

Use of Mixing Zones in 303d Listed Waters

Spencer Bohaboy
Surface Water Management
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Background

- ▶ The Department conducts a water quality assessment of the state's water bodies every two years
- ▶ Assessment is based upon data collected from various sources and entered into the Department's database (i.e. DEQ, EPA, volunteer)
- ▶ Some stream segments can be very large (i.e. Middle Columbia River is > 300 miles)
- ▶ Data collected in one part of a segment can result in the listing of an entire stream segment as being water quality limited
 - In some cases, local data indicates that the waters are consistently meeting water quality criteria even though the segment is listed as water quality limited
 - In some cases, local data indicate that the discharge is not contributing to the exceedance
- ▶ TMDL development may be delayed for years

Problem

- ▶ DEQ has received comments on draft NPDES permits to the effect that, if the proposed discharge is to a waterbody on the 303(d) list, there is no assimilative capacity to allow a mixing zone and criteria must be met at end of pipe

Case Study

▶ City of Hood River

- The Middle Columbia River is listed as water quality limited for pH
- Local data indicates that waters are meeting water quality criteria
- Local data indicates that discharge is not contributing to the exceedance of water quality criteria
- Permit was issued that required:
 - Interim WQBEL for pH at current performance with Final WQBEL at pH water quality standards
 - facility planning process including the development of a robust local characterization and in-stream modeling
 - Use of a compliance schedule for design and construction of alternative outfall
 - The use of a compliance schedule allows for the potential of a alternative final WQBEL that includes a mixing zone

RMZ in 303d Memo

- ▶ Memo to describe circumstances that supports the use of a mixing zone in an impaired water body where there is no TMDL
- ▶ Mixing Zone would be permitted where it may be found that:
 - (1) assimilative capacity is available and
 - (2) it can be demonstrated that a discharge is not contributing to the water quality impairment
- ▶ Memo describes:
 - procedures for robust evaluation of receiving water body,
 - criteria for demonstrating that the water body is attaining water quality criteria
 - how findings should be documented for permit development
 - Use of compliance schedules
- ▶ Sharing knowledge: Permit writers will
 - request data collected be included in LASR
 - notify Assessments of cases where criteria have changed or errors were identified

Memo Review

- ▶ Open comment period for two weeks (due 10/28/2015)
- ▶ Please call or email Spencer Bohaboy for questions and/or to post comments
 - 503-229-5415
 - Bohaboy.Spencer@deq.state.or.us
- ▶ Final version should be issued within a few weeks depending upon comments
- ▶ Ultimately, the memo will be incorporated into the Mixing Zone IMD and referenced in the RPA IMD