Summary of Changes from the Draft to the Final 2002 Integrated 303(d) List

Below is a summary of the changes from the February 22, 2002 draft document that have been made and incorporated in the Final 2002 Integrated 303(d) List. Most changes are in direct response to comments made during the public review process.

Priority Ranking and TMDL Development

Several commentors noted inconsistencies in the prioritization scheme used to rank waters for TMDL development. The 1998 303(d) List used a mix of numerical and "low" priority rankings. All of the numerical rankings carried over from the 1996 list (i.e., priorities 1 through 23) have been changed to a "high priority" for TMDL development to be consistent with the "high," "medium" and "low" priority scheme adopted by MDE in 2002.

Although §6.1 of the Draft 2002 Integrated 303(d) List stated that "TMDL work would begin on high priority waters within two years even though they might not be completed in two years," some commentors felt that the Department did not clearly identify waters targeted for TMDL development in the next two years. In response, a check box was included in final list to further identify those listings slated for TMDL development in the next two years. In addition to the high priority waters, some other lower priority waters have also been targeted for TMDL development in the next two years. Consult §6 for specific revised language on TMDL development and priority ranking.

Impairing Substance Category

Some commentors cited data that they felt merited further refinement of the "impairing substance" category in order to more specifically identify the probable cause of water body impairment. Where the commentors provided supporting data, changes were made to the listing. In most cases, the changes were made to the biological impairments where stream habitat data indicated a likely sediment problem. Accordingly, the "impairing substance" was changed from biological to sedimentation. However, the "impairment category" remained biological, not substantially altering the listing itself.

Tidal Versus Non-Tidal Listings

The 1998 listings for sediments, nutrients, and bacteria in the Anacostia River (basin code 02140205) were non-specific and did not designate whether the listings were for tidal or non-tidal waters. Since Maryland includes both tidal and non-tidal waters in the Anacostia basin, the listing was clarified to reflect this. Also, Rock Cr. (02140206) was erroneously listed as a "Tidal" water when addressing the nutrient and sediment impairments. These Rock Creek listings have been changed to "Non-tidal" as no tidal portion of the creek resides in Maryland.

Sources of Impairment

The 303(d) regulations require the Department to identify, where practicable, the sources of pollution for 303(d) listed impairments. Most watersheds have point, non-point and natural sources that are either causing or contributing to the identified impairment. Some commenters noted listings where the Department failed to mention or erroneously cited a given source of pollution as contributing to watershed impairment. Where specific comments were received in this regard, pollution sources were added to or removed from the listings as appropriate. The sources of pollution identified in the listings, however, are used for informational purposes only and do not necessarily indicate a substantial source of loading to the watershed.

Mercury Thresholds

Revised thresholds have been calculated for fish tissue impairment due to mercury contamination. The current MDE threshold for 303(d) listing is 235 parts per billion. Exceedence of the 235 ppb threshold in fish tissue can pose health risks to individuals consuming the contaminated fish. This number is now included in the listing methodology (see §4.5.7.2) for toxic impairment due to methylmercury (MMHg) in fish tissue. As a result, five waters that were listed in the 2002 Draft list have not been included in the final report. These include Johnsons Pond [(MMHg = 160 ppb) Wicomico River Headwaters, basin code 02130304], Piney Run Reservoir [(MMHg = 147 ppb)] South Branch Patapsco River, basin code 02130908], Brighton Dam [(MMHg = 166 ppb) basin code 02131108], Clopper Lake [(MMHg = 182 ppb) Seneca Creek, basin code 02140208], and the Conowingo Dam Susquehanna River [(MMHg = 107) basin code 02120204]. Also, new fish tissue data for the Youghiogheny River Lake [(MMHg = 263)] Youghiogheny River, basin code 050202011 and for the Potomac River Dam #4 [(MMHg = 359) Potomac River Washington County, basin code 02140501] support listing for methylmercury impairment in fish tissue, consistent with the existing statewide mercury advisory.

Insufficient Data to Make an Impairment Determination

There were several waters for which the commentors recommended listing where the Department had insufficient data to make a water quality determination. Many of the suggested listings were partial nutrient impairments in lakes [Bishopville Pond (basin code 02130103), Wye Mills Community Lake (basin code 02130503), Myrtle Grove Lake (basin code 02140111), Hunting Creek Lake (basin code 02140303), Cunningham Lake (basin code 05020204), Brighton Dam (basin code 02131108) and Conowingo Pool (basin code 02120204)] that had been identified in the 1993-1995 Maryland Water Quality Inventory or 305(b) Report. One non-tidal creek, Double Pipe Creek (basin code 02140304) was also suggested as being listed for bacteria.

Due to the age of these data (i.e., greater than the maximum of six years identified in the joint MDE and DNR data solicitation letter – appendix A), the Department was of the

opinion that the data may not be reflective of current water quality conditions. Accordingly, these waters were placed on Part-3 of the current list indicating that there were insufficient current data to make an impairment determination. As new data are acquired, the Department will reassess these waters for impairment.

In addition, the methylmercury data for Lake Roland (Jones Falls, basin code 02130904) was determined to be insufficient due to potential quality control problems associated with laboratory analysis. This impoundment was placed on Part-3 of the list as well because of insufficient data for assessment determination.

Other Erroneously Listed Waters

Although not specifically commented upon, there were two other waters that were erroneously listed in the draft and that were delisted (Part-6) in the Final list. One was a 12-digit watershed, Gravel Creek [(021304040502, Gravelly Branch, in the Upper Choptank Watershed (02130404)], where a biological sample was re-evaluated and professional biologists determined that a large number of black flies (family Simuliidae) in the sample rendered an impairment determination difficult.

The second erroneously listed water was Loch Raven Reservoir, which was mistakenly listed for PCBs in fish tissue. PCB data in fact indicate no fish tissue impairment and Loch Raven was thus de-listed. Loch Raven Reservoir is still, however, on the list for elevated methylmercury concentrations in fish tissue and a fish consumption advisory is in effect for that impairment.

Inter-jurisdictional Waters

In MDE's TMDL and 303(d) listing coordination meetings with the District of Columbia, data were provided for the Anacostia basin (basin code 02140205) suggesting an impairment for heptachlor epoxide and PCBs in the water column. As per these data, and with District concurrence, the Anacostia has been listed as impaired for these two chemicals in the final List.

Individual Control Strategies

A few commenters felt that the 1996 Individual Control Strategies (ICS) listings in Baltimore Harbor should be moved to Part-5 of the 2002 303(d) List. The Department's position is that since the ICS's are currently in effect or in the process of implementation this effectively serves as a technological fix to the water quality impairment. As such, the ICS impairments are more appropriately listed on Part-4b of the 2002 List (see §2.1.1).