

National Disaster Management Office

GIS



National Geospatial Council Update

2021

GIS IN DISASTER MANAGEMENT

- During an actual emergency it is critical to have the right data, at the right time, displayed logically, to respond and take appropriate action.
- By utilizing a GIS, all departments can share information through databases on computer-generated maps in one location.
- Without this capability, emergency workers must gain access to a number of department managers. Most emergencies do not allow time to gather these resources. This results in emergency responders having to guess, estimate, or make decisions without adequate information.
- This costs time, money, and—in some cases—lives.

- **GIS provides a mechanism to centralize and visually display critical information during an emergency.**

GIS IN DISASTER MANAGEMENT Fiji

- OPERATIONS PERIOD

- 1 fulltime GIS officer
- 2 NEC GIS Volunteers
- Disaster Esri License

And is supported by various ministries with capable GIS staff and relevant information during Declared state of natural disaster.

- Peace time

- Support the NDMO Office in Day to Day Activities
- CBDRR
- Projects
- Updating and digitization of Disaster Database
- Workshops and relevant meetings
- X 3 User License (x 1 year renewal)

GIS UNIT - STRUCTURE

Director National Disaster Management Office (DDM)

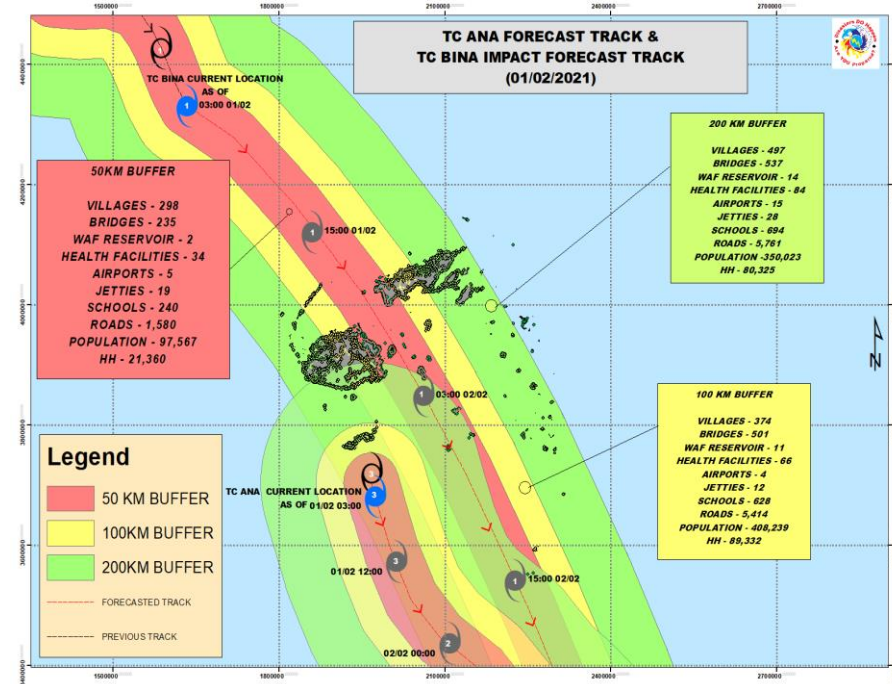
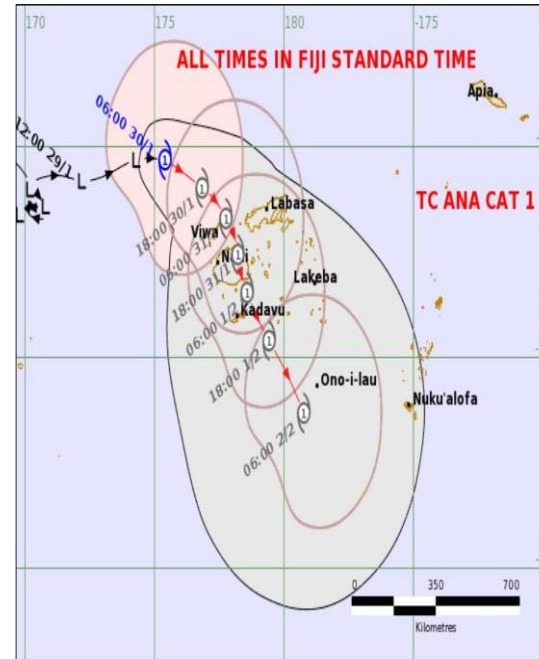
Principle Administrative Officer (PAO – EPC)

Senior Administrative Officer GIS (SAO – GIS) (ESTABLISHED IN 2019)

INTERNS(X 2) (NEC VOLUNTERS)

OPERATIONAL PERIOD PRE – IMPACT

- FORECAST DATA – FIJI MET
- IMPACT FORECAST MAP
- DIVISIONAL UPDATE
- NATIONAL DISASTER MANAGEMENT COUNCIL UPDATE



OPERATION

- ISO – INITIAL SITUATION OVERVIEW (ALONG CYCLONE PATH)



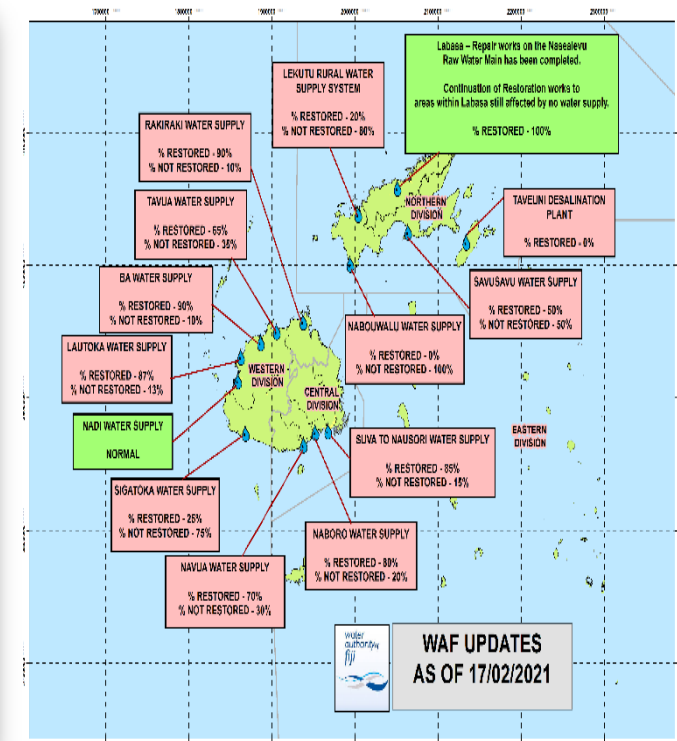
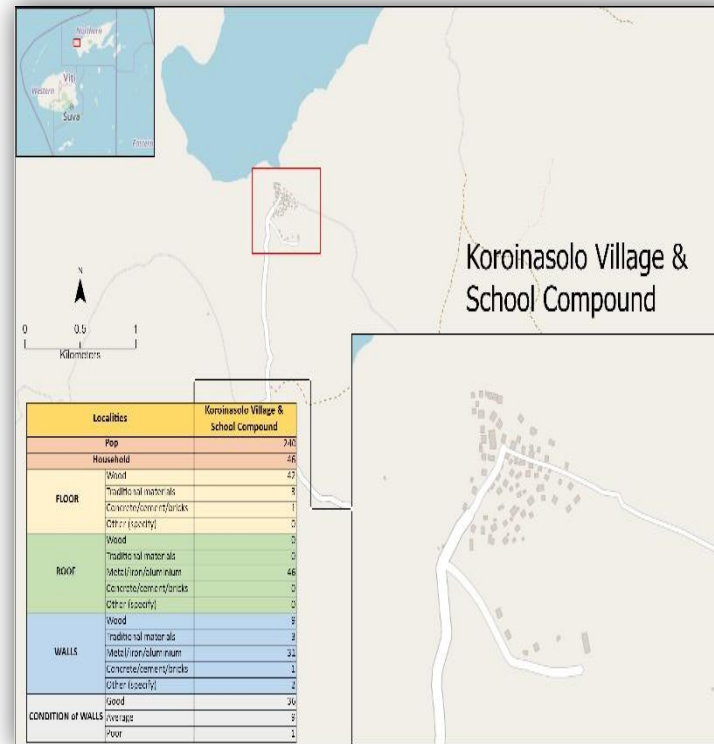
- FLIGHT ASSESSMENT (PARTNERS NZ AND AUS) – High resolution Imagery of affected areas (48 – 72 hrs.)



- Processing of Geotagged images from PARTNERS (E.G NZ AND AUS)

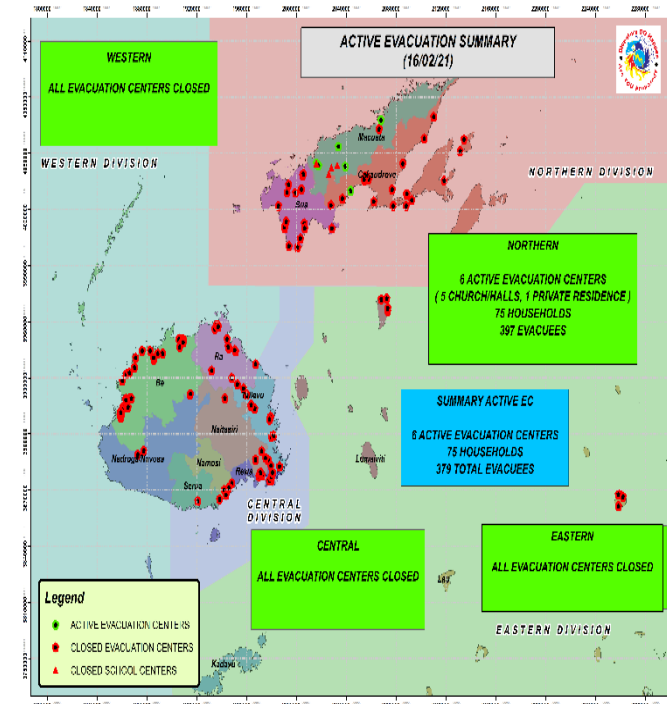
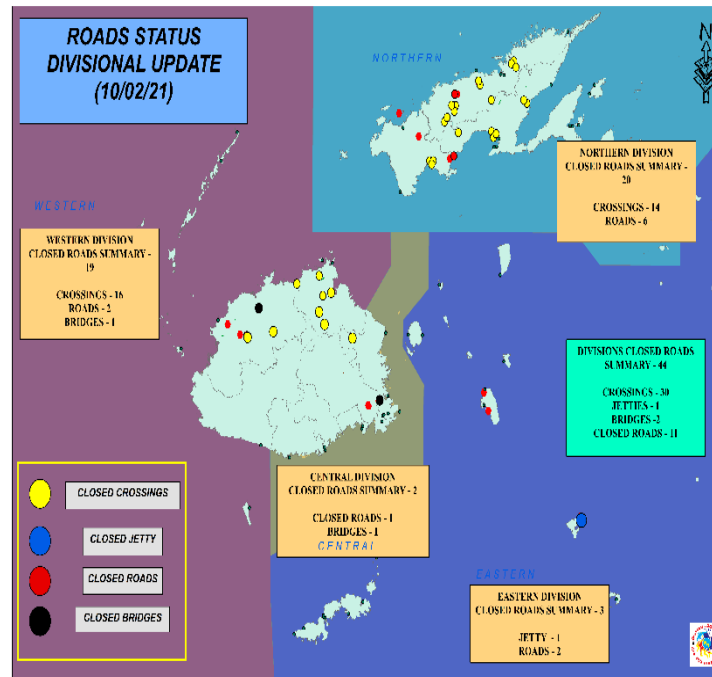
- Inclusion of Baseline data (CENSUS DATA) to Geotagged images

. Digitization and Update of affected Evacuation Center, infrastructure , Utility , Roads for Situation reports and briefs.



OPERATION

- ISO – will give you an overview
- IDA – will give you priorities
- DSA – will give you costs



. Digitization and Update of affected Evacuation Center, infrastructure , Utility , Roads for Situation reports and briefs.

POST - IMPACT – Peace time

- AAR - LESSONS LEARNT



- UPDATE OF DISASTER DATABASE (NEW SERVER – 10% POPULATED)
 - Update of Sendai Monitor
 - Accommodate data request (GIS shp and excel)
 - Support DRR activities
 - Disaster Awareness Activities

Conclusion

- NDMO – Building Disaster database through Digitization of Disaster records.
- Strengthening of relationship with Academic Institutes – Internship and Data sharing (Disaster Database)
- Collaboration with Ministries - MOU