

KOSHI FLOOD OUTLOOK SYSTEM

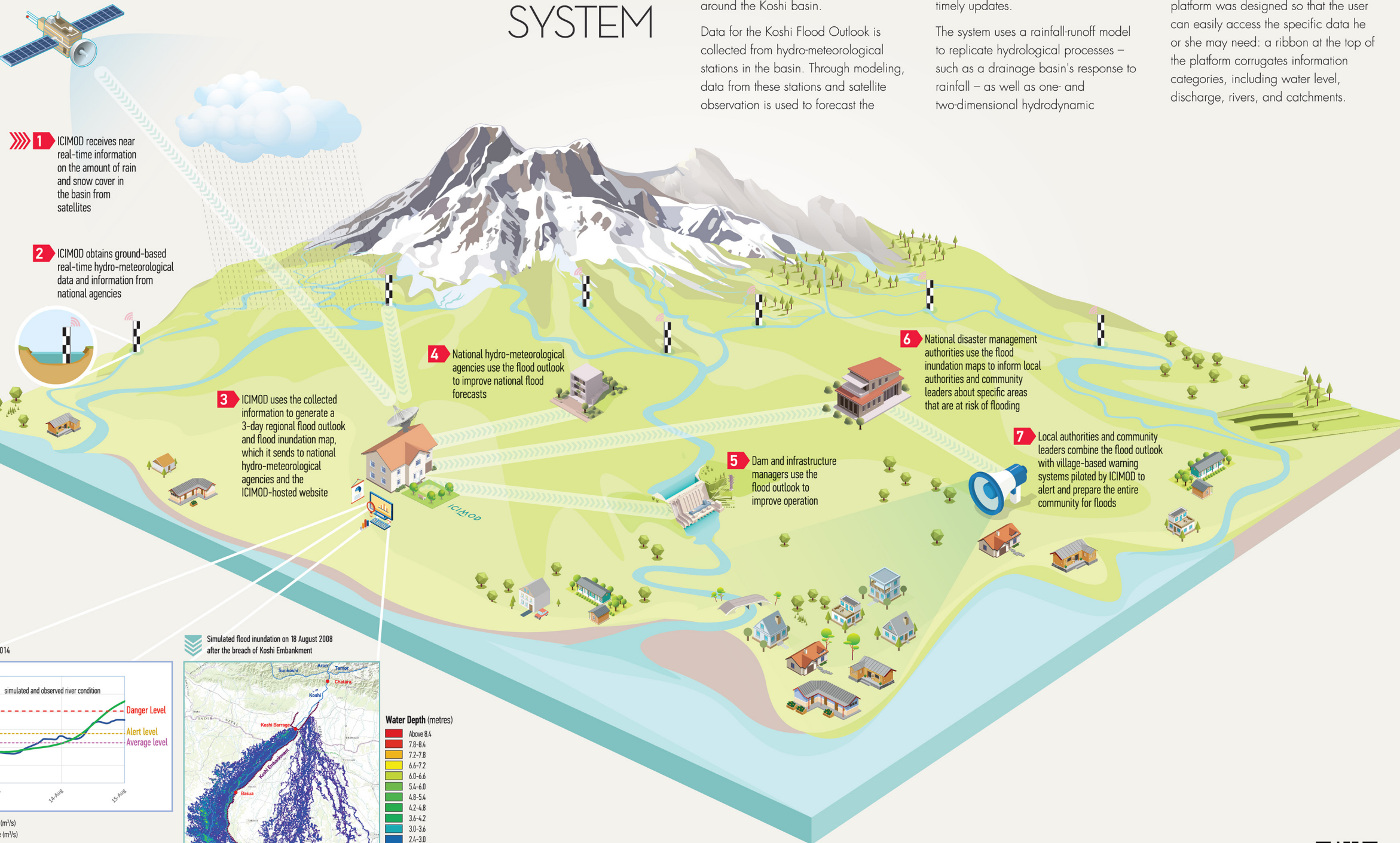
Floods are now traceable with the Koshi Flood Outlook. The Koshi Flood Outlook is a platform that provides real-time information on water levels and discharge rates at different points around the Koshi basin.

Data for the Koshi Flood Outlook is collected from hydro-meteorological stations in the basin. Through modeling, data from these stations and satellite observation is used to forecast the

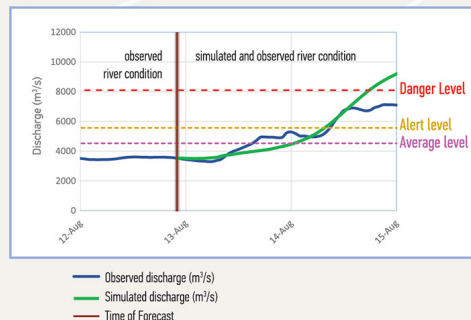
discharge and water levels along the entire reach of the river. Once calculated, this data is transmitted to an ICIMOD-hosted Koshi Flood Outlook website, which provides the user with timely updates.

The system uses a rainfall-runoff model to replicate hydrological processes – such as a drainage basin's response to rainfall – as well as one- and two-dimensional hydrodynamic

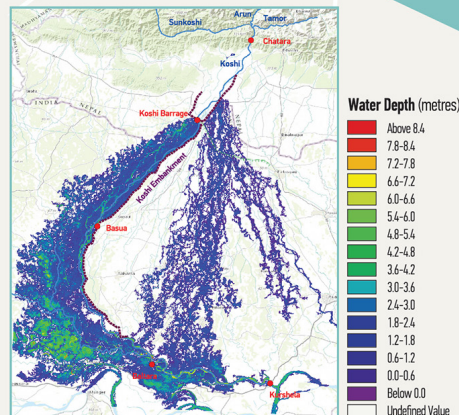
modelling to replicate flow velocity and travel time in the channel. The models produce an inundation map, which predicts the areas that are at risk of flooding. The Koshi Flood Outlook platform was designed so that the user can easily access the specific data he or she may need: a ribbon at the top of the platform corrugates information categories, including water level, discharge, rivers, and catchments.



Flood Outlook for Koshi River, Chitara, Nepal 13-14 August 2014



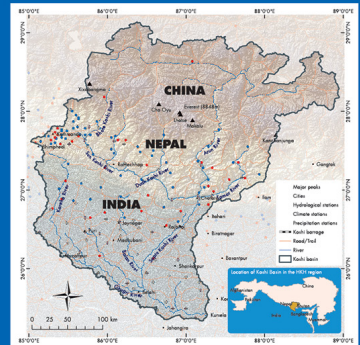
Simulated flood inundation on 18 August 2008 after the breach of Koshi Embankment



Key Features

- Real-time access to flood information
- Three-day water level and discharge rate forecasts
- Publicly-accessible data
- Flood inundation maps

Flood information from the region, for the region



Data from stations across the basin is used to generate a regional flood outlook for the Koshi basin.

Australian Aid

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For further information:

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