One of the first key examples of a quantum modular form, which unifies the Witten-Reshetikhin-Turaev (WRT) invariants of the Poincaré homology sphere, appears in work of Lawrence and Zagier. We show that this series is one instance in an infinite family of quantum modular invariants of negative definite plumbed 3-manifolds, using a recently developed theory of Akhmechet, Johnson, and Krushkal (AJK) which extends lattice homology and BPS q-series. The radial limits of this infinite family of invariants may be thought of as deformations of WRT invariants. As part of this work, we also provide the first calculations of the AJK series for infinite families of 3-manifolds. This talk includes joint work with Eleanor McSpirit.