

**TABLE 3-1: DEFINITION OF TRIBUTARY CONDITIONS BASED ON THE PALMER INDEX AND NET INFLOW**

<b>Tributary Hydrologic Classification</b>	<b>Palmer Index Class Limits</b>	<b>2-wk mean L.O. Net Inflow Class Limits</b>
Very Wet	3.0 or greater	Greater $\geq$ 6000 cfs
Wet	1.5 to 2.99	2500-5999 cfs
Near Normal	-1.49 to 1.49	500-2499 cfs
<del>—moderate drought</del> Dry	-1.5 to -2.99	-5000 – 500 cfs
<del>severe drought</del> Very Dry*	-3.0 or less	Less than -5000 cfs

The wettest of the two indicators describes the current tributary condition

\*For modeling purposes, the dry and very dry classes can be combined into one class

The Net Inflow is represented by  $NI = RF - ET + \text{Inflows}$ ,  
where RF = rainfall over the lake, ET = lake evapotranspiration, and Inflows = all inflows to the Lake.

Using the basic mass balance equation, the Net Inflow can be calculated by  $NI = DS + \text{Outflows}$ ,  
where DS = storage change, and Outflows = measured outflows

The Palmer Index is a meteorological index that responds to weather conditions that have been abnormally dry or abnormally wet. The index is calculated based on precipitation and temperature data, as well as the local available water content of the soil.

Discussion on Palmer Index: <http://www.drought.unl.edu/whatis/indices.htm#pdsi>  
[http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/cdus/palmer\\_drought/wpdanote.shtml](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/cdus/palmer_drought/wpdanote.shtml)

Current Conditions:

[http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/regional\\_monitoring/palmer.gif](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif)