

Pulse Flow Approach- Bastrop, Columbus, Wharton

Base Flow Pulse

BBEST Recommendation Magnitude (2000 – 3000 cfs); Frequency (8 – 10 annually); Duration (3-5 days)

Proposed Standard 3000 cfs, 2 per Season, Duration ~~4~~ 3 Days

1. Applies only if application has a new on-channel dam with reservoir > ~~2500~~ 5000 acre-feet or diversion rate 500 cfs and greater
- ~~1.2.~~ Engaged when flow is 3000 cfs or more, pumping could occur such that pumping does not reduce streamflow below 3000 cfs
- ~~1.3.~~ Applies as a permit condition to all new permits > 500 cfs

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~~Except to the extent required under step 7, permits to which this provision applies would not include a condition spelling out a Base Pulse Flow requirement. Applications to which this provision applies would be evaluated to see if an applicable Base Pulse Flow Standard would be impaired (to be tested in WAM Run 3) The Base Pulse Flow would be considered impaired if the permit, in combination with other permits subject to the standards, impair the Base Flow Pulse (e.g. 10% reduction in volume) The baseline for comparison would be permits in effect at the time of adoption of the standard and the analysis would consider the period of record If an impairment is indicated, any permit issued would be adjusted/conditioned in an appropriate manner to mitigate/reduce the impairment.~~

High Flow Pulses

BBEST Recommendation Magnitude (8000 cfs); Frequency (2 Events in 3 years); Duration (2-3 days)

Proposed Standard 8000 cfs, 1 event every 1.5 Years, Duration 2 Days

1. Applies only to a permit involving a new on-channel dam with reservoir > ~~2500~~ 5000 acre-feet or diversion rate 10% of the magnitude (800 cfs or greater)
- ~~1.2.~~ Engaged when flow is 8000 cfs or more, pumping could occur such that pumping does not reduce streamflow below 8000 cfs
3. Except to the extent required under step 7, permits to which this provision applies would not include a condition spelling out a Base Pulse Flow requirement.
- ~~3.4.~~ Applications to which this provision applies would be evaluated to see if an applicable Base Pulse Flow Standard would be impaired (to be tested in WAM Run 3)

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~~3-5.~~ The Base Pulse Flow would be considered impaired if the permit, in combination with other permits subject to the standards, impair the Base Flow Pulse (e.g. 10% reduction in volume)

~~3-6.~~ The baseline for comparison would be permits in effect at the time of adoption of the standard and the analysis would consider the period of record

~~3-7.~~ If an impairment is indicated, any permit issued would be adjusted/conditioned in an appropriate manner to avoid, with option of using mitigation strategies mitigate/reduce the impairment.

Channel Maintenance

BBEST Recommendation Magnitude (27,000 to 30,000 cfs); Frequency (1 event per 3 years); Duration 3 days).

Proposed Standard 27,000, 1 event every 3 years, Duration ~~2-3~~ days

- Would apply to any permit involving a new on-channel dam with reservoir > ~~2500~~ 5000 acre-feet or diversion rate 10% of the magnitude (2700 cfs or greater)
- Recommended Language for 5731 below:

A qualifying channel maintenance flow event is defined as an event that begins with a flow of at least 27,000 cfs, as measured at USGS Gage 08161000, Colorado River at Columbus, Texas, has a duration of 48 hours, and includes flows below 27,000 cfs that occur within the 48-hour period following the initial 27,000 cfs flow. If a qualifying channel maintenance flow event has not occurred within the last 24 months, and has not been allowed to pass the diversion points, Permittee's diversions during the first 48 hours after the qualifying channel maintenance flow event has reached the diversion point shall not reduce streamflow below the applicable diversion point to less than the equivalent of 27,000 cfs at USGS Gage 08161000, Colorado River at Columbus, Texas.