
4.8 Summary

The Impervious Cover Method was applied as a tool to support TMDL development. Specifically, the IC method was applied to support specification of existing conditions, TMDL target conditions, allocation, and MOS. The pilot TMDL applications were completed to support evaluation of the ICM as a TMDL development tool.

Each pilot watershed was evaluated by obtaining and analyzing watershed landuse data provided by the states. Land use coverage data was evaluated to obtain impervious cover maps for each sub-basin within each watershed. A TMDL target of 9% impervious cover was established for each watershed and existing %IC were estimated and compared to the 9% target. In expanded applications of the basic, recommended IC method, stormwater runoff volume and selected pollutant loads were also identified and evaluated for illustrative purposes.

Table 4-24 provides a summary of the size and estimated percent IC for each pilot TMDL watershed. The IC Method analysis predicted that five of the seven watersheds were impacted (IC > 10%) and that three of those (Tributary to Bond Brook, Three Ponds Brook, and Artic Brook) experienced severe degradation (IC > 25%). Two watersheds, Peters River and Cohas Brook were not predicted to be impacted overall from stormwater volume, so additional stressor and source identification appears warranted. The Cohas Brook watershed is relatively large, however, and two of its five sub-basins had percent IC of 11.6% and 9.2%. Thus, the Cohas Brook TMDL evaluation served to identify sub-basins within the watershed where stream quality impacts may originate.

The seven pilot TMDL applications completed using the IC method are under evaluation for feasibility for use in large TMDL applications. These pilot TMDL applications will be evaluated based on several criteria including scientific appropriateness, and defensibility and compliance with TMDL process protocols (e.g., targets, allocations, and MOS). The ICM may also be applied to support TMDL implementation including planning, BMP specification, and monitoring activities. TMDL implementation is described in Section 5 below.

Table 4-24 Pilot TMDL Watersheds with Area and Estimated Percent IC

Watershed	Area (Sq. Mi.)	Estimated Percent Impervious Cover
Tributary to Bond Brook, Maine	1.7	27%
Beaver Brook, New Hampshire	73.0	12%
Goodwives River, Connecticut	1.9	19%
Peters River, Massachusetts	7.9	7%
Three Ponds Brook, Rhode Island	1.7	47%
Cohas Brook, New Hampshire	15.0	7%
Artic Brook, Maine	1.0	38%