TAAL VOLCANO
BASE SURGE HAZARD MAP

Legend
- Zones prone to base surge
- Buffer zone
- Potential eruption vent
- Lake / Waterbody
- Municipal boundary
- Barangay boundary
- Road

Disclaimer:
Administrative boundaries based on PSA data (2016) are approximate.

Base Surge Hazard Zone limits are based on the reconstructed extents of the worst-case eruption of 1754 using energy-line modeling. This is replicated for five (5) potential eruption vents, namely, Taal Volcano Island Main Crater, Bintinggang Malaki, Pirapiro, Off-Calauit and Bintinggang Munti. Buffer Zones are marked out at one (1) kilometer aerial distance from the hazard zone limits as additional precautionary zones, in case such are needed, for public safety guidance.

As a general reminder, Taal Volcano island is designated as a Permanent Danger Zone (PDZ).

Areas within and close to the Volcano Island may be affected by large volcanic fragments explosively thrown out (ballistic projectiles) from the vent.

Areas around Taal Volcano that could include those extending beyond the coverage of this map may experience fallout from ashfall. Fallout from ashfall deposition depends on prevailing wind direction and magnitude of eruption, but is generally heavier near the active vent and thins out indefinitely away from the eruption center.

Assumptions
1. Possible eruption from various active vents within the volcano island were considered for modeling.
2. Worst-case scenario is similar to the 1754 eruption.
3. If the eruption center occurs outside the volcano island, excepting Off-Calauit, hazard zonation boundaries will change.

Assumptions based on Ruerdo (1983) and PHIVOLCS (1999)

Base data from NAMRIA (ISAR Data 2013), DPWH Road Data (2015), and DOST-PHIvolcs


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