

## 2010 Project Summary, URE-08-10

**Project Title:** Technical assistance, development, and support to the Yukon River Fish Wheel Salmon Monitoring Project at Rampart Rapids using remote video technology

**Project Proponent:** David Daum

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### Project Objectives

The Rampart Rapids fish wheel video project (URE-09-10) is an integral part of in-season management of main-stem Yukon River salmon populations, especially for Chinook *Oncorhynchus tshawytscha* and fall chum salmon *O. keta*. The Rampart Rapids video project is located on the main-stem Yukon River, 1,176 km upstream from the Yukon River mouth and 58 km above the confluence of the Tanana River. The fish wheel site is located on the south bank of the Yukon River. The fish species counted at the project are mainly Chinook and chum salmon, along with whitefish species. Because of the technical nature of this project and the data analysis required, there is a continued need for technical assistance and support throughout the annual project operations.

Specific project objectives include:

- 1) provide technical assistance during the summer/fall field season to the Rampart Rapids video enumeration project (URE-09-10);
- 2) support remote website development; and
- 3) assist in post-season data analysis and annual report review for the Rampart Rapids video monitoring project (URE-09-10).

### Project Summary and Accomplishments

Technical in-season assistance for the Rampart Rapids video monitoring project (URE-09-10).

The project leader, David Daum, USFWS, made two on-site visits (June 21-25 and August 18-19) to the Rampart Rapids video monitoring project (URE-09-10) during the 2010 field season. The site visits were used to check the technical operation of the video system, repair aging electrical components, and discuss project specifics with the operator, Stan Zuray. In-season spreadsheets and data output were checked for content and accuracy. Also, numerous phone and e-mail correspondences were made throughout the field season, discussing various aspects and operations of the Rampart Rapids video monitoring project.

Remote website support and development.

A website is maintained at Rampart Rapids throughout the summer months by S. Zuray (URE-09-10) to disseminate current information concerning the video project and other on-going research projects at the site. The project leader, D. Daum, assisted in the integration of additional information onto the website and updated links to the most current data available. An alternative remote power source, a water turbine generator, was installed and operational for

most of the 2010 field season. The water turbine, along with previously installed solar panels, provided 100% of the electrical needs for the Rapids Research Center camp.

*Post-season data analysis and annual report review for the Rampart Rapids video monitoring project (URE-09-10).*

The project leader, D. Daum, provided post-season data analysis including water temperature data (download, analyze, and graphics), data integrity check (over three months of video catch data), and statistical help. The draft 2010 report for the Rampart Rapids video monitoring project (URE-09-10) was reviewed and comments forwarded to S. Zuray for incorporation into the final 2010 report.