

DEQ Discussion of Potential TMDL Role in Addressing Local Impact Concerns

It is expected that “total mass” caps for individual point sources will be established for the trading program based on the criteria for in-river quality identified by the Lower Boise River and other associated TMDLs. It is DEQ’s opinion that these caps, in combination with the rigorous evaluation of the ratios that have been established for the trading system will act in a protective fashion to reduce the potential for localized impacts to the river.

While the concerns describing the potential for local impacts from trading from all possible directions in the river are valid to a point, a close evaluation of the trading system has not shown them to be significant provided that appropriate caps are established based on the water-quality targets identified by the TMDL. The TMDL should address the means by which appropriate caps will be established.

To answer the first concern specifically (decreaser upstream of increaser), if appropriate caps are established for the trading system, there are no diversions currently located in the Lower Boise River system (below where the NY Canal branches off) that are large enough to cause a sufficiently significant change in the total in-river flow to result in the problem that is described. The majority of the reduction (water with a lower concentration of phosphorus) will still be transmitted directly downstream, with only a minor percentage of the water being removed from the main channel. DEQ’s analyses show that a diversion would have to remove in excess of 60% of the total in-river flow volume for a trade to result in a significant local water quality problem. This is based on both the critical conditions analysis and the catastrophic events assessment performed on the location ratios during the development of the trading system design.

To answer the second concern specifically (increaser upstream of decreaser), if appropriate caps are established for the trading system, sufficient in-river mixing has been observed to occur to prevent localized impacts and ensure a uniform reduced concentration within a reasonable distance downstream of the reducer. Once again, this observation relies on the establishment of trading caps appropriate to the water-quality targets identified by the TMDL.