- 1. The presumption of establishing a long-term planning requirement is that all the permittees will have programs to correct existing problems caused at least in part by past stormwater management actions or the lack thereof. Therefore, this planning requirement must be accompanied by expansion of the Phase II permit to include a capital budget and program for implementing priority corrective, and preventive, actions identified by the planning process. By the date of permit reissuance, the Phase II permittees will have been subject to the requirement for a municipal stormwater program for 12 years. By the end of the term of the next permit, the coverage will have been 17 years. That amount of time is more than reasonable to expect those municipalities to have established a capital program and budget devoted to solving existing water quality problems. Therefore, the 2019 permit should require establishment of those programs within the 5-year term of that permit. As has traditionally been done in reducing water quality problems caused by sewage, another flow stream managed by public utilities, all levels of government should provide financial support for solving stormwater-related problems. Local governments should not be allowed to rely solely on federal and state grants and loans to implement strategies.
- 2. In addition, the permit should require that the municipal stormwater fees intended to be used to help fund priority strategies be assessed no later than fiscal year 2020. The minimum size of the assessment should also be addressed within the permit. One possible option for that minimum is to require a fractional increase in the fees that are established to meet all the other (programmatic) stormwater management requirements. Municipalities should have to be prepared to defend the adequacy of those fees. If Ecology prefers not to use fees as the basis, then simply require identification of an overall budget amount to meet the programmatic requirements, and make the capital budget requirement a fractional increase in the budget. This approach could be used for Phase I and II permittees.
- 3. The planning proposal does not require any type of assessment step or method to gauge how much action (a.k.a., strategies) are necessary to protect or restore water quality. So how can anyone judge whether the proposed strategies are reasonably adequate to achieve the goal in any particular catchment or subwatershed? If the HSPF modeling approach can be translated into new programs that allow rapid and easier use of flow data to calibrate the model for individual streams, it could be the basis for evaluating strategies and determining overall level of efforts needed.
- 4. The draft includes statements that it is difficult for the municipal stormwater managers to cross the "boundary of authority and responsibility" between growth management and stormwater management. This is used as a justification to not require non-structural strategies such as zoning, or building requirements. I remind Ecology that these permits are issued to the municipality, not the stormwater utility of a municipality. Ecology's NPDES permit requirements should not be constrained by the limits of a stormwater manager's authority. Ecology has

acknowledged that traditional structural strategies are inadequate to meet water quality objectives. By allowing local governments to take non-structural strategies off the table will limit the effectiveness of the strategies in achieving the goal and makes Ecology complicit in the long-term degradation of the aquatic resources of the state. Municipalities are already required by the State's Growth Management Act to protect fisheries resources. Ecology needs to use its NPDES authority to reinforce that requirement.

- 5. The option of using a focused implementation of stormwater strategies such as enhanced O&M, enhanced public education, and enhanced source control must not compromise a base level effort of those strategies that is necessary in all of the MS4 areas. That base level effort should be clearly defined in the permit.
- 6. For item 4.b of the planning, Ecology needs to better identify what it would consider a data gap. This could require Ecology to first identify a minimum level of data that are necessary to have a defendable prioritization. Topic areas to consider for such a minimum level might include: Flow data: Sufficient data from which to compute various metrics that have values associated with healthy versus unhealthy conditions for PS lowland streams.
 Channel conditions: stream channel embeddedness, stream bank stability. Consider use of the

rapid stream channel assessment protocols identified in local studies and by the Center for Watershed Protection.

Historical and current fish presence

Physical and Chemical Water Quality Parameters:

Sufficient dissolved oxygen and temperature data from which to assess compliance with the time-dependent water quality standards

Stormwater-related toxics: Cu, Zn, a petroleum-based parameter (BTEX?)

B-IBI scores

The above list of data types are desirable and should be used when available. But a subset may be acceptable for setting initial priorities. When a municipality does not have a minimum amount of data, it is an Ecology policy decision re whether to give the permittee an extra amount of time to collect data before an initial prioritization, or to allow an initial prioritization followed by collection of the minimum data. In the latter case, a reanalysis of priorities is in order.

- 7. Using terminology as defined in the Watershed Characterization guidance, is a municipality with basins only in the conservation and development quadrants (i.e., lower priorities) expected to employ a similar level of effort to restore, as compared to a municipality with one or more basins in the protection and/or restoration quadrants?
- 8. If restoration and protection strategies are to be developed for some or all of priority basins, how many priority basins must a municipality designate? Consider requiring strategies for at least some minimum percentage of the MS4 service area. A 10% requirement implies a goal of developing strategies over a 50 year period (i.e., 10% per permit term). Note that this does not correspond to implementing strategies over 50 years, but rather a much longer time frame.

- 9. Step 3 in the prioritization process requires an interim report that includes identification of the percentage of total impervious area per basin. Note that local studies have concluded that the percentage of forest cover retained is also an indicator of watershed health and the potential for recovery. Therefore, have municipalities report not only TIA, but forest cover, and lawn/landscape/pasture percentages if possible. Forest cover percentages may be computable (and may already be estimated) from the satellite image interpretations paid for by Ecology. The "Sanborn" estimates originally on the X drive at Ecology have been updated at least twice; the latest effort not more than five years ago.
- 10. Be careful about allowing municipalities to use their capital budgets to solve problems in "higher priority" basins in other jurisdictions. Municipalities cannot be relieved of their responsibility to rectify the water quality problems caused by their MS4. It may be possible to allow this approach if the money is used in a basin that the municipality shares with another municipality.
- 11. Under "Approach/Methods for Catchment Area Planning:

Add "more stringent requirements for development" to section 3.a. In Section 3.e., it is not clear that "more targeted or focused" means more stringent. In Section 3.f., how is a municipality supposed to "identify where build-out at current or proposed zoning will not be adequately mitigated" without the use of a quantitative tool such as the evaluations done in the last Phase I permit? See comment # 3 above.