RECLAMATION

Managing Water in the West

TR-2013-09

Travel to Roza Canal & Power Plant

Coordination of upcoming field testing for hydrokinetic research

Date(s) of Travel: July 8-10, 2013

U.S. Department of the Interior
Bureau of Reclamation
Technical Service Center
Hydraulic Investigations and Laboratory Services Group
Denver, Colorado

BUREAU OF RECLAMATION
Technical Service Center
Denver, Colorado

TRAVEL REPORT

Code: 86-68460 Date: July 24, 2013

To: Manager, Hydraulic Investigations and Laboratory Services Group

From: Josh Mortensen, Hydraulic Engineer

Subject: Travel to Roza Canal & Power Plant to coordinate upcoming field testing for hydrokinetic research

1. Travel period: 8 July – 10 July 2013

2. Places or offices visited: Yakima Field Office – Roza Canal & Power Plant

3. Purpose of trip: The primary purpose of the trip was to coordinate tasks for testing at the power plant and canal for hydrokinetic impact research coming up in August. A secondary purpose was to discuss a study of the power plant forebay and spillway under load rejection conditions as part of a separate project.

4. Synopsis of trip: On Monday July 8th, Josh travelled to Yakima, WA joined by Erin Foraker from the Research and Development office. Tuesday morning Josh and Erin met with Tom Glover (Roza power plant supervisor) to discuss general plans and scheduling for the upcoming hydrokinetics testing with Instream Inc., performance testing procedures planned at the power plant, and study needs for the forebay and spillway capacity. While Erin and Tom discussed a separate research project, Josh discussed the details of the performance testing plans with David Hoyt (plant operator). While at the power plant Josh also took photos of the plant spillway and downloaded data from the water level logger in the forebay.

Tuesday afternoon Josh and Erin drove the 11 mile reach of the main canal to show Erin the canal system and where and how testing is planned in conjunction with the hydrokinetic deployment. They downloaded data from each water level logger site (loggers deployed in March of 2013). The logger and deployment pipe at site # 3 (just upstream of the Instream test site) had been stolen. Plans to install another logger and prevent future vandalism are being discussed. Also, while on the canal Josh and Erin met with Ken Miller and Shane Grovue from Instream as they were on site to oversee initial construction of their test site. After seeing the entire canal system and wrapping up discussions with YFO staff Josh and Erin travelled back to Denver on Wednesday July 10th.

5. Conclusions: Discussions with David Hoyt from the power plant indicated that a complete performance test with a full range of wicket gate openings may not be possible in early August

due to the flow demand of the irrigation district. Delaying testing to the end of August when flow demands have decreased may allow sufficient flow through the unit for complete tests to be performed. Josh will coordinate the testing schedule with Ron Moores (power plant foreman) and the River Operations Group from YFO, as well as Instream.

For the forebay/spillway capacity study, Josh will submit a PMP and cost estimate to Tom Glover for a new service agreement to be setup before August 16th (deadline for new SA's before the financial system outage).

6. Action correspondence initiated or required: N/A

7. Client feedback received: N/A

cc: Tom Glover (YAK-5210)
Ron Moores (YAK-5230)
Chuck Garner (YAK-5100)
Mike Pulskamp (86-61600)
Erin Foraker (86-69000)

SIGNATURES AND SURNAMES FOR:

Travel to: Roza Canal & Power plant, Yakima, WA

Dates of Travel: 8 July – 10 July 2013

Names and Codes of Travelers: Josh Mortensen, 86-68460

Travelers:

Joshua D Mortensen 7/12/13

Joshua D. Mortensen — Date
Hydraulic Investigations and Laboratory Services Group

Reviewer:

7/12/13

Leslie J. Hanna — Date
Hydraulic Investigations and Laboratory Services Group

Noted and Dated by:

Robert F. Einhellig 7/15/2013

Robert F. Einhellig, Manager — Date
Hydraulic Investigations and Laboratory Services Group