esp Escuela Superior Politécnica del Litoral



Andrés Velastegui-Montoya Isabel Chuizaca-Espinoza dvelaste@espol.edu.ec isadchui@espol.edu.ec **FICT-CIPAT/ESPOL** FICT/ESPOL

José García-Romero josaggar@espol.edu.ec **FICT/ESPOL**

Renata Pacheco Quevedo renata.quevedo@inpe.br **INPE**

Christhian Santana-Cunha **UFRGS**

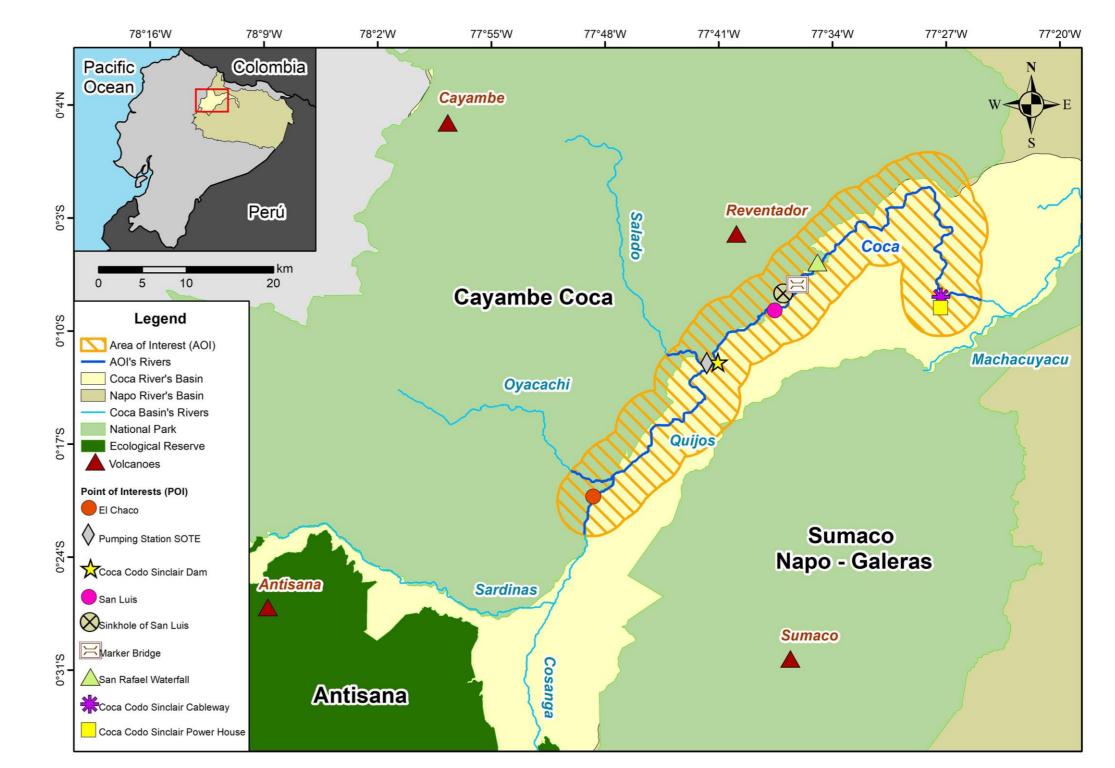
José Ochoa-Brito **University of Maryland**

Mijaíl Arias-Hidalgo **FICT-CADS/ESPOL**

ASSESSING REGRESSIVE EROSION EFFECTS: UNVEILING RIVERSIDE LAND USE LAND COVER CHANGES POST HYDROELECTRIC PROJECT CONSTRUCTION

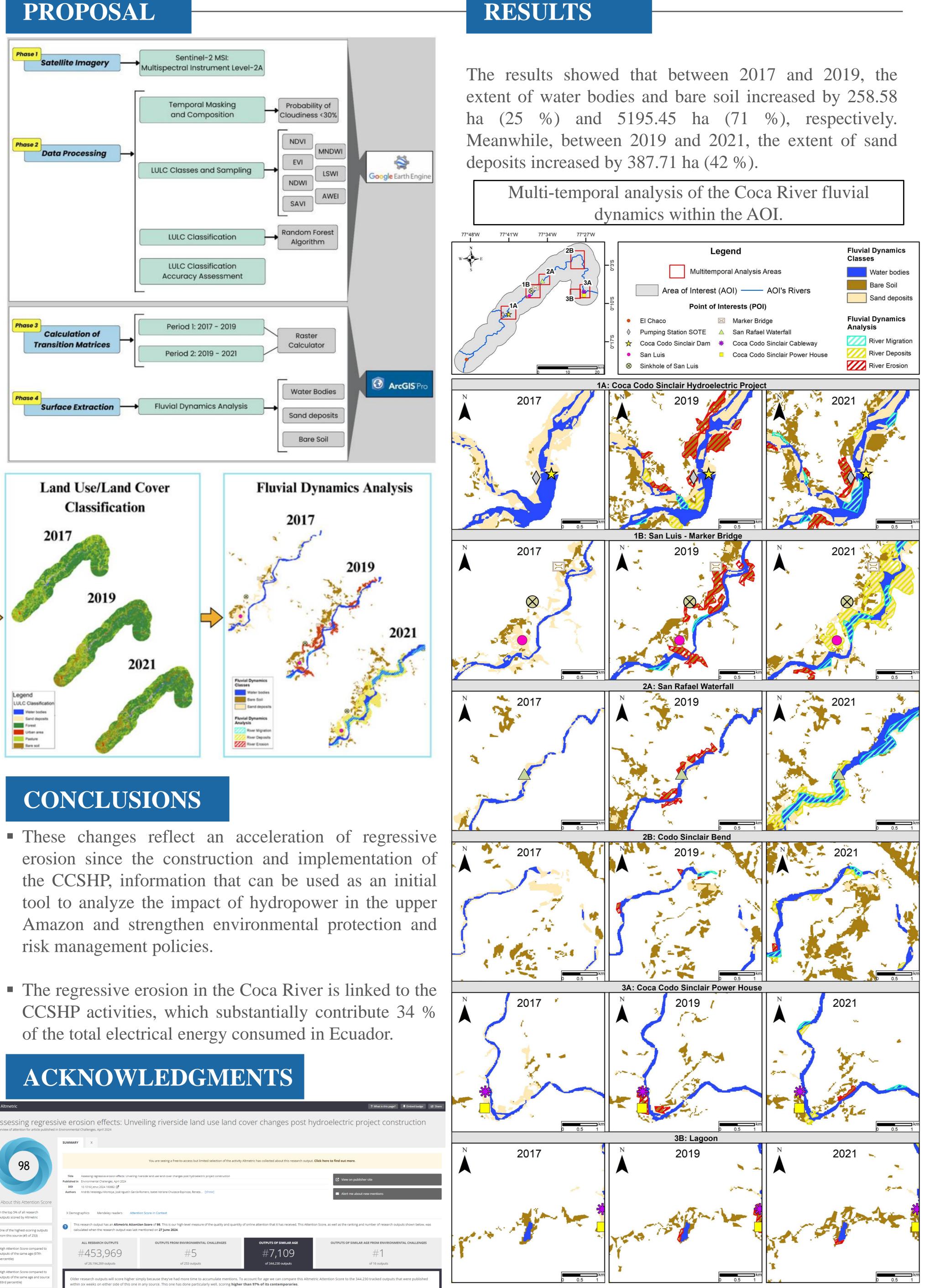
PROBLEM

In Ecuador, the Coca Codo Sinclair Hydroelectric Project (CCSHP) provides 34 % of the country's energy demand. However, since its inauguration in 2016, regressive erosion in the Coca River has accelerated, causing the collapse of the San Rafael waterfall in 2020 and damage to oil and electricity infrastructure.

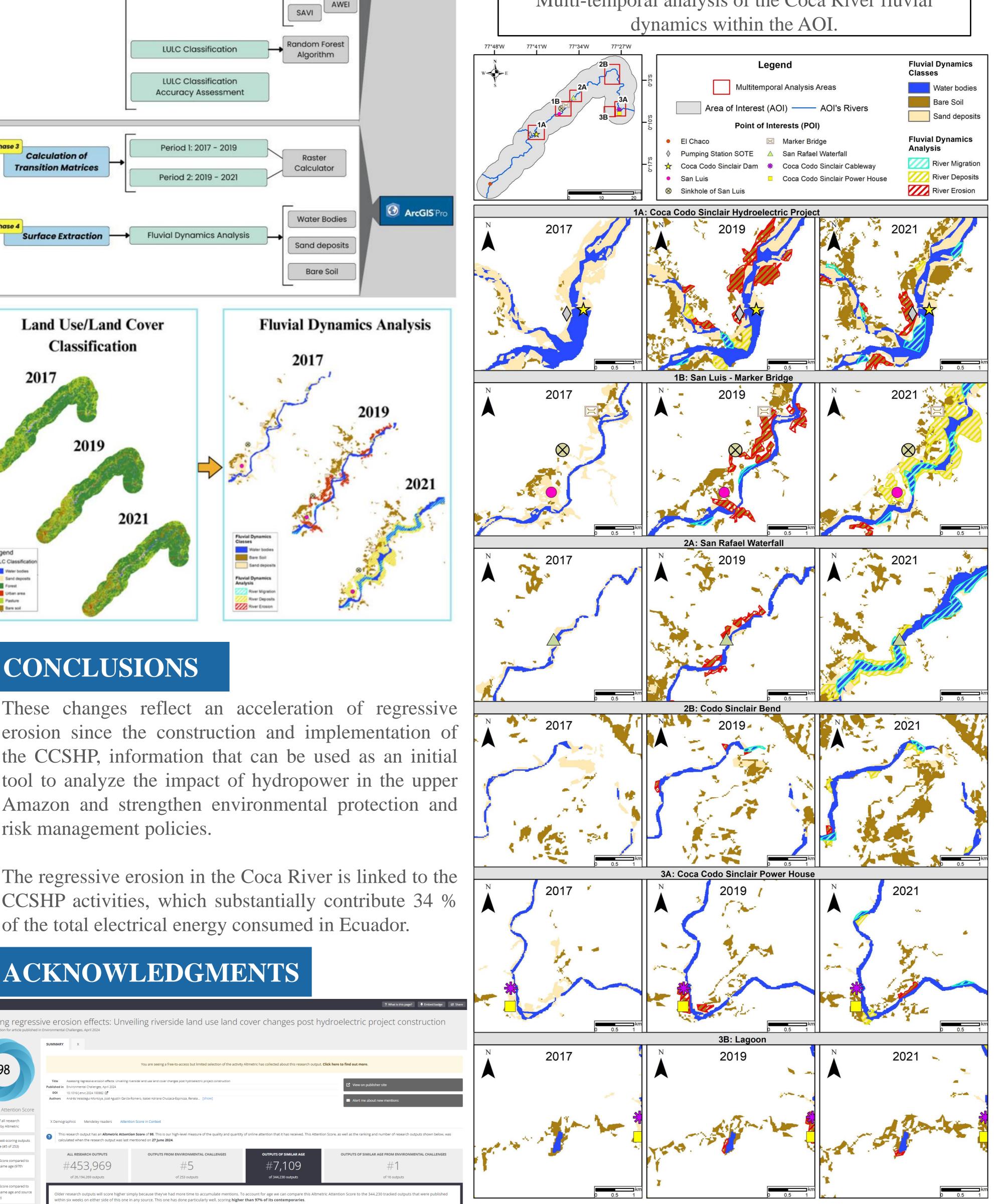


MAIN OBJETIVE

This study aimed to assess the effects of regressive erosion along the Coca River through changes in land use and land cover (LULC) to identify the impact of CCSHP operations on migration, deposition, and river channel erosion during 2017–2021.



RESULTS



	ive erecien offecter large	iling riverside land use land		? What is this page? # Embed badge to Sha
ASSESSINg regress		ening riverside land use land o	Lover changes post ny	droelectric project construction
	SUMMARY X			
98	You are seeing a free-to-access but limited selection of the activity Altmetric has collected about this research output. Click here to find out more .			
	Title Assessing regressive erosion effects: Unveiling riverside land use land cover changes post hydroelectric project construction Published in Environmental Challenges, April 2024 DOI 10.1016/j.envc.2024.100882			C View on publisher site
? About this Attention Score	Authors Andrés Velastegui-Montoya, José Agustín García-	Romero, Isabel Adriana Chuizaca-Espinoza, Renata [show]		Alert me about new mentions
In the top 5% of all research outputs scored by Altmetric	X Demographics Mendeley readers Attention Score in Context			
One of the highest-scoring outputs from this source (#5 of 253)	This research output has an Altmetric Attention Score of 98. This is our high-level measure of the quality and quantity of online attention that it has received. This Attention Score, as well as the ranking and number of research outputs shown below, was calculated when the research output was last mentioned on 27 June 2024.			
	ALL RESEARCH OUTPUTS	OUTPUTS FROM ENVIRONMENTAL CHALLENGES	OUTPUTS OF SIMILAR AGE	OUTPUTS OF SIMILAR AGE FROM ENVIRONMENTAL CHALLENGES
High Attention Score compared to outputs of the same age (97th percentile)	#453,969	#5	#7,109	#1
	of 26,194,269 outputs	of 253 outputs	of 344,230 outputs	of 16 outputs
High Attention Score compared to outputs of the same age and source (93rd percentile)	Older research outputs will score higher simply because they've had more time to accumulate mentions. To account for age we can compare this Altmetric Attention Score to the 344,230 tracked outputs that were published within six weeks on either side of this one in any source. This one has done particularly well, scoring higher than 97% of its contemporaries.			