

Critical Zone Science: Water Transfers Through the Critical Zone
Understanding Forest Water Balance Grading Rubric: 15 pts total

Question	3 pts awarded	2 pts awarded	1 pt awarded	0 pts awarded
1	Student lists all reservoirs and fluxes listed in class or in the text (clearly distinguishing between reservoirs and fluxes)	Student lists some of the reservoirs and fluxes, but not all, or do not clearly distinguish between reservoirs and fluxes.	Student lists few of the reservoirs or fluxes. Answer is poorly organized.	Student does not list any reservoirs or fluxes.
2	Student clearly labels reservoirs and fluxes listed in Q1, and may delineate additional parts of the water cycle. Fluxes connect two pools or show movement (e.g. with an arrow).	Student labels some reservoirs and fluxes. Diagram is easy to read and references are clear.	Few reservoirs and fluxes are labeled, there is no distinction between the two, or the listings are somewhat confusing.	Reservoirs and fluxes are not marked on the graphic, or it is too confusing to be interpreted.
3	Student clearly and concisely distinguishes between Med. and temperate climates (for instance using monthly precip and temp sketches), and indicates how these differences would impact each component of the water balance in a mountain environment.	Student distinguishes between climates and gives some indication of how this impacts the components of the water balance.	Student distinguishes between climates or gives an example of how it would impact the components of the water balance.	There are no distinctions made between the two regimes for water balance components.
4	Student lists all of the data needed including volume and density for snow, as well as deep subsurface stores.	Student lists some data needed but not all.	Student lists a few pieces of data.	Student does not list any data, or list is not clear enough for comprehension.
5	Student includes a correct version of the water balance equation, with components accurately and clearly indicated [not just "Q", but "Q=discharge" or "Q (discharge)"].	Water balance written by the student is mostly correct, but is missing a component or components are not labeled/explained.	Water balance as written by the student is missing multiple components and the components are ambiguous or cryptic.	Student does not include an equation.