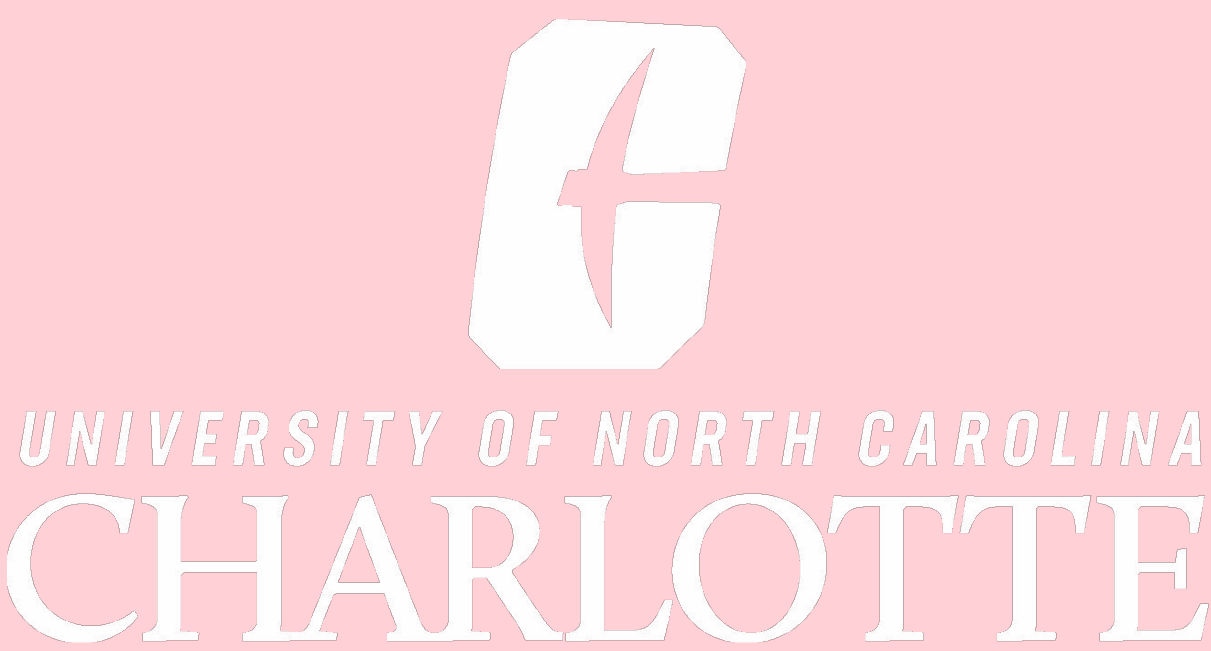


FROM ANCIENT CANALS TO CLIMATE FUTURES: WATER HERITAGE AND CLIMATE RESILIENCE IN THE ANDES

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Introduction

- **The Kawsay Pacha Archaeological Research project**
 - Callejón de Huaylas region in Peru
 - Incorporates Indigenous practices, worldviews, and knowledge to understand ancient landscape structures
 - International Project
- **Huaylas river basin**
 - Prone to increasing drought due to climate change.

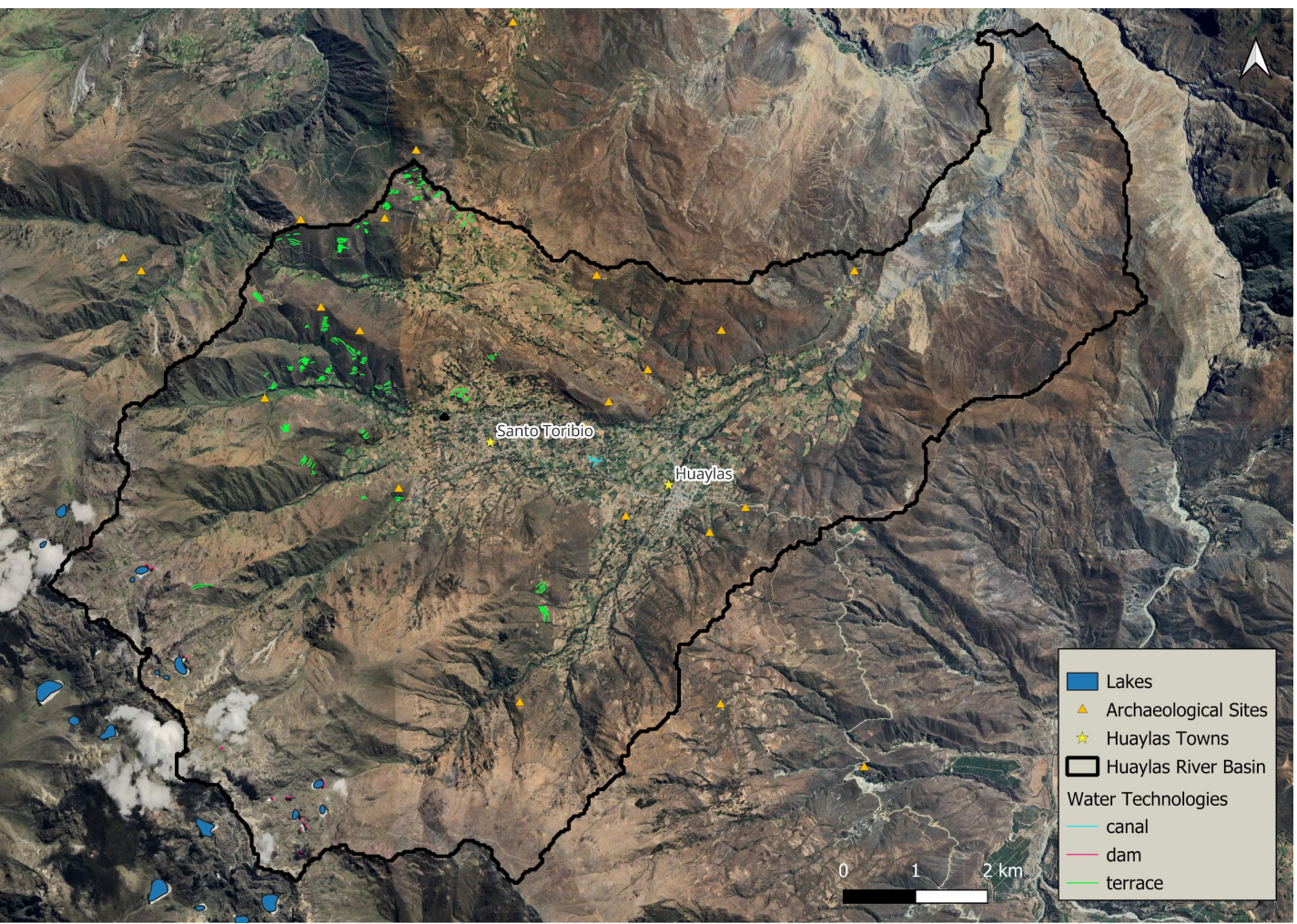
Objectives

- **Modern Uses of Historic Technologies**
 - Modern hydraulic systems are inadequate compared to historical
 - Revitalize and reuse existing structures
 - Understand historical engineering methods
- **Connecting with Local Communities**
 - Increase understanding of indigenous engineering and lifestyles
 - integrate local histories
- **Engaging with History**
 - Using ancient archeological sites to better understand water needs as climate change begins to impact hydrological systems
- **Preliminary Mapping**
 - Reference for future projects and excavations

Method

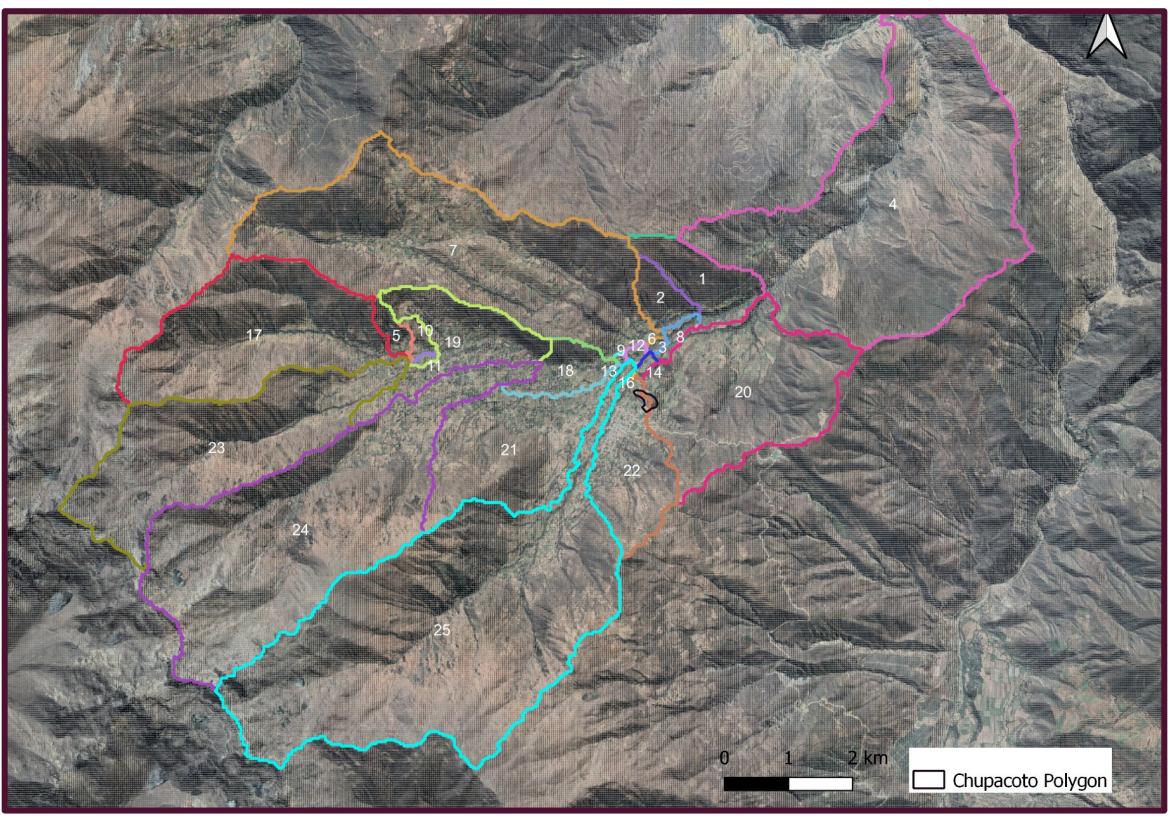
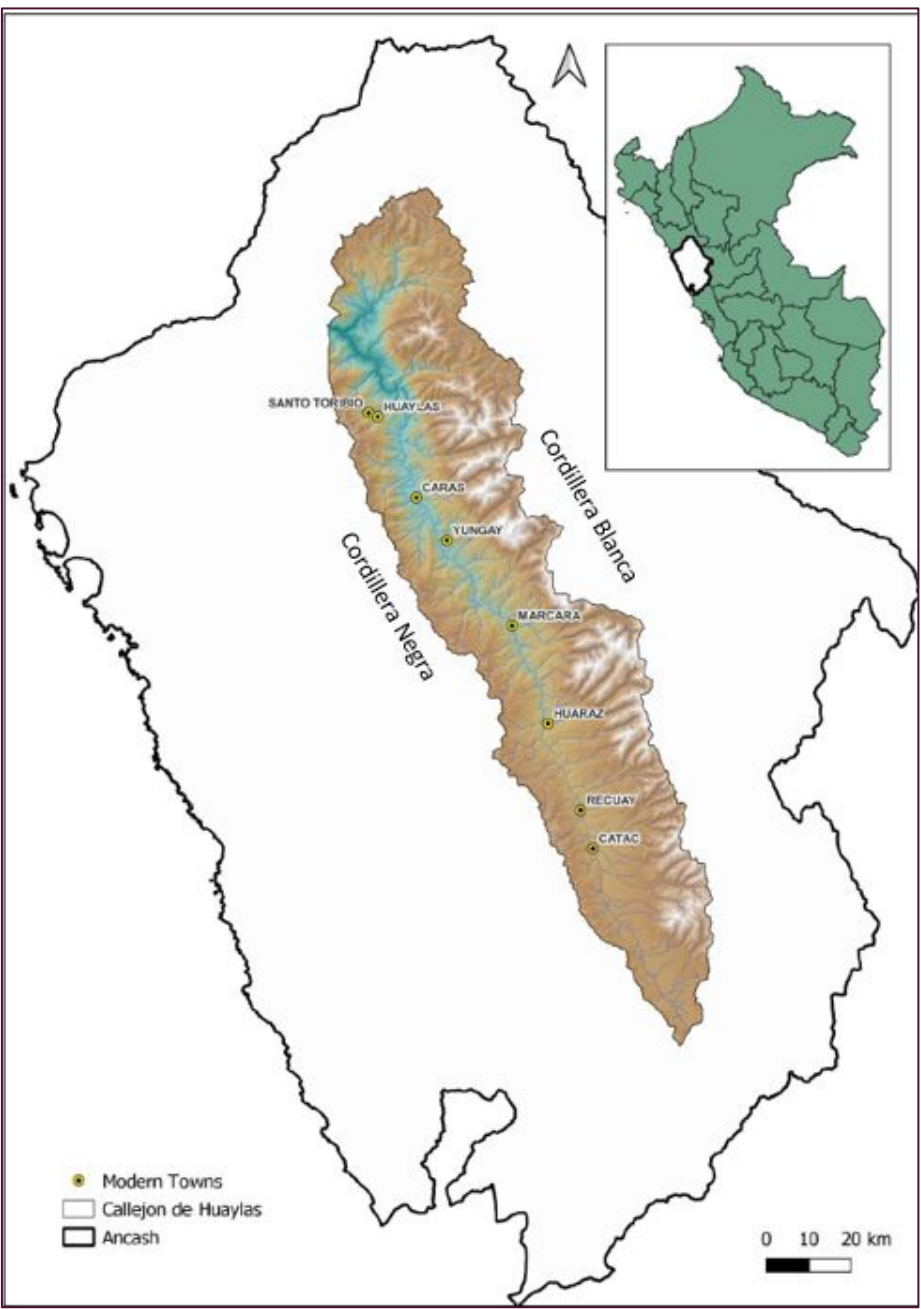
- **Preliminary Readings**
 - Previous publications to contextualize our research
 - Understanding the foundation of dry/wet technology categories
- **Mapping**
 - QGIS
 - Reservoirs, dams, canals, terraces
 - Satellite and Google Earth data
 - Grid system
- **In-Person confirmation**
 - Future endeavor
 - Distinguish between modern/historical features

Collected Data/Results



ID	Technology	Wet/dry	Grid#	Basin#	Notes
1	INULL dam	wet	64	23	INULL
2	INULL dam	wet	64	23	INULL
3	INULL dam	wet	64	23	INULL
4	INULL canal	dry	64	23	INULL
5	INULL dam	wet	64	23	INULL
6	INULL dam	wet	88	23	INULL
7	INULL dam	wet	90	24	INULL
8	INULL dam	wet	90	24	INULL
9	INULL terrace	dry	112	24	check this
10	INULL terrace	dry	112	24	check
11	INULL terrace	dry	112	24	check
12	INULL dam	wet	117	24	INULL
13	INULL dam	wet	117	24	INULL
14	INULL dam	wet	117	24	INULL

Reference Images



Huaylas River Basins



Archaeological Canal



Example of Reservoir



Callejón de Huaylas region in Peru

Conclusions

- **Hydrological Systems in the Callejón de Huaylas region in Peru**
 - Multiple features found on the landscape that inform researchers about the use of technology in the area
- **Indigenous Communities Have a Voice and History that Matters**
 - This project would not have been possible without the knowledge and aid of Indigenous community members who carry historic understandings of their land and its hydrological systems
- **Future Research Capacity**
 - The data collected will be used to cross check with data collected in the field to speed up data collection and ensure accuracy

References



Bibliography



Colleen's LinkedIn



Neha's LinkedIn