

# Surface Water 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 Surface Water 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

- |                          |                          |                          |  |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | A. Findings and impact conclusions relating to water quality and quantity effects of the proposed project. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | B. Mitigation recommendations to offset any adverse impacts of the project.                                |
- 

## II. Purpose and Need for the Action

SAT INC MIS N/A

- |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | A. Purpose and need for the project to include what the project entails and why it is being conducted.            |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | B. Final use of the discipline study.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 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

- |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | B. Summarize differences between alternatives as they relate to surface water resources.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 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
-----	-----	-----	-----

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

- |                          |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | A. Description of natural framework to surface water.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 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

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

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

### ***Indirect and Cumulative Effects***

SAT INC MIS N/A

- |                          |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | A. Evaluate indirect impacts for each alternative, considering:                                     |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Nonpoint source problems.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. Water quantity concerns.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. Hydrologic impacts due to long-term stream flow impairment and changes in stormwater quantities. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. Changes in land use patterns along the transportation corridor.                                  |

SAT INC MIS N/A

- |                          |                          |                          |                          |  |
|--------------------------|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | B. Evaluate cumulative impacts:  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Evaluate direct impacts (e.g., pollutant loading, impervious surface increases, permanent stream crossings, loss of properly functioning riparian zone).                  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 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 surface water discipline report, however it is not essential. See the Mitigation Measures section of Surface Water Discipline Report Technical Guidance, for more information on what qualifies as mitigation and what should be considered required conservation measures.

SAT INC MIS N/A

- |                          |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Brief description with general statements about the <a href="#">Highway Runoff Manual</a> 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

- |                          |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | 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., |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | B. Summarize project elements that reduce impacts or the potential for impacts from construction activities.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Measures to protect surface water resources above and beyond those required.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. Potential stormwater BMP retrofit opportunities above and beyond required stormwater treatment.  |

General Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_