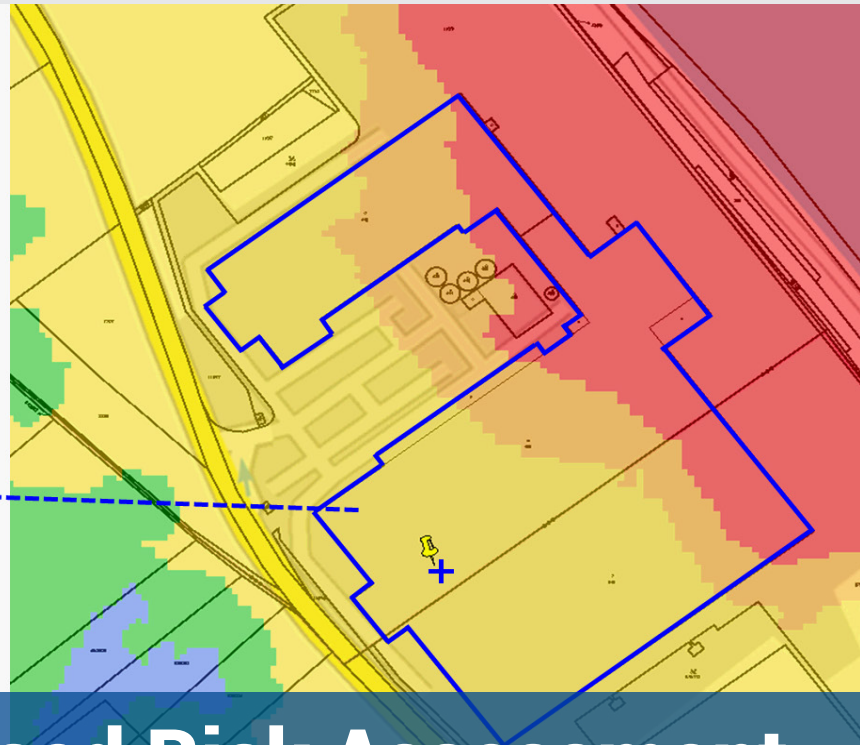
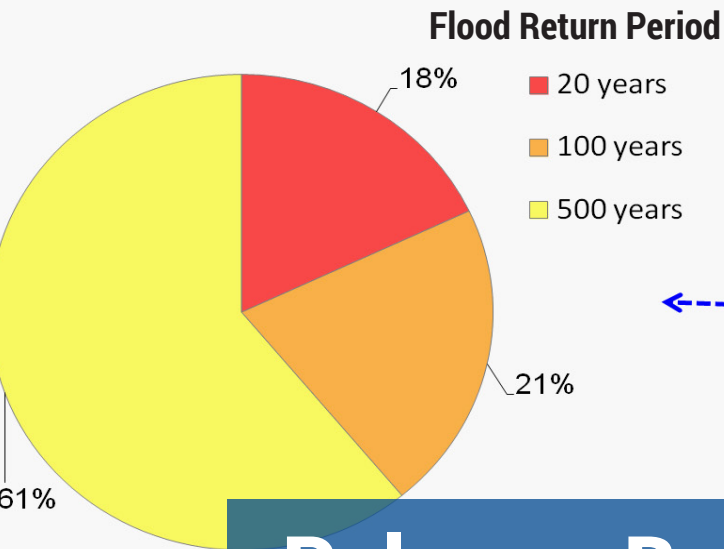




Polygon-Based Risk Assessment

Subscription Service

Polygon-Based Risk Assessment

Intermap's polygon-based risk assessment subscription service is one step in the risk evaluation process of larger sites, such as industrial areas, agricultural parcels, construction sites, transportation infrastructure, individual buildings, industrial halls, or simply custom defined shapes.

Probable maximum loss (PML) calculations and bulk evaluations may be biased due to point-based evaluation of the sites insured. To avoid these overestimated or underestimated risks, the polygon-based assessment provides the right answer. It also helps automate the evaluation process of smaller area units (e.g., individual industrial buildings, residential or SME sites, medium sized parcels) so that each area site does not need to be manually or visually assessed.

Unlike point-based assessment (e.g., roof-top or door-step address points, parcel centroids), the polygon-based assessment provides multiple responses, better describing the range of risk within the assessed area. Official polygons, such as building footprints or parcel geometries, can be assessed, as well as custom defined shapes.



Fast and Simple Answers

Intermap's web service provides the minimum, maximum and mean hazard for the polygon being assessed. Statistics are also calculated for the percentages of multiple hazard zones within the assessed polygon.

Input 1: Assessed Polygon - the assessed polygon, e.g., user defined polygon, building footprint, parcel geometry, in GeoJSON or KML format (the assessed polygons can be provided by Intermap).

Input 2: Hazard Layer - Intermap's or third party hazard layer.

Output 1: Maximum and Minimum Hazard value within the assessed polygon.

Output 2: Percentage of the Individual Hazard values (zones) within the assessed polygon.

Output 3 - Mean Hazard value averaging either the hazard value in the center point of the assessed polygon or a weighted average value based on the percentual shares of the individual hazard zones.



As an example, there are three flood hazard zones present: A, B, and C whereas A (transparent) is the “no risk” zone while C (dark blue) is the “high risk” zone.

Assessment of the parcel polygon, number 33 (red outlines): Even if the reference center point is in flood hazard zone “C” (this would be the response of the point-based assessment), only 45% of the parcel is in zone “C” while 45% of its area is in less risky zone “B” and another 10% in “no risk” zone “A.”

Assessment of the building footprint, house number 32 (purple outlines): Even if the government defined center point of the building is in “no risk” zone “A”, 65% of the house is in the riskier zone “B.”



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