager will prepare detailed quarterly reports which will include detailed spending and cost variance within the project.
Any Cost Change request must be submitted formally to the Finance manager with supporting documents, who will review and make approval based on justification and supporting documents. Any Cost Change request which will exceed the 10% contingency

and 5% management reserve must be submitted formally to the Country director with supporting documents, who will review and make final approval. The budget baseline will be updated if change requests are made. The project budget is allowing 10% contingency and 5% management reserve.

Figure 9: WCS Project Cost Control Procedure



Source: Y.Novelo, Author, 2024. Own work.

4.5 Quality Management Plan

4.5.1 Introduction

The Quality Management Plan aims to ensure that the project deliverables meet the required quality of WCS Belize and Global standards. This plan outlines those responsible to ensure the quality of the project is maintained and their roles and responsibilities, as well as the project quality objectives, standards, requirements, and tools. The plan is to provide Quality management for this project and serve as a template for the implementation of quality tools and techniques to be used in projects implemented across the organization. The standards and tools created for this project is applicable to other projects implemented by WCS.

4.5.2 Quality Management Approach

The Quality Management Approach uses the Project Management Institute's PMBOK (2017) of the three processes of Quality Planning, Quality Assurance and Quality control. The following Sections will apply each concept of these practice groups to define monitoring and control of quality standards.

4.5.3 Plan Quality Management

The Plan quality management provides guidance on the quality requirements and lists the standards required for the project. Essential to plan quality is the project charter and scope baseline as the information influences the project quality. In addition, it used quality templates, WCS standards, and expert judgement to create the plan. Table 17, list

the stakeholders with distinct roles and responsibilities listed to manage the plan to ensure quality standards are met for the project. Note in the process of Planning quality the development of this table is essential to understand those responsible to maintain any project quality. The table template can remain the same and individuals can be changed depending on the team executing the project.

Table 17: Roles and Responsibilities for Quality Management

Name	Role	Quality Responsibility
Country Director	Project Manager	Final Approval of all Deliverables
Human Resource Manager	Quality Control	Quality Audits, monitor tools and metrics . being met
Assistant Country Director	Quality control	Monitoring and Control, evaluation of project and oversight.
Technical Coordinator	Project Lead	Monitoring and control, reporting, engaging with stakeholder and providing feedback.
WCS project Team	Implementation Team	Engage with stakeholders and provide feedback on

Name	Role	Quality Responsibility
		deliverables, contribute to compiling and tracking metrics.

Note: Table elaborated by Y.Novelo, Author, 2024. Own work.

The quality objectives for this project shall be as follow:

- Project Management: Improve the efficiency of project implementation for all projects.

- Software: Software implementation to improve organization and efficiency

- Stakeholder/Staff: Satisfaction with method, templates, and software, with ease of use and functionality in daily work.

- Pilot Implementation: Determining the effectiveness of the software, with completion of deliverables and task. Additionally, using SPI to determine the progress value of the project being implemented as a key indicator of quality.

- Project management methodology guide: The guides and principles implemented and identifying the effectiveness and determining its improvement in the organization project implementation.

4.5.4 Quality Assurance

The table below will provide metrics to measure quality to meet the quality objectives listed above. This measure ensures the actions and the metrics associated with them to maintain the quality of the project and ensure it is meeting the standards expected.

Table 18: Quality requirements along with metrics

Quality Objectives	Quality Requirements	Metric	Frequency
Project management efficiency	Staff improvement in meeting deliverable deadlines	Deliverable completed	Consistently
	Project meeting held consistently	Meetings	Consistently
	Budget spending is in line with budget allocations	Budget reports	Consistently
	Scope of projects are aligned	Project report	Consistently
	Calculate the current progress with planned progress.	Shedule Performance Index	Consistently
Software efficiency	Improve organization	Gannt Chart	Consistently

Quality Objectives	Quality Requirements	Metric	Frequency
	Improve tracking of deliverable	Gannt Chart / Schedule activities	Consistently
	Increase communication	Shared documents and messages in platform	Consistently
Stakeholder/Staff Satisfaction	Increase in use of software and method	High use of Software	Continuously
	Stakeholder response time short	Feedback	Continuously
	Decrease complaints	Feedback	Continuously
Pilot Implementation	Use of Software by team, active tracking, and placement of task within software, task transferred to next individual carrying out. Task and deliverables completed in timeframe.	SPI Calculation Task in tracker application. Task completed on time.	Continuously

Quality Objectives	Quality Requirements	Metric	Frequency
	Sharing and organization of documents in platform. Use software to calculate SPI of project to determine efficiency of implementation of project		
Project Management methodology guide, Principles	Use of software, guides, and tools. Increase efficiency in project deliverables and tasks.	SPI Deliverables completion time.	Continuously

Note: Table elaborated by Y. Novelo, Author, 2024. Own Work.

4.5.5 Quality Control

The monitoring and control process for the project will include consistent checking that deliverables are met on time; meetings are done between teams and stakeholders as scheduled in the activity sheets. Additionally, survey on the staff feedback on the use of the method and software system prior to implementation and after to determine satisfaction and use of the software. WCS globally monitors staff use of software and provides feedback, this will be used as a measure to determine staff usage overall and what aspects of the software are used more in comparison to others. A checklist tool will be developed with the

listed measures and metrics to measure and grade impact of the project after 6 months implementation, with a report to conclude the success of the project.

Change control is to be addressed similarly as in previous sections whereby change requests must be approved by the Country director and Project manager. The documentation of each change request will be filed whether approved or not for auditing purposes. Changes requested must contain a justification, a new measure, metric, and frequency must be created and linked to the project objectives. Change requests must be included in all reports with outcomes.

4.6 Resource Management Plan

4.6.1 Introduction

The Resource Management Plan outlines the process utilized to successfully identify, outsource, and manage all resources associated with successfully implementing the WCS Project Management Method project. The physical resources required are minimal with only the need for workshop and training materials, rental of facilities and software license purchases. The human resources required are higher with some staff dedicating full-time and part-time for the implementation and participation in the project. This information is valuable as it will assist WCS to determine the human resources required to maintain the implementation in the future, and properly allot time to staff.

4.6.2 Resource Management Approach

The Resource management approach will use the six PMBOK® Guide processes of Plan resources, Estimate Activity, Acquire resources, Develop Team, Manage Team, and Control resources to guide this project resource management plan.

4.6.3 Plan Resource Management

Resource Planning is understanding the work, the desired output, staff competencies, project timelines and using this information to deliver the stakeholders' requirements. In this section we will provide tables identifying the stakeholder requirements, and resources required to accommodate the requirements.

Table 19: Stakeholder Requirements for the WCS Project

Stakeholder Desired output:	Functional method to implement projects
	Accompanying software to organize and track milestones, deliverables, and teams.
Stakeholder Requirements	Method: Adaptive management to be applicable across all projects ran by the WCS
	Training: Staff to be trained in the use of method and software
	Cost: Resource and financial cost to develop and implement methods and software.
	Software: minimum of two to three software application usage to track and organize projects
	Evaluation: Evaluate the effectiveness of the method and software from feedback by staff, surveys, and project deliverable success.

Note: Table elaborated by Y. Novelo, Author, 2024. Own work

Table 20: Resource Requirement to manage resources.

Activity	Resource	Category	Type
Method	Expert in the implementation of an adaptive management approach	Personnel	Internal
	Literature and books to provide information	Material	Internally, Web sourced
Training	Expert to provide training on method and training on use of software	Personnel	Internal
	Facility for training	Equipment	Internal
	Materials, supplies for training, guides	Material	External
Software	Purchasing software	Equipment	External
Evaluation	Monitoring and evaluation expert to review feedback, conduct survey and audit reports	Personnel	Internal

Note: Table elaborated by Y. Novelo, Author, 2024. Own work

4.6.4 Estimating Activity

Estimating resource activity used the scope of the project, stakeholder's requirement, project budget estimation, expert judgement, and analogous estimating. The use of previously implemented software projects such as WCS Spatial Monitoring and Reporting Tool provided sufficient information to determine the minimum requirements to implement a software within the organization. This provided insight into the training

materials required, staff time and trainers needed per group. Additional information was gathered from the staff in implementing the method and time requirement, training needs. The table below will provide activity and estimating the requirements necessary.

Table 21:Estimating Activity Requirements.

Activity	Team Role	Responsibility	Hours	Assumption
Method Implementation	Project Manager (Student)	Implementation of method	15 hours per week	Time will be provided for student to pilot implementation with one project
Method Research	Project Manager (Student)	Literature review on method and process of implementation	5 hours per week	Time will be provided for student to pilot implementation with one project
Training	Project Manager (Student)	Facilitate the training of staff	6 hours per training	Approval of training and resources by Country Director/Stakeholder
	Team/Staff	Participate in training	6 hours per training	Approval of staff time to participate in training

Activity	Team Role	Responsibility	Hours	Assumption
Materials and Equipment purchase	Project Manager and Staff	Identify software and request license payment	20 hours entire project lifecycle	Suitable software identified and agreed upon. Finance available to purchase upon Country Director approval of Purchase Request
	Project Manager (Student)	Workshop materials purchase	4 hours entire project life cycle	Country Director Approval of Purchase Request
Evaluation of Project	Project Manager (Student) Human Resource Manager and Country Director	Assessment report on staff feedback, surveys, and budget	25 hours entire project cycle	Use of Quality and monitoring control reports and other reports to create evaluation

Note: Table elaborated by Y. Novelo, Author, 2024. Own Work.

4.6.5 Acquire Resources

The resource requirement and the cost baseline in the project charter and budget estimating was used to identify the resources that may be either internally or externally used and to assign them to the respective activities within the project. The cost management details the purchase request for outsourced material.

Staff time is considered provided by the organization, however for future project implementation it is tracked to determine how much staff time is dedicated to capacity building and the cost to the organization for yearly evaluation. Core Staff participating in the pilot program will dedicate time during the pilot phase and all staff are expected to provide time for the year duration of the phased implementation. The team and staff are expected to use the resources and time throughout the week during working hours of 8:00am to 5:00pm. Training venues are expected to be the office conference room hence is considered internal.

External requirements are materials needed for training such as supplies the facilitator will use. Additionally, the purchasing of the software license must be purchased by the organization from a web-based source or WCS global organization. WCS Belize will capitalize from previous knowledge and experiences of other WCS programs who are currently using Project management software. The organization will seek recommendations from these other country programs to assess best software to purchase and use. Additional, external cost will be catering for training sessions. Table 22 provides the estimate of resources along with the type of resources required for the specific tasks.

Table 22: Resource Requirement Matrix

#	Quantity	Description	Task	Category	Type
1	1	Project Manager (Student)	Entire lifecycle	Personnel	Internal

2	1	Country Director/Stakeholder	Entire lifecycle	Personnel	Internal
3	1	Finance Manager	Entire lifecycle	Personnel	Internal
4	1	Human Resource Manager	Entire lifecycle	Personnel	Internal
5	6	Project officers (Staff)	Entire lifecycle	Personnel	Internal
7	1	Facilitator	Entire lifecycle	Personnel	Internal
8	3	Advisor	Entire lifecycle	Personnel	Internal
9	1	IT Officer	Entire lifecycle	Personnel	Internal
10	3	Project Management Software	12 months 1 year purchase	Equipment	External
11	24	Computer for each staff	Entire lifecycle	Equipment	Internal
12	1	Projector	Trainings	Equipment	Internal
13	1	Easel	Trainings	Equipment	Internal
14	1	Shop Paper	Trainings	Material	External
15	4	Printing	Trainings	Material	Internal
16	24	Pens	Trainings	Material	External
17	24	Post Its	Trainings	Material	External
18	24	Notebooks	Trainings	Material	External
19	4	Catering	Trainings	Personnel	External

Note: Table elaborated by Y. Novelo, Author, 2024. Own work.

4.6.6 Develop Team

Team development is defined by “the process of assembling various members to build an effective team” (Miles, 2022). In WCS Teams are formed based on project objectives and team individual expertise. This specific project is internal to WCS and therefore all staff are considered a part of the team.

In the Pilot phase a smaller team (Core Team) will be developed by the implementing officer considered the Project Manager (which is the student). The Pilot phase of the project will use the method and software to be implemented. The pilot will use a project managed by the Student within WCS. The team will comprise of staff dedicated to the project; essential staff such as the Country Director, Accountant, Finance Manager, and HR immediately form a part of the team. Additional staff such as project officers are dependent on the project currently being working on. Other staff such as the Assistant country Directors becomes involved in the absence of the Country Director or in Advisory positions.

In the implementation of the project across the Belize program all staff makes up the Team but may not directly correspond to the student on a frequent basis but will correspond to their respective Project Manager and Lead. In this Phase the Student will assist Project Managers and Lead to ensure the Project Methods are implemented correctly, facilitate training, and evaluate feedback change.

The use of the Tuckerman Ladder will be used to develop teams and provide some motivation among teams and individuals. The Tuckerman Ladder of Forming, Storming, Norming, Performing, Adjourning is one great way to develop teams and is found useful in

maintaining organization and team spirit. Figure 10 shows the Tuckerman Ladder, please note it may not always be used in the same sequential order displayed below.

Figure 10: Stages of Tuckerman Ladder in Team Building

Source: Bakkah, 2016 developed Tuckerman Ladder

The Project Manager (student) will also use the following techniques to determine which team member to train, coach, mentor, motivate or assist as follows:

1. Team building meetings to develop team spirit and trust among one another.
2. Use Virtual meeting and chat using WCS internal Microsoft Teams to discuss and meet on issues to develop and maintain the team.
3. "Open door" policy meaning face to face meetings, emails, or virtual meetings to address issues and opportunities to develop the team.

4.6.7 Manage Team

The Management of the Team is to ensure the coordination of the project by the team is effective and efficient. The Project Manager will implement tools and techniques to ensure the Teams are functional.

1. The Core Team will have a bi-weekly meeting to access project progress and outcomes.
2. Project Managers will have meetings monthly to determine progress, challenges, and solutions/recommendations for the project.
3. Staff will have bi-monthly meetings to provide progress and feedback, especially with urgent feedback can be done.
4. Annual performance evaluation using the WCS process will be used and documented as part of the project.

Conflict within the Teams will be handled by the Project Manager and HR through WCS organizational process. It is expected that minor conflicts and disagreements can be resolved within individuals. Conflicts that may become escalated will go through the WCS HR process. Conflicts and issues are to be documented and filed for HR purposes.

4.6.8 Control Resources

Control Resources primarily will manage and monitor the physical resources required to complete the project. The Project Manager (student) is to ensure all the requirements are obtained on time. Resources needed by the staff or requested by the staff must first come to the Project Manager to ensure it is a part of the requirement list and to

identify where funds will be sources to supply the resources. The purchasing of any external outsourced resource will follow the Procurement Procedure discussed in the Cost Management plan.

The project Manager along with the Finance manager will monitor the acquisition and funding for all resources. External purchases must obtain approval from the Country Director as stated in the procurement procedure. Any change to the requirements must be made to the Project Manager (Student), with justification via email. The validity of the request will be discussed with the Finance and Country Director who will have ultimate approval if the request requires large budgetary adjustment as discussed in the Procurement Procedure. In terms of Human resources, Staff time and effort will also be monitored with feedback coming to the Project manager or respective Project Manager. Staff issues will be handled by HR and Project Manager, if necessary, the Country Director will be consulted. As part of the project evaluation, staff resources and time will be documented to develop a baseline on project implementation as such for future project use.

4.7 Stakeholder Management Plan

4.7.1 Introduction

The WCS project stakeholder management plan outlines the project stakeholders for this project. Additionally, it has classified the stakeholders' based on power, interest and influence developing the stakeholder matrix. Understanding the matrix and the stakeholder's plan further outlines the management approach and communication to guide engagement effectively and efficiently throughout project life cycle. The objective of this

plan is to ensure the different stakeholders are engaged in communication for overall project success.

4.7.2 Stakeholder Management Plan Approach

The management plan approach follows the guideline form the PMBOK® which entails identifying stakeholders using a list, plan stakeholder engagement, manage and monitor stakeholder engagements. The plan used the information gathered in the scoping process along with information obtained from the Background of the organization to develop the plan. The company organizational chart and roles are essential to understanding the different stakeholders' functions and identifying the stakeholders.

4.7.3 Identify Stakeholders

The process of identifying the project stakeholder used the company organizational chart (Figure 1) and roles to understanding the different stakeholders' functions. The Stakeholder list details their involvement, interest and used the stakeholder mapping of power/ interest grid to highlight individual impact and influence in the project. It identifies those stakeholders who have very high impact and influence and those who have limited to none. This process is considered iterative as the project progresses, meaning that the list can be reexamined and revised and add any new stakeholders.

Table 23: Stakeholder List for WCS Project

Organization	Job Title	Responsibility
WCS Belize	Country Director	Provides approval for all major decision making or changes within the project, approval of project and funds
WCS Belize	Assistant Country Director Marine	Provide approvals in the absence of CD, also serves and advisor and feedback on project implementation
WCS Belize	Assistant Country Director Terrestrial	Provide approvals in the absence of CD, also serves and advisor and feedback on project implementation
WCS Belize	Finance Manager/HR	Assist in the allocation of funding, auditing, monitoring of budget and resources
WCS Belize	Accountant	Assist in the allocation of funding, approval of payments and coordination and logistics of funds
WCS Regional	Coordinator, Fisheries/IT support	Provide IT support to the project, feedback on software and pilot
WCS Belize	Site Manager, MFC	Participate in pilot of software and provide necessary feedback
WCS Belize	Coordinator, CWT/Project Manager	Implement the WCS project and oversee the entire project progress and report to the CD.
WCS Belize	Coordinator, Communication	Participate in pilot of software and provide necessary feedback

Organization	Job Title	Responsibility
WCS, Regional	Regional Coordinator, CWT	Participate in pilot of software and provide necessary feedback. Advisory to the software implementation and usage based on experience with use of other software implemented in the region.
WCS Belize	Administrative Assistant	Assist in logistics and acquiring vendors for training
Suppliers	Caters	Provide catering for trainings, meetings, and presentations
Suppliers	Training Supplies	Provide training supplies to execute trainings
WCS Global	IT/ Helpdesk	Provide license for approved software and installation on individuals computers

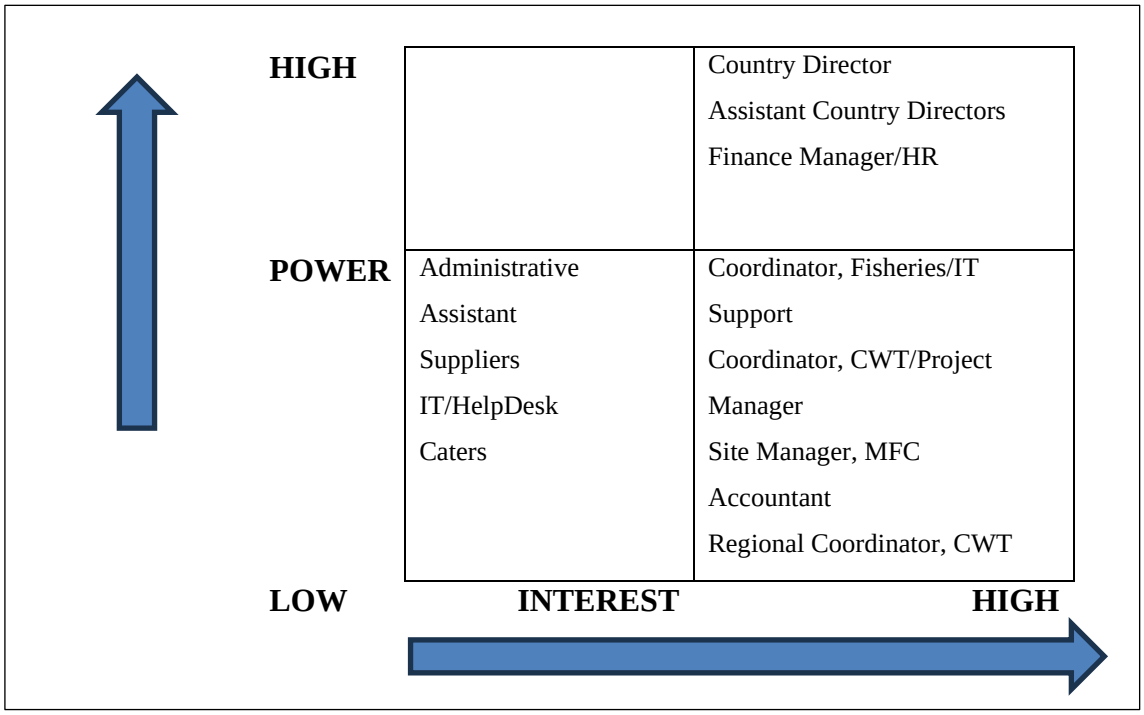
Note: Table elaborated Y. Novelo, Author, 2024. Own work.

The stakeholder list above provided necessary information to formulate the Stakeholder matrix Power/Interest. The figure below represents the stakeholders who have high power and high interest within the project. In the representation below those individuals are the Country Director, Assistant Country Director, and Finance Manager. The Country Director holds the highest power and interest in decision making and in the success of the project. The Finance Manager, who is also the organization HR personnel, has high power and interest as she assists in many of the approvals and monitoring of the project success. The Assistant Country Directors are a proxy for the CD, which provides

them with great power and interest in project success. Their advisory position to the project also places them high as their inputs and requirements can impact the project outcomes.

The Regional Coordinator, CWT, IT Support, Accountant, Regional Coordinator CWT and Project Manager have high interest in the project outcome, however low power. The project outcomes influence their work and typically are a part of the implementation team. The success of the project if of their interest but have limited to low power in decision making aspect of the project. The suppliers, Administrative Assistant and IT/global have Low power and low interest, they are providing a service or some support, the full extent of the project does not affect their work and therefore interest and power are low.

Figure 11: Power and Interest of WCS Stakeholders



Source: Y.Novelo, Author, 2024. Own work.

4.7.4 Plan Stakeholder

The Stakeholder's engagement in this project is essential as it defines how groups and individuals are interacting and interacted with by the implementers of the project, vital in the success of the project. In planning stakeholders understanding the needs, expectations, interest, and potential impacts is a guise to assist them to interact effectively. The process of stakeholder engagement is necessary for a suitable project outcome and maintaining satisfaction with the stakeholders for current and future projects. In this process we created a stakeholder engagement matrix, which indicated the different level of engagement of the stakeholders using the PMBOK Guide ® 5 stakeholder engagement matrix level of *Unaware, Resistant, Neutral, Supportive, and Leading.* The matrix highlights a comparison on how each group or stakeholder is currently engaged, represented by the letter "C" and "D" to indicate the desired engagement level required. In the event both "C" and "D" fall in the same column, this means that the stakeholder is currently engaged, and the stakeholder is encouraged to continue engaging. Table 24 represents the Stakeholder Assessment Matrix for the WCS Project and the current and desired level of engagement for each stakeholder.

Table 24: Stakeholder Engagement Assessment Matrix

ID	**Stakeholder**	**Unaware**	**Resistant**	**Neutral**	**Supportive**	**Leading**
1	Country Director				C	D
2	Assistant Country Director			C	D	

ID	Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
3	Finance Manager/HR			C	D	
4	Coordinators				C	D
5	Local IT support				C	D
6	Managers			C	D	
7	Accountant			C	D	
8	Regional Coordinators			C	D	
9	IT Global	C			D	
10	Admin Assistant	C			D	
11	Suppliers	C			D	

Note: Table elaborated by Y. Novelo, Author, 2024. Own work.

4.7.5 Manage Stakeholders

In the initial implementation of the project the Project Team will have an initial "Kick-off" meeting to review the objectives, scope, budget, schedule, and stakeholder plan. A meeting to reassess the stakeholder list to revised and update for removal or addition of stakeholders and the stakeholder engagement matrix will be updated. Project Team will identify stakeholder's gaps, solutions to adjust gaps and improve engagement levels.

A meeting with all stakeholders will be held to inform everyone and groups of the project and project details and roles in participating in the project. Based on stakeholder engagement, the project manager will have independent meetings with stakeholders with high power and high interest for feedback and improvement needs and support. Project

Manager along with the team will identify the needs and issues and discuss possible solutions and recommendations to address them.

An issue log (See Appendix 7) will be developed to track and monitor issues. Resolutions to issues will be handled by the Project Manager and team, in the event it requires decision process from the Country Director or Assistant Country Director, the issues will be presented, and a best solution will be attained. The issue log will be updated to state the status to ensure no issue is left pending.

Issues pertaining to external stakeholders will go through WCS grievance process, which will be handled by the Human Resource Manager and Country Director. These are issues that stakeholders may have with WCS staff and to ensure confidentiality and protection of the stakeholder from any possible victimization. See Appendix 8 for WCS grievance readdress process. Communication with Stakeholder will follow WCS current Communication Strategy to maintain WCS Standards and reduce the possibility of grievance with external stakeholders. The Communication Strategy provide further details engagement and communication with Stakeholders.

4.7.6 Monitor Stakeholder

The Project Manager is responsible to monitor stakeholders' engagement to implement the engagement strategies, improve, modify, or increase the stakeholder involvement. Monthly meetings with stakeholders with High power and interest will be held to provide progress on deliverables in addition to monthly reports. Project meetings with the team will also serve as means to communicate any information or feedback from

stakeholders or issues need to be addressed. The project Manager will continuously use her leadership abilities to communicate the vision and inspire stakeholders to continue supporting the work and outcomes of the project.

The stakeholder engagement matrix will be reviewed frequently within meeting and by the Project manager to track any changes in the level of engagement of each stakeholder. It will also be used to feedback and identify the causes of stakeholder disengagement, if any becomes present throughout the project. Change request will follow similar Perform Integrated Change Control Process whereby request is sent to Project Manager and if necessary to hire ups to address.

4.8 Regenerative/ Sustainable Procurement Procedure

4.8.1 Introduction

The World Commission on Environment and Development defines sustainable procurement as "*adopting and integrating sustainable development principles within procurement decisions and processes, while ensuring that they meet the requirements of the business and its stakeholders. This includes both sustainably developed products and materials, as well as responsibility for supplier conduct."* Procurement procedures have now expanded to include various level of sustainability within the requirement to obtain cost effective and quality products or services. The buyer's perspective, sustainable procurement now consists of balancing three essential concepts: 1. Environment: ecofriendly concerns, energy performance, waste reduction, product lifespan, protection of resources, etc. 2. Ethics and society: respect for human rights, working conditions,

inclusivity, diversity, etc. 3. Economy: cost, product quality, delivery timeframes, etc (Manutan, 2022). The application of these three concepts during procurement hold suppliers and buyers accountable on both ends to ensure all three aspects remains priority during procurement.

WCS as an international organization do follow strict procurement guidelines to ensure transparency and accountability across all country programs. Within the Quality management plan above, list the procurement procedure locally. The applicability of sustainable procurement is a measure above the normal procurement process listed. The organization, however, do follow a standard of sustainable procurement implemented by the global and local organization. In this section, it will describe WCS Belize sustainable procurement process implemented and followed by the employees and suppliers. While this current project requires minimal outsourced products from suppliers, sustainable procurement is considered priority for the organization.

4.8.2 Regenerative/ Sustainable Procurement Guidelines

Procurement of Materials and supplies

WCS Belize purchase multiple equipment, materials and supplies for its day-to-day operations and function of research. WCS Global has mandated to all country programs that materials, supplies and equipment is not to be supplied from China. This is the organization stance on the countries harsh working condition, resource misuse or non-environmentally products. A “Blacklist” of countries for these same reasons were created by the organization to highlight countries and suppliers who have constantly violated human rights

and continued pollution or misuse of resources. Locally, WCS Belize obtain available items local, where these issues are non-existent. Equipment needed from abroad is purchased through WCS Global or an approved third-party vendor who is aware of the organization stipulations. WCS Belize Administrative team follow procurement procedures and additionally require justification for purchases from external vendor and conducts a check to ensure there is no issue with the vendor.

WCS has created a list of approved local vendor and is updated on a bi-annual basis. This allows the organization and employees to create a relationship with suppliers and ensure both parties remain accountable for sustainable procurement. While this is more difficult for local vendors, as sustainable procurement is not a familiar concept in Belize. The vendors have adopted to insure items are eco-friendly, organic, economical, and available within the timeframe.

WCS was one of the first organization who required catered meals are to be serve in reusable dishware or biodegradable disposables. This initially came with hire cost, which the organization absorb, however the country laws have now banned plastics and biodegradable disposables are now the norm. Additionally. Government have reduced the importation tax on these items.

Procurement of Services

The procurement of services, the organization host many trainings and workshops across the country. WCS does not have stringent regulation on procurement of services but follow minimal guidelines. Catering: Food is to be organic, and the organization does not allow the purchasing of beef as a stance against cattle farming harsh conditions and

production of greenhouse gasses. Additional, guidelines are to use eco-friendly, reusable, or biodegradable dishware. The organization often uses partner organizations who have similar stipulations and goals. Also, to support small businesses and growing partnerships. Accommodations are with hotels who have sustainable goals and visions in line with the organization, uses biodegradable products and have give-back programs to their employees and communities.

The sustainable procurement of materials and services is to follow, the environment, Societal and economic balance stated in the introduction. WCS Project Methodology project will adhere to these guidelines listed when acquiring materials, supplies and services.

4.8.3 Regenerative /Sustainable Procurement Control

Procurement control will follow procedures listed in 4.5 Quality Management Plan and 4.6 Resource management plan. As stated WCS follows a stringent procurement process that also is aligned with the donor organization request. The organization administration team is the check and balance to ensure the procedures in 4.8.2 are followed along with procurement procedure listed in the above sections. The organization also conducts a yearly audit to ensure organizational accountability and transparency which is outsourced to an auditing firm.

5 CONCLUSIONS

The WCS project management methodology plan is a comprehensive document which was developed using the guidelines of the PMBOK® Guide sixth and seventh edition. It integrated the various knowledge areas, techniques, tools, and strategy to guide the effective and efficient implementation of the project throughout its life span. The WCS team have had knowledge and experience in implementing multiple and varying project, and with global assistance worked on similar software and methodology integration, which is expected to enhance the successful completion of this project.

WCS will be provided with this comprehensive document, to follow for implementation of the methodology guide implementation. It will serve as a guide to assist in the project along with the activities and budget to further facilitate the continued upkeep of necessary licensing and training. Documents that will be created (training materials, templates, guidelines) will be property of the organization to use as necessary, adopt and integrate into their project management systems. The project is values at$ BZ 15,000, and is the operational budget to implement the methodology, however, cost for licensing software will be continuous cost and will be added to the organization yearly fiscal budget to ensure the software used will be continually operated. The schedule start date to further the project is mid-March 2024 and run for 1 year with phased implementation.

Since the project is an internal capacity building of the organization and staff much of the funding will be from unrestricted funds from the global organization. Therefore, its implementation will be dependent on the organization fiscal budget and global approval,

which will ensure cost, resource and quality management plans are in lined with global requirements.

WCS project methodology plan consists of 8 subsidiary plans, which was developed to strategically provide the organization with proposed guidelines and plans to implement a methodology and accompanying software to improve the organization overall implementation of projects. This will provide overall positive impact to the nation and regional conservation field.

1. A project Charter was developed by the student in collaboration with WCS Country Director. The Charter reflects the summary of the project goals, objectives, requirements, deliverables, and budget. The project charter serves as the basis for developing this document and its subsidiary plans.
2. The Scope Management Plan was developed to provide the necessary timeline, work breakdown structure, the stakeholders' roles and responsibilities and the change control process for the project.
3. The Schedule management plan outlined the project start and end dates of tasks and milestones that are to be accomplished for project completion. The plan used the guidance of the PMBOK Guide 6th edition and developed subsidiary section of plan schedule, define activities, sequence activities, estimate activity duration, develop schedule, and control schedule which detail the implementation of the project from conception to completion.
4. The Cost management plan provided an overview of who will manage implementation, expenses relating to activities, and final budget for each activity. The budget also

includes contingency funds of (10%) and management reserve funds (5%) for unidentified risks. It also developed the mechanism to control the budget of the project.

5. The Quality Management Plan developed three subsidiary area recommended by PMBOK® Guide. These areas are Quality Planning, Quality Assurance and Quality control. The plan outlines these three areas to ensure quality output and control for the project, additionally discussed WCS procedure with regards to quality monitoring and control.
6. The Resource management plan developed the six PMBOK® Guide processes of Plan resources, Estimate Activity, Acquire resources, Develop Team, Manage Team, and Control resources to guide the project resource management plan. It also encompassed WCS procedure for procurement of outsourced resources and guidance for procurement.
7. The Stakeholder management plan listed the stakeholders involved in the project and classified the stakeholders' based on power, interest and influence developing a stakeholder matrix. It also involves the process such as planning, managing, and monitoring the stakeholders throughout the project duration.
8. The Regenerative/Sustainable Procurement Procedure essentially describe the procedures WCS has incorporated throughout the years that aligns with sustainable procurement. It outlines WCS regulations that will be followed throughout the duration of the project, these regulations, process, and guidelines have been stipulated by the global organization or implemented locally and adopted to this project.

9. The Pilot and implementation of methodology guideline and software, primarily to determine the tools and project management strategies that are feasible and effective for the organization use. The pilot will facilitate a feedback mechanism from users to determine best practices and software functionality to adopt. This is to assist the full implementation of the methodology guides and software throughout the organization.

6 RECOMMENDATIONS

The student throughout the development of this document have used each subsidiary plan to guide the successful implementation of the project. Additionally, to ensure that successful completion, it is recommended that WCS take into consideration the following recommendations:

1. The country Director prioritizes the implementation of the project by mandating time from staff to participate in the project and attend training. Without her direct lead employees will not see the necessity to uptake the methodology.
2. Each subsidiary plan be reviewed in detail with the WCS staff and implemented as guided within the plan.
3. The WCS team should ensure sufficient post-evaluation is conducted to assess the effectiveness of the methodology and accompanying software. This result should be shared with staff and allowed for open feedback.
4. The WCS staff should be in consultation throughout the process with documented feedback on the implementation of the methodology and software, a continued

process of feedback loop to manage issues, and recommendation to improve the project and implementation.

5. WCS implementing team should ensure frequent meetings, to develop the project and carry out deliverables, discuss challenges and solutions with the team during meetings and access assistance from global.
6. After completion reassess budget to reflect actual cost and to determine actual operational cost for continual operation of software usage and add on packages.
7. The regenerative procurement procedure should be incorporated, additionally developed further to encompass the full definition of sustainable procurement with an official guideline, templates, and process.
8. The project team should follow the methodology of the PMBOK® Guide 6th and 7th edition, and reference, when necessary, especially when making changed to this plan to ensure consistency and coherence.

7 VALIDATION OF THE FGP IN THE FIELD OF REGENERATIVE AND SUSTAINABLE DEVELOPMENT

Regenerative Development defined by Mang (2012) “a system of technologies and strategies for generating the patterned whole system understanding of a place, and developing the strategic systemic thinking capacities, and the stakeholder engagement/commitment required to ensure regenerative design processes to achieve maximum systematic leverage and support, that is self-organizing and self-evolving”. In other words, RD is a new and different way of looking forward into the future. Sustainable development involves controlling the resource or trying to maintain it in the same state as we use it. RD looks at ecology and the use of resources in the aspect of how we can balance ecosystem, people, culture, economy, politics and spiritual to achieve a functional status.

RD focus on 6 processes spiritual, environmental, cultural, social, political, and economic. Functional RD of ecosystems and biodiversity while allowing the planet to thrive and all other process functional. We must understand that the use of our planet in the changing world do means change will occur but that we can adapt and better the changes. In example we take our use of resources and ensure they are done with an environmental focus, helping the communities, gaining economically, enhancing culture, politics and spirituality without the compromise of any as long as a RD design and perspective is followed.

The development of WCS project methodology will ensure RD is kept at the centre, and proposed projects will ensure to keep the 6 processes in place and maintain the Planetary boundaries of RD to ensure “safe operating space for all of humanity” by keeping track of biosphere integrity, climate change, land system change and freshwater usage

(Muller, 2017) as WCS global motto is “Saving Wildlife in Wild places”. It is operated under these categories of RD and will continue to do so to maintain conservation strategy and action. This project will use RD principles to develop the project management methodologies and tools and proposed further RD principles and processes for the organization to incorporate within its operation.

BIBLIOGRAPHY

Adobe Communication Team. (2022). Project Management Methodologies. Retrieved: Unknown date from https://business.adobe.com/blog/basics/methodologies-old-do-not-publish

Bakkah Team. (2023). Tuckerman Ladder Model in PM- Ladder Stages of Team Development. Retrieved January 3rd 2024 from https://bakkah.com/knowledge-center/tuckman-ladder-and-its-effect-on-projects-success

Boogard. K., (2022). Wrike. What is Hybrid Project Management? Retrieved February 5th 2023 from https://www.wrike.com/blog/what-hybrid-project-management/#:~:text=As%20Merriam%2DWebster%20explains%2C%20hybrid,create%20an%20entirely%20new%20method.

Folger, J., (2022). Investopedia. Non-governmental organization (NGO)? Definition, example and how it works. Retrieved February 5th 2023 from https://www.investopedia.com/ask/answers/13/what-is-non-government-organization.asp

Hernandez, C., (2019). Regenerative development in a nutshell. Retrieved February 5th 2023 from https://msd.unimelb.edu.au/thrive/news/regenerative-development-in-a-nutshell#:~:text=Regenerative%20Development%20is%20an%20approach,by%20embracing%20uncertainty%20and%20change.

Holmes Corporation. (2020) PMP Exam Preparation. Chapter 2: Project life cycles, phases and process groups. Retrieved February 4th 2023 from https://www.certwise.com/wp-content/uploads/2017/03/CW_PMP_Reading-Sample.pdf

https://ucipfg.com/Repositorio/GSPM/manuales/Regenerative_development_EM.pdf

Mang, P. a. (2012). Regenerative Development and Design. En R. A. Meyers, Encyclopedia of Sustainability Science and Technology. Springer. Recuperado el 21 de February de 2017, de 35 Regenesis Group: http://regenesisgroup.com/wpcontent/uploads/2015/02/Encylopedia_Sustainability_Science_Ch303.pdf

Manutan, L. (2022). Sustainable procurement: Definition, state of play and advantages. Retrieved January 18th 2024 from https://www.manutan.com/blog/en/glossary/sustainable-procurement-what-it-means-the-state-of-play-and-the-advantages-it-offers

McCombes, S. (2022). Descriptive Research Definition, Types, Methods and Examples. Retrieved February 12th 2023 from https://www.scribbr.com/methodology/descriptive-research/

Miles, M. (2021). Developing your dream team: 7 game-changing tactics. Retrieved 3rd January 2024 from https://www.betterup.com/blog/developing-teams

Müller, E. (2017). Regenerative development, the way forward to saving our civilization. Abstract: Komos Journal, 2015, 1–39.

Oxford Reference (2023). Research methods definition. Retrieved February 12th 2023 from https://www.oxfordreference.com/display/10.1093/oi/authority.20110803100153801;jsessionid=6823CE69D9EF66F58D1CE12C7E062D1A

Professional Development. (2023). Predictive and Adaptive Project Management. Retrieved February 5th 2023 from https://www.professionaldevelopment.ie/predictive-and-adaptive-project management#:~:text=Predictive%20project%20management%20refers%20to,or%20%E2%80%9CWaterfall%E2%80%9D%20project%20management.

Project Management Institute. (2021). A Guide to the Project Management Body of Knowledge, (*PMBOK* ® *Guide*) - Seventh Edition, Project Management Institute, Inc., 2021

Project Management Institute. (2017). A Guide to the Project Management Body of Knowledge, (*PMBOK* ® *Guide*) - Seventh Edition, Project Management Institute, Inc., 2017.

Project Management Institute. (2005) Practice standard for earned value management (PMI Global Standard) (2005 ed.) Newtown Square, PA: Project Management Institute.

Teamhood website, 2023. Hybrid Project management. Retrieved February 5th 2023 from https://teamhood.com/project-management-resources/hybrid-project-management/

Varshney, A. (2011). Overlapping in secondary sources of Information in Social Science 1995 2000 : An Evaluative study. p. 288p. Retrieved from: http://hdl.handle.net/10603/40587

Wildlife Conservation Society. (2018). Wildlife Conservation Society-Belize Strategic Plan 2018. Developed by Blue Earth Consultant. (Word File)

APPENDICES

Appendix 1: FGP Charter

CHARTER OF THE PROPOSED FINAL GRADUATION PROJECT (FGP)

1. Student name

Yamira Celeni Novelo

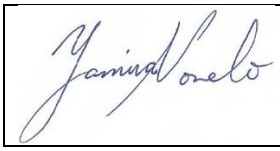
2. FGP name

Develop a Project Management Methodology for the implementation within the Wildlife Conservation Society-Belize Program that improve the organization effectiveness and success.

3. Application Area (Sector or activity)

Project Management method, conservation organization

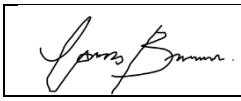
4. Student signature



5. Name of the Graduation Seminar facilitator

Carlos Brenes Mena

6. Signature of the facilitator



7. Date of charter approval

February 26th 2023

8. Project start and finish date

January 9th 2023	July 9th 2023

9. Research question

What elements are necessary to allow the organization to implement a new method in managing projects within the organization?

10. Research hypothesis

Is it possible to develop and implement a project methodology for Wildlife Conservation Society-Belize that will improve their project management effectiveness?

11. General objective

To propose a project management methodology to implement within the organization to improve project effectiveness and success.

12. Specific objectives

1. Create a project charter which authorize and approve the WCS Belize project and grants the project manager authority to apply organizational resources to the project.
2. To develop a scope management to ensure that the project includes all the work required to complete the project satisfactory to WCS.
3. To develop a schedule management plan which outlines all the project activities to be completed.
4. To develop a Quality Management plan to manage and control the project and quality requirements for the project.
5. To develop a Cost management plan to create a budget and controls for to implement the proposed project methodology.
6. To develop a Human resource management plan to manage the resources required for implementation.
7. To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.
8. To develop a Regenerative/sustainable procurement management plan that identifies and assign contracts to suppliers.

13. FGP purpose or justification

The aim of the Final Graduation Project (FGP) is to propose a project management methodology for Wildlife Conservation Society- Belize Program (WCS). WCS is an international conservation organization which aim is protection of wildlife and wild places across the globe. The organization has over 60 programs globally both in marine and terrestrial conservation. The Belize chapter has been operational for over 35 years working in both the marine and terrestrial sector. The organization carries out multiple projects yearly and have expanded in the last two years with a larger terrestrial team managing a private protected area in the Maya Forest Corridor.

WCS currently do not use or follow any method of project management to implementation its project. An ad hoc system is used whereby proposal are written in the format required by the donor and when successful implementation of that project follows the proposal checklist, budget, and activity chart. This way of carrying out project have consistently led to delay in delivers, increase in budget and requirement to request extension. Additionally, teams are not fully aware of their responsibilities and activities they are to carry out, and finance team struggle with procurement processes and often is delayed due to lack of communication. While projects are completed, they are not completed on schedule, on budget and teams are pressured with last minute activities to meet deliverables.

The FPG will develop and proposed a hybrid methodology along with tools and software that can meet the needs of the organization to effectively implement any of their projects on schedule and within budget. The project seeks to implantation a method and software to organize deliverables with stated date and responsible personnel, arrange for monthly meetings and communication for continued progress update and lastly incorporate finance needs in regard to information required for procurement and budgeting processes. This will allow WCS to work in a more organize manner, clarify roles and responsibilities, and improve communications across teams to improve their overall implementation of projects within the organization. Additionally, financially benefit the organization by reducing the need to use the organization restricted funds to complete projects, and improve the organizations name with donors supporting conservation work.

14. Work Breakdown Structure (WBS). In table form, describing the main deliverable as well as secondary, products or services to be created by the FGP.

Final Graduation Project	
WBS	Task

1	**Final Graduation Seminar**
1.1	FGP Profile Deliverables
1.1.1	FGP Charter (1-22)
1.1.2	Annexes: FGB Work Break down Structure, FGP Schedule, & Preliminary Bibliography
1.1.3	Chapter I Introduction
1.1.4	Chapter II Theological Framework
1.1.5	Chapter III Methodological Framework
1.1.6	Chapter VII Validation of Regenerative and Sustainable Development
1.1.7	Completion of Executive Summary Abstract Chapter 1-3 FGP Document and Charter
2	**Tutor**
2.1	Tutoring Process
2.1.1	Tutor Assignment
2.1.2	Appointment and communication with Tutor
2.2	Adjustment to Previous Chapters (if Necessary)
2.3	FGP WCS Development Process
2.3.1	Develop Project Charter for WCS Project Management Methodology
2.3.2	Develop a scope management plan
2.3.3	Develop a schedule management plan which to outline all the project activities to be completed.
2.3.4	Identify and propose the necessary tools (Software)which complements the proposed method.
2.3.5	Pilot the method and selected tools using a suitable project to determine effectiveness.
2.3.6	Develop a Quality Management plan to manage and control the project and quality requirements for the project.
2.3.7	Develop a Cost management plan to create a budget and controls for to implement the proposed project methodology.
2.3.8	Develop a Human resource management plan to manage the resources required for implementation.
2.3.9	Develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.
2.3.10	Develop a Regenerative/sustainable procurement management plan that identifies and assign contracts to suppliers.
2.4	Chapter V Conclusion
2.5	Chapter VI Recommendations
2.6	Chapter VII Completion of Regenerative and Sustainable Development
2.7	Compilation of FGP document (Reference List, Annexes)
3	**Reading by Reviewers**
3.1	Reviewers' assignment request
3.1.1	Assignment of 2 Reviewers

3.1.2	Communication with Reviewers
3.1.3	GFP Submission to Reviewers
3.2	Reviewers work
3.2.1	Reviewer 1 FGP Reading
3.2.2	Reviewer 1 Report
3.2.3	Reviewer 2 FGP Reading
3.2.4	Reviewer 2 Report
4	**Adjustments**
4.1	Report for Reviewers
4.2	FGP Document update based on Reviewers report
4.3	Second Review by reviewers
4.4	FGP Document based on Reviewers second review
5	**Presentation to Board**
5.1	Final Review by board
5.2	Presentation to Board
5.3	Board Examination Evaluation and Grade Report

15. FGP budget

Item	*Description*	*Cost (US)*
Software License Acquisition	Payment for 3 months of project management software	$300
Focus Group	1 workshop to consult stakeholder of need of software	$100
Training	4 Training session to of Stakeholders to use and operate software	$150
	Total Cost	**$550**

16. FGP planning and development assumptions

- Access and availability of information of WCS operation and project implementation is organized and easily available.
- Project management software will meet the basic needs of the organization project management needs
- Full cooperation from WCS staff in the development of FGP and pilot.

- Research time for the FGP will be at least 25 hours per week during the FGP development process.

17. FGP constraints

- The maximum time frame to finalize the FGP is 12 weeks.
- Project management software cost higher than expected.
- Pilot of software require more time to fully understand the capability of software use.
- Monitoring and Evaluation strategy nonexistent in WCS

18. FGP development risks

- Client (WCS) may delay implementation of pilot testing due to competing priorities which can delay the deliverables development.
- Funding inadequate to support the development of the project and implementation of the pilot delaying deliveries development of the FGP.
- Inadequate communication with review due to time constraint of researcher delaying the development of document.
- Client (WCS) requesting additional deliverables and changes to the original project objectives delaying development of FGP.

19. FGP main milestones

Milestones are related to deliverables on the second level (deliverables) and third level (control accounts) of the WBS of section 14 of this Charter. At the same time the deliverables are related to the specific objectives (in the case of the FGP please include the times for the tutorship reviews as well as for the readership).

Milestone Deliverables	**Start Date**	**End Date**
Final Graduation Seminar	9th January 2023	26th February 2023
FGP Charter (1-22)	9th January 2023	26th February 2023

Annexes: FGB Work Break down Structure, FGP Schedule, & Preliminary Bibliography	9th January 2023	
Chapter I Introduction	13th February 2023	19th February 2023
Chapter II Theological Framework	30th January 2023	5th February 2023
Chapter III Methodological Framework	6th February 2023	12th February 2023
Chapter VII Validation of Regenerative and Sustainable Development	13th February 2023	19th February 2023
Completion of Executive Summary Abstract Chapter 1-3 FGP Document and Charter	20th February 2023	26th February 2023
Tutor	**27th February 2023**	**31st May 2023**
Tutoring Process	27th February 2023	31st May 2023
Tutor Assignment	27th February 2023	4th March 2023
Appointment and communication with Tutor	27th February 2023	4th March 2023
Adjustment to Previous Chapters (if Necessary)	6th March 2023	12th March 2023
FGP WCS Development Process	13th March 2023	31st May 2023
Develop a scope management plan	13th March 2023	19th March 2023
Develop a schedule management plan which to outline all the project activities to be completed.	20th March 2023	26th March 2023
Identify and propose the necessary tools (Software)which complements the proposed method.	20th March 2023	26th March 2023
Pilot the method and selected tools using a suitable project to determine effectiveness.	27th March 2023	23rd April 2023

Develop a Quality Management plan to manage and control the project and quality requirements for the project.	27th March 2023	2nd April 2023
Develop a Cost management plan to create a budget and controls for to implement the proposed project methodology.	2nd April 2023	9th April 2023
Develop a Human resource management plan to manage the resources required for implementation.	10th April 2023	16th April 2023
Develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.	17th April 2023	23rd April 2023
Develop a Regenerative/sustainable procurement management plan that identifies and assign contracts to suppliers.	24th April 2023	30th April 2023
Chapter V Conclusion	1st May 2023	7th May 2023
Chapter VI Recommendations	1st May 2023	7th May 2023
Chapter VII Completion of Regenerative and Sustainable Development	8th May 2023	14th May 2023
Compilation of FGP document (Reference List, Annexes)	8th May 2023	21st May 2023
Reading by Reviewers	**22nd May 2023**	**18th June 2023**
Reviewers' assignment request	22nd May 2023	28th May 2023
Assignment of 2 Reviewers	22nd May 2023	28th May 2023
Communication with Reviewers	22nd May 2023	28th May 2023
FGP Submission to Reviewers	29th May 2023	4th June 2023
Reviewers work	5th June 2023	18th June 2023
Reviewer 1 FGP Reading	5th June 2023	11th June 2023
Reviewer 1 Report	11th June 2023	11th June 2023

Reviewer 2 FGP Reading	12th June 2023	18th June 2023
Reviewer 2 Report	18th June 2023	18th June 2023
Adjustments	**19th June 2023**	
Report for Reviewers	19th June 2023	25th June 2023
FGP Document update based on Reviewers report	26th June 2023	2nd July 2023
Second Review by reviewers	3rd July 2023	9th July 2023
FGP Document based on Reviewers second review	9th July 2023	16th July 2023
Presentation to Board	**17th July 2023**	**23rd July 2023**
Final Review by board	17th July 2023	23rd July 2023
Presentation to Board	17th July 2023	23rd July 2023
Board Examination Evaluation and Grade Report	17th July 2023	23rd July 2023

20. Theoretical framework

20.1 Estate of the "matter"

The Wildlife Conservation Society is an international non-governmental organization in operation in Belize for over 35 years. The organization implement multiple projects in the area of science research in marine and terrestrial, capacity building with government, community and NGO's. Policy and reform of legislation in the aspects of conservation action, management, and conservation strategies. The organization seeks to balance the resources, people, and environment for the benefit of all.

The organization has grown over the past 10 years and with its expansion there has been no incorporation of formal project management method implemented the manage the multiple projects within the organization. This has resulted to various mismanagement of projects, unknow cost to the organization and ineffective completion of project that goes beyond their budget and schedule. The development of a project methodology seeks to remedy these issues with the complimentary implementation of software tools to assist WCS to organize, manage and track its

project. This will benefit the organization and its various projects it implements across the country and region.

20.2 Basic conceptual framework

Project management, Project Methodology, Conservation organization

21. Methodological framework

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
Create a project charter which authorize and approve the WCS Belize project and grants the project manager authority to apply organizational resources to the project.	Project Charter	Primary: Interviews & Meetings WCS Documents and reports	Qualitative. Written information analysis.	Bibliographical files Semi-structured interviews Focus Group	Limited data on the organization
To develop a scope management to ensure that the project includes all the work required to complete the project satisfactory to WCS.	Scope Management Plan	Secondary: PMBOK® Guide sixth and seventh edition, Articles and Journals Primary: Interviews & Meetings WCS Documents and reports	Qualitative. Written information analysis	Semi-structured interviews Focus Group WBS	No previous project similar to this done in the organization to use as guideline
To develop a schedule management plan which to outline all the project activities to be completed.	Schedule Management Plan	Secondary: PMBOK® Guide sixth and seventh edition, Articles and Journals Primary: Interviews & Meetings	Qualitative. Written information analysis	Semi-structured interviews Focus Group WBS	Time must be in line with FGP

		WCS Documents and reports			
To develop a Quality Management plan to manage and control the project and quality requirements for the project.	Quality Management plan	Secondary: PMBOK® Guide sixth and seventh edition, Articles and Journals Primary: Interviews & Meetings WCS Documents and reports	Qualitative. Written information analysis	Flow Charts, Brainstorming, Expert Judgement	Must be in line with WCS company Quality policy and procedure
To develop a Cost management plan to create a budget and controls for to implement the proposed project methodology.	Cost Management Plan	Secondary: PMBOK® Guide sixth and seventh edition, Articles and Journals Primary: Interviews & Meetings WCS Documents and reports	Qualitative. Written information analysis Quantitative: Budget and Cost analysis	Analogous Estimation, Parametric estimation, Group Decision making technique, Expert judgement, vendor analysis	No budget within WCS to implement project
To develop a Human resource management plan to manage the resources required for implementation.	Resource Management Plan	Secondary: PMBOK® Guide sixth and seventh edition, Articles and Journals	Qualitative. Written information analysis	Resource Breakdown structure, Responsibility assignment	Competing priorities with staff and resources to be available

		Primary: Interviews & Meetings		Matrix, expert judgement	
To develop a Stakeholder management plan that identifies the persons and groups in the project and strategies for engagement.	Stakeholder Management Plan	Secondary: PMBOK® Guide sixth and seventh edition, Articles and Journals Primary: Interviews & Meetings WCS Documents and reports	Qualitative. Written information analysis	Influence Interest Matrix, Expert Judgement	Availability of stakeholders and requirements change
To develop a Regenerative/sustainable procurement management plan that identifies and assign contracts to suppliers.	Regenerative/ Sustainable Plan	Secondary: PMBOK® Guide sixth and seventh edition, Articles and Journals Primary: WCS Strategic Plans, interviews, emails, and project proposals, and software development websites	Qualitative. Written information analysis	Expert Judgement, Vendor analysis	Limited knowledge of this within the organization to implement
To identify and propose the necessary tools (Software)which	Software Use	Primary:	Qualitative. Written	Comparison, pros con list, Website reviews	Cost of software

complements the proposed method		interviews, project proposals, and software development websites	information analysis		
To pilot the method and selected tools using a suitable project to determine effectiveness.	Analysis Report	Primary: WCS Documents interviews, and software development websites	Quantitative: Analysis from outcome of Pilot testing	Personal developed criteria, expert judgement	Time line sufficient to determine true feasibility of method and software

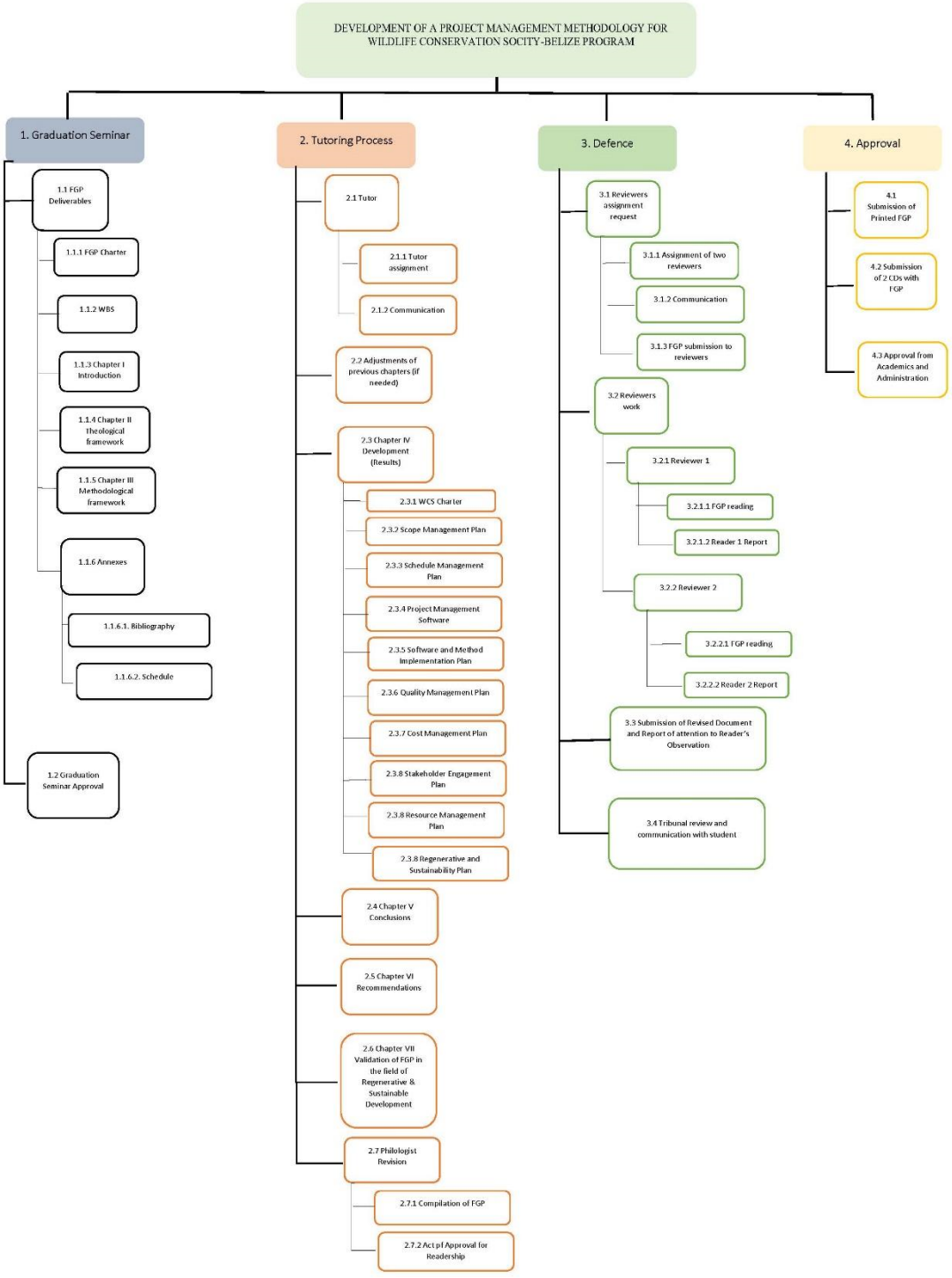
22. Validation of the work in the field of the regenerative and sustainable development.

The FGP will incorporate the Regenerative principles and concepts to develop the project methodologies for WCS Belize program. All the process of the FGP will follow the project management concept of Planning, Executing, Monitoring, Control and closing; and incorporation of Regenerative Development within all the process will be done. Additionally, all staff of WCS -Belize and of those the Director wish to share will have access to the project, templates and guidelines for replication and use as the WCS see fit.

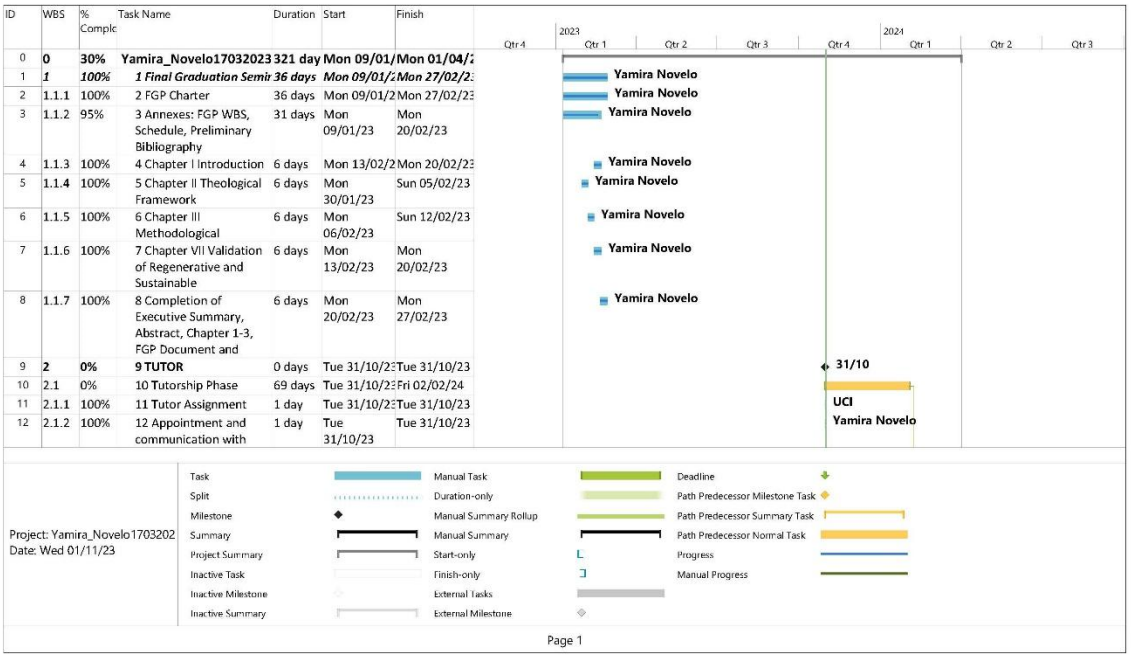
The development of the project methodology and tools used will be done considering all aspects of RD, conservation and the value for nature and its resources. Specifying consideration will be done to ensure cost, budget and resource use and procurement of service and material follows RD principles and concepts. In light of this the all meeting will be done using virtual aspect, communication via email, and virtual platform. Face to face meeting will take advantage of staff already in office to reduce transportation and emission during transportation, or wastage of paper. The procurement of service will analyze vendors not only on cost but on environmentally friendly aspect.

The indicators that will be used to measure RD is the number of meetings done virtually, communication done virtually, surveys or questionnaires using virtual form and approved vendors list which meets the criteria of the organization and environmentally friendly.

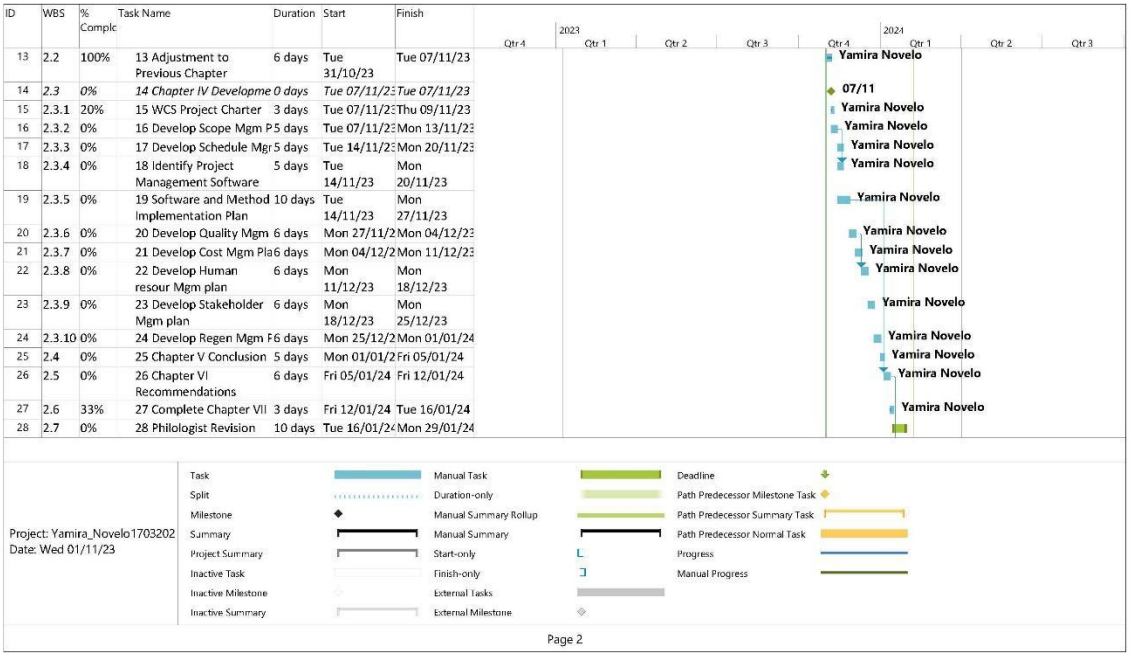
Appendix 2: FGP WBS



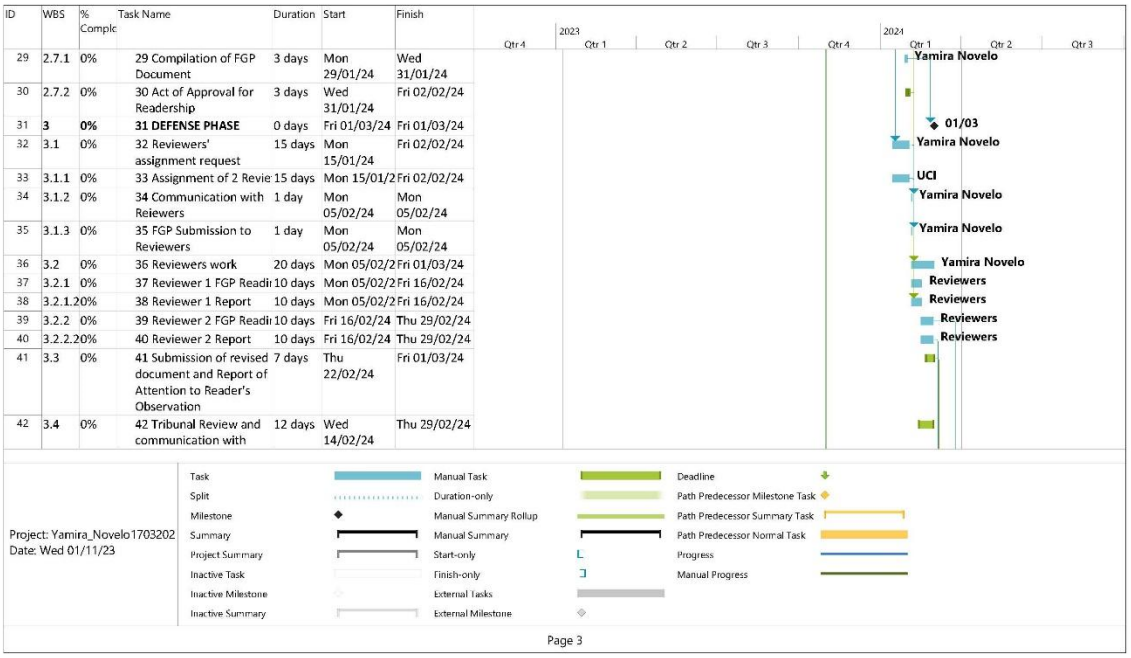
Appendix 3: FGP Schedule



ID	WBS	% Complc	Task Name	Duration	Start	Finish
0	**0**	**30%**	**Yamira_Novelo1703202**	**321 day**	**Mon 09/01/**	**Mon 01/04/**
1	***1***	***100%***	***1 Final Graduation Semi***	***36 days***	***Mon 09/01/***	***Mon 27/02/2***
2	1.1.1	100%	2 FGP Charter	36 days	Mon 09/01/2	Mon 27/02/23
3	1.1.2	95%	3 Annexes: FGP WBS, Schedule, Preliminary Bibliography	31 days	Mon 09/01/23	Mon 20/02/23
4	1.1.3	100%	4 Chapter I Introduction	6 days	Mon 13/02/2	Mon 20/02/23
5	1.1.4	100%	5 Chapter II Theological Framework	6 days	Mon 30/01/23	Sun 05/02/23
6	1.1.5	100%	6 Chapter III Methodological	6 days	Mon 06/02/23	Sun 12/02/23
7	1.1.6	100%	7 Chapter VII Validation of Regenerative and Sustainable	6 days	Mon 13/02/23	Mon 20/02/23
8	1.1.7	100%	8 Completion of Executive Summary, Abstract, Chapter 1-3, FGP Document and	6 days	Mon 20/02/23	Mon 27/02/23
9	**2**	**0%**	**9 TUTOR**	0 days	Tue 31/10/23	Tue 31/10/23
10	2.1	0%	10 Tutorship Phase	69 days	Tue 31/10/23	Fri 02/02/24
11	2.1.1	100%	11 Tutor Assignment	1 day	Tue 31/10/23	Tue 31/10/23
12	2.1.2	100%	12 Appointment and communication with	1 day	Tue 31/10/23	Tue 31/10/23

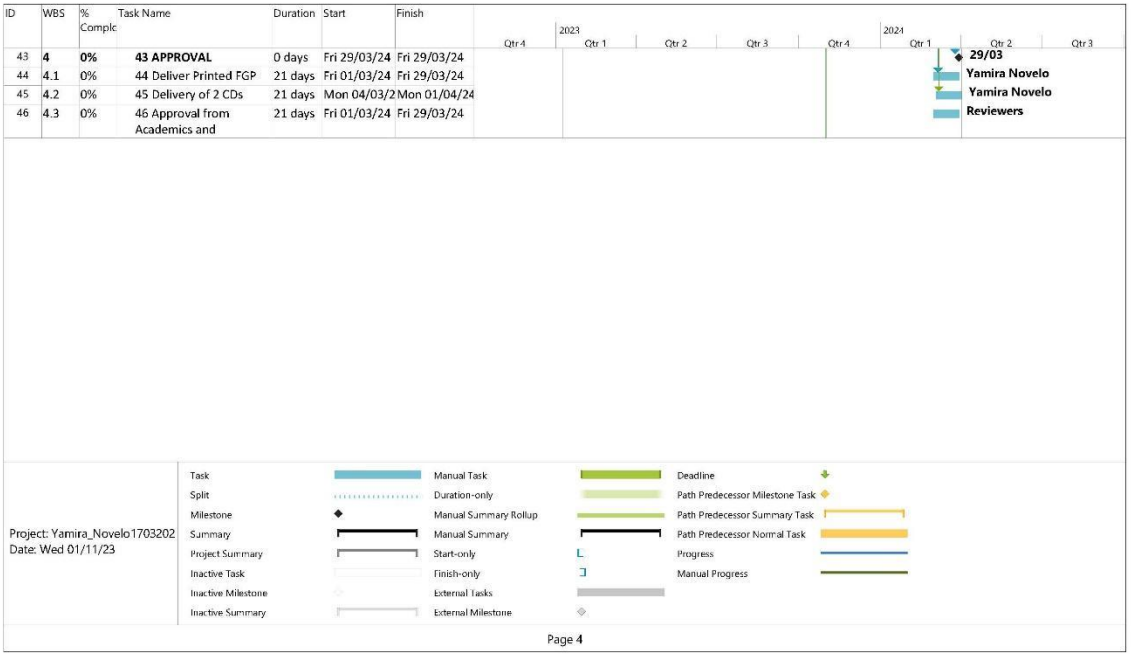


ID	WBS	% Complc	Task Name	Duration	Start	Finish
13	2.2	100%	13 Adjustment to Previous Chapter	6 days	Tue 31/10/23	Tue 07/11/23
14	*2.3*	*0%*	*14 Chapter IV Developme*	*0 days*	*Tue 07/11/23*	*Tue 07/11/23*
15	2.3.1	20%	15 WCS Project Charter	3 days	Tue 07/11/23	Thu 09/11/23
16	2.3.2	0%	16 Develop Scope Mgm P	5 days	Tue 07/11/23	Mon 13/11/23
17	2.3.3	0%	17 Develop Schedule Mgr	5 days	Tue 14/11/23	Mon 20/11/23
18	2.3.4	0%	18 Identify Project Management Software	5 days	Tue 14/11/23	Mon 20/11/23
19	2.3.5	0%	19 Software and Method Implementation Plan	10 days	Tue 14/11/23	Mon 27/11/23
20	2.3.6	0%	20 Develop Quality Mgm	6 days	Mon 27/11/2	Mon 04/12/23
21	2.3.7	0%	21 Develop Cost Mgm Pla	6 days	Mon 04/12/2	Mon 11/12/23
22	2.3.8	0%	22 Develop Human resour Mgm plan	6 days	Mon 11/12/23	Mon 18/12/23
23	2.3.9	0%	23 Develop Stakeholder Mgm plan	6 days	Mon 18/12/23	Mon 25/12/23
24	2.3.10	0%	24 Develop Regen Mgm F	6 days	Mon 25/12/2	Mon 01/01/24
25	2.4	0%	25 Chapter V Conclusion	5 days	Mon 01/01/2	Fri 05/01/24
26	2.5	0%	26 Chapter VI Recommendations	6 days	Fri 05/01/24	Fri 12/01/24
27	2.6	33%	27 Complete Chapter VII	3 days	Fri 12/01/24	Tue 16/01/24
28	2.7	0%	28 Philologist Revision	10 days	Tue 16/01/24	Mon 29/01/24



ID	WBS	% Complc	Task Name	Duration	Start	Finish
29	2.7.1	0%	29 Compilation of FGP Document	3 days	Mon 29/01/24	Wed 31/01/24
30	2.7.2	0%	30 Act of Approval for Readership	3 days	Wed 31/01/24	Fri 02/02/24
31	**3**	**0%**	**31 DEFENSE PHASE**	0 days	Fri 01/03/24	Fri 01/03/24
32	3.1	0%	32 Reviewers' assignment request	15 days	Mon 15/01/24	Fri 02/02/24
33	3.1.1	0%	33 Assignment of 2 Revie	15 days	Mon 15/01/2	Fri 02/02/24
34	3.1.2	0%	34 Communication with Reiewers	1 day	Mon 05/02/24	Mon 05/02/24
35	3.1.3	0%	35 FGP Submission to Reviewers	1 day	Mon 05/02/24	Mon 05/02/24
36	3.2	0%	36 Reviewers work	20 days	Mon 05/02/2	Fri 01/03/24
37	3.2.1	0%	37 Reviewer 1 FGP Readi	10 days	Mon 05/02/2	Fri 16/02/24
38	3.2.1.2	0%	38 Reviewer 1 Report	10 days	Mon 05/02/2	Fri 16/02/24
39	3.2.2	0%	39 Reviewer 2 FGP Readi	10 days	Fri 16/02/24	Thu 29/02/24
40	3.2.2.2	0%	40 Reviewer 2 Report	10 days	Fri 16/02/24	Thu 29/02/24
41	3.3	0%	41 Submission of revised document and Report of Attention to Reader's Observation	7 days	Thu 22/02/24	Fri 01/03/24
42	3.4	0%	42 Tribunal Review and communication with	12 days	Wed 14/02/24	Thu 29/02/24

Page 3



ID	WBS	% Complc	Task Name	Duration	Start	Finish
43	**4**	**0%**	**43 APPROVAL**	0 days	Fri 29/03/24	Fri 29/03/24
44	4.1	0%	44 Deliver Printed FGP	21 days	Fri 01/03/24	Fri 29/03/24
45	4.2	0%	45 Delivery of 2 CDs	21 days	Mon 04/03/2	Mon 01/04/24
46	4.3	0%	46 Approval from Academics and	21 days	Fri 01/03/24	Fri 29/03/24

Page 4

Appendix 4: Preliminary bibliographical research

Asana (2022) Project management methodologies 12 popular framework.
https://asana.com/resources/project-management-methodologies
Justification: Review and background on different project method to assist in development of project methodology for the client.

Asana (2022). The #1 software in product and project management.
https://asana.com/product/why-asana
Justification: Research on the best and popular software to use to manage projects in order to select the most suitable software to use for the organization.

Burke, R. (2013). Project Management: planning and control techniques/-Fifth edition.
https://books.google.com.bz/books?hl=en&lr=&id=uJgYAgAAQBAJ&oi=fnd&pg=PR1&dq=scholar+articles+Project+Management+plan&ots=4YAI5MfqwD&sig=gUX-t56HHSjT0D_uD94yfgh7c9M&redir_esc=y#v=onepage&q&f=false
Justification: The book provide planning and control techniques for project management and will be used as a guide in creating the project management plan.

Charvat, J., 2003. Project Management Methodologies: selecting, implementing and supporting methodologies and processes for projects. Hoboken, New Jersey: John Wiley and Sons.
Justification: The article provide guidelines on selecting and implementing methodologies which Will provide research with knowledge in developing the FGP and Project for the Client.

Heerkens, G. (2000). How to: implement project management in any organization. Paper presented at Project Management Institute Annual Seminars & Symposium, Houston, TX. Newtown Square, PA: Project Management Institute.
https://www.pmi.org/learning/library/implement-project-management-organization-uncertainties-474
Justification: Guide in the implmentation of Project methods background to develop and design and appropriate method for the client.

Hidalgo E. S., (2019). Adapting the scrum framework for agile project management in science: case study of a distributed research initiative
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6441834/
Justification: Case study on project management methodology used in science to review as background on possible method to use for the organization.

Karaman, E., and Kurt, Murat., 2015. Comparison of Project management methodologies: prince 2 versus PMBOK® Guide for it projects. International Journal of Applied Sciences and engineering research Vol. 4 issue 4, 2015.
https://eclass.hmu.gr/modules/document/file.php/

Justification: Document provide comparision of methodology to determine best approach for the project.

Moseley, R.K., Tam, C., Mullen, R., Long Y.C., Ma J.Z. 2004. A conservation project management process applied to mountain protected area design and management in Yunnan, China. Pages 227-234 in Harmon, D., and Worboys, G. (editors) Managing Mountain Protected Areas: Challenges and Responses for the 21st Century. Andromeda Editrice, Colledara, Italy.
https://www.conservationgateway.org/Documents/Yunnan-CAP-book-chapter.pdf
Justification: Case study on project management applied in conservation project to review as background on possible method to use for the organization.

Project Management Institute. (2017). *A guide to the Project Management Body of Knowledge (PMBOK® Guide)* (6th ed.). Project Management Institute.(PDF File)
Justification: The guide to write and create the project management plan for this project, essential for the Final Graduation Project is written in line with this book.

Singh, R., and Lano, K., 2014. Literature Survey of previous research work in Models and Methodologies in Project Management. International Journal of Advanced Computer Science and Applications, 5 (9), 107-122.
Justification: Document providing additional literature that can provide additional information and Assist in developing and designing the methodology for the client.

Appendix 5: WCS Survey Questionnaire

WCS Project Management Questionnaire

Hi Everyone!

I have created this survey with the aim to gather general information on your perspective of the organization management and implementation of projects. This will also facilitate space for you to provide suggestions/comments on how we can improve our management of projects. Your responses will be kept anonymous and within the organization.

This information is vital for me to begin to formulate the organization and team requirements for my Final Graduation project. It also a vital for me to obtain your individual perspective on project management and our current organization operation of projects. There is no right or wrong answers, please be as open and honest as possible. I ask for your full participation to allow this process to reflect everyone inputs. Thanks for taking the time!

Sincerely,

Yamira

* Indicates required question

1. Email *

2. 1. Can you describe the strategy implemented by WCS when managing projects?

3. 2. What is your method for executing a project? Do you follow:

Check all that apply.

- [ ] Linear process where by initiating and planning must be completed before moving on the next process of the project. The stages follow this linear process of Initiating, Planning, Executing, Monitoring and Closure.
- [ ] Iterative Process where by a cycle of planning and execution is revisited often to address changes. Therefore the process can go through various cycles before final completion. The stages are Initiating, planning, executing, adapting, monitoring repeating the last 4 stages as needed and then closure.
- [ ] Combination: a combination of linear and iterative process
- [ ] Other: _____

4. 3. What is your outlook on how projects are currently managed? *

5. 4. Can you identify your role when managing and implementing projects? For example I am a part of the implementation team, I am on the ground executing X Y deliverables *

6. 5. Do you believe you roles are clearly defined when managing and implementing projects?

   Mark only one oval.

   - ◯ Yes
   - ◯ No
   - ◯ Other: _____

7. 6. Are your projects completed within the timeframe and on budget?

   Mark only one oval.

   - ◯ Yes
   - ◯ No
   - ◯ Other: _____

8. 7. Do your project stay in line with its goals and objectives?

   Mark only one oval.

   - ◯ Yes
   - ◯ No
   - ◯ Other: _____

9. 8. Do you interact with your project stakeholders and incorporate feedback?

Mark only one oval.

- ◯ Always
- ◯ Usually
- ◯ Sometimes
- ◯ Rarely
- ◯ Never
- ◯ Other: _____

10. 9. How would you rate communication within the organization? *

Mark only one oval.

- ◯ Very Satisfactory
- ◯ Satisfactory
- ◯ Neutral
- ◯ Need Imptovement
- ◯ Needs major improvement
- ◯ Other: _____

11. 10. How often do you have project meetings?

Mark only one oval.

- ◯ Every day
- ◯ Once a week
- ◯ Once every 2 weeks
- ◯ Once a month
- ◯ Less than once a month
- ◯ Other: _____

12. 11. Do you feel these project meeting are productive and provide sufficient feedback to assist in completing your project deliverables?

Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Other: _____

13. 12. Do you currently use any project management software? If Yes please list them. *

_____

_____

_____

_____

_____

14. 13. List your top 4 challenges when managing or implementing a project. *

_____

_____

_____

_____

_____

15. 14. What do you believe management needs to do to improve its project management and implementation performance? *

_____

_____

_____

_____

_____

16. 15.Please share any other comments.

This content is neither created nor endorsed by Google.

Google Forms

Appendix 6: Scope Control Template

Scope Change Template
Request Form:
Name
Date:
Time:

Obj / Activity	Amendement Requst	Document needed amended	Requestee	Justification for Amendment	Status	Personnel	Date Approved/Denied
Objective 1 Software Implementation	*Request to use Planner within Teams and include New tracking App*	*WBS Gantt Chart Budget 2.1*	*Nicole Auil*	*Planner allows to visually see daily activities etc…*	*Approved*	*Team and Coordinator*	
Activity: 2.3….. Implementation of Software					*Signature:* *Project Coordinator*		

Appendix 6.1: Change Map

Change Map

Project:
Budget
Time/Months:

Project Coordinator:

Objective/ Activity	New activity	Indicator	Finance	Schedule adjustment	Human Resource	Date

Appendix 7: Philologist Approval

Guadalupe Novelo Gillett
General Studies Department
Sacred Heart Junior College
#1 Jospeh Andrew Drive
San Ignacio
Belize, C.A

February 6th, 2024

Universidad Para La Cooperacion Internacional
Avenida 15, Calle 35
Barro Escalante, San Jose 10101
Costa Rica

To Whom it May Concern:

Re: Philological Review of Yamira Novelo Final Graduation Document.

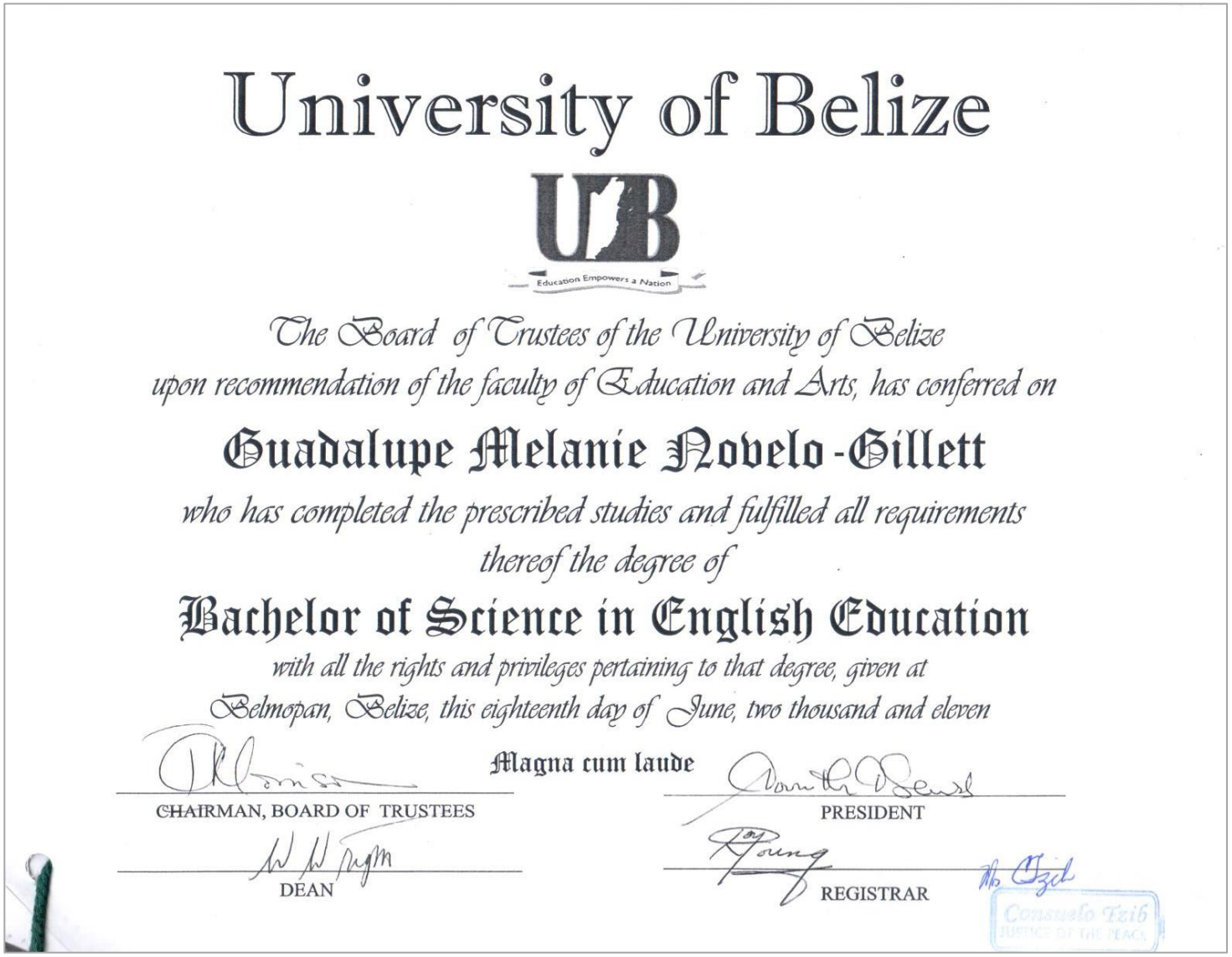
I have read and reviewed the Final Graduation Project entitled "Development of a Project Management methodology for Wildlife Conservation Society-Belize Program" prepared by Yamira Novelo and submitted in fulfilment of the requirement for the Master's in Project Management (MPM) Degree at UCI.

I have considered the standard of academic writing and the use of English in the document. I confirm spelling, grammar and necessary edits suggested has been corrected to my satisfaction. In my opinion the document meets the literary and linguistic standards expected of a student for a degree at the Masters level.

Sincerely,

Guadalupe Novelo Gillett
English Lecture
General Studies Department
Sacred Heart Junior College

Appendix 8: Academic Qualifications of Philologist



University of Belize

UB

Education Empowers a Nation

The Board of Trustees of the University of Belize
upon recommendation of the faculty of Education and Arts, has conferred on

Guadalupe Melanie Novelo-Gillett

who has completed the prescribed studies and fulfilled all requirements
thereof the degree of

Bachelor of Science in English Education

with all the rights and privileges pertaining to that degree, given at
Belmopan, Belize, this eighteenth day of June, two thousand and eleven

Magna cum laude

CHAIRMAN, BOARD OF TRUSTEES

PRESIDENT

DEAN

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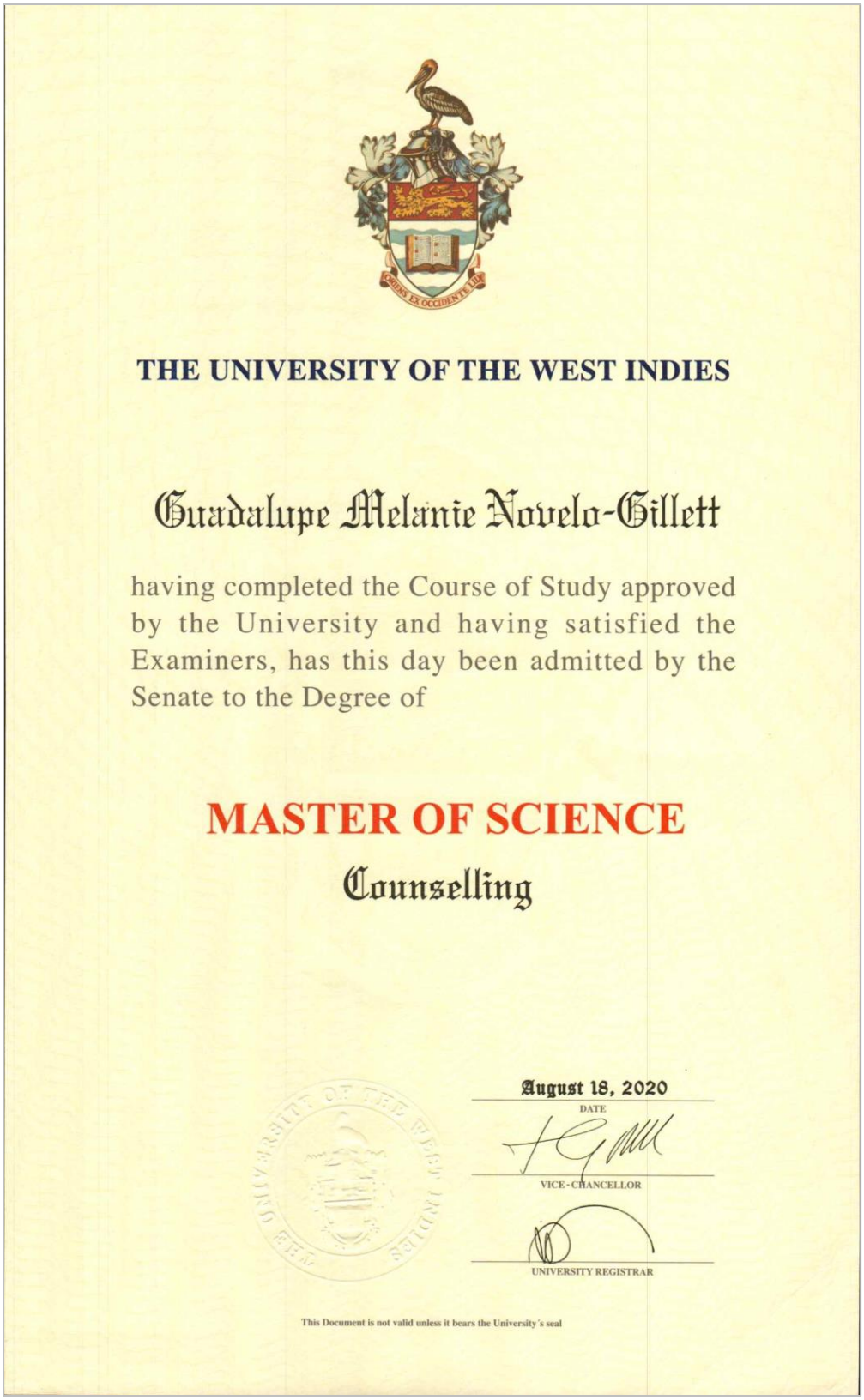
Consuelo Tzib
JUSTICE OF THE PEACE



THE UNIVERSITY OF THE WEST INDIES

Guadalupe Melanie Novelo-Gillett

having completed the Course of Study approved by the University and having satisfied the Examiners, has this day been admitted by the Senate to the Degree of

MASTER OF SCIENCE

Counselling

August 18, 2020
DATE

VICE-CHANCELLOR

UNIVERSITY REGISTRAR

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