

**UPPER COLUMBIA RIVER
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY**

**Quality Assurance Project Plan for the
Assessment of Sediment Toxicity to
White Sturgeon (*Acipenser transmontanus*)
Amendment No. 1**

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Exponent

Parametrix

HydroQual

June 2010

SECTION A: PROJECT MANAGEMENT

A1 TITLE AND APPROVAL SHEET

QUALITY ASSURANCE PROJECT PLAN FOR THE "ASSESSMENT OF SEDIMENT TOXICITY TO WHITE STURGEON (*Acipenser transmontanus*) AMENDMENT NO. 1"

Quality Assurance Project Plan Approvals

EPA Project Coordinator:	Helen Bottcher		Date: <u>6/14/2010</u>
EPA Quality Assurance (QA) Manager:	^{Gov} Gina Grepo-Grove		Date: <u>6/14/10</u>
Teck Project Coordinator:	Marko Adzic		Date: <u>06-12-10</u>
Teck Technical Team Coordinator & Task Manager:	Markus Hecker		Date: <u>6/17/10</u>

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A3 DISTRIBUTION LIST

EPA Project Coordinator:	Helen Bottcher
EPA QA Manager:	Gina Grepo-Grove
Teck Project Coordinator:	Marko Adzic
Teck Technical Team Coordinator & Task Manager:	Markus Hecker
Study Team Leader:	David Vardy

A4 INTRODUCTION

A4.1 Introduction

This amendment outlines proposed minor modifications to four of the sediment sampling stations outlined within the May 2010 *Assessment of Sediment Toxicity to White Sturgeon (Acipenser transmontanus)* Quality Assurance Project Plan (QAPP). The modifications outlined herein are limited to minor updates in physical positioning (i.e., coordinates) of sediment sampling stations.

All other aspects associated with field sampling and handling procedures, laboratory analysis, Quality Assurance/Quality Control (QA/QC) measures, and data validation activities remain unchanged from the approved QAPP (May 2010).

A4.2 Modifications

Based on technical input and at the request of the U.S. Environmental Protection Agency, minor modifications to target sediment sampling stations have been made to four sediment sampling stations. As illustrated within Map 1, one target station within the Lower Portion of Marcus Flats and two target stations within China Bend have been slightly modified to more closely align with the thalweg. In addition, one alternate station at Little Dalles was also refined. A summary of sediment sampling station coordinates using the Universal Transverse Mercator system is listed within Table A-1 and are illustrated within Map 1.

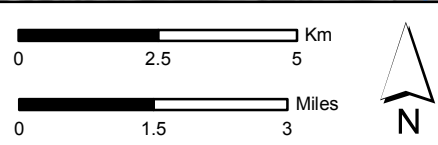
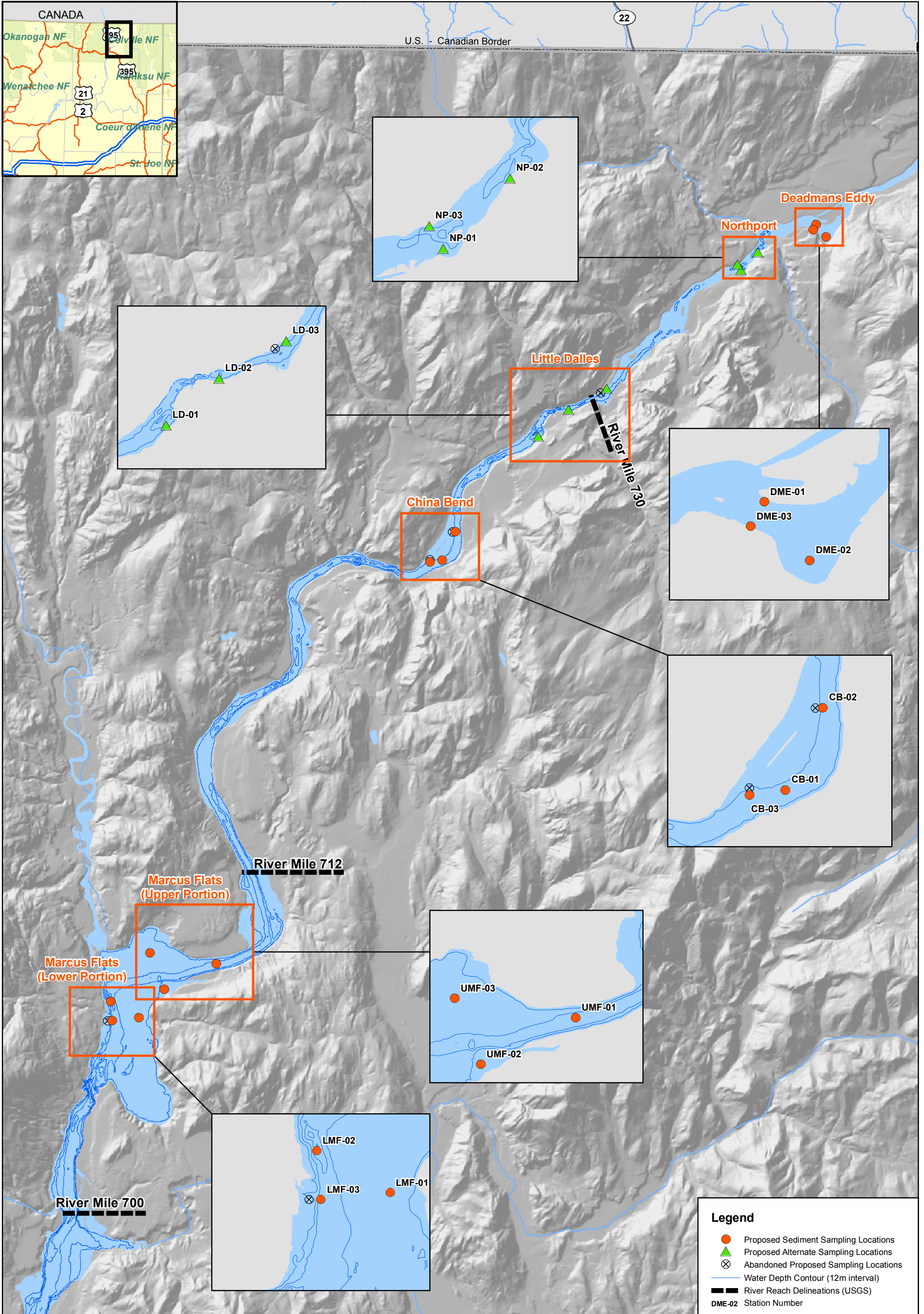
Table A-1. Universal Transverse Mercator Coordinates of Sediment Sampling Stations for White Sturgeon Toxicity Testing.

Sampling Area Description	Universal Transverse Mercator Coordinates	
	Easting	Northing
Deadman's Eddy (DME)		
DME-01	446405.316	5420949.545
DME-02	446795.613	5420448.714
DME-03	446288.597	5420740.789
China Bend (CB)		
CB-01	431604.246	5407646.304
CB-02	432120.704	5408773.751
CB-03	431112.592	5407574.889
Marcus Flats - Upper Portion (UMF)		
UMF-01	422651.955	5391668.047
UMF-02	420593.484	5390655.659
UMF-03	420027.511	5392090.602
Marcus Flats - Lower Portion (LMF)		
LMF-01	419596.598	5389522.361
LMF-02	418470.318	5390165.566
LMF-03	418534.187	5389414.844
Northport (NP) - Alternative Location		
NP-01	443442.450	5419135.820
NP-02	444108.470	5419838.750
NP-03	443302.500	5419361.440
Little Dalles (LD) - Alternative Location		
LD-01	435417.180	5412544.520
LD-02	436606.680	5413599.700
LD-03	438123.570	5414445.120

SECTION B: REFERENCES

Teck. 2010. Quality Assurance Project Plan for the Assessment of Sediment Toxicity to White Sturgeon (*Acipenser transmontanus*), Upper Columbia River RI/FS. Submitted and approved by EPA, May 2010. Prepared for Teck American Incorporated, Prepared by Entrix, Exponent, Parametrix, Inc., HydroQual, and Cardwell Consulting, LLC.

MAPS



Map 1 **Assessment of Sediment Toxicity to White Sturgeon Sediment Sample Locations**

Upper Columbia River, WA