## 1. Calculation Method

We used the Granier's equation for sap flow calculation:

Sap flow rate (cm/hr) =360\*0.119 \*{( $\Delta T_{max}-\Delta T$ )/  $\Delta T$ }<sup>1.231</sup>,

where  $\Delta T$  is the temperature difference between the two probes,  $\Delta T_{max}$  is the zero flow  $\Delta T$ . We used the maximum  $\Delta T$  observed between 0 AM and 6 AM in each day. Assumption is trees are fully recharged with water by dawn.

Reference

Granier, A (1987) Tree Physiology 3, 309-320

2. Tree Description

	# of		BHD
Species	probes		(cm)
Ponderosa		2	12.1
Ponderosa		1	6.4
Ponderosa		4	80.2
Sugar		4	35.0
Black		6	101.9
Black		2	32.8
Black		2	38.2
	Ponderosa Ponderosa Ponderosa Sugar Black Black	Species probes Ponderosa Ponderosa Sugar Black Black	SpeciesprobesPonderosa2Ponderosa1Ponderosa4Sugar4Black6Black2