

## **DRAFT NPS REDUCTION PLAN OUTLINE (Updated April 2011)**

### **EXECUTIVE SUMMARY**

#### **Chapter 1 Spokane River Watershed NPS Phosphorus Background and Issues**

- Section 1.1 Introduction
- Section 1.2 Background
- Section 1.3 Purpose
- Section 1.4 Phosphorus Control Approach
- Section 1.5 Watershed and Subbasin Description

#### **Chapter 2 Spokane River Watershed Total Maximum Daily Load (TMDL) Identification of NPS Phosphorus Loads**

- Section 2.1 Introduction
- Section 2.2 Summary of NPS Phosphorus Sources
- Section 2.3 Summary of NPS Phosphorus Loads and Load Allocations

Note that Chapter 2 provides the TMDL information on NPS phosphorus. Since the information is general the information and supporting analyses in Chapters 4 through 7 provide more detailed information.

#### **Chapter 3 Subbasin Assessment - NPS Phosphorus**

- Section 3.1. Watershed Nonpoint Source Phosphorus
- Section 3.2 Lower Spokane River Subbasin
  - Section 3.2.1 Lower Spokane River Subbasin Land Use
  - Section 3.2.2 Lower Spokane River Subbasin Pollution Sources
- Section 3.3 Upper Spokane River WA Subbasin - NPS Phosphorus
  - Section 3.3.1 Upper Spokane River WA Land Use
  - Section 3.2.2 Upper Spokane River WA Subbasin Pollution Sources
- Section 3.4 Little Spokane River Subbasin - NPS Phosphorus
  - Section 3.4.1 Little Spokane River Subbasin Land Use
  - Section 3.4.2 Little Spokane River Subbasin Pollution Sources
- Section 3.5 Hangman Creek Subbasin - NPS Phosphorus
  - Section 3.5.1 Hangman Creek Subbasin Land Use
  - Section 3.5.2 Hangman Creek Subbasin Pollution Sources
- Section 3.6 Upper Spokane River ID Subbasin - NPS Phosphorus
  - Section 3.6.1 Upper Spokane River ID Land Use
  - Section 3.6.2 Upper Spokane River ID Subbasin Pollution Sources
- Section 3.7 Coeur d'Alene Lake Subbasin - NPS Phosphorus
  - Section 3.7.1 Coeur d'Alene Land Use
  - Section 3.7.2 Coeur d'Alene Subbasin Pollution Sources
- Section 3.8 Upper Coeur d'Alene River Subbasin - NPS Phosphorus
  - Section 3.8.1 Upper Coeur d'Alene River Subbasin Land Use
  - Section 3.8.2 Upper Coeur d'Alene Subbasin Pollution Sources
- Section 3.9 South Fork Coeur d'Alene River Subbasin - NPS Phosphorus
  - Section 3.9.1 Upper Coeur d'Alene River Subbasin Land Use
  - Section 3.9.2 Upper Coeur d'Alene River Subbasin Pollution Sources
- Section 3.10 St. Joe River Subbasin - NPS Phosphorus
  - Section 3.10.1 St. Joe River Subbasin Land Use
  - Section 3.10.2 St. Joe River Subbasin Pollution Sources

#### **Chapter 4 Spokane River Watershed - NPS Phosphorus**

- Section 4.1 Water Quality Report Screening

Section 4.2 Report and Data Credibility Assessment  
Section 4.3 NPS Phosphorus Database  
Section 4.4 Summary of Phosphorus Dataset  
Section 4.5 Groundwater Total phosphorus Data Analysis  
Section 4.6 Groundwater Orthophosphorus Data Analysis  
Section 4.7 Surface Water Total Phosphorus Data Analysis  
Section 4.8 Surface Water Orthophosphorus Data Analysis  
Section 4.9 Prioritization of NPS Phosphorus Sources and Subbasins  
Section 4.10 NPS Phosphorus Data Gaps  
Section 4.11 NPS Phosphorus Recommended Studies

Note that Chapter 4 primarily consists of the data compilation and analyses completed during Phase 1. Chapter 5 summarizes the field data collection to fill selected data gaps. Chapters 6 and 7 address advanced analyses completed during the Phase 1 Supplement and Phase 2.

### **Chapter 5 Watershed Conditions and Supplemental Data**

Section 5.1 Visual Inspection of Watershed Conditions  
Section 5.2 Groundwater Phosphorus Source Monitoring Data {Summarize from Field Data TMs}  
Section 5.3 Surface Water Phosphorus Source Monitoring Data {Summarize from Field Data TMs}

### **Chapter 6 Spokane River Watershed – Groundwater NPS Phosphorus Advanced Analysis**

Section 6.1 Groundwater Analytical Methods and Tools for NPS Phosphorus Assessment  
Section 6.2 Applicability and Feasibility of Groundwater Techniques for Spokane River Watershed  
Section 6.3 Selection of Groundwater Analysis Techniques for Application to Spokane River Watershed  
Section 6.4 Application of Selected Groundwater Analysis Techniques

### **Chapter 7 Spokane River Watershed – Surface Water NPS Phosphorus Advanced Analysis**

Section 7.1 Surface Water Analytical Methods and Tools for NPS Phosphorus Assessment  
Section 7.2 Applicability and Feasibility of Surface Water Techniques for Spokane River Watershed  
Section 7.3 Selection of Surface Water Analysis Techniques for Application to Spokane River Watershed  
Section 7.4 Application of Selected Surface Water Analysis Techniques

### **Chapter 8 NPS Phosphorus Control Measures**

Section 8.1 Best Management Practices (BMPs) for NPS Phosphorus  
Section 8.2 Types of BMPs  
Section 8.3 Sources of BMP Information  
Section 8.4 Evaluation of BMPs  
Section 8.5 Prioritization of BMPs for Spokane River Watershed

Note that Chapters 9 through 18 combine the results of data analyses, BMP evaluation, and watershed conditions into specific watershed management strategies.

### **Chapter 9 Spokane River Watershed – NPS Phosphorus Management Strategy and Actions**

Section 9.1 Introduction  
Section 9.2 Priorities based on Phosphorus Data Analysis (Summarize and Appendix with Phase 1 TM)  
Section 9.3 Regulatory Authorities in Washington and Idaho  
Section 9.4 Nonpoint Source Phosphorus Reduction Strategy  
Section 9.5 Summary of Actions and Schedule

### **Chapter 10 Lower Spokane River Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 10.1 Introduction

Section 10.2 Implementation Strategy, Actions, and Schedule  
Section 10.3 Specific Actions by Category  
Section 10.3.X Title {Provisional Sections – dependent upon selected activities}  
Potential SubSection titles include:  
Public Education and Outreach Programs  
Urban/Suburban Stormwater Treatment and Infiltration to Groundwater  
Stormwater Runoff and Discharge to Surface Water  
Septic Sewage Abatement and Leaching to Groundwater  
Septic Sewage Abatement and Discharge to Surface Water  
Agricultural Practices, Stormwater Runoff, and Soil Erosion  
Forestry Practices

#### **Chapter 11 Middle Spokane River Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 11.1 Introduction  
Section 11.2 Implementation Strategy, Actions, and Schedule  
Section 11.3 Specific Actions by Category  
Section 11.3.X Title {Provisional Sections – dependent upon selected activities}

#### **Chapter 12 Little Spokane River Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 12.1 Introduction  
Section 12.2 Implementation Strategy, Actions, and Schedule  
Section 12.3 Specific Actions by Category  
Section 12.3.X Title {Provisional Sections – dependent upon selected activities}

#### **Chapter 13 Hangman Creek Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 13.1 Introduction  
Section 13.2 Implementation Strategy, Actions, and Schedule  
Section 13.3 Specific Actions by Category  
Section 13.3.X Title {Provisional Sections – dependent upon selected activities}

#### **Chapter 14 Upper Spokane River Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 14.1 Introduction  
Section 14.2 Implementation Strategy, Actions, and Schedule  
Section 14.3 Specific Actions by Category  
Section 14.3.X Title {Provisional Sections – dependent upon selected activities}

#### **Chapter 15 Coeur d'Alene Lake Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 15.1 Introduction  
Section 15.2 Implementation Strategy, Actions, and Schedule  
Section 15.3 Specific Actions by Category  
Section 15.3.X Title {Provisional Sections – dependent upon selected activities}

#### **Chapter 16 Upper Coeur d'Alene River Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 16.1 Introduction  
Section 16.2 Entities and Stakeholders  
Section 16.3 Overview of Reduction Strategy, Actions, and Schedule  
Section 16.4 Overview of Opportunities  
Section 16.5 Specific Actions by Category

#### **Chapter 17 South Fork Coeur d'Alene River Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 17.1 Introduction  
Section 17.2 Implementation Strategy, Actions, and Schedule  
Section 17.3 Specific Actions by Category  
Section 17.3.X Title {Provisional Sections – dependent upon selected activities}

#### **Chapter 18 St. Joe River Subbasin - NPS Phosphorus Management Strategy and Actions**

Section 17.1 Introduction  
Section 17.2 Implementation Strategy, Actions, and Schedule  
Section 17.3 Specific Actions by Category  
Section 17.3.X Title {Provisional Sections – dependent upon selected activities}

Chapters 19 through 22 are additional supporting information that typically is part of an Implementation Plan. These sections will be brief in the NPS Reduction Plan to provide the necessary and relevant information concerning the “what” and “where” components of implementation and the NPS Reduction Plan’s connectivity to the TMDL process but will not provide the level of detailed information that an implementation plan would.

#### **Chapter 19 Funding Opportunities**

#### **Chapter 20 Measuring Progress**

#### **Chapter 21 Adaptive Management**

#### **Chapter 22 Reasonable Assurances**

**Appendices (to be determined; many documents to be referenced, but not included as appendices)**