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# Cruce de Blanco, Dominican Republic



Assessment Presentation



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*Project Location: Cruce de Blanco, Dominican Republic*

*Chapter(s): Case Western Reserve University*

*Brief Description of Project: The proposed project would involve the creation of a secondary water supply for the community of Cruce de Blanco. Specifically, this would involve the design and construction of a dam for an inlet, a cistern for storing the water, and a pipeline to transport it from the dam to the cistern. This new supply would initially provide water to thirty houses (one sixth of the community) and the school, but could be designed to eventually replace the existing system which is deteriorating.*

*Project Risk Level: Level 2*

*Dates of travel: March 10, 2007 – March 18, 2007*



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## Project Team & Travel Team

*Project Team: Juan Palomares, Katherine Bobak, Yugarshi Mondal, Michael Davidson, Janice Ahn, Alberto Hernandez-Martinez, Tim Sykes, Erin Gallagher, Brian Tietz, Brad Collins, Rita Cabral, Jenny Nelson, Vicky Apostolopolous, Emily Newton, Geoff Peyton*

*Travel Team Names: To be Determined from above group by presentation date*

*On-the ground Contact Phone # for the travel team: (978-877-1500)*

*Nearest US Consulate Contact info:*

- US Embassy, Santo Domingo, (809) 221-2171

*Nearest Hospital Contact Info:*

- **HOSPITAL DR PEDRO E DE MARCHENA**  
Dirección: 16 DE AGOSTO BO  
Teléfono: 809-525-3364



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## Living Arrangements

### *Where will you be staying?*

- Antiguo Hotel Europa, Santo Domingo, Dominican Republic, 809-285-0005
- Federacion de Campensinos Hacia el Progreso Ecotourism Center

### *How will you be traveling to your destination?*

- Air Travel from Cleveland to Santo Domingo
- Travel by Van from Santo Domingo to Cruce de Blanco (approximately 2 hours)

### *What are your sources of food and water?*

- Food and water will be provided by the ecotourism center



## *Safety Plan*

- Review day's activities and possible safety concerns each morning
- Establish and follow the “buddy system”, which will include one Spanish-speaking person per group
- Each person will carry the name and address of the hotel in case of becoming separated
- Carry an extra container of water when venturing outside of town



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## Safety & Emergency Plan

### *Customs Clearance for Travel Equipment*

- Key Pieces of equipment being taken include surveying equipment, water testing equipment, and a gps unit
- There are no required customs clearances for the equipment



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## Safety & Emergency Plan

### *Emergency Plan & Exit Strategy*

- In event of medical emergency, members will go to the Hospital Marchena
- In event of political unrest, members will go to the United States Consulate in Santo Domingo
- In the event of a hurricane alert, a notice will be posted on the U.S. Embassy in Santo Domingo's web page. Traveling members are aware of this possibility.



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## Logistics of Community Interactions

- *The community is divided politically between the Federacion and the Association, though more economically than socially.*
- *Culturally there are several issues regarding the water. Most importantly an ignorance towards illness presumed to be caused by the water.*



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## Logistics of Community Interactions

- *Plan for interacting/interviewing the community:*
  - *At least half of those members traveling are either native speakers or have studied abroad in Spanish speaking countries*
  - *A “town hall” meeting will be held in the community to make sure the entire community is aware of what is happening with the project*
  - *A medical and cultural survey of the community will be conducted, as well as taking medical histories, making sure to speak with all social segments in the community*
  - *We may visit surroundings areas if there is time*



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## Objectives of Site Assessment Trip

- *Overall Project Objective:*
  - *To provide the community with a stable water supply system*
  - *To directly distribute water to 30 homes not receiving water*
  - *To create a system that can be expanded to serve the greater community*
- *Give the background of the project:*
  - Initiated through contact of the Peace Corps
  - Current water system was installed by construction company in the 1980s
    - Is deteriorating and clogs regularly in heavy rains



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## Objectives of Site Assessment Trip

- *Community Involvement:*
  - Our group will be working directly with the Federacion, a local organization
  - The men who maintain the current system will have input, as they will maintain any future system
- How will the project be communicated?
  - Meetings with community members who do not receive water
  - Door to Door canvassing of the population for health and cultural information



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## Objectives of Site Assessment Trip

- How will the community participate in construction and maintenance?
  - The men who currently maintain the water system will be approached about maintaining the future one
  - The younger members of the community will be asked to help in construction
- *Site Assessment Data Needs:*
  - Water Quality and Current Health Status
  - Health and Cultural surveys will be taken and analyzed upon return
  - Identification of water sources and data on each
  - Water usage information on community



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## Objectives of Site Assessment Trip

- *Baseline Health Assessment Data*
  - Compare statistics from the bottom of village to the top of village
  - The primary health metrics in the village are diarrhea, dehydration, fever, rashes, and yeast infections.
    - Other metrics include number of family deaths and how many doctor visits in the past year.
  - Overall health improvement due to supplying better water to both halves of the village and hosting an educational town meeting is expected from this project. Also, implementation of a records system at the local medical clinic.



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# Site Assessment Methodology

- *Potential impacts to the physical environment that the project may cause and what data will be collected to monitor.*
  - *The main impact would be depletion of a water source by diverting all water in the source to the new water system*
  - *We will compare water usage needs, to the flow of the river, as well as based on meteorological data*
- *Describe what training your team has undergone to collect above data.*
  - *The technical team will have participated in a surveying workshop prior to travel in March*
  - *Some travel team members are certified in first aid and cpr*



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## Community Involvement

- *An oversight committee will be formed out of the group of people who currently repair the system to repair and maintain the new system*
- *After we leave we will keep in contact with Esteban and the other leaders of the Federacion and the local volunteer from the Peace Corps, Vanessa Vissar*
- *The project will initially affect 175-200 people however the system should eventually provide for 600*
- *Depending on the analysis of the data collected in the site assessment the necessity of a second site assessment will be determined by May*
  - *If a second assessment does not occur design alternatives will be discussed through our local student contract, Mario Sosa*



## Budget

- *Geoff Peyton (Project Lead) and Jacob Crandall (Chapter President) oversee budgeting*

Expense	Cost
On Ground	\$3920
Materials	\$2000
Other	\$9000
Total	\$14920

Names	Hours
Project Lead: Geoff Peyton	130
Mentor Hours: Dr. Cawley	100
Student Hours: Names Listed on Previous Slide	200



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## Donors

- *List sources of funds and in-kind contributions*
  - Case Alumni Association
  - Case School of Engineering
  - Case School of Engineering Senior Fund
  - Student Contributions



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## Project Lead Sign-Off

- *I, Geoffrey Peyton as the mentor/project lead/faculty advisor of this project, have reviewed the technical and logistical contents of this project, and approve of the proposed design. I will also comply with TAC recommended changes and make suggested changes before traveling on the implementation trip.*
- *Signed: Geoffrey Peyton*