- WAC 173-245-040 CSO reduction plan. (1) The CSO reduction plan must be sufficiently complete so that plans and specifications can be developed from it for projects that may proceed into design within two years of plan submittal. Sufficient detail of any remaining projects must be provided so that detailed engineering reports can be prepared in the future.
- (2) CSO reduction plans shall include the following information together with any other relevant data as requested by the department.
- (a) Documentation of CSO activity. Municipalities shall complete a field assessment and mathematical modeling study to establish each CSO's location, baseline annual frequency, and baseline annual volume; to characterize each discharge; and to estimate historical impact by:
- (i) Flow monitoring and sampling CSOs. Monitoring and sampling at one or more CSO sites in a group that are in close proximity to one another is sufficient if the municipality can establish a consistent hydraulic and pollutant correlation between or among the group of CSO sites. Sampling may not be required for CSO sites that serve residential basins; and
- (ii) Developing a rainfall/stormwater runoff/CSO model to simulate each CSO site's activity; and
- (iii) Verifying the model's accuracy with data collected under
 (a)(i) of this subsection; and
- (iv) In circumstances where an historical impact may be discernible, observing and sampling the receiving water sediments adjacent to each CSO site or group of sites to establish the presence and extent of any bottom deposits; and
- (v) If the sewer service area upstream of a CSO site includes sanitary sewer sources other than domestic sewage, samples of the sediment deposits shall receive heavy metal analysis and organic pollutant screening. Pending review of results of these analyses, the department may require additional pollutant analyses. If two or more CSO sites serve the same industrial/commercial sources, sediment sampling adjacent to one representative CSO site may suffice.
- (b) To achieve the greatest reasonable reduction at each CSO site, control/treatment alternatives that shall receive consideration include, but are not limited to:
- (i) Use of best management practices, sewer use ordinances, pretreatment programs, and sewer maintenance programs to reduce pollutants, reduce infiltration, and delay and reduce inflow; and
- (ii) In-line and off-line storage with at least primary treatment and disinfection at the secondary sewage treatment facility that is served by the combined sewer; or
- (iii) Increased sewer capacity to the secondary sewage treatment facility that shall provide at least primary treatment and disinfection; or
- (iv) At-site treatment equal to at least primary treatment, and adequately offshore submerged discharge. At-site treatment may include a disinfection requirement at CSO sites that are near or impact water supply intakes, potentially harvestable shellfish areas, and primary contact recreation areas; or
 - (v) Storm sewer/sanitary sewer separation.
- (c) Analysis of selected treatment/control projects. Municipalities shall conduct an assessment of the treatment/control project or combination of projects proposed for each CSO site. The assessment shall include:
- (i) An estimation of the water quality and sediment impacts of any proposed treated discharge using existing background receiving wa-

ter quality data, and estimated discharge quality and quantity. The department may require a similar analysis for proposed storm sewer outfalls for basins that drain industrial and/or commercial areas; and

- (ii) An estimation of the selected projects' impacts on the quality of effluent from and operation of a municipality's secondary sewage treatment facility. During wet weather flow conditions, a municipality shall maximize the rate and volume of flows transported to its secondary sewage treatment facility for treatment. However, those flows must not cause the treatment facility to exceed the pollutant concentration limits in its NPDES permit; and
- (iii) The estimated construction and operation and maintenance costs of the selected projects; and
- (iv) The general locations, descriptions, basic design data, sizing calculations, and schematic drawings of the selected projects and descriptions of operation to demonstrate technical feasibility; and
- (v) An evaluation of the practicality and benefits of phased implementation; and
- (vi) A statement regarding compliance with the State Environmental Policy Act (SEPA).
- (d) Priority ranking. Each municipality shall propose a ranking of its selected treatment/control projects. The rankings must be developed considering the following criteria:
- (i) Highest priority must be given to reduction of CSOs that discharge near water supply intakes, public primary contact recreation areas, and potentially harvestable shellfish areas;
- (ii) A cost-effectiveness analysis of the proposed projects. This can include a determination of the monetary cost per annual mass pollutant reduction, per annual volume reduction, and/or per annual frequency reduction achieved by each project;
- (iii) Documented, probable, and potential environmental impacts of the existing CSO discharges.
- (e) Municipalities shall propose a schedule for achieving "the greatest reasonable reduction of combined sewer overflows at the earliest possible date." (RCW 90.48.480.) If the agreed upon schedule exceeds five years, municipalities shall propose an initial five-year program of progress towards achieving the greatest reasonable reduction. Factors that municipalities and the department shall use to determine compliance schedules shall include but not be limited to:
 - (i) Total cost of compliance;
 - (ii) Economic capability of the municipality;
- (iii) Other recent and concurrent expenditures for improving water quality; and
- (iv) The severity of existing and potential environmental and beneficial use impacts.

[Statutory Authority: RCW 90.48.110. WSR 00-15-019 (Order 00-07), § 173-245-040, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. WSR 87-04-020 (Order DE 86-34), § 173-245-040, filed 1/27/87.1