

## Executive Summary: Improving Environmental Documents - Comment Form Analysis

For more detail please reference the full report: Improving Environmental Documents

### **Purpose**

We conducted this study to determine the common comments made by FHWA and WSDOT reviewers in environmental documentation. Information about common comments can help the project teams better understand what reviewers are looking for in current projects, improve the quality of environmental documents and speed up project delivery. Results of the analysis were used to create tips for document writers and reviewers. Also, we suggest developing tools that could help WSDOT improve the quality of environmental documents.

### **Methods**

Comment forms were requested from WSDOT regions and Highways and Local Programs staff. Comment forms more than 10 years old and forms lacking a priority rating assigned to each comment were excluded from the analysis. Approximately 100 comment forms were submitted which resulted in 3807 comments from 13 projects. Comments were categorized to identify patterns and trends.

### **Results**

Results of the comment analysis are described in two categories: general and discipline-related. Information in the general category applies to all environmental document authors and reviewers. The discipline-related provides general discipline and discipline-specific information. Each section contains suggestions for ways authors and reviewers can improve their documents (see appendix).

#### General

**Document inconsistencies:** The analysis revealed two major types of contradictory content: Document inconsistent (references, organization, use of terms), and inconsistent document content (conflicting conclusions, level of detail). To increase the consistency of general project information in environmental documents, we recommend creating a style guide for an author's packet.

**Editorial:** Editorial comments include all of the basic writing and presentation elements of the text, ranging from simple spelling errors and word use issues to layout and writing style. Over 37% of all comments fell into the editorial category. A technical editor should review documents before they are sent to WSDOT and FHWA for review.

**Writing style:** Comments on writing style tended to focus on the need to improve the clarity of the text and consistency within the document.

**Graphics:** The graphics in environmental documents were found to have problems in two areas: readability and content. To improve readability and quality of graphics, we recommend the development of standard graphic templates for inclusion in the author's packet.

#### Discipline-related

**General :** Some discipline-specific comments highlighted universal problems that relate to all disciplines. The comments split into eight general categories: project description, impacts, conclusions, project alternative/option, process, content, fact checking, and other. Issues in each category include, but are not limited to: missing, incorrect or misleading information, inconsistent level of detail throughout, or conclusions are not adequately supported.

**Discipline-specific:** Please see the following table for detailed writers and reviewers guidance for disciplines with the most common mistakes.

### **Conclusion and Recommendations**

This analysis revealed several areas where environmental documents can be improved and some common errors can easily be avoided or remedied. Document writers can improve document quality by:

- Establishing a naming convention,
- Creating standards for graphics.
- Cross-checking section information to ensure it is consistent.
- Standardizing project information in an author's packet.
- Paying particular attention to process requirements.

When finalizing document content make sure the project is in line with state and regional plans, and that commitments are commensurate with impacts and the project team is not over-committing the agency to mitigation.

Editing documents for format, grammar, spelling, and organization prior to review will enable reviewers to focus on technical content. Non-technical documents should be written in the plain talk/reader-friendly format but use discipline-specific standard language and define technical terms that the reader may not be familiar with. Use terms consistently throughout the document. Most importantly, the information should be presented in a way that is useful to the reader and the public.

Each discipline has specific information they need to provide in their sections. It is important that writers provide the appropriate level of detail for projects and disciplines (right-sized). Discipline specific recommendations are summarized in the table below.

The reviewer plays an important role in providing feedback to writers. They are the discipline experts and should focus efforts on substantive content and not editorial or stylistic content. Reviewers should follow the comment form instructions on how to apply the comment priority ranking. Generally, things like inconsistent information and mismatched information that may lead the reader to misinterpret findings should be given a 1 or 2 priority rating. Conflicting conclusions should always be rated as a priority 1 concern. Most editorial comments should be given a low priority rating. Graphics should be checked for readability, consistency and completeness.

<b>Document Inconsistencies</b>															
<b>Writer</b>	<b>Reviewer</b>														
<ul style="list-style-type: none"> <li>Establish naming conventions for project phases and alternatives. Track name changes.</li> <li>Inform discipline report writers as name changes occur.</li> <li>Run a “find and replace” word search prior to submitting document for review to eliminate these types of errors.</li> <li>Create an author’s packet. See Future Work below.</li> <li>Ensure document content supports the conclusions.</li> <li>Ensure that information is consistent between sections and technical documents.</li> <li>Verify that project elements (alignments, lanes, ramps) are correct and consistent.</li> <li>Stipulate level of detail (right size) for sections and analysis.</li> </ul>	<ul style="list-style-type: none"> <li>Ask authors for established naming conventions for project phases and alternatives.</li> <li>Request a copy of the author’s packet.</li> <li>Inconsistent/mismatched information should be ranked a 1 or 2 priority.</li> <li>Conflicting conclusions should always be rated as priority 1 concern.</li> </ul>														
<b>Future Work</b>															
<p>To increase the consistency of general project information we recommend that ESO create a standardized author’s packet. An author’s packet contains basic project related information for all discipline authors to reference. An author’s packet is provided to discipline authors at the beginning of a project. A template author’s packet provides an author with a model to follow when creating their own project specific, author’s packet. Information in an author’s packet should include:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Name and contact for the project manager</td> <td style="width: 50%;">List of discipline authors and reviewers</td> </tr> <tr> <td>A project schedule</td> <td>Project description</td> </tr> <tr> <td>Discipline Report completion schedule</td> <td>Project Objectives</td> </tr> <tr> <td>Overall document schedule</td> <td>Purpose and Need statement</td> </tr> <tr> <td>Document format style guide</td> <td>Basic traffic information</td> </tr> <tr> <td>Graphic style guide</td> <td>Project design information and level of design</td> </tr> <tr> <td>Template for Discipline Report summary</td> <td>Change management protocol</td> </tr> </table>		Name and contact for the project manager	List of discipline authors and reviewers	A project schedule	Project description	Discipline Report completion schedule	Project Objectives	Overall document schedule	Purpose and Need statement	Document format style guide	Basic traffic information	Graphic style guide	Project design information and level of design	Template for Discipline Report summary	Change management protocol
Name and contact for the project manager	List of discipline authors and reviewers														
A project schedule	Project description														
Discipline Report completion schedule	Project Objectives														
Overall document schedule	Purpose and Need statement														
Document format style guide	Basic traffic information														
Graphic style guide	Project design information and level of design														
Template for Discipline Report summary	Change management protocol														
<b>Editorial</b>															
<b>Writer</b>	<b>Reviewer</b>														
<ul style="list-style-type: none"> <li>Thoroughly edit documents before sending for review.</li> <li>Make editing a requirement in the consultant contract.</li> <li>Watch for cut and paste errors.</li> <li>Ensure that section headings and content match up.</li> <li>Make sure references are included and are correct.</li> </ul>	<ul style="list-style-type: none"> <li>Most editorial comments should be given a low priority rating.</li> <li>Focus review on content and not on stylistic or editorial issues. Discuss this issue with project lead and set expectations.</li> </ul>														
<b>Writing Style</b>															
<b>Writer</b>	<b>Reviewer</b>														
<ul style="list-style-type: none"> <li>Non-technical documents should be written in the plain talk/reader-friendly format. Include this as a contract requirement.</li> <li>Use discipline-specific standard language.</li> <li>Define technical terms and use terms consistently.</li> <li>Documents need to be “right-sized”.</li> </ul>	<ul style="list-style-type: none"> <li>Focus reviews on standard language and appropriate use of correct terminology.</li> <li>Avoid stylistic comments unless specifically requested to include them.</li> </ul>														

<b>Graphics</b>	
<b>Writer</b>	<b>Reviewer</b>
<ul style="list-style-type: none"> <li>Do graphics need to clearly convey information at the right scale?</li> <li>Do graphics include important project information such as project limits and landscape features (i.e. wetlands), and location of impacts and improvements?</li> <li>Include standard graphic elements (north arrow, scale, legend, etc.) and verify that graphic labeling is correct.</li> <li>Do graphics strengthen information conveyed in the text?</li> <li>Use a standard graphic layout format as included in the author’s packet.</li> <li>Graphics need to reproduce well in black and white. Make this a requirement in the consultant contract to reduce cost.</li> </ul>	<ul style="list-style-type: none"> <li>FHWA is particularly concerned with the readability, consistency, and completeness of graphics.</li> <li>Reviewers should focus attention on the clarity of graphics.</li> <li>Ask the project manager if they have established a standard graphic layout.</li> <li>Be specific when commenting on graphics. Attach an annotated copy of the drawing to the comment form if needed.</li> </ul>
<b>Future Work</b>	
<p>Develop standard WSDOT graphic style guide for inclusion in the author’s packet to improve readability and quality of graphics. Use existing templates/standards as a starting point for building discipline specific or environmental document specific templates. This process will be closely coordinated with the EPM chapter owners, the Environmental Information group (GIS) and Region staff. The end result is a series of sample graphics and standards.</p>	
<b>General Discipline Content</b>	
<b>Writer</b>	<b>Reviewer</b>
<ul style="list-style-type: none"> <li>Making certain that all project elements, locations and impacts for each discipline are properly and fully described.</li> <li>Ensure that you are making the correct effect determination (type and level) and that it is well supported and clearly stated.</li> <li>Support all conclusions.</li> <li>Discuss the process of alternative development and screening and the differences between alternatives.</li> <li>Follow state, federal, local agency and discipline specific processes.</li> <li>Confirm with lead agencies that suggested mitigation is deemed appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Most of FHWA comments were in the editorial and missing information comment categories.</li> <li>FHWA is particularly concerned that the project details and , impacts and are fully and correctly supported.</li> <li>Verify that the public process was followed. Check that impacts are completely described and the reason for the impact is discussed.</li> <li>Make sure that conclusions are supported.</li> <li>Make sure that all discipline specific public process information is included.</li> </ul>
<b>Section 4(f)</b>	
<b>Writer</b>	<b>Reviewer</b>
<ul style="list-style-type: none"> <li>Quantify impacts and adequately describe the effect of the project on the resource.</li> <li>Describe how effect determinations were made.</li> <li>Include discussion about the alternatives.</li> <li>Support conclusions.</li> </ul> <p>Include a map or air photo showing the property boundaries, ownership information and project location.</p>	<ul style="list-style-type: none"> <li>FHWA is particularly concerned that accurate description of impact size and location to Sec 4(f) properties are given.</li> <li>Develop well supported conclusions.</li> <li>Document that the appropriate Sec 4(f) process was followed (de minimus, programmatic, or individual).</li> </ul>

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

<b>Social and Economic (and Environmental Justice)</b>	
<b>Writer</b>	<b>Reviewer</b>
<ul style="list-style-type: none"> <li>• Cover direct, indirect and cumulative effects.</li> <li>• Highlight the benefits of the project.</li> <li>• Discuss the alternatives and differences.</li> <li>• Discuss efforts made to engage the community and what we heard from them.</li> </ul>	<ul style="list-style-type: none"> <li>• FHWA is particularly concerned with the accurate identification of EJ communities, the scope of the impact, and the level and effectiveness of public involvement.</li> <li>• 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.</li> </ul>
<b>Wetlands</b>	
<b>Writer</b>	<b>Reviewer</b>
<ul style="list-style-type: none"> <li>• Describe baseline conditions.</li> <li>• Accurately describe the wetland functions.</li> <li>• Provide a complete discussion of impacts (where, what, how, etc.).</li> <li>• Correctly portray impacts and verify impact details.</li> <li>• Demonstrate that proposed minimization measures will address project impacts.</li> <li>• Discuss differences between the alternatives. Provide detailed information.</li> <li>• Understand and identify commitments.</li> </ul>	<ul style="list-style-type: none"> <li>• Check for completeness and correctness of project description and impacts discussion.</li> </ul>
<b>Energy</b>	
<b>Writer</b>	<b>Reviewer</b>
<ul style="list-style-type: none"> <li>• Include a complete project description containing the appropriate level of background information.</li> <li>• Discuss the source of impacts.</li> <li>• Focus impact discussion at the appropriate level (i.e. discuss emissions and energy use, not global warming).</li> <li>• Make sure all conclusions are supported and data conveys the correct message.</li> <li>• Articulate the differences between the alternatives.</li> <li>• Include methodology and use most current information.</li> <li>• Be aware of the level of precision your information suggests.</li> <li>• Always present information in a way that is useful to the reader/public.</li> <li>• Verify information and calculations are correct</li> </ul>	<ul style="list-style-type: none"> <li>• Focus efforts on completeness of project description details and background information;</li> <li>• Source of and level of energy consumption should be included and discussed at the appropriate scale.</li> <li>• Check that conclusions are supported and clearly written.</li> <li>• The alternative discussion should include the benefits/trade-offs of each.</li> <li>• Ensure methodology is clear and complete and sources are current.</li> </ul>