2.5 – Workshop Solution: Formulating EFM Relationships

1. Sacramento Splittail...

Season: 2/1 to 5/31

Duration: 24-days, Minimums (sustained highs) then Maximum (largest extent)

Rate of Change: not applied

Flow Frequency/Duration: 25% (4-yr) - Flow frequency

Hypothesis: Increased flow will improve (+) floodplain spawning

2. Habitat for shad and striped bass...

Season: 1/1 to 5/31

Duration: 14-days, Means (average) and then Minimum (low)

Rate of Change: not applied

Flow Frequency/Duration: 50% (2-yr) - Flow frequency

Hypothesis: Curve with flow-value points of 0-0, 10000-10, 100000-0

3. Benthic macroinvertebrate biodiversity...

Season: 10/1 to 9/30

Duration: 1-day, Means (average) and then Maximum (high)

Rate of Change: not applied

Flow Frequency/Duration: 50% (2-yr) - Flow frequency

Hypothesis: Increased flow will improve (+) benthic biodiversity

4. Protection of the shoals spider lily...

Season: 6/1 to 7/30
Duration: 1-day
Rate of Change: not applied

Flow Frequency/Duration: 95% (of time) - Flow duration

Hypothesis: Curve with flow-value points of 0-0, 2700-10, 100000-10

5. Water exchange for wetland health...

Season: 5/15 to 9/15
Duration: 1-day
Rate of Change: not applied

Flow Frequency/Duration: 30% (of time) - Flow Duration

Hypothesis: Increased flow will improve (+) water exchange for wetland health

5. Extra Credit - Water exchange for wetland health...

Season: 5/15 to 9/15
Duration: 1-day
Rate of Change: not applied
Flow Frequency/Duration: Flow Duration

Hypothesis: Increased %X will improve (+) water exchange for wetland health

Reverse Lookup: 6,000-cfs