16 June 2021

PRELIMINARY SATELLITE-DERIVED FLOOD ASSESSMENT

Mazaruni/L.B.E.Rive Sub-Region, Region 7 - Cuyuni-Mazaruni, Guyana

Status: Inundated structures and affected road along the Mazaruni river observed

Further action(s): continue monitoring
FLOODS OVER GUYANA

Legend
- Region boundary
- International boundary
- River
- Satellite detected water as of 04 June 2021 [Joint ABI/ViIRS]
- Cloud mask
- Area of interest

Background: ESRI Basemap

Satellite detected water as of 14 June 2021

[Map showing regions and areas of interest]
Water increase along the river

Sentinel-2 image acquired on 14 June 2021
Image Center: 59°40'13.62"W 5°42'41.72"N
AOI 1-1 Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni

Inundated structures along the Mazaruni river observed

Worldview-2 / 13 Jan 2020

Cartosat-2E / 15 June 2021
AOI 1-2 Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni

Inundated structures along the Mazaruni river observed

Worldview-2 / 13 Jan 2020

Cartosat-2E / 15 June 2021
AOI 1-3 Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni

Water increase along the Mazaruni river

Sentinel-2 / 1 Mar 2021

Sentinel-2 / 14 June 2021
AOI 1-4 Mazaruni/L.B.E.Rive Sub-Region, Region 7 - Cuyuni-Mazaruni

Water increase along the Moruka river

Sentinel-2 / 27 Sep 2020

Sentinel-2 / 14 June 2021
AOI 1-3 Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni

Water increase along the river

Sentinel-2 / 1 Mar 2021

Sentinel-2 / 14 June 2021
Water increase along the Mazaruni river
AOI 2-1 Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni

Water increase along the Mazaruni river and over mine zone observed

Worldview-3 / 25 Apr 2018

Cartosat-2E / 13 June 2021
AOI 2-2 Imbaimadai town, Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni

Water increase along the Mazaruni river and affected road observed

Worldview-3 / 25 Apr 2018

Cartosat-2E / 13 June 2021
SUMMARY OF FINDINGS

• Increased water level of the Mazaruni river, AOI 1 and AOI2 in Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni as of 14 June 2021;

• Inundated structures along the Mazaruni river in AOI1, Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni as of 14 and 15 June 2021;

• Inundated mine area in AOI2, Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni as of 13 June 2021;

• Affected road near by Imbaimadai town in AOI2, Mazaruni/L.B.E.Rive Sub-Region, Region 7- Cuyuni-Mazaruni as of 13 June 2021;
COPYRIGHTS AND SOURCES

Data sources:

(1) Satellite Image (Post-event)
Sentinel-2 / 14 June 2021
Copyright: Contains modified Copernicus Sentinel Data [2021]
Source: ESA

Cartosat-2E / 13 & 15 June 2021
Copyright: ©2021 National Remote Sensing Center / ISRO
Source: NRSC / ISRO

(2) Satellite Image (Pre-event)
Sentinel-2 / 27 Sep 2020 and 1 Mar 2021
Copyright: Contains modified Copernicus Sentinel Data [2021]
Source: ESA

Worldview-3 / 25 Apr 2018 and Worldview-2 / 13 Jan 2020
Copyright: 2018 Digital Globe and 2020 Digital Globe
Source: Maxar, ESRI Basemap

(3) Ancillary data
Administrative boundaries: Guyana Lands and Surveys Commission, HDX
Populated places: OpenStreetMap
Waterways: OpenStreetMap
Analysis: UNITAR-UNOSAT
Production: UNITAR-UNOSAT