

CALL THRESHOLD CALCULATION AFTER THE TRANSITION PERIOD

At each SIF Measurement Location, compliance will be assessed on the first day of each month from March-October (March is considered to be subsequent to October), and a Call Threshold will be calculated as follows:

Equation 1:

Call Threshold = Long-term SIF Threshold + Type A SIF Adjustment + Type B SIF Adjustment

The Long-term SIF Thresholds are those specified in Exhibit D. Under conditions of full compliance, both SIF Adjustments will be zero. The magnitude of a SIF Adjustment will increase as levels and duration of non-compliance increase, and will decrease as levels of non-compliance decrease. A SIF Adjustment will be proportional to the magnitude of the non-compliance, while also accounting for its duration. In no event will a Call Threshold increase above the applicable Tribal Water Right.

Type A SIF Adjustment

If the Water Use Program implementation fails to meet a Call Threshold, then the Type A SIF Adjustment will be calculated according to the following 3 steps and added to the Long-term SIF Threshold to determine the instream flow requirement for the month. Step 1: the percent departure in the previous month from the Call Threshold requirement will be computed. Step 2: if the non-compliance is not corrected, then starting in the second month of non-compliance, and continuing in all subsequent months of the Irrigation Season or Seasons, the number of sequential months of non-compliance will be summed, with each month counting as 1%. Step 3: the percentages calculated in steps 1 and 2 will be summed and then multiplied by the Long-term SIF Threshold to produce the Type A SIF Adjustment for the month. Calculating the Type A SIF Adjustment in this manner increases the Long-term SIF Threshold for the month by an amount that is proportionally equivalent to the magnitude of the non-compliance, and also accounts for duration of non-compliance. Mathematically, the Type A SIF Adjustment is calculated as follows:

Equation 2:

*Type A SIF Adjustment*_{*i*} = *Long-term SIF Threshold*_{*i*} ×

$$\left(\frac{\text{Call Threshold}_{i-1} - Q_{\text{min}5}_{i-1}}{\text{Call Threshold}_{i-1}} + \frac{\text{Number (2 or more) of sequential months out of compliance}}{100} \right)$$

Where,

i = the current month;

i - 1 = the previous month;

*Q*_{*min*5}_{*i*-1} = the average daily flow of the five days of lowest flow during the preceding month.

Type B SIF Adjustment

The Type B SIF Adjustment will be calculated in one of two ways, as described in the following sub-sections.

Method 1. If the Riparian Program implementation fails to produce Sufficient Participation by the end of the Transition Period, then the Type B SIF Adjustment will be calculated according to the following 3 steps and added to the Long-term SIF Threshold to determine the instream flow requirement for the month. Step 1: the percent departure in the previous month of the linear extent of compliant Riparian Management Agreements from the required linear extent of Sufficient Participation will be computed. Step 2: if the non-compliance is not corrected, then starting in the second month of non-compliance, and continuing in all subsequent months of the Irrigation Season or Seasons, the number of sequential months of non-compliance will be summed, with each month counting as 1%. Step 3: the percentages calculated in steps 1 and 2 will be summed and then multiplied by the Long-term SIF Threshold to produce the Type B SIF Adjustment for the month. Mathematically, the Type B SIF Adjustment will be calculated for the month as follows:

Equation 3:

$$SIF \text{ Adjustment } B_i = Long\text{-term SIF Threshold}_i \times \left(\frac{Sufficient \text{ Participation length} - Compliant \text{ RMA length}_{i-1}}{Sufficient \text{ Participation length}} + \frac{Number \text{ (2 or more) of sequential months out of compliance}}{100} \right)$$

Where,

i = the current month;

i - 1 = the previous month;

RMA = Riparian Management Agreement.

Method 2. After the Riparian Program implementation has produced Sufficient Participation within a SIF Region, then subsequent non-compliance will be addressed differently. In this situation, the Type B SIF Adjustment will be calculated according to the following 3 steps and added to the Long-term SIF Threshold to determine the instream flow requirement for the month. Step 1: the percent departure in the previous month of the linear extent of compliant Riparian Management Agreements from the required linear extent of Sufficient Participation will be computed, after removing the Retired Riparian Length from the calculation. Step 2: if the non-compliance is not corrected, then starting in the second month of non-compliance, and continuing in all subsequent months of the Irrigation Season or Seasons, the number of sequential months of non-compliance will be summed, with each month counting as 1%. Step 3: the percentages calculated in steps 1 and 2 will be summed and then multiplied by the Long-term SIF Threshold to produce the Type B SIF Adjustment for the month. Mathematically, the Type B SIF Adjustment will be calculated for the month as follows:

Equation 4:

$$SIF \text{ Adjustment } B_i = Long\text{-term SIF Threshold}_i \times \left(\frac{Sufficient \text{ Participation length} - Retired \text{ Riparian Length}_{i-1} - Non\text{-retired compliant RMA length}_{i-1}}{Sufficient \text{ Participation length}} + \frac{Number \text{ (2 or more) of sequential months out of compliance}}{100} \right)$$

Where,

UPPER KLAMATH BASIN COMPREHENSIVE AGREEMENT
EXHIBIT E – LONG-TERM COMPLIANCE DOCUMENT 3-4/2014

i = the current month;

$i - 1$ = the previous month;

RMA = Riparian Management Agreement;

Retired Riparian Length is defined in subsection 3.10.2, and for the purposes of Equation 4 cannot exceed 40% of the Sufficient Participation length.