

# **KEEP AN EYE ON URBAN DEVELOPMENT**

Improve public safety with regular, remote tracking of urban change. Between inspections, across all your dams.

With the Rezatec Urban Change product you gain powerful insights that ensure you can detect new development with accuracy and deploy inspection resources to the right place at the right time.

# **Identifying Urban Development**

Urban development is on the rise and encroaching on once-rural dams and reservoirs. This means you are under increasing pressure to keep communities safe and ensure your dams are classified correctly. But your time and financial resources are stretched, with sites spread across wide geographical areas and a lack of data to help you prioritize inspections. You need a solution that ensures accurate classifications, enables sound emergency planning and keeps people safe.



Buildings adjacent to dam breach inundation zone



### **Monitor What Matters**

Rezatec's Urban Change product remotely provides one central view of new developments within the inundation zone for every dam within your jurisdiction. Its optical data feeds combine with advanced analytics to deliver accurate insights on developments more frequently between dam inspections. The product highlights precise areas of urban growth by detecting buildings that may be of concern, so you can deploy your inspection resources for optimal efficiency where they're needed most, track issues between dam visits and improve emergency plans.



#### **Product Overview**

## Building Detection. Failure Prevention.

Using Geospatial AI, our Urban Change product identifies building development across a whole state or region so that you can identify where lives are at risk.

Our Al-powered model compares two optical datasets, with sub-metre resolution, from two different time periods and flags clusters of pixels that have changed. Using third-party data sets we improve the training to filter out clusters that are larger than houses in that area, and other objects, such as bodies of water, car parks or driveways. Inundation maps are then loaded into the platform, giving us a clear view of where further investigation is required. This ensures you are only notified of the changes that matter to you.

# **Classify Correctly**

Our Urban Change product can be used between inspections, or in conjunction with an inspection, to enhance your data and improve the accuracy of dam classifications. For example, a dam classified as low-hazard could be quickly reclassified to high-hazard if urban change is detected, without waiting for a manual inspection. This makes the process of classification more accurate and efficient, leading to greater public safety.

# Geospatial Al

Urban Change is a Geospatial Al product. The technology combines optical satellite data with advanced analytics to deliver accurate insights on building change across the inundation zones of every dam in your state. Its easy-to-use visualizations highlight exact risk areas, which means you can monitor and report on risk for each dam remotely and cost-effectively.



#### **About Rezatec**

Rezatec's Geospatial AI platform delivers new insights that empower you to manage your ground-based assets and critical infrastructure dynamically, efficiently and at scale. This means you can prioritize investment in the right place at the right time, boost the value of your assets and make informed decisions about resource deployment to super-charge productivity.



## **CONTACT US TO FIND OUT MORE**

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