

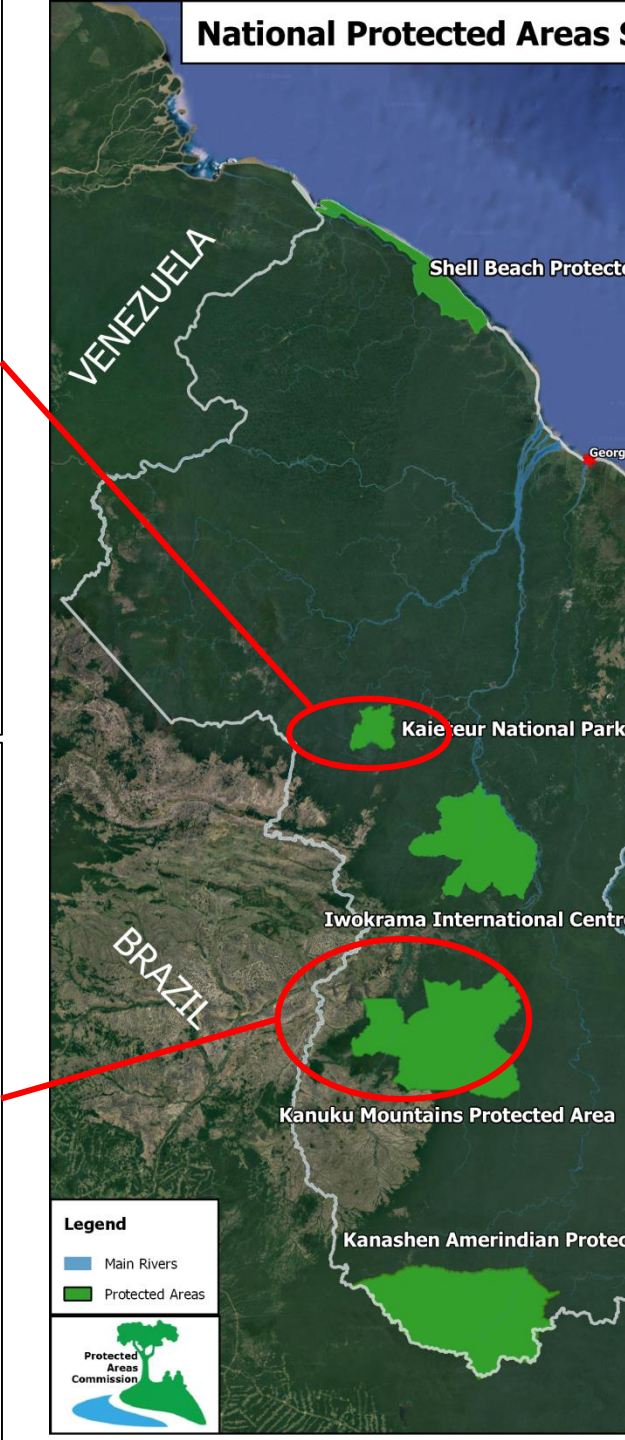
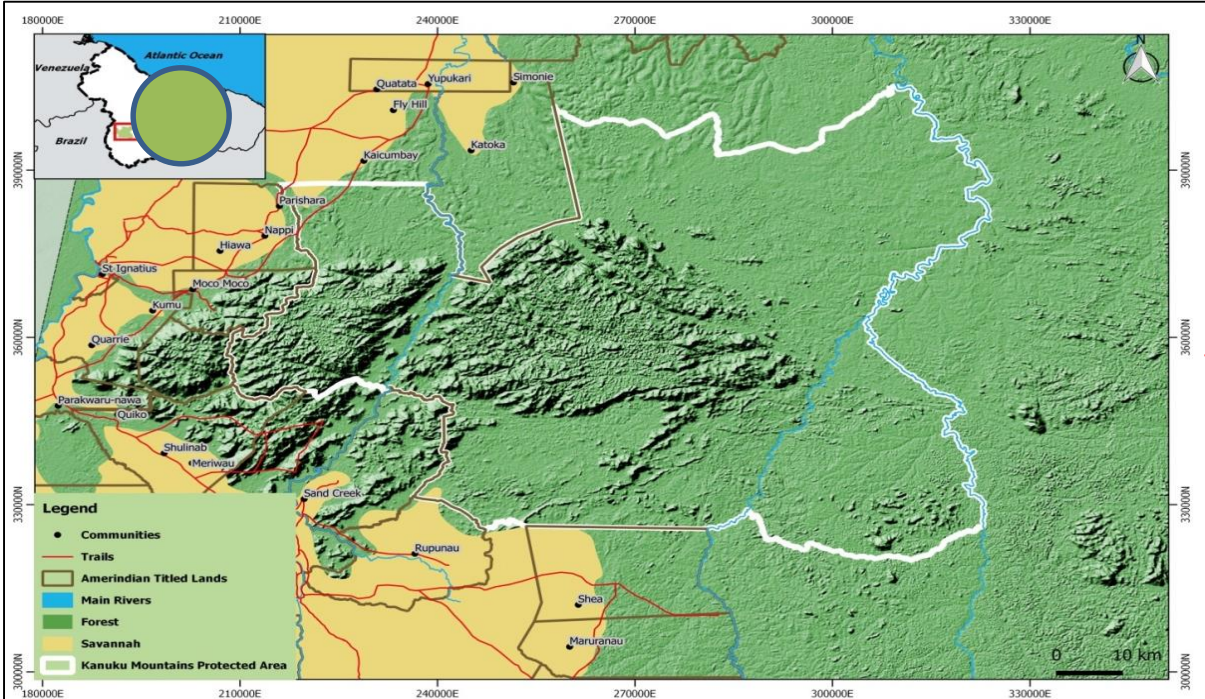
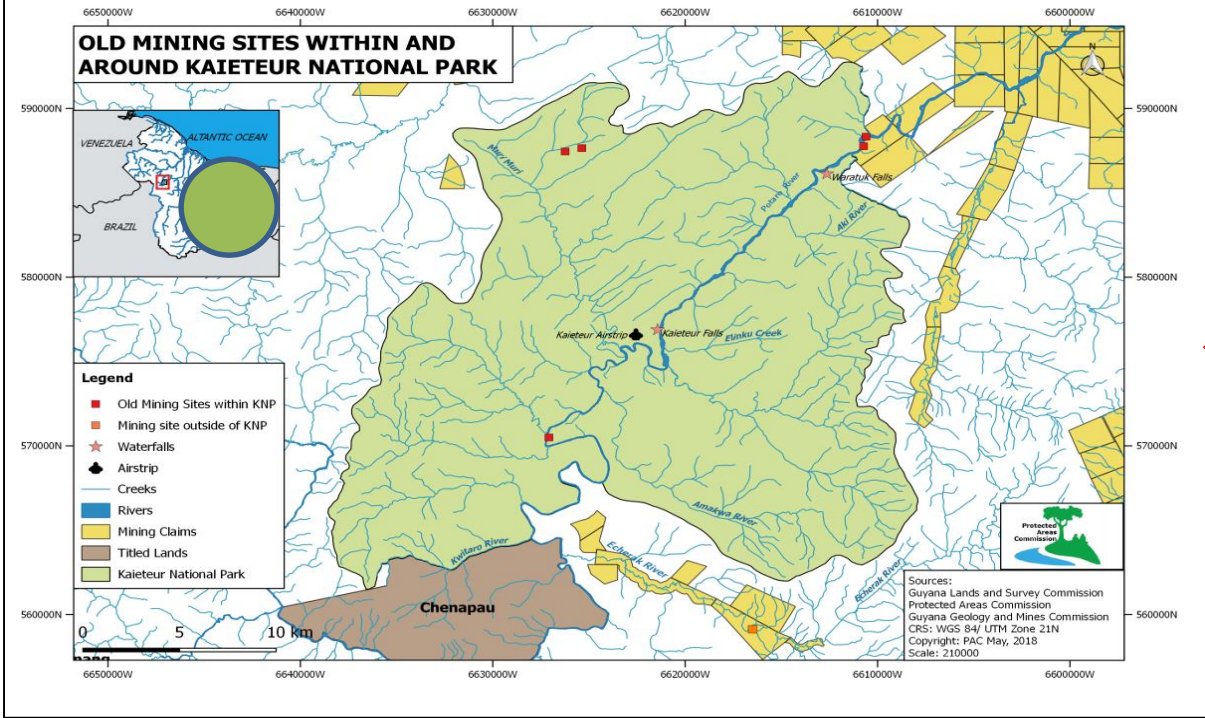
Monitoring: How are protected areas responding to incidents and impacts of illegal and legal goldmining



Mr. Timothy Babb
GIS Officer
Protected Areas
Commission

Introduction

- **Department responsible -> Ecological Treatment Monitoring & Research**
- **Team involved -> EMR technical staff & rangers**
- **Developing and implementing monitoring protocols**
 - **Overflight protocols**
 - **Mercury & Water quality testing protocols**
 - **Ranger based patrols**



An aerial photograph of a dense, vibrant green forest. The trees are packed closely together, creating a textured, mosaic-like appearance of various shades of green. A semi-transparent, dark rectangular box is centered over the image, serving as a background for the text. The overall scene is bright and natural, suggesting a healthy, mature forest.

Overflights



Information collected

KAIETEUR NATIONAL PARK FLY-OVER DATA SHEET														
WP	Coordinates	Time	Area Description	Mining	Status	Machinery					Trails	Camp	Pers	Notes
				Y/N	A/ IA	E	D	T	B	A	Y/N	Y/N	#	



Coordination & location



Type of operation



No. of camps



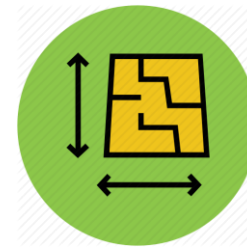
Type of equipment




No. of individuals



Trails



Size of operation

A person is using a blue handheld mercury and water quality testing device. The device is connected to a rugged tablet displaying a data interface. The text "Mercury and water quality testing" is overlaid on the image.

Mercury and water
quality testing

- **Mercury test of;**
 - **Important fish species**
 - **Water sample**
 - **Sediment samples**

Currently analyzing results

- **Water quality testing**
 - **using Aqua Troll probe -> 18 parameters, specifically turbidity**



Where?- Major rivers within the Protected Area,

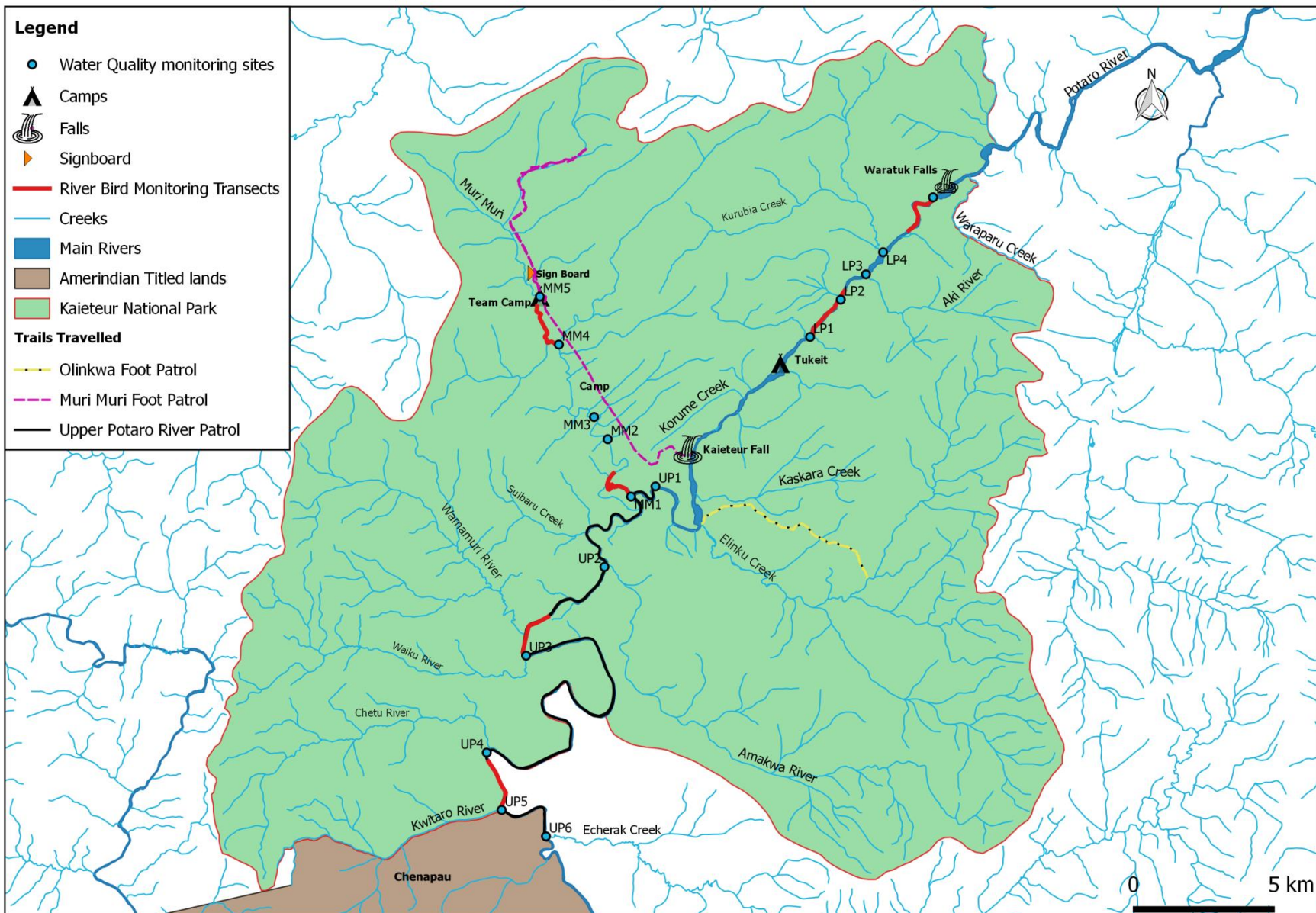
Why? - Effects of legal mining upstream



Ranger based patrol

Ranger Based Monitoring in Kaieteur National Park - EMR

Department Training and Implementation Trip





Process of address treats of illegal gold mining

1. Report of incident

Ranger patrol
or informal
complaints

2. Observation

Overflight, ground
truthing and
collection of data

3. Analysis and reporting

Report is produced
and submitted to
PAC management

4. Follow up

Contacting
stakeholders and/or
relevant authorities,
(GGMC, GDF, etc)

Challenges

- **Remoteness and Inaccessibility**
- **Safety Issues**
- **Limited capacity & Resources (Financial and Human)**

