Stormwater Discipline Report Checklist

Project Name: _____ Job Number: _____

Contact Name: _____

Date Received: _____ Date Reviewed: _____ Reviewer: _____

(SAT = Satisfactory; INC = Incomplete; MIS = Missing; N/A = Not Applicable)

Answers are required for questions which have no N/A box.

A Stormwater Discipline Report can be highly detailed or extremely concise depending upon whether the level of impact or controversy is substantial or minimal. Project teams should take care to "right-size" the discipline report so it adequately addresses the impacts and controversy without over-analyzing or providing unnecessary information.

I. Summary of Conclusions

The summary of conclusions should be written in Plain Talk language.

SAT	INC	MIS	N/A	
❑	❑	❑		A. Findings and impact conclusions relating to water quality and quantity effects of the proposed project.
❑	❑	❑		B. Mitigation recommendations to offset any adverse impacts of the project.

II. Purpose and Need for the Action

SAT	INC	MIS	N/A	
❑	❑	❑		A. Purpose and need for the project to include what the project entails and why it is being conducted.
❑	❑	❑		B. Final use of the discipline study.
❑	❑	❑		C. Relevant background information on the project along with an identification of entities with vested interests.

III. Description of Alternatives

SAT	INC	MIS	N/A	
❑	❑	❑		A. Succinct description of each alternative being evaluated, including the no-action or no-build alternative. Include the site-specific requirements and constraints associated with each proposed alternative.
❑	❑	❑		B. Summarize differences between alternatives as they relate to stormwater impacts.
❑	❑	❑		C. Map(s) or figure(s) showing alternatives and project boundaries.

IV. Studies, Coordination, Methods, and Regulations

The purpose of this section is to provide adequate evidence of the background work and resources used to justify the analysis approach taken. This includes a review of rules and regulations and the proposed project's compliance.

SAT	INC	MIS	N/A	
❑	❑	❑		A. Summarize Baseline Documentation:
❑	❑	❑	❑	1. Describe all potentially affected water resources in the project area.
❑	❑	❑	❑	2. List all reports, data sources acquired, and contacts made during project development in an appendix.
❑	❑	❑	❑	3. Summarize those data sets or reports most pertinent to the project, how they will be used for the analysis, and why they were selected.
❑	❑	❑		B. Identify the rules and regulations that are relevant to the project and how they relate to stormwater and future stormwater conditions.
❑	❑	❑	❑	1. WSDOT Plans, Programs, and Policies.
❑	❑	❑	❑	2. Growth Management Act and Comprehensive land use plans (review GMA restrictions limiting development).
❑	❑	❑	❑	3. Local basin plans, watershed protection plans, watershed analysis, etc.
❑	❑	❑	❑	4. Critical areas ordinances.
❑	❑	❑	❑	5. Wellhead/aquifer protection plans. (Refer to groundwater discipline study.)
❑	❑	❑	❑	6. Combined sewer outfall reduction plans (only if runoff will be discharging to a combined sewer system).
❑	❑	❑	❑	7. Total Maximum Daily Loads (TMDLs) and 303d status.
❑	❑	❑	❑	8. Limiting Factors Analysis, Habitat Conservation Plans, 4D rules, or relevant biological assessments.
❑	❑	❑	❑	9. Local Shoreline Plans and Ordinances.
❑	❑	❑	❑	10. Shellfish Closure Response Plans.

V. Project Area Then and Now

This section establishes the natural environment and overlaying built environment from which impacts will be evaluated and compared. The detail and focus should be commensurate with the level of impacts anticipated.

SAT	INC	MIS	N/A	
❑	❑	❑		A. Description of natural framework to surface water.
❑	❑	❑	❑	1. Description of soils and their potential to cause or mitigate water quality/quantity problems. Consider geologic setting, slopes, hazardous areas, soil types, soil drainage, water holding characteristics and erodibility.

SAT	INC	MIS	N/A	
❑	❑	❑	❑	2. Description of climate.
❑	❑	❑		B. Description of Surface Water Resources.
❑	❑	❑	❑	1. Identify basin, sub-basin, and project boundaries.
❑	❑	❑	❑	2. Identify WRIA(s).
❑	❑	❑	❑	3. Summary of available sampling data and assessment of its adequacy.
❑	❑	❑	❑	4. Surface water body locations and typing.
❑	❑	❑	❑	5. Surface water quality classifications of waterbodies and their beneficial uses.
❑	❑	❑	❑	6. CWA 303 (d) listed waters. Identify the phase of Ecology listing, i.e., is there a TMDL plan in place, under development, or in the implementation phase?
❑	❑	❑	❑	7. Source identification for existing and/or historical surface water quality problems (point and nonpoint source pollutants).
❑	❑	❑	❑	8. Stream channel features that influence its vulnerability to project impacts (width, depth, riparian vegetation, bank condition, etc.).
❑	❑	❑	❑	9. Identify existing drainage pathways and stormwater outfall locations. Quantify existing impervious surface.
❑	❑	❑	❑	10. Surface water hydrologic features (discharge rates peak and minimum instream flows).
❑	❑	❑	❑	11. Marine waters (tidal and current patterns, flushing rates for estuarine systems, etc.).
❑	❑	❑	❑	12. Reference to hazardous materials analysis if soil or sediment quality and contamination are an issue.
❑	❑	❑	❑	13. Reference to wetland analysis and possible summary of key related issues.
❑	❑	❑	❑	14. Reference to groundwater analysis and possible summary of key related issues.
❑	❑	❑	❑	15. Reference to floodplain analysis and possible summary of key related issues.
❑	❑	❑	❑	16. Reference to fisheries analysis and possible summary of key related issues (especially in areas with ESA concerns).
❑	❑	❑		C. Other issues and constraints.
❑	❑	❑	❑	1. Describe public and private water supply sources including wellhead protection areas and identified aquifer recharge areas.
❑	❑	❑	❑	2. Briefly describe spill data (historical records of major spills, locations, extent, etc.) and reference the hazardous materials discipline report.
❑	❑	❑	❑	3. Groundwater contamination and remediation actions, also referencing the hazardous materials discipline report.

VI. Environmental Consequences

The focus and level of detail for this evaluation should be commensurate with the level of concern. The assessment should consider construction, operational, and indirect impacts from project development. The cumulative environmental effects of the proposed actions, in the context of other actions in the surrounding environments, should be addressed on a watershed basis. A summary statement should be included for all significant impacts.

Comparison of Alternatives

SAT	INC	MIS	N/A	
❑	❑	❑		A. Clearly identify all significant construction activities and potential impacts for each alternative considering:
❑	❑	❑	❑	1. Erosion and sedimentation potential and the risks to water quality.
❑	❑	❑	❑	2. Describe all activities that could have an effect on water quality such as in-water, over-water, or near-water work.
❑	❑	❑	❑	3. Work in erosion hazard zones.
❑	❑	❑	❑	4. Potential pH impacts (when extensive concrete work is involved).
❑	❑	❑	❑	5. Extent of clearing and grading.
❑	❑	❑	❑	6. Potential impacts associated with project staging areas.
❑	❑	❑	❑	7. Refer to Groundwater study for potential impact to groundwater quality and sole source aquifers from contaminant sources.
❑	❑	❑	❑	8. Refer to Hazardous Materials study for information on sediment quality, contamination sources and potential spillage pathways.
❑	❑	❑		B. Evaluate operational impacts for each alternative, considering:
❑	❑	❑	❑	1. Impacts of projected typical highway runoff on loadings to receiving waters (see the Quantitative Procedures for Surface Water Impact Assessments (pdf 98 kb) technical guidance document).
❑	❑	❑	❑	2. Effects of impervious surface additions and alterations to surface hydrology.

Indirect and Cumulative Effects

SAT	INC	MIS	N/A	
❑	❑	❑		A. Evaluate indirect impacts for each alternative, considering:
❑	❑	❑	❑	1. Nonpoint source problems.
❑	❑	❑	❑	2. Water quantity concerns.
❑	❑	❑	❑	3. Hydrologic impacts due to long-term stream flow impairment and changes in stormwater quantities.
❑	❑	❑	❑	4. Changes in land use patterns along the transportation corridor.

SAT	INC	MIS	N/A	
❑	❑	❑		B. Evaluate cumulative impacts:
❑	❑	❑	❑	1. Evaluate direct impacts (e.g., pollutant loading, impervious surface increases, permanent stream crossings, loss of properly functioning riparian zone).
❑	❑	❑	❑	2. Evaluate indirect impacts on a watershed scale, especially considering the impacts of future development (e.g., potential changes in stream flow pattern and morphology).

Conservation and Mitigation

A. Conservation Measures

Conservation measures are required activities or standard practices that are routinely employed on WSDOT projects to avoid or minimize impacts on water quality and quantity. These activities are often incorrectly considered mitigation measures and should be discussed separately.

Some projects are recommended to summarize these required activities in the Stormwater Discipline Report, however it is not essential.

SAT	INC	MIS	N/A	
❑	❑	❑	❑	Brief description with general statements about the *Highway Runoff Manual* or project specific requirements such as Temporary Erosion and Sediment Control and spill prevention measures, groundwater protection, stormwater treatment and general maintenance practices. Any descriptions about BMPs that may be installed to treat highway runoff should include a caveat that these facilities may change as project design progresses.

B. Mitigation Measures

Summarize the activities that reduce impacts that remain despite required conservation measures. Consider measures that restore or replace environmental resources. Mitigation measures should be evaluated for site-specific problems and for cumulative impacts related to overall watershed development.

SAT	INC	MIS	N/A	
❑	❑	❑		A. Identify all mitigation for significant impacts for each alternative. Mitigation strategies include stormwater retrofit, off-site mitigation or restoration options or plans, opportunities for utilizing special/newly researched BMPs, assistance with watershed priorities set through watershed planning, Low Flow Frequency Analysis, etc.
❑	❑	❑		B. Summarize project elements that reduce impacts or the potential for impacts from construction activities.
❑	❑	❑	❑	1. Measures to protect water quality above and beyond those required.
❑	❑	❑	❑	2. Potential stormwater BMP retrofit opportunities above and beyond required stormwater treatment.

General Comments: _____

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