

Feedback on FANFAR system and floods during 2019 from

Sierra Leone National Water Resources Management Agency

Ishmail Kamara

2/5/2020



Flood events during 2019

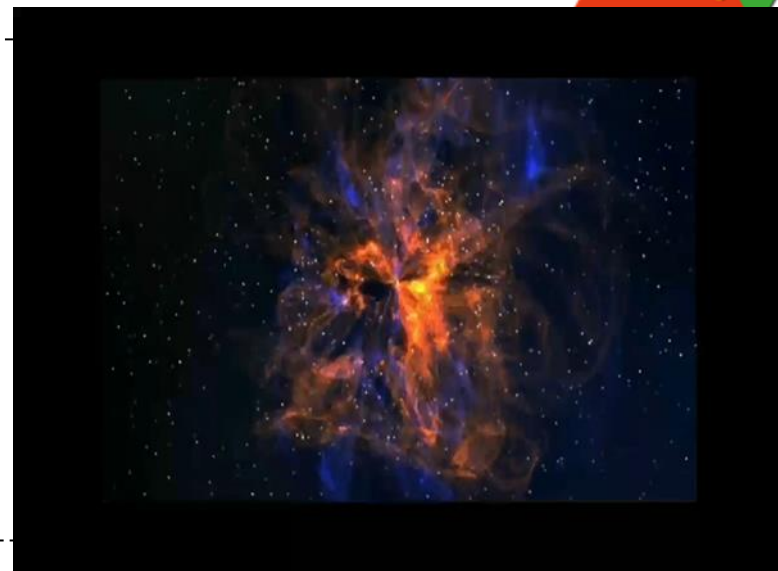
Summary of all events

Worst event

Where Freetown, Western Area

When August 2nd and 3rd 2019

Casualties & damage	Population	
	8,138 Affected Households	DAMAGE TO HOUSING
	39,452 Affected persons	7,844 Slightly
	5,303 Displaced persons	4,364 Partially
	6 Deaths	441 Completely



Second worst event

Where Sulima (Etreme south)

When August 6 2019

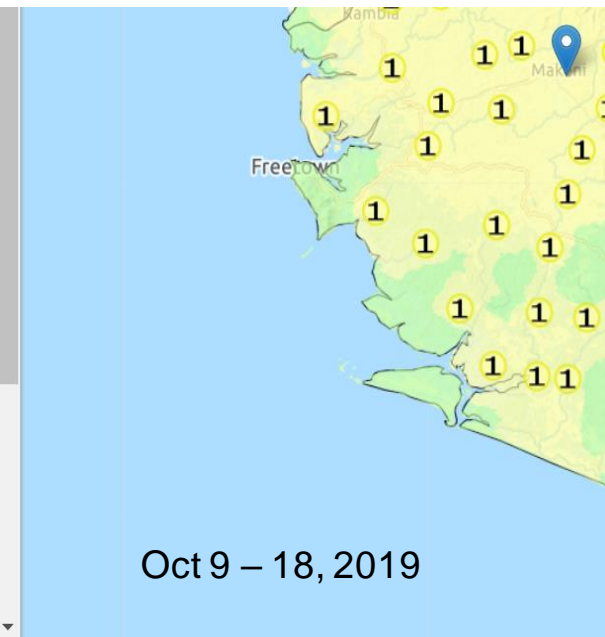
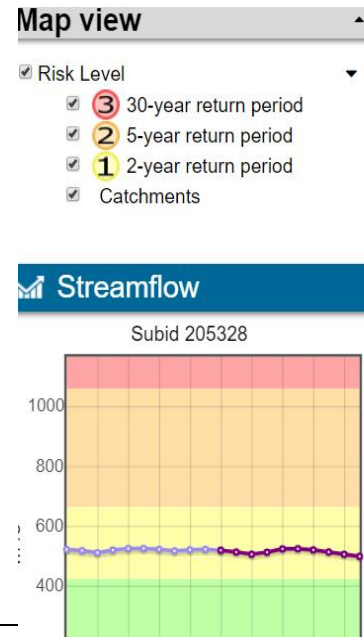
Casualties & damage Mostly houses



Accuracy of FANFAR forecasts & alerts

How well did FANFAR forecast floods / streamflow peaks during 2019?

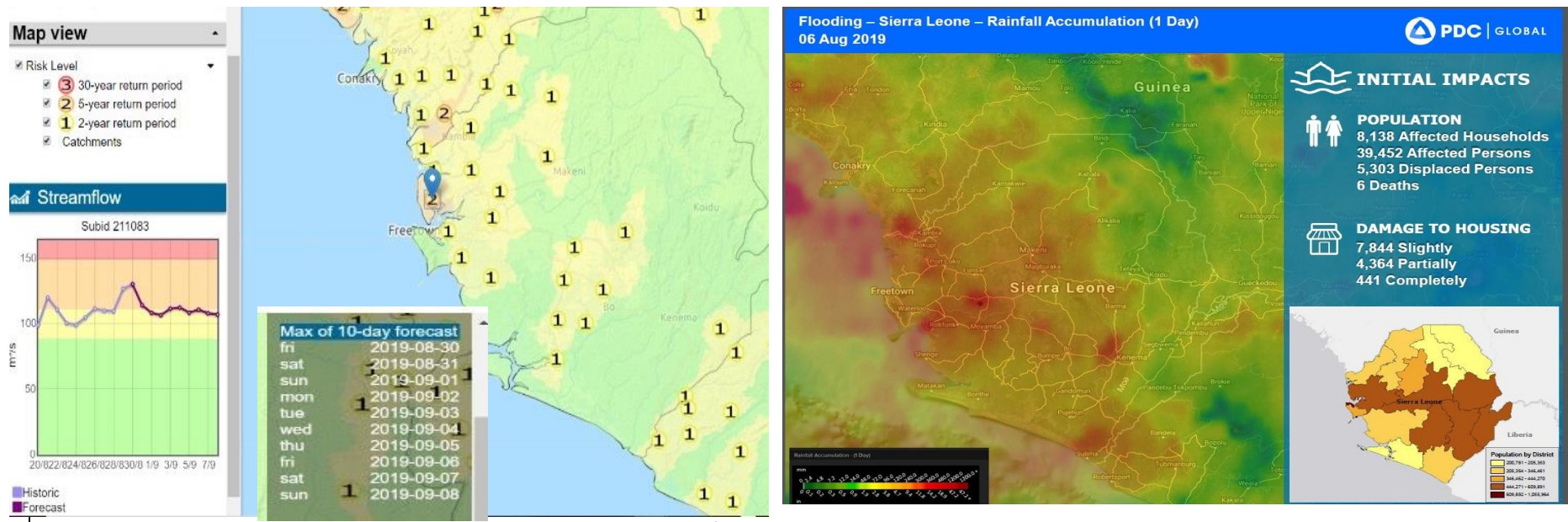
1. FANFAR forecasted well enough when compared with Sierra Leone's Meteorological forecast of heavy rains in August 2019 using the African Web Viewer (Supported by UK MET)
2. The FANFAR predictions of the locations of peak flows were near to the actual
3. The FANFAR timing of the peak was mostly early: say around 2 to 3 days



op, 10 - 14 February 2020, Abuja, Nigeria

Accuracy of FANFAR forecasts & alerts

- The severity level showed by FANFAR created less impact on the ground for most of late August, with the exception of early August 2nd/3rd flood events
- There was minimum impact with the severity level 2 showed in Kambia district – however this may also be due to preventive steps like drainage clearing



How we used the FANFAR system in 2019



Forecasting system used:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> FANFAR	<input type="checkbox"/> OTHER	<input type="checkbox"/> NONE
How often:	<input checked="" type="checkbox"/>	<input type="checkbox"/> < 1 PER WEEK	<input checked="" type="checkbox"/> 1-7 TIMES PER WEEK	<input type="checkbox"/> EVERY DAY
At what time:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> BEFORE FLOOD	<input type="checkbox"/> DURING FLOOD	<input type="checkbox"/> AFTER FLOOD
What component(s):	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> VISUALISATION PORTAL	<input checked="" type="checkbox"/> HYDROLOGY-TEP	<input type="checkbox"/> KNOWLEDGE BASE

1. The FANFAR is a very good system for flood forecasting, the forecast information page is great and has lots of information
2. The most useful feature is the 10 days most history and forecast feature
3. There is the need to create a self-retaining history of forecast produced say in the last one year
4. FANFAR flood risk information in the form of screenshot was shared to stakeholders in the form of screenshots and sent through emails and whatsapp



Additional feedback

- Sierra Leone has fully established the National Water Resources Management Agency with key staff employed
- The NWRMA has received funds and is currently constructing new 17 surface and 20 groundwater stations
- The NWRMA is currently developing a framework for flood forecasting and early warning system – mainly using the FANFAR system



www.fanfar.eu

