# **FSOC Fish Passage Training Outline**

September 17-20, 2012 Best Western Hood River Inn Hood River, OR Riverview Room

## September 17 – Session 1: Introduction and Background

2:00 - 3:00 PM: Course Introduction (Bryan Nordlund - NMFS)

3:30 – 3:45 PM: Break

- 3:45 4:30 PM: Background (Nordlund)
- 4:30 5:00 PM: Site Visit Overview (Alan Ritchey and Martin Olson ODFW)

#### **September 18 – Session 2: Site Visits**

7:45 – 8:00 AM: Meet in the Best Western Parking Lot (*in front of lobby*)

8:00 AM - Depart from Hotel\*

5:00 PM – Arrive at the Best Western

\*Box Lunch and Transportation Provided Included with Registration

### September 19 – Session 3: Juvenile Fish Screen and Bypass Designs

- 8:00 9:00 AM: Juvenile Fish Screen and Bypass Design (Bryan Nordlund NMFS) History, criteria, and objectives of screen and bypass design
- 9:00 10:00 AM: Juvenile Fish Screen and Bypass Design (Nordlund) Screen and bypass – hydrology, hydraulic calculations, and terminology

10:00 - 10:15 AM: Break

- **10:15 11:30 AM: Juvenile Fish Screen and Bypass Design (Nordlund)** Fish behavior and physiology as applied to screen and bypass design
- 11:30 Noon: Juvenile Fish Screen and Bypass Design (Nordlund) Positive barrier screen design
- Noon 1:00 PM: Lunch Break (provided)
- 1:00 2:00 PM: Juvenile Fish Screen and Bypass Design (Nordlund) Positive barrier screen design (continued)
- 2:00 3:00 PM: Juvenile Fish Screen and Bypass Design (Nordlund) Screen types (descriptions, criteria, benefits, disadvantages, and appropriate uses)

3:00 - 3:15 PM: Break

- 3:15 3:30 PM: Juvenile Fish Screen and Bypass Design (Nordlund) Debris management and uniform velocity
- 3:30 4:30 PM: Juvenile Fish Screen and Bypass Design (Nordlund) Bypass design
- **4:30 5:00 PM: Juvenile Fish Screen and Bypass Design (Nordlund)** Monitoring and evaluations
- 7:00 9:00 PM: Social Hosted (Shoreline Room) Sponsored by HDR Engineering, Inc.

## September 20 – Sessions 4-8: Screen and Bypass Systems

- 8:00 8:30 AM: Oregon Screen and Passage Issues (Mike Jensen ODFW)
- 8:30 9:00 AM: Managing Sediment at Fish Screens (Ray Gilmour WDFW)
- 9:00 10:00 AM: Resolving Site Issues in Screen and Bypass Systems (Paddy Murphy IDFG)
- 10:00 10:15 AM: Break
- 10:15 Noon: Introduction to Upstream Fish Passage Systems (Ken Loffink ODFW)
- Noon 1:00 PM: Lunch Break (provided)
- 1:00 2:30 PM: Juvenile Lamprey Passage (Matt Mesa USGS)
- 2:30 2:45 PM: Break
- 2:45 5:00 PM: Upstream Fish Passage Systems FishXing (Mike Love Mike Love and Associates)