



02. Resilience against natural disasters –
technology for early warning,
Prof. Jorge Alva Hurtado, Chair WFEO
Committee on Disaster Risk
Management





**World Federation of Engineering
Organizations**

Committee on Disaster Risk Management



RESILIENCE AGAINST NATURAL DISASTERS: PIURA RIVER'S EARLY WARNING SYSTEM

TECHNICAL PROPOSAL

PERUVIAN ASSOCIATION OF PROFESSIONAL ENGINEERS

LIMA, 2018

SUSTAINABLE DEVELOPMENT GOALS (SDGS)

6

9

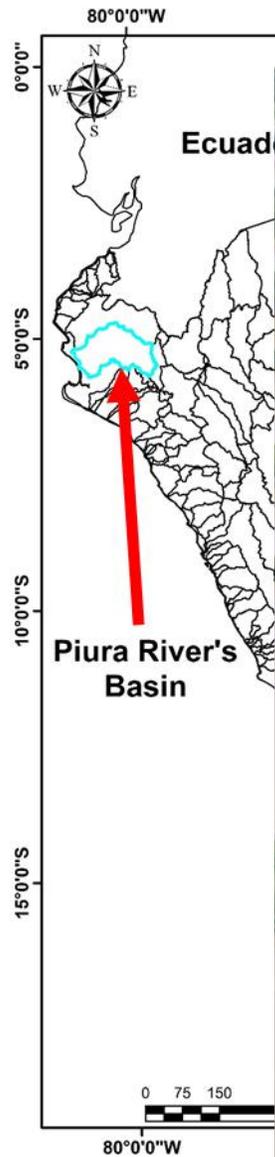
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13

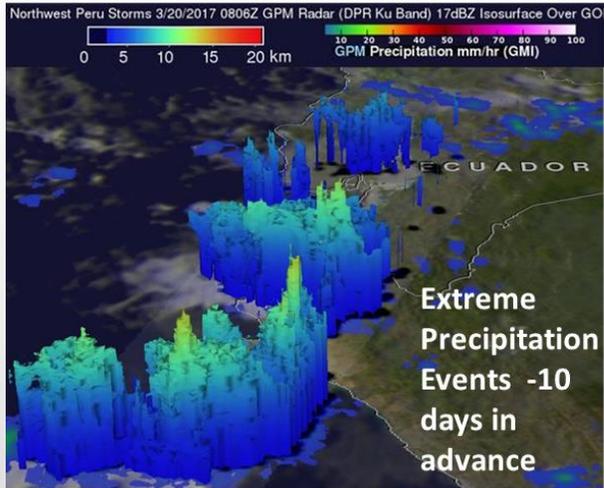
CLIMATE
ACTION



PROJECT LOCATION



PIURA RIVER'S EARLY WARNING SYSTEM



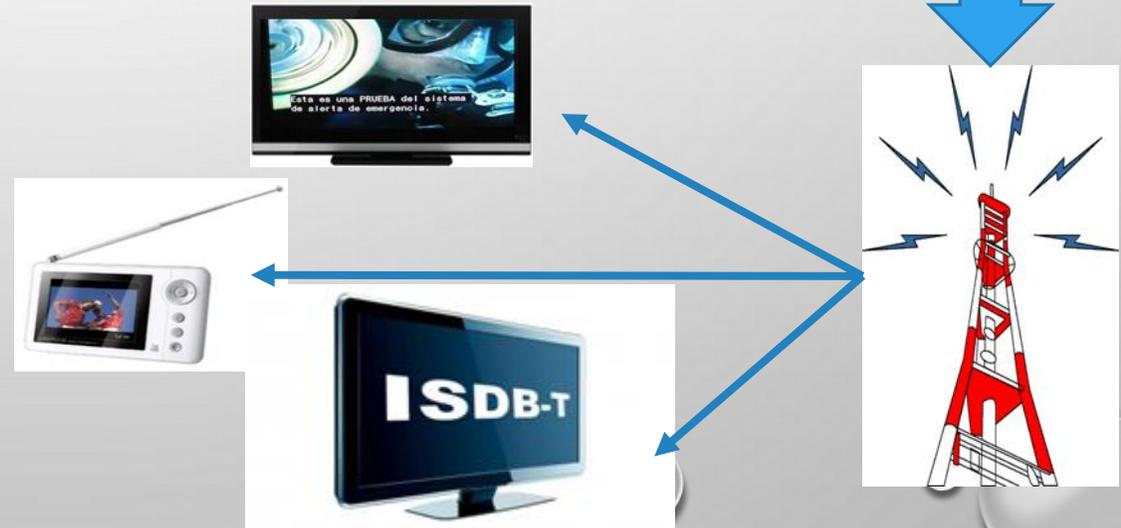
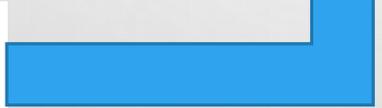
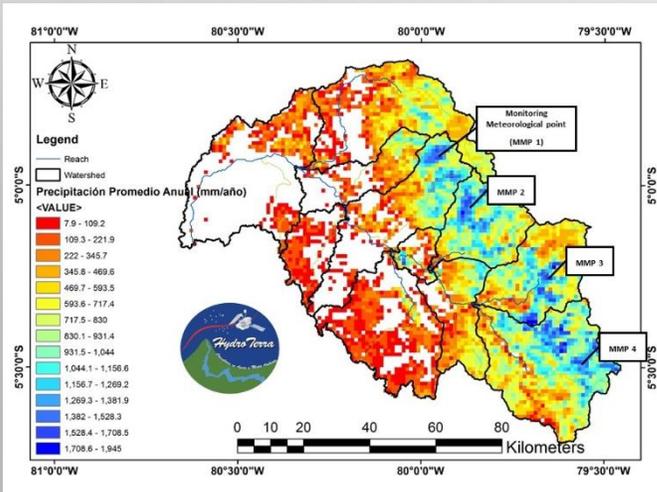
Hydrologic and Hydraulic Modelling – 10 days in advance



Alert to the Authorities

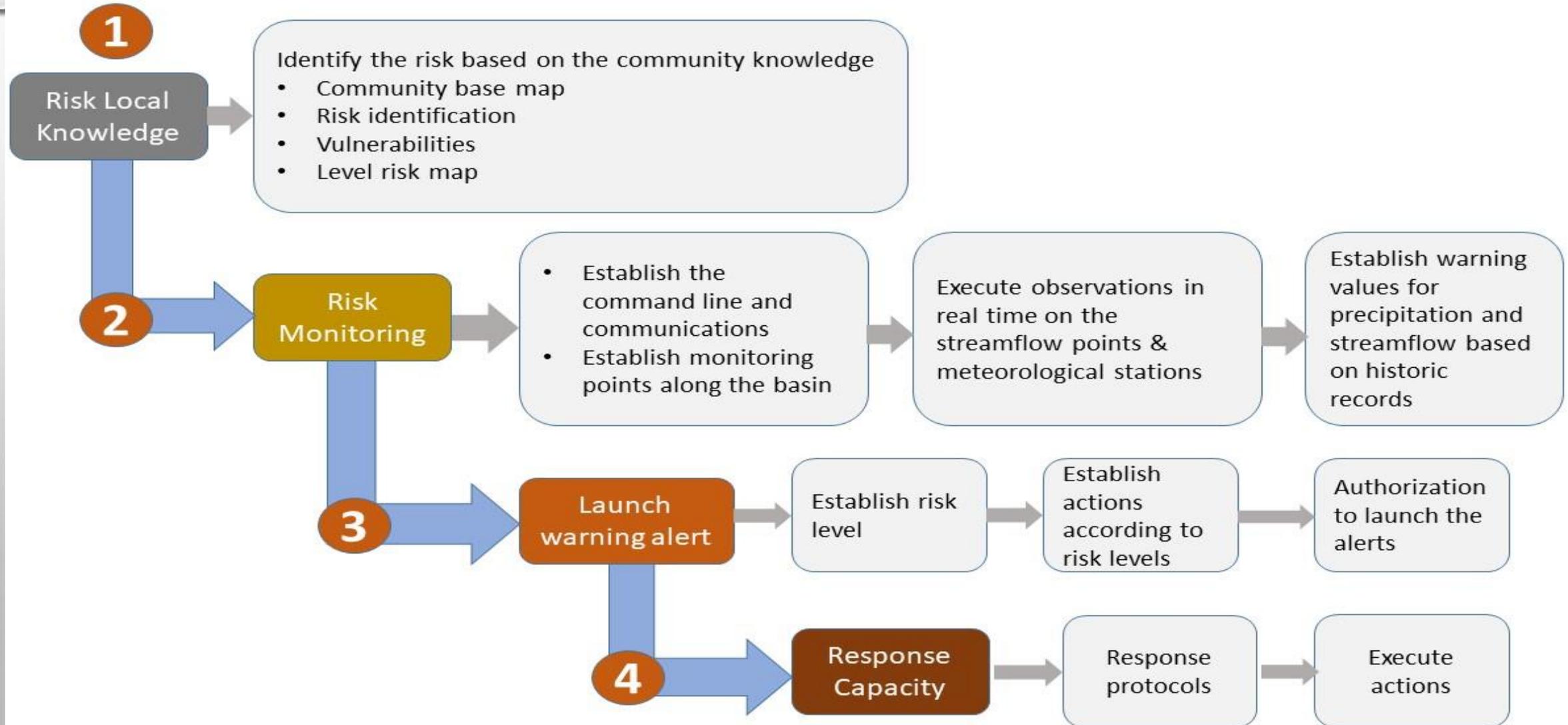


Historical Hydrology Calibration Satellite Info 1998 - 2017



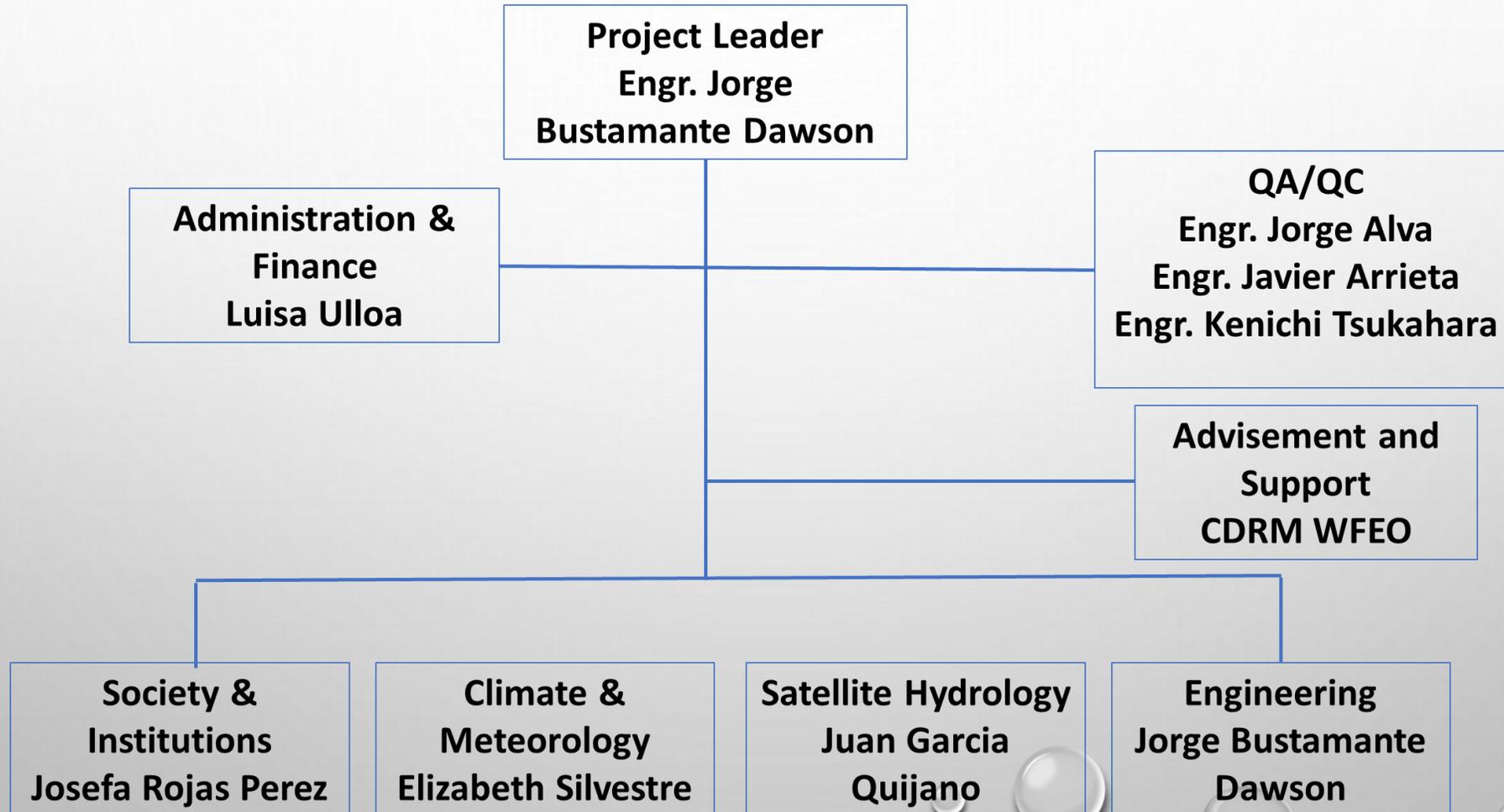
PIURA RIVER'S EARLY WARNING SYSTEM

Structure of the Early Warning System:



PIURA RIVER'S EARLY WARNING SYSTEM

TEAM STRUCTURE OF "PIURA RIVER'S EARLY WARNING SYSTEM"



PIURA RIVER'S EARLY WARNING SYSTEM

International Experience

GOV.UK

River and sea level stations in England

8:42pm Monday 26 February 2018

River and sea level stations. These level gauges provide data for the next few days. Enter a location to find stations. Or use the map to find stations.

Location

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TUHH > WB > S

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Languages

Integrated Public Alert & Warning System

- > Alerting Authorities
- > Private Sector Industry
- > American People

Governance

- > Components

Informational Materials

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20. Februar 2018

Das Institut für Wasserbau mit der Universität Hamburg untersucht die Auswirkungen von Hochwasserscheren auf dem Gebiet der Piura Fluss und in den flussnahen Bereichen sowie in den arbeitsnahen Bereichen.

El Niño Phänomen im Bereich der Westküste

UN
United Nations Office for Disaster Risk Reduction

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Early warning systems

France's Secretary of State for the Overseas, Ms. Rachida Dati, and the UN Secretary-General's Special Envoy for Climate Change and Disaster Risk Reduction, Mr. Michel Jarraud, listen to her during a meeting on the CREWS initiative.

By Jonathan Fowler

NEW YORK, 29 September 2017 – The United Nations Secretary-General has announced a new initiative to help vulnerable countries and thereby curb the impact of disasters. The initiative was unveiled at the United Nations World Conference on Disaster Risk Reduction in Sendai, Japan.

"The goal is that by 2020, a significant number of countries will have established early warning systems for all major hazards," said the Secretary-General.

MISSISSIPPI WEATHER ALERTS

STAY CONNECTED

[Flood Warning issued February 26 at 9:46AM CST until February 28 at 6:00AM CST by NWS](#)

26 February 2018

...The National Weather Service in Jackson has issued a Flood Warning for the following rivers in Mississippi... Chickasawhay River At Enterprise affecting Clarke County The National Weather Service in Jackson has issued a * Flood Warning for The Chickasawhay River At Enterprise

[Flood Warning issued February 26 at 9:45AM CST until further notice by NWS](#)

26 February 2018

...The Flood Warning continues for the following rivers in Mississippi... Big Black River Near Bovina affecting Hinds and Warren Counties Big Black River Near Bentonia affecting Madison and Yazoo Counties ...Flood Warning extended until further notice... The Flood Warning continues for The Big Black River Near Bovina

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FLOODS

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