Rezatec

OPTIMIZE INSPECTION DEPLOYMENT. AT SCALE.

Improve public safety with regular, remote tracking of urban development across all dams in your state. Use Downstream Hazard to gain powerful insights that enable you to accurately determine building development from your desk.

Population growth impacts hazard risks

Urban development is on the rise, encroaching on once-rural dams and reservoirs. This means state regulators are under increasing pressure to keep communities safe and ensure dams under their jurisdiction are classified correctly with EAPs in place where needed.

But resources are stretched. With field operatives spending hours manually searching for publicly available information in order to assess and prepare for site visits, and dams spread across large geographic areas, the risk of missing developments that can impact hazard ratings looms large.

Downstream risk looms large

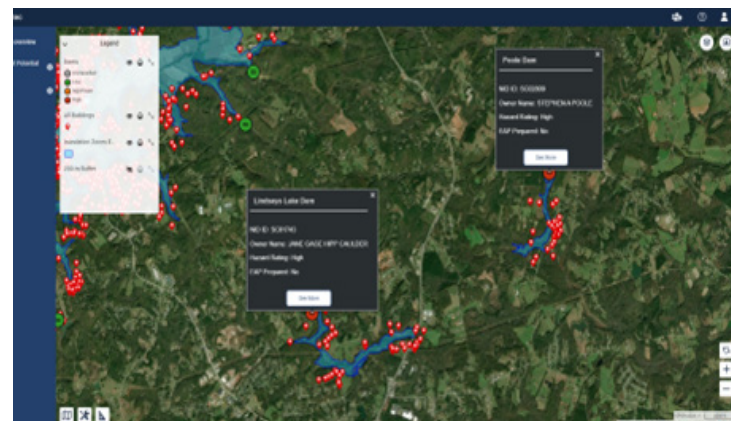**4.6% increase in privately owned housing completions in twelve months ***

$150 billion in damages and nearly 1,000 deaths were caused by weather and climate disasters in the US in **

24 dams fail each year on average since 1980 ***

3.8% of the dam failures that occur in the U.S. have resulted in one or more fatalities ***

Monitor what matters

Downstream Hazard remotely provides one central view of new developments in the inundation zone for every dam under your jurisdiction. Its optical data feeds combine with advanced analytics to deliver accurate insights on developments that have the potential to change dam hazard classifications. The product automates the process of detecting precise areas of urban growth. From your desk, you can prioritize buildings, areas, flood and inundation zones, deploy inspection resources for optimal efficiency, and focus your people in areas where they can add the most value.

Optimize inspection deployment. At scale.

From your desk Downstream Hazard enables you to deploy resources efficiently, save 30% on inspection preparation time, and better manage and act on risk.

Save time and effort
Automates the process of identifying buildings within inundation zones at scale.

Buildings are identified in a precise, accurate and reliable method using a geocoding engine.

Locations and addresses are provided for buildings within the flood zone and a buffer area.

rezatec.com | info@rezatec.com

*Data compared between October 2023 and October 2022, U.S. Census Bureau and the U.S. Department of Housing and Urban Development
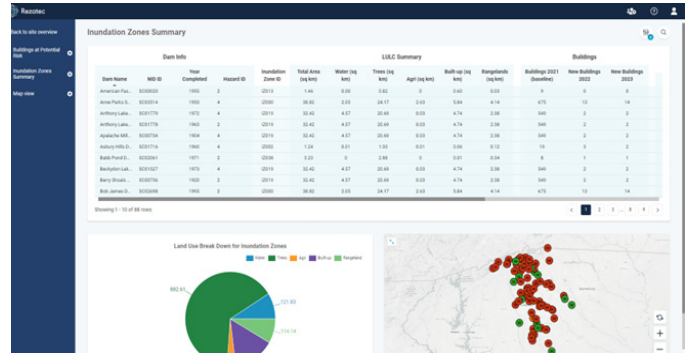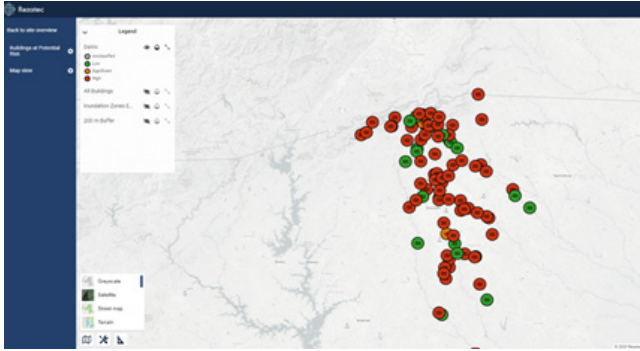**Data from the National Oceanic and Atmospheric Administration (NOAA)
***National Performance of Dams Program, Dept. of Civil & Environmental Engineering, Stanford University

Rezatec

Manage risk and public safety more effectively
Geospatially visualizes dam locations with key attribute information, including hazard rating.

Geospatially visualizes existing flood maps and dam information. Creates estimated flood zones*
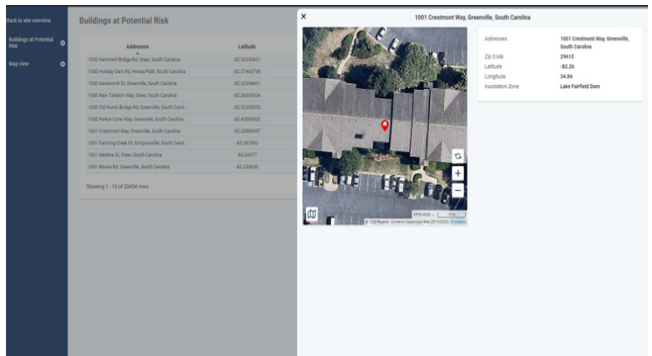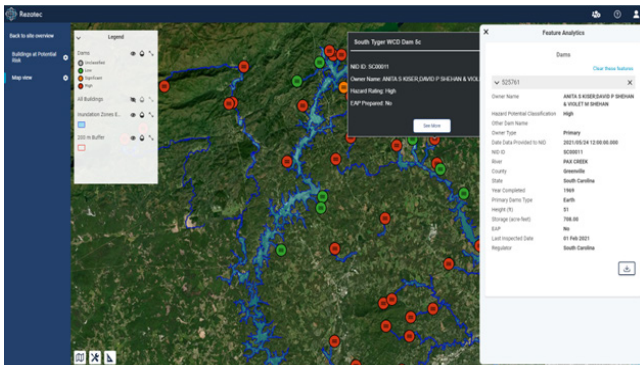

Review or update Emergency Action Plans
Ensures knowledge gaps are addressed and appropriate planning is in place in the event of a dam failure.

Helps you filter and sort the data more easily for use in emergency planning.

Sources critical infrastructure and contact information for inclusion in emergency action plans*

features available in Downstream Hazard Enhanced

Deliverables

- **Access** to geospatial AI data and insights through Rezatec's secure online platform.
- **Collection and processing** of address data
- **Geospatial mapping** of dams, inundation maps and building locations
- **Table view** of all buildings with filter
- **Annual updates** highlighting changes to the data identified in the first year

- **Downloadable** data in ESRI Shapefile, Excel, or CSV format and downloadable graphs in PNG format
- **Estimated dam failure flood zone*** uses digital terrain model and modeled water flow using total water volume
- **Classification by building type** identifies critical infrastructure, like hospitals, schools, and other community buildings
- **Land Use information*** sourced and hosted where available
- **Weather data** for forecast weather local to each dam site

*As part of the feasibility assessment, Rezatec identifies potential data sources available and any limitations