

Meeting Minutes

Project Name	HDh.Nolhivaranfaru Skimming Well Gallery System
Subject	Kick Off Meeting
Venue	Nolhivaranfaru Island, Council Office
Date	8 th August 2022
Start Time	Approx 3:30pm
Finish Time	4:30pm (followed by site visit)

	Name	Position	Organization
Attendees	Ahmed Mujthaba	State Minister	Ministry of Environment, Climate Change and Technology
	Afsal Hussain	Director	Ministry of Environment, Climate Change and Technology
	Zainab Gulisthan	Assistant Project Co-ordinator	Ministry of Environment, Climate Change and Technology
	Aishath Nafua	Environmental Research Officer (project focal point)	Ministry of Environment, Climate Change and Technology
	Abdulla Nadheem	President	Nolhivaranfaru Council
	Abdul Kareem Abdul Rahman	Vice President	Nolhivaranfaru Council
	Ameena Mohamed	Council Member	Nolhivaranfaru Council
	Ahmed Waheed	Council Member	Nolhivaranfaru Council
	Zaheena Abdulla	Council Member	Nolhivaranfaru Council
	Abdulla Niyaz	Council Member	Nolhivaranfaru Council
	David Cox	Project Manager	NRW Specialists
	Tony Falkland	Hydrogeologist	NRW Specialists
Hussein Zahid	Environmental Consultant	LAMER Group, Maldives	

Record of Discussion

Item	Details	Action owner	Date
1	Introduction		
1.1	The Chairperson welcomed all attendees and attendees were introduced.		
1.2	The meeting started with Afsal providing a brief introduction of the project, its objective and source of funding followed by the state minister with the remark on the project and its potential benefits to the community. He also highlighted the focus of the government on providing for community needs to improve their quality of life through various developmental projects.		
1.3	The council president then thanked the team from the ministry for choosing the island for this project and its potential importance to the farming community.		

	He also added that there is a large area of the island allocated for farmers that include free board and commercial plots. Various types of agricultural produce are farmed in these plots such as cucumber, chillies, leaf cabbage, papaya, water melon etc. The farms are watered using groundwater extracted from shallow wells either manually or using electric or petrol pumps of varying capacities.		
2	Consultant's Presentation		
2.1	After a brief introduction of the representatives in the meeting, the environmental consultant gave a power point presentation (translated to Dhivehi from English) of the project to the meeting audience for ease of understanding of the project by the council representatives.	NRW	
2.2	The presentation outline included; <ul style="list-style-type: none"> 1. Objectives of the project 2. Source of funding 3. Beneficiaries 4. Information of the project concept design 5. Project timeline and work plan 		
2.3	A copy of the presentation is attached in Appendix A.		
3	Project Questions		
3.1	After the presentation the floor was open to questions. The consultants answered the questions by the council with regard to the design and construction of the gallery and how it works.	CTCN	
3.2	The council asked about the distribution of the water from the gallery which has been planned. The consultant confirmed that the project is only funded for the construction of the gallery and supply of a pump but not for a storage tank or distribution network to the farms. The team from the Environment ministry also acknowledged this and understands the importance of sourcing the water from the gallery instead of the farmers' current practices. The state minister pledged to explore sources of possible funding for the water distribution system. It was also confirmed by the ministry representatives and the consulting team that this matter will be discussed in the project steering committee that has been formulated as part of the project implementation process.	NRW	
4	Site Visit		
4.1	After the kickoff meeting, the consultants visited the farming site with some members of the council and representatives from the ministry to see how the farming is practiced.		
4.2	Photos of the site visit are shown below. After the site visit, the Consultant remained on the island to undertake the preliminary investigations for the gallery (Activity 2.3)		







5	APPENDICES		
	Appendix A – Consultant’s Presentation		

PROJECT KICK-OFF MEETING

**PROJECT 3100004903 – SKIMMING WELL GALLERY SYSTEM FOR
AGRICULTURAL USE IN HDH NOLHIVARANFARU**

08th August 2022

AGENDA

Key issues to discuss:

- Project background and purpose
- Introduce Consultant and Team
- Infiltration Galleries
- Program and Main Activities

PROJECT BACKGROUND AND PURPOSE

The project is funded by the United Nations.

The main project purpose is to:

- **Assist the community in providing a reliable and sustainable water supply system for agriculture on Nohivaranfaru Island**

The United Nations advertised for a Consultant to undertake these works. NRW Specialists (Australia) assisted by Lamer (Maldives) were successful and were awarded the contract

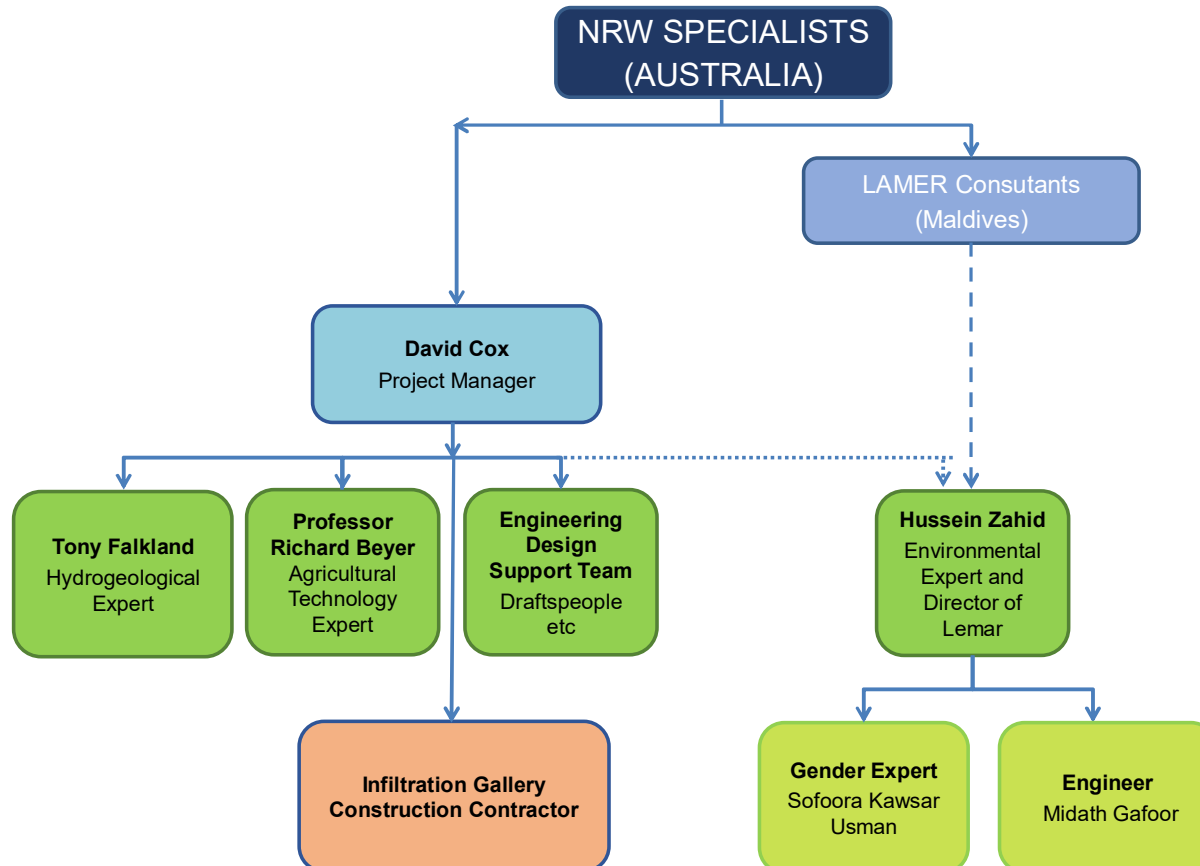
CONSULTANT'S EXPERIENCE

NRW Specialists is an international consultant that has undertaken a number of water supply projects in Australia, New Zealand, South and SE Asia, Middle East and across the Pacific Region. We have also successfully designed infiltration galleries.

LAMER Group is based in Male' and has undertaken numerous projects across the Maldives.

CONSULTANT'S TEAM

The Consultant has assembled a team of international and local experts to undertake the project.



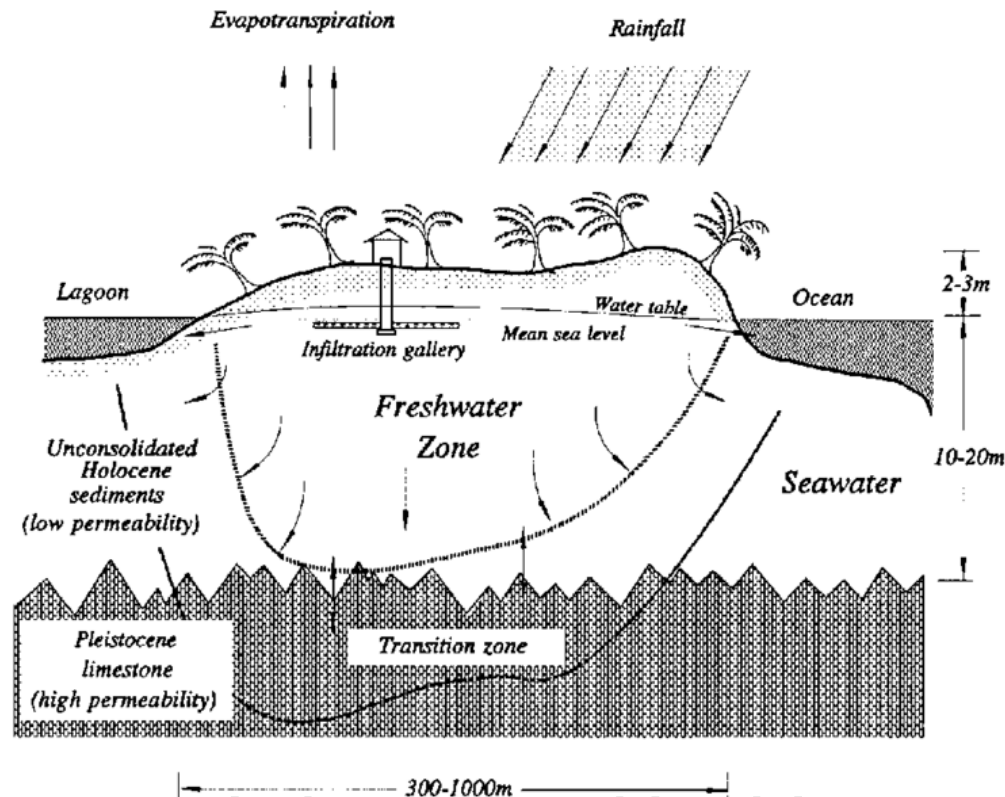
KEY PROJECT ACTIVITIES

The Project Scope is to:

- Consult with the Community to ensure engagement and valuable contributions
- Investigate suitable options for an infiltration gallery
- Design an infiltration gallery on the islands
- Construct the infiltration gallery;
- Test and Monitor the gallery; and
- Capacity building on water use efficiency for agriculture and monitoring groundwater.

WHAT IS AN INFILTRATION GALLERY

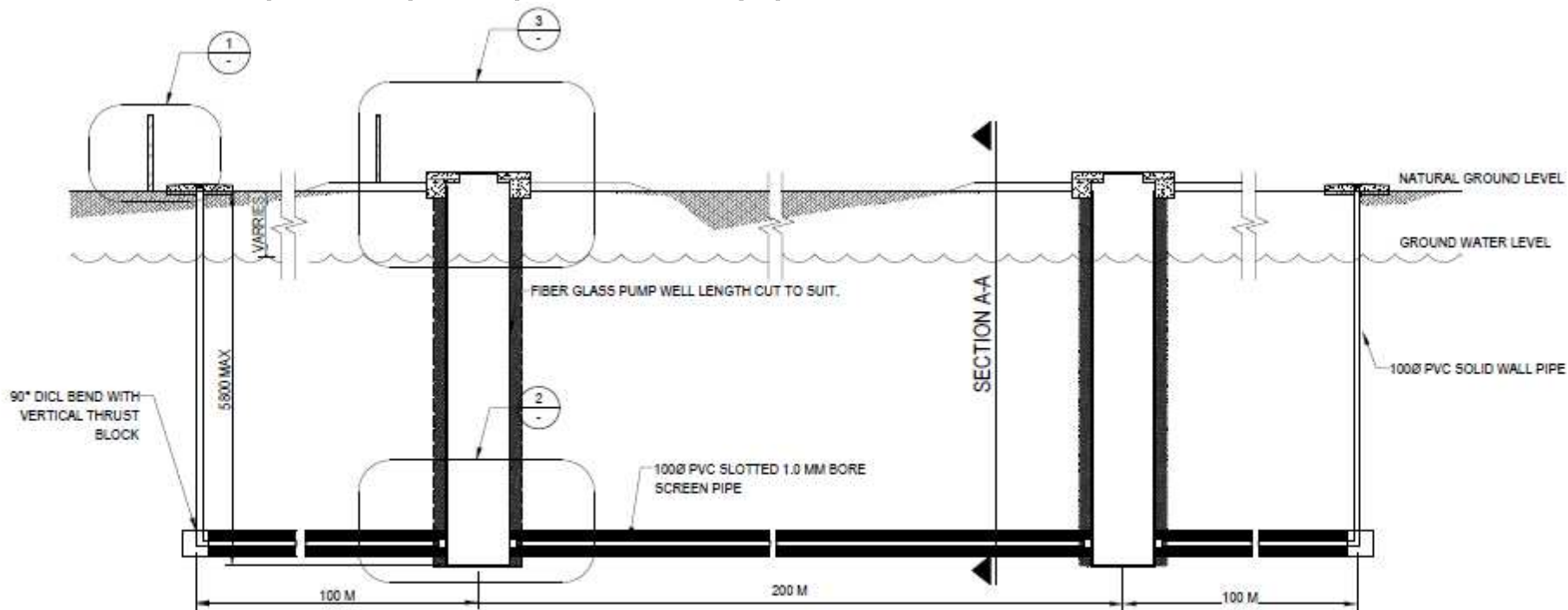
An infiltration gallery is an underground pipe system with holes/slots in it to allow water to seep into a well and be pumped out for irrigation.



The rainwater is harvested in this manner

WHAT IS AN INFILTRATION GALLERY

A pump is fitted into the wells and water is pumped out to the area. Water continuously slowly seeps into the pipes and fills the wells.



INFILTRATION GALLERY GENERAL ELEVATION

SCALE : NTS

WHAT IS AN INFILTRATION GALLERY



PVC pipes with slots



Excavating for the pipe



Installing the gallery



Top of Well

This was
a recent
project in
the
Pacific
Region

PROGRAM AND ACTIVITIES

The following program was developed for the project. The activities below have been completed and we are now at Activity 2

Item	Activity	Duration (work days)	Start Date	Finish Date
1	OUTPUT 1: DEVELOPMENT OF IMPLEMENTATION PLANNING AND COMMUNICATION			
1.1	Activity 1.1 Implementation Plan			
	a) Hold Inception Meeting	1	28/04/2022	29/04/2022
	b) Prepare Detailed Work Plan	15	29/04/2022	20/05/2022
1.2	Activity 1.2 Monitoring and evaluation plan and Impact statement			
	a) Prepare UN Documentation in Required Forms	20	29/04/2022	27/05/2022
1.3	Activity 1.3 Technical assistance closure report			
	a) Prepare CTCN Closure and Data Collection Report near end of project	20	7/10/2023	27/10/2022

PROGRAM AND ACTIVITIES

The Kick Off Meeting is Activity 2.1(b) – it was slightly delated due to Eid holidays

2	OUTPUT 2: INFILTRATION GALLERY SITE SELECTION			
2.1	Activity 2.1 Report on the kick-off meeting and stakeholder consultations			
	a) Develop list of proposed attendees/organisations for Kick Off Meeting	5	27/05/2022	3/06/2022
	b) Schedule and hold Kick Off meeting	15	3/06/2022	24/06/2022
	c) Produce brief report on Kick off meeting and Stakeholder Consultations	5	24/06/2022	1/07/2022
2.2	Activity 2.2 Detailed description of the Project Steering Committee, with name and contact details of the members, respective institutions, gender, etc.			
	a) Set up and create Steering Committee (max 10 participants)	5	1/07/2022	8/07/2022
2.3	Activity 2.3 Report on the preliminary investigation in HDh.Nohlivanfaru			
	a) Schedule Proposed Site Visit to Nohlivanfaru	5	8/07/2022	15/07/2022
	b) Site visit to Nohlivanfaru	10	15/07/2022	29/07/2022
	c) Report on Site Visit	5	29/07/2022	5/08/2022
	d) Site selection of proposed gallery site	5	5/08/2022	12/08/2022
	e) Report on Concept Design and Preferable Design	10	12/08/2022	26/08/2022

David Cox and Tony Falkland will be visiting from Australia during the week of 7 to 11 August to assess the site for the Infiltration Gallery (Activity 2.3b)

PROGRAM AND ACTIVITIES

During Output 3, the environmental factors are assessed and the infiltration gallery designed

3	OUTPUT 3: DESIGN OF INFILTRATION GALLERY SYSTEM AT SELECTED SITE			
3.1	Activity 3.1 Report on the environmental assessment of the infiltration			
	a) Undertake EIA for proposed gallery site	40	26/08/2022	21/10/2022
	b) Prepare EIA in accordance with regulation of Maldives (EIA regulation, 2012/R-27).	40	26/08/2022	21/10/2022
3.2	Activity 3.2 Detailed engineering design of the infiltration gallery system			
	a) Gallery configuration finalisation	5	21/10/2022	28/10/2022
	b) Filtration material assessment	2	21/10/2022	25/10/2022
	c) Hydraulic calculations	3	25/10/2022	28/10/2022
	d) Develop engineering drawings	15	28/10/2022	18/11/2022
	e) Develop specifications for selected contractor	5	28/10/2022	4/11/2022
	f) Submission of Engineering Design Drawings	2	4/11/2022	8/11/2022
3.3	Activity 3.3 Minute of the Project Steering Committee meeting with a list of participants disaggregated by gender, materials used etc			
	a) Arrange Project Steering Committee Meeting	15	8/11/2022	29/11/2022
	b) Hold Project Steering Committee Meeting and discuss Environmental and Engineering	1	29/11/2022	30/11/2022
	c) Produce and submit Minutes of the Meeting	2	30/11/2022	2/12/2022

PROGRAM AND ACTIVITIES

During Output 4, the infiltration gallery is constructed and tested

4	OUTPUT 4: INSTALLATION AND MONITORING OF THE INFILTRATION GALLERY AT SELECTED SITE			
4.1	Activity 4.1 Installation, testing and commissioning of the infiltration gallery system at selected site			
	a) Mobilisation period	20	2/12/2022	30/12/2022
	b) Construction of Infiltration Gallery	80	30/12/2022	21/04/2023
4.2	Activity 4.2 Report on the monitoring of the infiltration gallery system and groundwater quality at selected site			
	a) Weekly salinity checks	40	21/04/2023	16/06/2023
	b) Daily rain gauge and flowmeter readings	40	21/04/2023	16/06/2023
4.3	Activity 4.3 Minute of the Project Steering Committee with a list of participants disaggregated by gender, materials used, and summary of the discussions held			
	a) Arrange Virtual meeting with Project Steering Committee	15	16/06/2023	7/07/2023
	b) Virtual meeting and produce Minutes of Meeting	5	7/07/2023	14/07/2023

PROGRAM AND ACTIVITIES

During Output 5, the agricultural expert provides advise to farmers

5	OUTPUT 5: CAPACITY BUILDING AND AWARENESS-RAISING TO INCREASE WATER USE EFFICIENCY FOR AGRICULTURE, MANAGE THE INFILTRATION GALLERY AND MONITOR GROUNDWATER QUALITY			
5.1	Activity 5.1 Report on recommendations to increase water use efficiency for agriculture at selected site			
	a) Quantitive survey of water use on plots	15	14/07/2023	4/08/2023
	b) Conduct water balance of excess water usage/ water consumption patterns	15	4/08/2023	25/08/2023
5.2	Activity 5.2 Guide materials (e.g., leaflets, handouts, flyers, brochures, videos, etc.) for sustainable agricultural practices (in English and Maldivian)			
	a) Develop Guide materials to ensure optimal return for effort for farmers	15	25/08/2023	15/09/2023
5.3	Activity 5.3 A manual for management of the infiltration gallery system and monitoring of groundwater quality at selected site (in English and Maldivian)			
	a) Develop Manual to include operation and maintenance requirements to manage the infiltration gallery successfully	15	15/09/2023	6/10/2023
5.4	Activity 5.4 Materials for training of trainer programme (e.g., presentations, satisfaction survey template, etc.)			
	a) Develop materials to raise farmer awareness for salinity/groundwater extraction relationship	15	6/10/2023	27/10/2023

QUESTIONS?

Any questions?

THANK YOU

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DC1

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Slide 3

AN5

Is it United Nations or CTCN?

Aishath Nafua, 25/07/2022

DC1

Funded by United Nations

David Cox, 27/07/2022

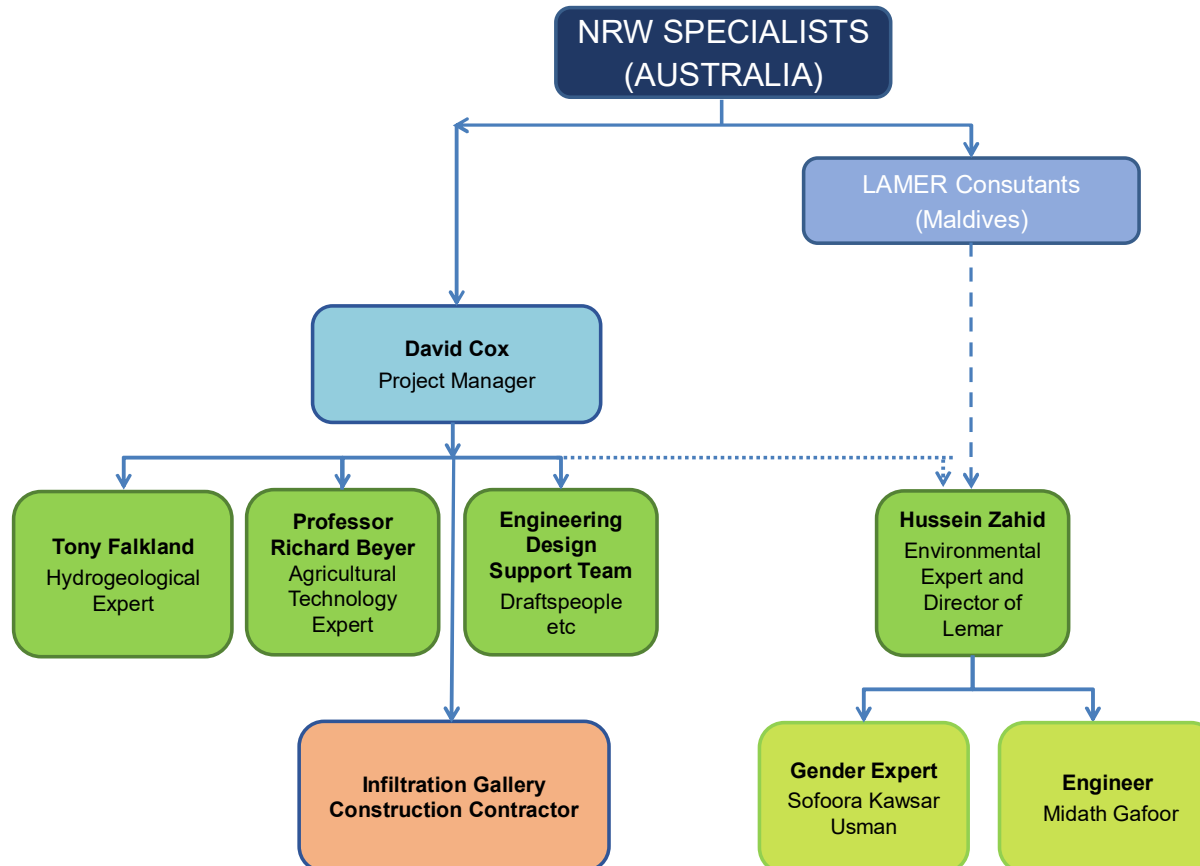
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The Project Scope is to:

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- Construct the infiltration gallery; AN2
DC2
- Test and Monitor the gallery; and AN3
DC3
- Capacity building on water use efficiency for agriculture and monitoring groundwater.

Slide 6

AN2

Please add monitoring works as well

Aishath Nafua, 25/07/2022

AN3

ToR indicates "Capacity building and awareness raising to increase water use efficiency for agriculture as well as to manage the infiltration gallery system and monitor groundwater quality" needs to be incorporated

Aishath Nafua, 25/07/2022

DC2

Included

David Cox, 27/07/2022

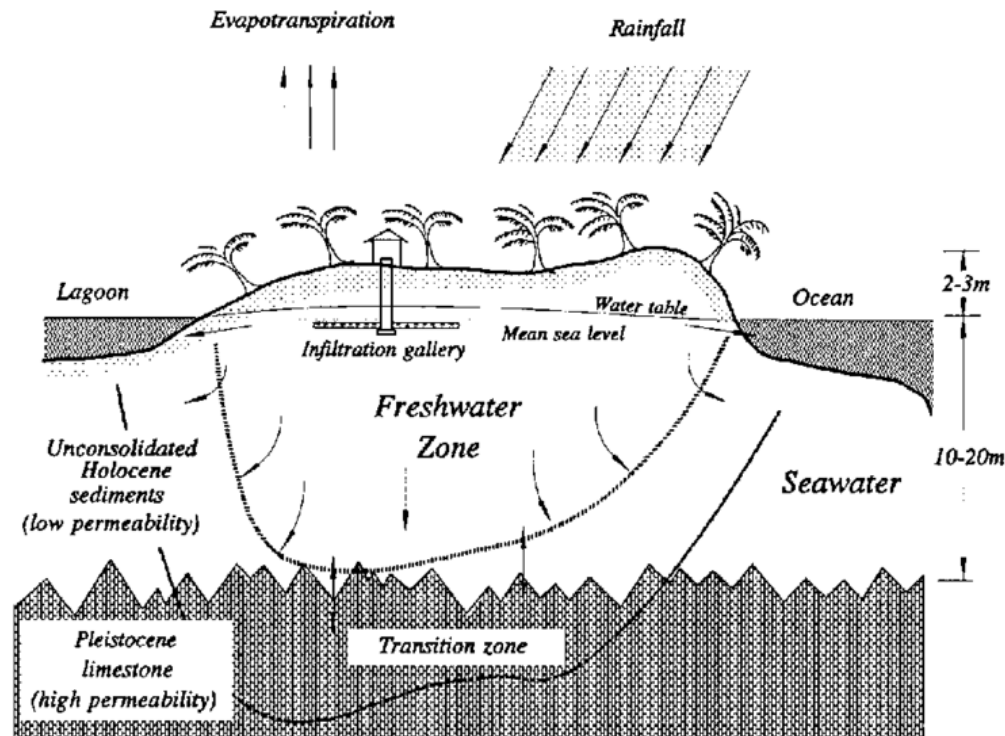
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