Remote sensing plays a critical role in contemporary monitoring programs, but our strategies for processing these data using automated procedures are not always reliable. In particular, the task of separating real from spurious changes remains problematic, especially in an object-based environment where differential errors in classification quality, spatial registration, scene illumination, resolution, and object delineation have forced some operators to adopt labor-intensive visual-interpretation strategies, or employ manual interaction on an object-by-object basis. In this paper, we present an updated summary of our new disturbance-inventory approach to land-cover monitoring that combines object-based classification and change-detection strategies with boundary-conditioning routines designed to maximize the spatial and thematic integrity of the finished products. With this approach, the final maps are only altered in regions of confirmed change, and spurious gaps, slivers, stretches, and encroachments are avoided. The approach constitutes an innovative, efficient, and transparent framework that can handle all the basic landscape dynamics, including feature appearance, disappearance, succession, expansion, and shrinkage, without the need for manual editing.