

## **Supplementary Material**

### **Post-wildfire moss colonisation and soil functional enhancement in forests of the southwestern USA**

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## **Text S1. Soil sample analysis methods**

We measured pH using a glass electrode immersed in a saturated paste of 10 mg soil mixed with a .01 M CaCl<sub>2</sub> solution and allowed to stand for 30 minutes. Carbon and Nitrogen samples were ground and analyzed using a 4010 Elemental Combustion System (Costech Analytical Technologies Inc. Valencia, CA). Phosphate was extracted using the Olsen (pH > 6) and Bray (pH ≤ 6) methods and analyzed using a Lachat Instruments QuikChem 8500 series Flow Injection Analyzer (Lachat Instruments, Loveland, Colorado, USA). Water soluble cations and metals were extracted using a 1M NH<sub>4</sub>Cl solution. We used an argon gas carrier and analyzed samples on a Thermo Scientific™ iCAP™ 7000 Series ICP-OES (Inductively Coupled Plasma-Optical Emission Spectrometry) or mass spectrometry (ICP-MS), using Qtegra™ ISDS™ Software. Cations and metals consisted of calcium, magnesium, potassium, sodium, sulfur, aluminum, and manganese. Additionally, we measured total iron, copper, zinc, nickel, cadmium, and lead but their concentrations were below detection levels.