Watershed Development Guidelines for Anadromous Fish Spawning (April 18, 2025).

- 1. Concentrate growth into already developed areas, saving rural lands that create the best habitat conditions.
- 2. Conserving spawning habitat is linked to conserving forests, wetlands, and working farms, and conserving these areas to the maximum extent possible for fisheries should be a top priority.
- 3. Adopt a low development, natural resource protection scenario for your comprehensive plan this would be a scenario that is likely to impact spawning habitat the least.
- 4. A target level of rural development, 5% impervious surface or ≤ 0.31 structures per hectare (1 structure per 8.5 acres), supports desirable spawning habitat needed for anadromous fish.
- 5. A threshold level of suburban development where increasingly intractable problems related to spawning habitat is 10% impervious surface or 0.84 structures per hectare (1 structure per 3 acres).
- 6. Beyond 15% impervious surface or 1.51 structures per hectare (1 structure per 1.5 acres), severe spawning habitat degradation and low production are expected.
- 7. Apply innovative stormwater, flow, and sediment management to development. Do not rely on stormwater to restore or maintain spawning habitat in lieu of watershed conservation.
- 8. Management and control of erosion from construction must be improved and vigorously enforced. Construction contributes a disproportionate load of sediment for the portion of the watershed it occupies.
- 9. Stream revitalization measures such as wetland creation, water quality forestry, and expanded riparian buffers should be applied to further control erosion, manage flow, and improve water quality.
- 10. Stream revitalization measures could/should follow if flow and sediment management succeeds.
- 11. When de-icing roads, the amount of salt should be minimized and the use of alternative de-icers that are less toxic is recommended.
- 12. Invasive stream restoration techniques should only be applied to severely degraded streams that have lost most of their ecological function. Do not expect spawning to return with these techniques.
- 13. Environmental management measures should be paired with monitoring to evaluate success. Very little is known about how stormwater management impacts fish habitat and fisheries.