

Table 1: Summary of general and discipline-specific guidance for writer's and document reviewers.

Document Inconsistencies	
Writer	Reviewer
<ul style="list-style-type: none"> Establish naming conventions for project phases and alternatives. Track name changes. Inform discipline report writers as name changes occur. Run a "find and replace" word search prior to submitting document for review to eliminate these types of errors. Create an author's packet. Ensure document content supports the conclusions. Ensure that information is consistent between sections and technical documents. Verify that project elements (alignments, lanes, ramps) are correct and consistent. Stipulate level of detail (right size) for sections and analysis. 	<ul style="list-style-type: none"> Ask authors for established naming conventions for project phases and alternatives. Request a copy of the author's packet. Inconsistent/mismatched information should be ranked a 1 or 2 priority. Conflicting conclusions should always be rated as priority 1 concern.
Editorial	
Writer	Reviewer
<ul style="list-style-type: none"> Thoroughly edit documents before sending for review. Make editing a requirement in the consultant contract. Watch for cut and paste errors. Ensure that section headings and content match up. Make sure references are included and are correct. 	<ul style="list-style-type: none"> Most editorial comments should be given a low priority rating. Focus review on content and not on stylistic or editorial issues. Discuss this issue with project lead and set expectations.
Writing Style	
Writer	Reviewer
<ul style="list-style-type: none"> Non-technical documents should be written in the plain talk/reader-friendly format. Include this as a contract requirement. Use discipline-specific standard language. Define technical terms and use terms consistently. Documents need to be "right-sized". 	<ul style="list-style-type: none"> Focus reviews on standard language and appropriate use of correct terminology. Avoid stylistic comments unless specifically requested to include them.
Graphics	
Writer	Reviewer
<ul style="list-style-type: none"> Do graphics need to clearly convey information at the right scale? Do graphics include important project information such as project limits and landscape features (i.e. wetlands), and location of impacts and improvements? Include standard graphic elements (north arrow, scale, legend, etc.) and verify that graphic labeling is correct. Do graphics strengthen information conveyed in the text? Use a standard graphic layout format as included in the author's packet. Graphics need to reproduce well in black and white. Make this a requirement in the consultant contract to reduce cost. 	<ul style="list-style-type: none"> FHWA is particularly concerned with the readability, consistency, and completeness of graphics. Reviewers should focus attention on the clarity of graphics. Ask the project manager if they have established a standard graphic layout. Be specific when commenting on graphics. Attach an annotated copy of the drawing to the comment form if needed.

EIS and EA Content	
Writer	Reviewer
<p><u>Project Description</u></p> <ul style="list-style-type: none"> Write complete and correct project description (include all project elements, locations and impacts). Include details (i.e. structure and construction sequence). Justify the foot print of the project. Write text that is informative to the uninformed and detail is appropriate (right size). Define Terms in document. <p><u>Impacts</u></p> <ul style="list-style-type: none"> Fully describe all impacts (cumulative, construction, secondary, temporary) for all alternatives. Use definitive terms for impacts and include avoidances. Support conclusions and mitigation for all alternatives. Confirm mitigation with Federal Lead (i.e. FHWA). <p><u>Conclusions</u></p> <ul style="list-style-type: none"> Provide sufficient support for conclusions. Provide sufficient details to support all effects determinations and assure support and clarity of text. Describe commitments and assure they are appropriate to impacts and regulation. <p><u>Project Alternative/Options</u></p> <ul style="list-style-type: none"> Show differences between all alternatives and discuss process and screening for their development. Ensure alternatives are sufficient and consistent described (or explain why not). <p><u>Process</u></p> <ul style="list-style-type: none"> Know all reg's and discipline processes (i.e. NEPA/SEPA). Regulatory determination should be supported by and attributed to the lead agency. Address all public comments, summaries key ideas, and take care on the tone of response. <p><u>Content</u></p> <ul style="list-style-type: none"> Ensure that writing is appropriate for specific document stage (i.e. for DEIS or updated to FEIS). Provide relevant & meaningful information on resource. Provide sufficient description of discipline or technical information to support project decisions. Ensure independence of project is described & supported Reference discipline results from the most recent documentation. Update with new information. Fully and consistently describe and support technical and project assumptions. Check consistent use of terms and correct layout of text and headings in document. Check math, numbers, quantities, time estimates. 	<p><u>Project description</u></p> <ul style="list-style-type: none"> Check the level of detail of document (right size). Assure that the project description is complete. Are project structures described (i.e. staging areas, location of structures etc.)? Is the project foot-print described and justified (i.e. project termini and right or ways)? Are terms defined that are used in document (especially when specific to the project)? <p><u>Impacts</u></p> <ul style="list-style-type: none"> Ensure that all impacts (cumulative, construction, secondary, temporary) are correctly described and supported for all alternatives. Check that impact discussion is properly located in the document. Ensure that impact discussion focuses on the type of impact being addressed. Are definitive terms used to describe impacts? <p><u>Conclusions</u></p> <ul style="list-style-type: none"> Ensure that conclusions are supported. Check effects determination (is there sufficient details and are they supported). Check appropriateness of commitments (relative to impacts and regulatory requirements). <p><u>Project Alternative/Options</u></p> <ul style="list-style-type: none"> Check alternatives for level of detail, that differences are shown, and consistence through all NEPA documents. Ensure that the screening process for alternatives is described. <p><u>Process</u></p> <ul style="list-style-type: none"> Are public comments fully address and check the tone of the responses. <p><u>Content</u></p> <ul style="list-style-type: none"> Is the text appropriate for the document stage (or type of document, section title, or issue). Are terms consistently used and defined when needed? Verify consistent level of detail (or if not, why). Ensure that summaries are complete and appropriate in detail. Ensure that the independence of project is described and supported.

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Section 4(f)	
Writer	Reviewer
<ul style="list-style-type: none"> Quantify impacts and adequately describe the effect of the project on the resource. Describe how effect determinations were made. Include discussion about the alternatives. Support conclusions. Include a map or air photo showing the property boundaries, ownership information and project location. 	<ul style="list-style-type: none"> FHWA is particularly concerned that accurate description of impact size and location to Sec 4(f) properties are given. Develop well supported conclusions. Document that the appropriate Sec 4(f) process was followed (de minimus, programmatic, or individual).
Visual Impacts	
Writer	Reviewer
<ul style="list-style-type: none"> Include the cause of impact and background information. Accurately discuss the cause of impact and describe the resulting effects. Portray complete view shed (both of the project and from nearby areas) to capture full viewer perspective. 	<ul style="list-style-type: none"> Ensure project description is complete. Review elements that cause visual impacts correctly. Make sure the viewer's perspective is accurately portrayed.
Historic, Cultural and Archaeological Resources	
Writer	Reviewer
<ul style="list-style-type: none"> Fully describe the project, including resource properties and prehistory information. Verify units (quantities) used in the report. Support determinations completely. Discuss all impacts (such as construction impacts and beneficial impact) not just adverse impacts. Provide information to support effect determinations. Include activities supporting legal and public process. 	<ul style="list-style-type: none"> Confirm project description is complete, all properties are adequately described and prehistory information is included. Review that impacts are discussed (construction impacts and beneficial impacts) as well as adverse impacts. Check that Section 106 and Sec 4(f) resource processes are sufficiently followed and documented.
Land Use	
Writer	Reviewer
<ul style="list-style-type: none"> Make sure the project description is complete. Discuss specific change in land use and cause. Include a discussion of improvements (positive impacts). Verify conclusions are supported and content is consistent with state and regional plans. Provide complete information on all land uses in the project area. State the project lead/co-lead in the document. 	<ul style="list-style-type: none"> Look for completeness of project description information including baseline data and impacts. Cross-check conclusions to ensure validity. Review procedures with care to ensure that the appropriate study process has been followed.
Wildlife, Fish and Vegetation	
Writer	Reviewer
<ul style="list-style-type: none"> Provide resource-specific project description and details. Ensure that all protected species are addressed. Discuss impacts. Discern between construction and 	<ul style="list-style-type: none"> Focus review on completeness of project description details and impacts. Verify that ESA consultation and compliance with BO

<ul style="list-style-type: none"> operational impacts. Discuss benefit to resource. Address ESA consultation and compliance. Include BO terms and conditions. Don't over commit. 	<p>terms and conditions are addressed appropriately in the report.</p>
Social and Economic (and Environmental Justice)	
Writer	Reviewer
<ul style="list-style-type: none"> Cover direct, indirect and cumulative effects. Highlight the benefits of the project. Discuss the alternatives and differences. Discuss efforts made to engage the community and what we heard from them. 	<ul style="list-style-type: none"> FHWA is particularly concerned with the accurate identification of EJ communities, the scope of the impact, and the level and effectiveness of public involvement. Comments about the public and legal process were more common for EJ issues than for any other discipline. Pay particular attention to these areas in your review.
Wetlands	
Writer	Reviewer
<ul style="list-style-type: none"> Describe baseline conditions. Accurately describe the wetland functions. Provide a complete discussion of impacts (where, what, how, etc.). Correctly portray impacts and verify impact details. Demonstrate that proposed minimization measures will address project impacts. Discuss differences between the alternatives. Provide detailed information. Understand and identify commitments. 	<ul style="list-style-type: none"> Check for completeness and correctness of project description and impacts discussion. Check for accuracy and consistency of numbers throughout document. Check that numbers are most up to date or final numbers.
Energy	
Writer	Reviewer
<ul style="list-style-type: none"> Include a complete project description containing the appropriate level of background information. Discuss the source of impacts. Focus impact discussion at the appropriate level (i.e. discuss emissions and energy use, not global warming). Make sure all conclusions are supported and data conveys the correct message. Articulate the differences between the alternatives. Include methodology and use most current information. Be aware of the level of precision your information suggests. Always present information in a way that is useful to the reader/public. Verify information and calculations are correct 	<ul style="list-style-type: none"> Focus efforts on completeness of project description details and background information; Source of and level of energy consumption should be included and discussed at the appropriate scale. Check that conclusions are supported and clearly written. The alternative discussion should include the benefits/trade-offs of each. Ensure methodology is clear and complete and sources are current.