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Report: April 2013

Floreana Pilot Project: Foundation “Fuente de Vida” visit to Galapagos



Floreana Community and Project team. © CDF 2013.

Objectives:

1. Visit to Sta Cruz from the technical team of the Foundation “Fuente de Vida” in order to present the project and the technology to the Galapagos National Park Service.
2. Plantation of 5 waterboxxes in the GNPS and 5 more in the CDF using endemic plants.
3. Visit to Floreana Island to make a recognizance of the areas where the plantations will take place and take measurements for the design of the green houses needed for the project.
4. Present the project and the technology to the local authorities and the community in Floreana.
5. Plantation of 10 endemic plants using the waterboxx technology in the town of Floreana.

Progress:

In order to continue with the implementation of the project; and to comply with the project schedule the CDF project team received the visit from the management and technical team of the Foundation “Fuente

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de Vida”, who is in charge of the implementation of the project “Agua, Vida y Naturaleza” in Santa Elena, Mainland Ecuador. The visit took place during the week starting on the 15th of April and the following work plan was followed (Table 1).

Table 1: Work plan schedule

Activities	Week 15th - 21st April 2013						
	Mon	Tues	Wed	Thurs	Frid	Sat	Sun
Arrival to Baltra - Santa Cruz							
Meeting to prepare presentation for the GNPS							
Presentation to the GNPS Restoration Team							
Plantation of 5 endemic plants in the GNPS office building using Waterboxx							
Plantation of 5 endemic plants in the CDF office building using Waterboxx							
Trip to Floreana							
Meeting with the GNPS coordinator in Floreana							
Visit to the Highlands							
Meeting with local authorities							
Plantation of 9 endemic plants using Waterboxx							
Presentation of the project and technology to the community							
Practical demonstration of the technology to the community							
Return to Santa Cruz							
Meeting to plan next steps and evaluate results obtained during this visit							
Return to Guayaquil							

It is important to mention that a number of strategic and time consuming activities were carried out previous the visit of the technical team from “Fuente de Vida”. We began the process of liaison with the local government institutions and the community in order to prepare the terrain for the visit and ensure a positive result of the activities planned during the visit, ensuring an efficient use of the economic resources invested in this trip. The activities implemented and results obtained (Table 2) conform a vital accomplishment towards a successful implementation of the Pilot Project in Floreana, and even more for the success of the “Galapagos Verde 2050” Plan.

Table 2: Liaison Activities and results achieved prior the visit.

Activities Implemented	Results Obtained
Liaison with GNPS to introduce Groasis Waterboxx technology	<ul style="list-style-type: none"> - GNPS fully supportive of the project. - Permission to plant waterboxx in GNPS office building. - Logistical support. - Provision of park rangers to clear the terrain. - GNPS will design and provide the necessary signage presenting biological information about the vegetation and the

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Activities Implemented	Results Obtained
Liaison with local parish council and community on Floreana Island	<p>Waterboxx technology.</p> <ul style="list-style-type: none"> - Parish Council fully supportive of the project. - Logistic support. - Provision of the terrain to build green house. - Provision of the terrain to execute the project in the low lands. - Local community member provided 2 ha. of terrain in the highlands to execute project.

1.- Presentation to the Galapagos National Park Service: The CDF an “Fuente de Vida” project team delivered an introductory presentation (Fig. 1) in order to accomplish two objectives: i) to officially present the Floreana Pilot Project and ii) to present the Waterboxx technology. To this presentation the GNPS restoration team was present; it is important to quote that the Director of Ecosystems and Restoration, and the Executive Director were not able to participate in this event due to unforeseen circumstances, however they have been informed about this project and they are fully supportive.



Figure 1. CDF and “Fuente de Vida” Project team delivering a presentation at GNPS Restoration Program technicians. © CDF 2013.

2.- Plantation of 5 endemic plants using the Waterboxx technology on the GNPS and CDF buildings: Immediately after the presentation, we proceeded to the practical explanation of the technology and the plantation of 10 endemic plants in the GNPS and the CDF buildings (figures 2, 3 and 4). The plantation of these endemic plants is a positive step forward in order to present the technology to Galápagos and showcase this to the visitors. Its main scientific purpose will be to enable easy access to daily information in order to measure the growth rate of these plants under the conditions presented by the waterboxx.



Figure 2 Waterboxx planting at GNPS office building (GNPS main entrance). © CDF 2013.



Figure 3. Waterboxx planting at CDF office building (entrance to Executive Director’s office). © CDF 2013.

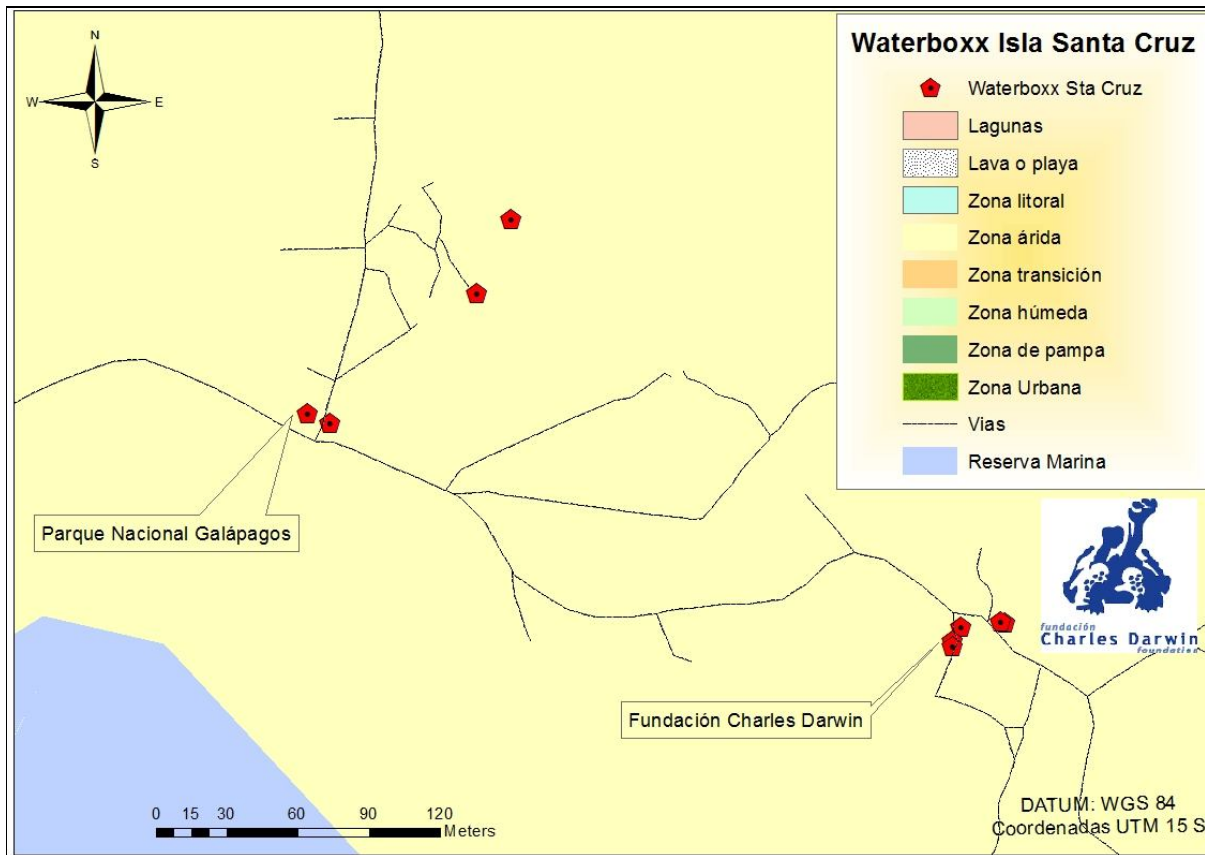
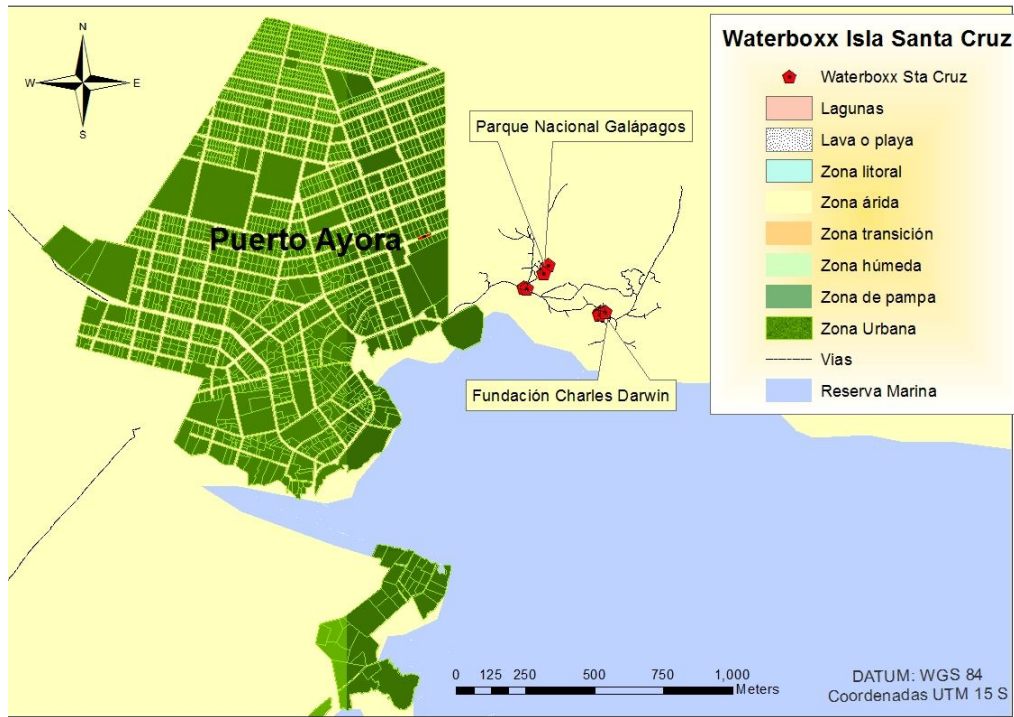


Figure 4. Maps showing the geographical location of each individual waterboxx planted in Santa Cruz. (Elaborated by Patricia Jaramillo, CDF 2013).

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3.- Visit to Floreana: The main purpose of the Galapagos visit was to conduct a field trip to Floreana to meet with the President of the local Parish Council, members of the community and to identify the locations approved for the project.

On the first day in Floreana the team went to meet the GNPS coordinator in order to arrange a visit to the highlands. The GNPS kindly offered the needed logistical support. We visited the private farm of Mr. Anibal Sanmiguel, who has kindly accepted to participate in this project and offered some of his land to use as the experimentation site for the waterboxx technology on the highlands (Figure 5).



Figure 5. Project team visiting the farm of Mr. Anibal Sanmiguel (right). © CDF 2013.

The next important activity carried out in Floreana was the presentation to the local Parish Council authorities and community about the project and the waterboxx technology.

I would like to point out, that the interest showed by the authorities and community were extremely positive. The President and the community pushed forward a previous meeting they had scheduled for the day and we manage to make our presentation at 8pm. Considering that the time and the energy invested on the previous meeting, it was a very successful presentation where we could have the main stakeholders and community member among the audience (Figure 6 and 8).



Figure 6. Project and waterboxx technology presentation to the Floreana Community. © CDF 2013.

The following activity was to visit the area in the lowlands where the sustainable agriculture production using the waterboxx technology will be implemented. This piece of land has been kindly offered by the President of the Floreana Parish Council and is located on the dry zone in the lowlands (Figures 7 and 8).



Figure 7. CDF team member taking GPS information from the area to be used for the agricultural production. (Dry zone -lowlands). © CDF 2013.

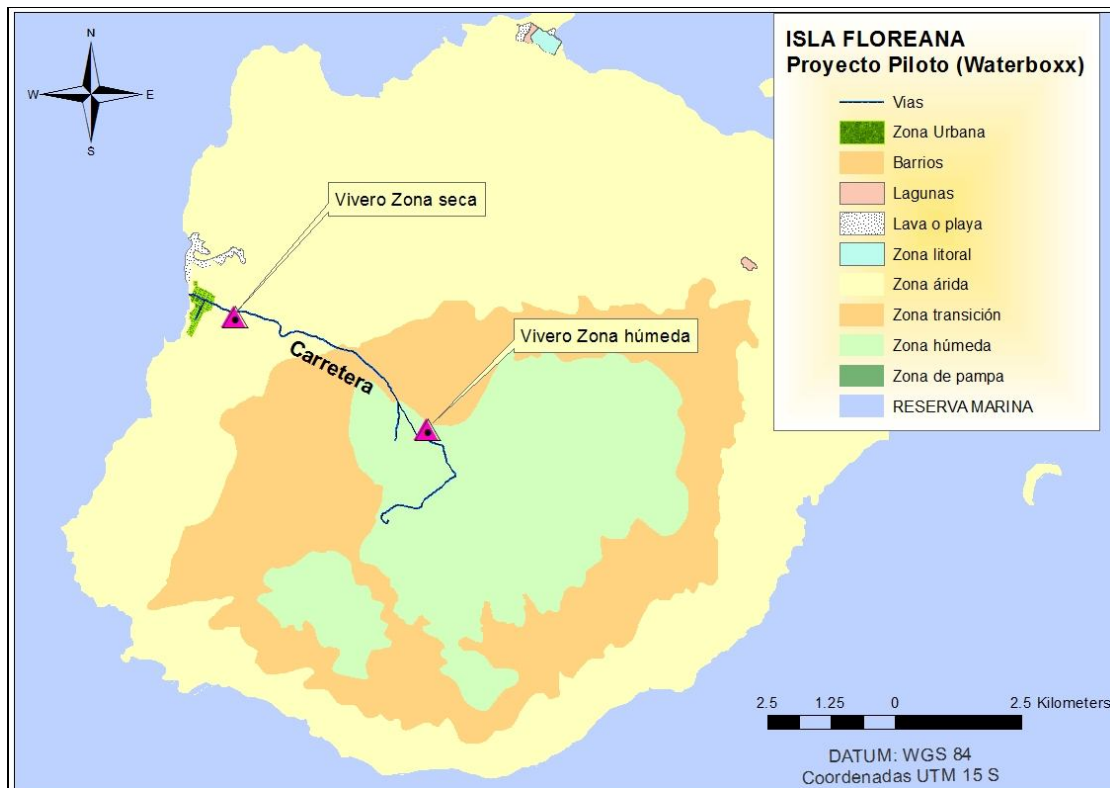


Figure 8. Map showing the geographic location of the two sites that will be utilized in the project. (Elaborated by Patricia Jaramillo, CDF 2013).

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Finally, during this visit to Floreana the plantation of 10 waterboxxes with endemic plants was successfully achieved (Figures 8 and 9).



Figure 8. Local community members learning about the waterboxx technology on the field. (Amazonas School, Floreana). © CDF 2013.

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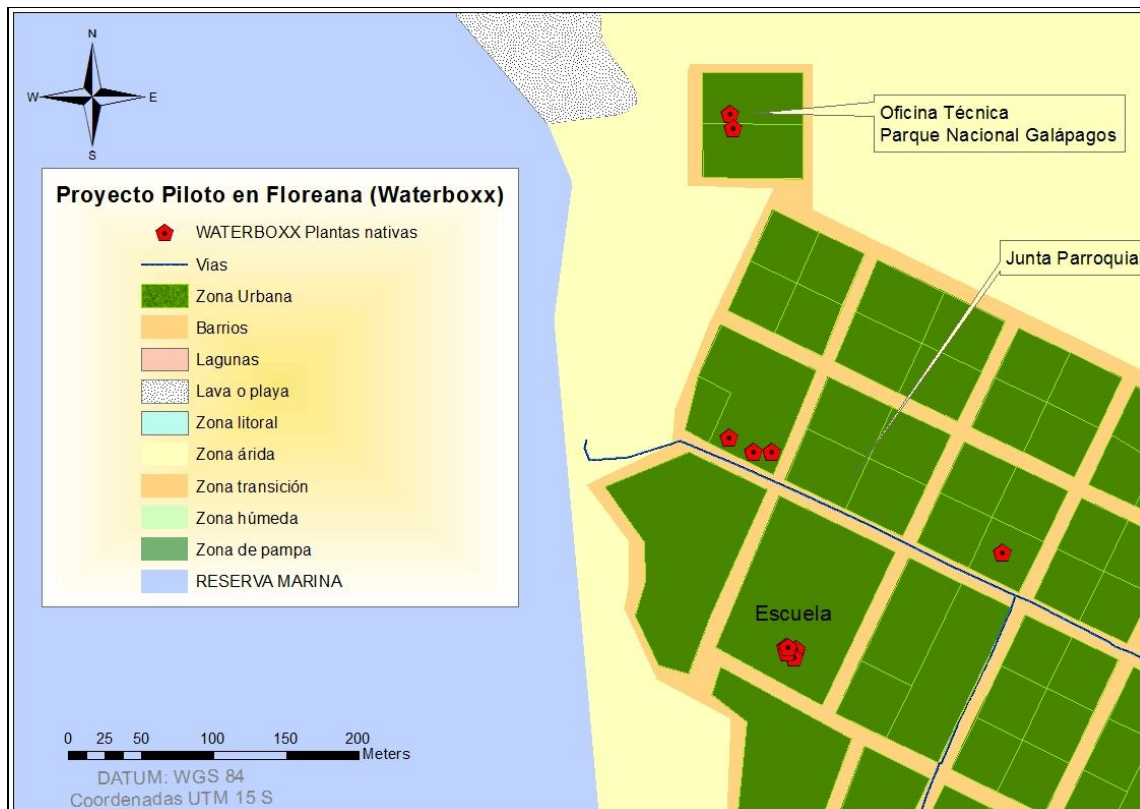


Figure 9. Map showing the geographical position of the 10 waterboxxes in the town of Floreana. (Elaborated by Patricia Jaramillo, CDF 2013)

Conclusions:

- As mirrored from above, we can said that all the objectives set for this visit has been successfully achieved. It was clear to observe that the local community in Floreana is in favor of this project and have given their full support to this novel initiative.
- It is important to maintain continuity now that we have officially presented the project.
- The construction of the needed infrastructure will begin as soon as possible; we already have the basic information on the design and will start purchasing the materials.
- During our final meeting it was decided that Ing. Junior Reyes will be the technician in charge of the capacitation and also will oversee the construction of the infrastructure.



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Annex I: Project Work plan

Activity	Responsible/Participants	1	2	3	4	5	6	7	8	9	10	11	12
Liaison with GNP to introduce Groasis Waterboxx technology	Coordinator of Ecological Restoration Program CDF; Project Leader; Groasis Team	Green											
Liaison with local parish and community on Floreana Island	Coordinator of Ecological Restoration Program CDF; Project Leader; Groasis Team; Senior Scientist (Botany)	Green											
Visit to Floreana Island in company of Groasis Waterboxx experts, CDF and other project partners	Coordinator of Ecological Restoration Program CDF; Project Leader; Groasis Team, COMON representatives		Green	Green									
Outreach with local community to introduce Groasis Waterboxx technology	Coordinator of Ecological Restoration Program CDF; Project Leader; Groasis Team; Senior Scientist (Botany); Senior Communications Officer, Field Assistants		Green	Green									
Importation of 600 Waterboxxes to Floreana (Agua, Vida y Naturaleza)	Agua, Vida y Naturaleza		Green	Green	Blue								
Workshop to implement strategic plan and to present the project to the community on Floreana Island	Coordinator of Ecological Restoration Program CDF; Project Leader; Groasis Team			Green									
Workshop to provide training to participants and supervision	(Groasis Team)				Blue								
Propagation of fruiting trees begins	Technician (Groasis team)				Blue	Blue	Blue						
Introduction of Groasis Waterboxx technology into the native plants propagation project	Coordinator of Ecological Restoration Program CDF; Project Leader; Senior Scientist (Botany)	Green	Green	Green	Blue	Blue	Blue						
Liaising with GNP to link Groasis Waterboxx propagation technology with reforestation activities	Coordinator of Ecological Restoration Program CDF; Project Leader; Senior Scientist (Botany)	Green	Green										
Reforestation program begins; construction of greenhouses and shade house.	Groasis Team, Field Assistants			Red	Blue	Blue	Blue						
Assessment of development of fruit tree propagation project	Coordinator of Ecological Restoration Program CDF; Project Leader; Senior Scientist (Botany)							Blue	Blue	Blue			
Assessment of development of reforestation project	Coordinator of Ecological Restoration Program CDF; Project Leader; Senior Scientist (Botany)									Blue	Blue	Blue	Blue
Elaboration of Regional Reforestation Plan	CDF team + Groasis technician	Green	Green		Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Visit to Floreana Island with COMON Foundation and presentation of results of project to date	Coordinator of Ecological Restoration Program CDF; Project Leader; COMON representatives												Blue

Blue = Planned; Green = On track, Red = Delayed. Month 1 = February.