

Figure S1: Percent transmission of infrared, visible and UV radiation wavelengths through Propafilm-C, 226 Lee UV and Mylar type-D films. Scans were produced using a Varian Cary 50 probe UV-visible scanning spectrophotometer.

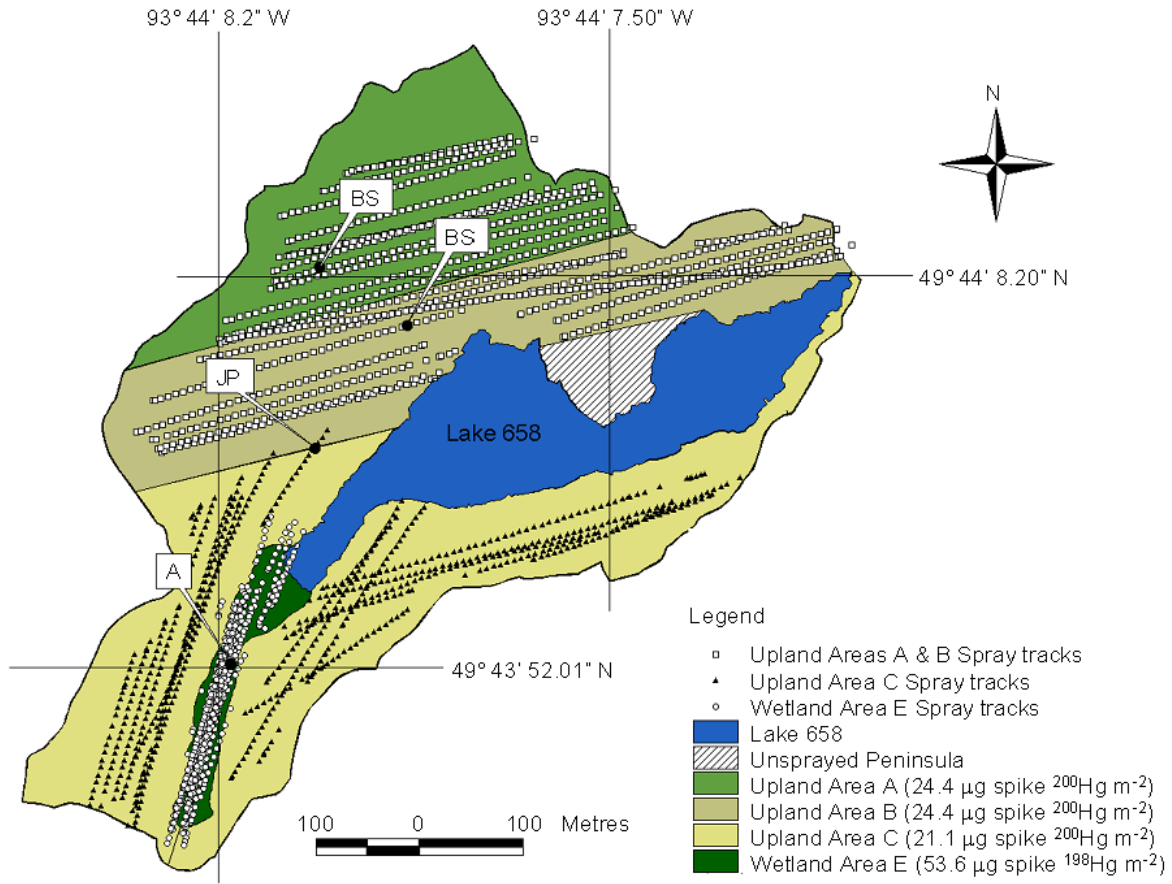


Figure S2: Map of the L658 watershed at the Experimental Lakes Area (NW Ontario) including the different areas used for the purpose of spike Hg(II) application, associated aircraft spray tracks, target 2003 spike Hg(II) loading rates, and locations of alder (A), black spruce (BS) and jack pine (JP) study trees.

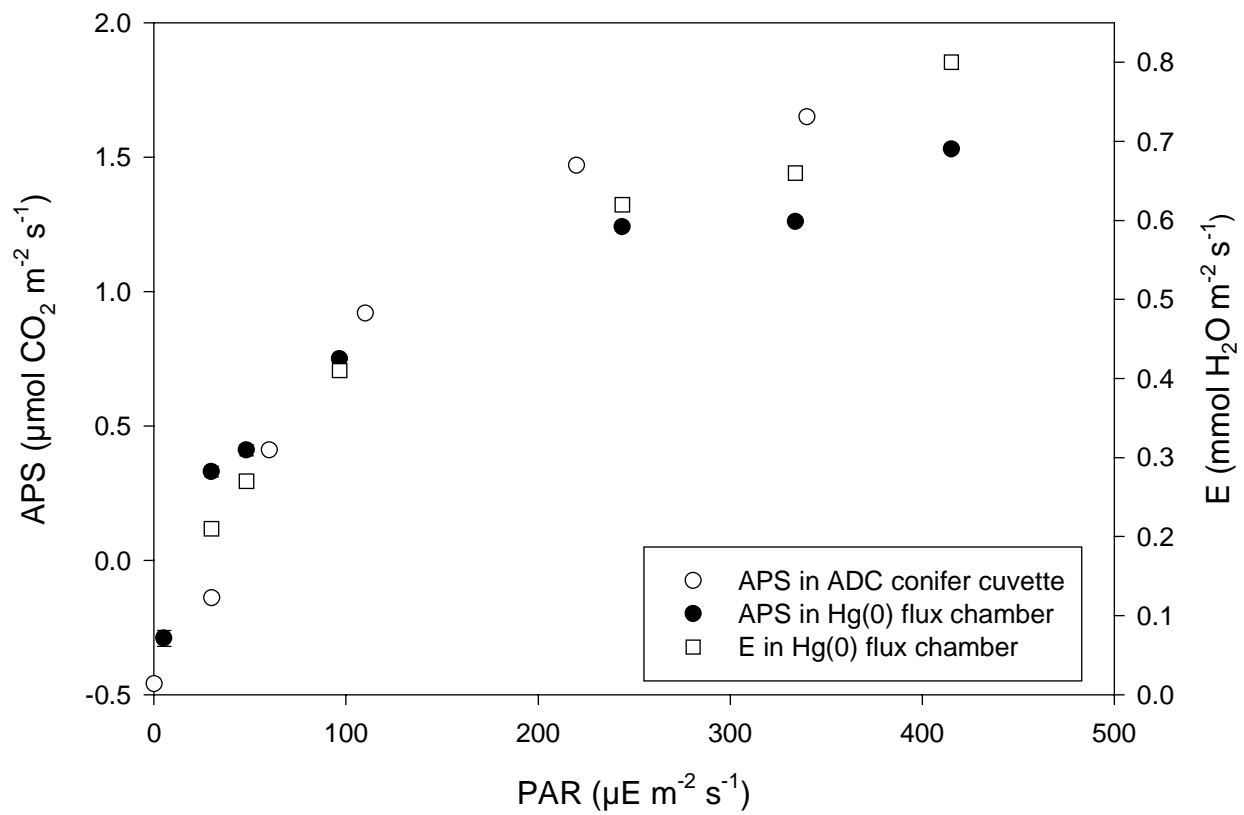


Figure S3: Apparent photosynthesis (APS) and evapotranspiration (E) radiation response of loblolly pine in the Hg(0) flux chamber and APS radiation response of loblolly pine using an ADC conifer cuvette.

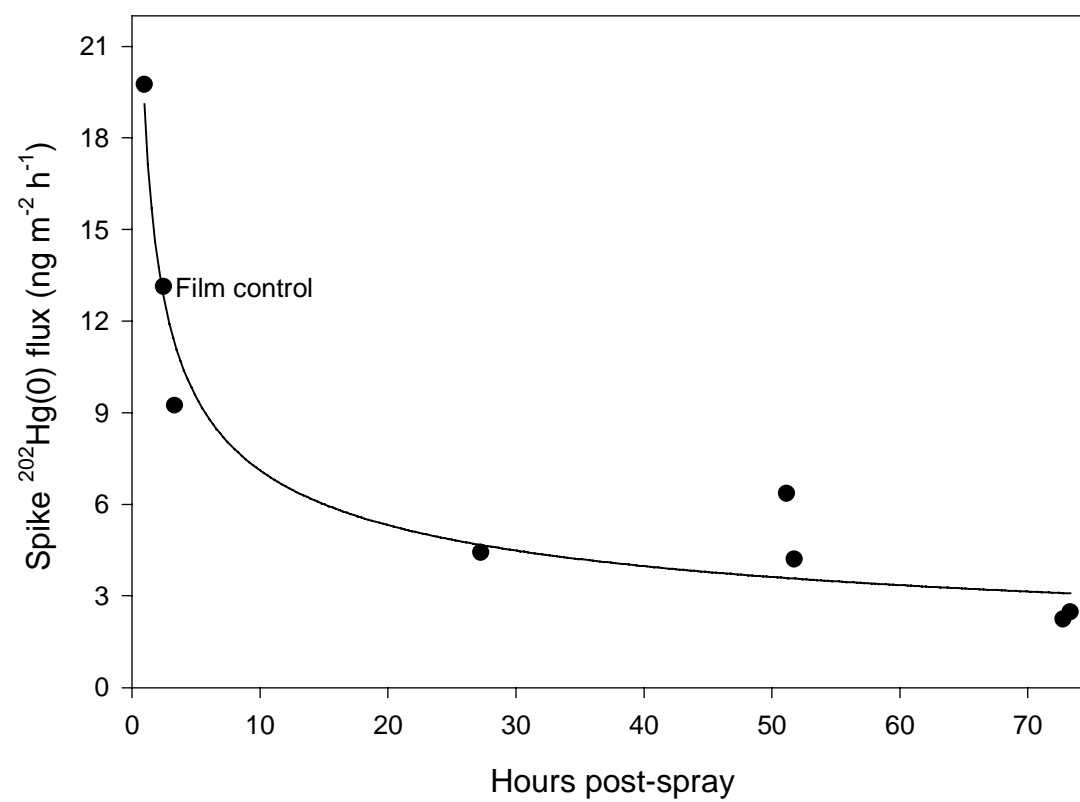


Figure S4: Spike flux of  $^{202}\text{Hg}(0)$  from jack pine foliage demonstrating the exponential decline of flux rate over time. This is the same tree as in Figure 5a.