



## Contract Description:

The overall goal of the project is to restore tidal connection between the Columbia River Estuary and the floodplain situated on McCoy and Hatfield Sites through breaching of dikes and riparian plantings. These enhancements would restore connectivity to approximately ten (10) miles of slough channels previously isolated from tidal influence due to the dikes. BPA funding will be used for project design, dike removal and monitoring. Pre and post project monitoring of Blind Slough will determine project effectiveness in water quality improvement of Blind Slough's channel network as well as increased fish access to spawning and off-channel rearing habitat for salmonid species.

The Work elements for this project fall into 5 different Objectives:

### Objective 1 – Design and Coordination

**WE A: Produce Design and/or Specifications** - Design for 2 dike breaches (Hatfield's and McCoy's)

**WE B: Coordination** - Landowners for the 2 dike-breach locations

**WE C: Produce Environmental Compliance Documentation** - Supplemental Analysis

### Objective 2 - Implementation

**WE D: Enhance Floodplain** - Hatfield site (Dike Breach)

**WE E: Enhance Floodplain** - McCoy site (Dike Breach)

**WE F: Plant Vegetation** - Hatfield site

### Objective 3 – Maintenance

**WE G: Maintain Vegetation** - Hatfield site

### Objective 4 – Monitoring

**WE H: Collect/Generate/Validate Field and Lab Data** - Effectiveness Monitoring (Water quality and fish presence)

### Objective 5 – Administrative

**WE I: Produce Status Report** - Monthly Reports via Pisces

**WE J: Produce Annual Report** -

**WE K: Manage and Administer Projects** - Prepare New SOW for FY06

## **BUDGET, NARRATIVE AND DELIVERABLES**

### **Objective 1: Design and Coordination**

#### **Task 1: Restoration design (dike breach and floodplain plantings) for Hatfield site**

With the assistance of Acme Consultants, produce a design, complete with Engineering specifications and a budget, such that a contract solicitation can be advertised.

Deliverable: Final engineering drawings, specifications, and construction budget for dike breach and plantings.

Duration: March 1, 2005 through July 31, 2005

#### **Task 2: Restoration design (dike breach only) for McCoy site**

With the assistance of Acme Consultants, produce a design, complete with Engineering specifications and a budget, such that a contract solicitation can be advertised.

Deliverable: Final engineering drawings, specifications, and construction budget for dike breach.

Duration: March 1, 2005 through July 31, 2005

#### **Task 3: Coordinate with landowner, BPA's Environmental Compliance branch, and NOAA Fisheries for Hatfield site**

Throughout the design and implementation phases of this contract, coordinate with the landowner. Work with BPA to assure NEPA / ESA compliance, preparing the necessary documents – including NEPA checklist. Also coordinate with NOAA Fisheries to assure design and construction methodologies meet NOAA's specifications.

Deliverable: Quarterly report, and NEPA Checklist

Duration: March 1, 2005 through February 28, 2006

#### **Task 4: Coordinate with landowner, BPA's Environmental Compliance branch, and NOAA Fisheries for McCoy site**

Throughout the design and implementation phases of this contract, coordinate with the landowner. Work with BPA to assure NEPA / ESA compliance, preparing the necessary documents – including NEPA checklist. Also coordinate with NOAA Fisheries to assure design and construction methodologies meet NOAA's specifications.

Deliverable: Quarterly report, and NEPA Checklist

Duration: March 1, 2005 through February 28, 2006

## **Objective 2: Implementation**

### **Task 5: Implementation – Remove dikes at 2 sites (Hatfield and McCoy)**

Solicit and award a contract to breach/remove dikes at Hatfield and McCoy sites.

Deliverable: Breached dikes at Hatfield and McCoy sites.

Duration: August 1, 2005 through October 31, 2005

### **Task 6: Implementation – Plant vegetation at Hatfield site and maintain that vegetation.**

Award a contract to plant trees/shrubs and maintain them at Hatfield site.

Deliverable: 1000 each 1" diameter willows planted and watered at Hatfield site. Six-months of maintenance of planted willows to assure survivability.

Duration: October 1, 2005 through March 31, 2006

## **Objective 3: Monitoring**

### **Task 7: Pre-monitor water quality prior to implementation**

Collect water quality data using standardized methods and reporting to adequately profile post-restoration water quality conditions in temperature, salinity, dissolved oxygen, and depth.

Deliverable: Annual Report

Duration: March 1, 2005 through October 31, 2005

### **Task 8: Monitor water quality post implementation**

Collect water quality data using standardized methods and reporting to adequately profile post-restoration water quality conditions in temperature, salinity, dissolved oxygen, and depth

Deliverable: Annual Report

Duration: November 1, 2005 through February 28, 2006

### **Task 9: Monitor fish presence post implementation.**

Fish monitoring will include species and number collected for salmonids, and estimates for other species that are found. Monitoring will be implemented using seines. Samples will be taken twice a month. The following protocol will be used for each sample:

- Capture
- Anesthetization
- Identification to Species
- Identification of existing marks such as fin clips, etc.
- Fork length

- Weight
- Mark or tag with dyes and/or injectors
- Release

Deliverable: Annual report

Duration: November 1, 2005 through February 28, 2006

**Objective 4: Administrative**

**Task 10: Reporting**

Submit Quarterly and Annual Reports to BPA. Quarterlies are due 15 days after the end of each quarter. The annual report is due 60 days after the completion of the contract.

Deliverable: Quarterly and Annual Reports

Duration: March 1, 2005 through February 28, 2006

**Task 11: BPA admin**

Submit SOW to BPA 90 days in advance. Complete metric forms.  
Submit accrual information.