

# ENVIRONMENTAL PRODUCTS QUALITY CONTROL PROCEDURE

April 25, 2006

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## **Title VI**

The Columbia River Crossing project team ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from its federally assisted programs and activities.

## **Americans with Disabilities Act (ADA) Information**

If you would like copies of this document in an alternative format, or are deaf or hard of hearing, please call the Columbia River Crossing Project office at (360) 737-2726 or (503) 256-2726.

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# 1. Introduction

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*This report details the processes and protocols that the Parametrix team will follow for its environmental deliverables associated with the Columbia River Crossing (CRC) project . The Quality Assurance/Quality Control (QA/QC) plan applies to all Parametrix project team members and project deliverables.*

*To clarify, Quality Assurance is defined as the process that focuses on assuring that Quality Control is occurring. Quality Control is the independent examination and review of the deliverable to make sure that it meets the requirements of the contract, client, and professional standard of care.*

*Parametrix will designate a QA/QC Manager for this contract who, at various increments of time, will check that deliverables possess the required QC documentation. However, it will be the responsibility of team members to ensure that all deliverables live up to the standards outlined here.*

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## 2. Implementation

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### 2.1 Reports

Each report will go through a three-tiered review process at each draft phase.

1. Once the writer is finished drafting his/her section of the report, he/she will complete a writer's review form. This form is to check that writers have met all necessary guidelines, such as using the report templates or following correct style guidelines.
2. After the writer's review form has been completed, the report proceeds through technical review. At this stage, a technical editor will review the report for grammar, consistency, flow, citations, and references.
3. Finally, the report goes through senior review. Senior reviewers will check that the report meets all primary goals. They look at the substance of the report and conclusions to identify any portions that need further explanation or correction.

All reviewer checklist forms will be kept with Parametrix project files. Electronic templates of these forms will be kept on the Parametrix server for the duration of the project.

The review forms used by Parametrix team members are shown in Tables 2-1 and 2-2.

#### QA/QC Team

The QA/QC Manager will lead the QA/QC team for reports. The following individuals will have QA responsibilities for the focus areas identified.

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### 2.2 Data

Data will be stored on the CRC project office server. Only GIS staff will have write access to the data. Original data will be stored separately from data used and manipulated for analysis or cartographical production. Separating 'raw' and 'usable' data will ensure that data gathered in the field or acquired from other sources will be retained unchanged for future uses while also accommodating mapping and spatial analysis.

Standards for data formats, projection, and metadata have been developed by the CRC project team. GIS data will be stored in ESRI shapefile format, using the Lambert Conformal Conic, NAD83, Washington State Plane South (US feet) projection. FGDC compliant metadata will be created and maintained for data used in final production maps or analyses used in the development or screening or alternatives.

The GIS team has two staff functions: GIS Coordinator and GIS Analyst. The Coordinator is responsible for ensuring GIS analyses and maps adhere to the standards outlined in this document. The Analyst(s) will perform the majority of data management, analysis, and mapping work.

The majority of GIS deliverables will be support for other deliverables, such as:

- Agency Coordination and Regulatory
- Public Involvement
- Scoping Report
- Alternatives Screening and Development

## **2.3 Project Management**

The CRC Project Management Plan outlines the responsibilities of team members. Each phase of the project requires the creation of a phase level scope of work, project schedule and project budget. These documents will be independently self-sufficient, but will also correspond. All documents will use the same numbering system to ensure easy readability. Specifically for the project schedule, we will outline the necessary time needed for document drafting, editing and review. This schedule will be adhered to by project team members, unless the client specifically requests changes that require delays.

### **QC Adjudication**

When client or QC reviewer comments are received, the deliverable task manager and project coordinator are responsible for tracking and briefly adjudicating review comments and communicating with the QC reviewer for each review phase. This will ensure that QC comments are properly interpreted and dealt with more efficiently. Where adjudication is required, it will be documented using the Parametrix comment tracking form.

### **Documentation**

All project QC forms, review comments, and adjudication, will be filed in the project files under a QC subfolder for each deliverable. These files will be maintained by Parametrix and will include both final deliverables and all draft documents sent out for external review.



**Table 2-1 Form A – For Writers**

**Columbia River Crossing  
MDR Quality Assurance Checklist**  
*Form A - For Writers*

| <p><b>Writers:</b> Please fill out this form upon completing your MDR and forward it (hard copy) to your technical lead or QA/QC designee. Place your MDR in the directory noted below, and name it according to conventions.</p> |  |
|---|--|
| <p><b>Tech Leads or QA/QC Designees:</b> Collect this form from your writer(s) and complete Form B with your review. Forward both completed forms, in hard copy, to Colin McConaha.</p>   |  |
| <p>Section Title: _____</p>   |  |
| <p>File Name and Path: <u>          X:\3012-004 I-5 CRC\06_MDR\01_Drafts\Draft 02\MDR_XXX_2006-XX-XX-v1-xx.doc          </u></p>  |  |
| <p>Technical Lead: _____</p>  |  |
| <p>Section Writer: _____</p>  |  |
| <p>Writer Signature<br/>(on hardcopy) _____</p>   |  |
| <p>Date: _____</p>  |  |
| <p>Comments: _____</p>  |  |
| <p style="text-align: center;"><b>Quality Assurance Review Task</b><br/>(only check tasks that you feel are fulfilled)</p>  | <p style="text-align: center;"><b>Comments</b><br/>(please provide explanation for task not checked)</p> |
| <b>1. Content &amp; Style</b>   |  |
| <input type="checkbox"/> Used correct template (2005-12-16 version)   |  |
| <input type="checkbox"/> Cited all applicable regulations following ODOT Style Guide  |  |
| <input type="checkbox"/> Have drawn a clear link between regulations and data   |  |
| <input type="checkbox"/> Identified data needs as specifically as possible in sections 1.4.2 and 1.4.3  |  |
| <input type="checkbox"/> References are included as footnotes   |  |
| <input type="checkbox"/> Paragraphs have introductory sentences (alerting reader to content of paragraph)   |  |
| <input type="checkbox"/> Conclusions are appropriate, supported, and complete   |  |
| <b>2. Tables</b>  |  |
| <input type="checkbox"/> All tables include a footer reference  |  |
| <input type="checkbox"/> Data have been checked for accuracy  |  |
| <b>3. Maps and Figures</b>  |  |
| <input type="checkbox"/> All figures are referenced in text   |  |
| <b>4. Proper spelling &amp; grammar</b>   |  |
| <input type="checkbox"/> Text   |  |
| <input type="checkbox"/> Tables   |  |
| <input type="checkbox"/> Maps/Figures/Tables/Graphics   |  |

**Table 2-2 Form B – For Reviewers**

| <b>Columbia River Crossing</b><br><b>MDR Quality Assurance Checklist</b><br><i>Form B - For Reviewers</i>  |  |
|--|--|
| <b>Reviewers:</b> Please collect Form A from the writer, and complete Form B with your review. Please forward signed hard copies of both completed forms to Colin McConnaha. |  |
| Section Title:   |  |
| File Name and Path:  |  |
| (Writer's Version): X:\3012-004 I-5 CRC\06_MDR\01_Drafts\Draft 02\MDR_XXX_2006-XX-XX-v1-xx.doc   |  |
| (Reviewed Version): X:\3012-004 I-5 CRC\06_MDR\01_Drafts\Draft 02\MDR_XXX_2006-XX-XX-v1-xx.doc   |  |
| Senior Reviewer's Signature (hardcopy):  |  |
| Date:  |  |
| General Comments:  |  |
| Quality Assurance Review Task<br>(only check tasks that you feel are fulfilled)  | Comments<br>(please provide comments on tasks not checked) |
| - Senior Review -  |  |
| <b>1. Content</b>  |  |
| <input type="checkbox"/> Content: Addresses project/client objectives  |  |
| <input type="checkbox"/> Identified and properly explained relevant regulations  |  |
| <input type="checkbox"/> Data: appropriate and described in enough detail  |  |
| <input type="checkbox"/> Have drawn a clear link between regulations and data  |  |
| <input type="checkbox"/> Methods: appropriate and described in enough detail   |  |
| <input type="checkbox"/> Link between methods and data well defined  |  |
| <input type="checkbox"/> Well written (clear & concise)  |  |
| <input type="checkbox"/> Conclusions are appropriate, supported, and complete  |  |
| <b>2. Tables, figures and maps</b>   |  |
| <input type="checkbox"/> Data are accurate   |  |
| <input type="checkbox"/> Data are displayed properly   |  |
| <i>Technical Review form on back</i><br>- Technical Review -   |  |

**Table 2-2 Form B – For Reviewers (reverse side)**

|  |  |
|--|--|
| Tech Reviewer's Signature (hardcopy):  |  |
| Date:  |  |
| Comments:  |  |
| <b>1. Content &amp; Style</b>  |  |
| <input type="checkbox"/> Fully complies with template and style standards        |  |
| <input type="checkbox"/> Clear link between regulations and data                 |  |
| <input type="checkbox"/> Clear link between methods and data well defined        |  |
| <input type="checkbox"/> Paragraphs have introductory sentences                  |  |
| <input type="checkbox"/> References are included as footnotes                    |  |
| <input type="checkbox"/> Well written (clear & concise)                          |  |
| <input type="checkbox"/> Conclusions are appropriate, supported, and complete    |  |
| <b>2. Tables, figures and maps</b>   |  |
| <input type="checkbox"/> All tables, figures and maps include a footer reference |  |
| <input type="checkbox"/> All figures are referenced in text                      |  |
| <input type="checkbox"/> Information in figures is accurate                      |  |
| <b>3. Proper spelling &amp; grammar</b>  |  |
| <input type="checkbox"/> Text  |  |
| <input type="checkbox"/> Tables  |  |
| <input type="checkbox"/> Maps/Figures/Tables/Graphics                            |  |