Summary of Consultation

On September 14, 2007, Douglas PUD filed a Revised Study Plan (RSP) Document with the Federal Energy Regulatory Commission (FERC) in accordance with 18 CFR § 5.13. On October 11, 2007, FERC issued its Study Plan Determination based on its review of the RSP Document and comments from stakeholders. FERC's Study Plan Determination required Douglas PUD to complete 10 of the 12 studies included in its RSP Document.

Douglas PUD has opted to complete all 12 studies to better prepare for the 401 Water Quality Certification process and to fulfill its commitment to the RWG participants. Information related to these 12 studies and a full collection of reports are included in this Initial Study Report (ISR) Document.

Appendix E (Summary of Consultation) of the ISR Document references the consultation record supporting the Pre-Application Document, Proposed Study Plan Document and RSP Document (Tables 1-3). Table 4 includes all correspondence and RWG documentation since the filing of the RSP Document. This information is shown in Table 4 with associated documentation for Table 4 in subsequent pages. In addition to the tables and documents included in Appendix E, all of the ILP-related material since the beginning of the relicensing process can be found on the Wells Project Relicensing website at www.douglaspud.org/relicensing.

Table 1 – Consultation Record Supporting the Pre-Application Document (PAD)		
Date	Consultation Document	Source
August 8, 2005	Information Request Letter	PAD Appendix B – 4
August 31, 2005	Stakeholder Outreach Letter	PAD Appendix B – 10
September 20, 2005	Stakeholder Outreach Letter	PAD Appendix B – 16
Aug – Oct 2005	Responses Received from Information Request Letter	PAD Appendix B – 22
Aug – Oct 2005	Critical Stakeholders Outreach Meetings	PAD Appendix B – 39
Aug – Oct 2005	Thank You Letters to Critical Stakeholders	PAD Appendix B – 41
October 18, 2005	ILP Workshop	PAD Appendix B – 44
October 18, 2005	ILP Workshop Sign-In Sheet	PAD Appendix B – 46
October 18, 2005	RWG Sign-In Sheets	PAD Appendix B – 48
October 24, 2005	Thank You Email after ILP Workshop	PAD Appendix B – 53
November 7, 2005	Meeting Notes from ILP Workshop	PAD Appendix B – 55
Oct 2005 – Oct 2006	RWG Meetings Schedule	PAD Appendix B – 61
November 15, 2005	Aquatic RWG Meeting	PAD Appendix B – 64
November 18, 2005	Cultural RWG Meeting	PAD Appendix B – 81
November 17, 2005	Recreation RWG Meeting	PAD Appendix B – 103
November 16, 2005	Terrestrial RWG Meeting	PAD Appendix B – 119
November 2005	Wells Project Tours and Participants	PAD Appendix B – 134
December 1, 2005	Letter to FERC requesting designation as non-federal representative for ESA consultation	PAD Appendix B – 136
December 7, 2005	Letter to Douglas PUD from FERC granting authorization to conduct day-to-day Section 106	PAD Appendix B – 139
December 7, 2005	Letter to Douglas PUD from FERC designating non-federal representative for ESA	PAD Appendix B – 142
January 9, 2006	Aquatic RWG Meeting	PAD Appendix B – 145
January 12, 2006	Cultural RWG Meeting	PAD Appendix B – 157
January 13, 2006	Recreation RWG Meeting	PAD Appendix B – 165
January 11, 2006	Terrestrial RWG Meeting	PAD Appendix B – 193
February 2, 2006	Aquatic RWG Meeting	PAD Appendix B – 204
February 9, 2006	Cultural RWG Meeting	PAD Appendix B – 243
February 10, 2006	Recreation RWG Meeting	PAD Appendix B – 267
February 8, 2006	Terrestrial RWG Meeting	PAD Appendix B – 282
February 1, 2006	Letter to Douglas PUD from WDFW regarding Relicensing Priorities	PAD Appendix B – 298
February 17, 2006	Letter to WDFW from Douglas PUD regarding Relicensing Priorities	PAD Appendix B – 304
March 2, 2006	Aquatic RWG Meeting	PAD Appendix B – 306
March 10, 2006	Recreation RWG Meeting	PAD Appendix B – 327

Table 1 – Consultation Record Supporting the Pre-Application Document (PAD)			
February 24, 2006	Terrestrial RWG Meeting	PAD Appendix B – 344	
March 22, 2006	Email regarding Wells Project Tour	PAD Appendix B – 366	
April 3, 2006	Letter to Douglas PUD from City of Pateros regarding Issue Statements	PAD Appendix B – 368	
April 6, 2006	Aquatic RWG Meeting	PAD Appendix B – 370	
April 11, 2006	Memo to Cultural RWG regarding Wells Area of Potential Effect (APE)	PAD Appendix B – 383	
April 14, 2006	Recreation RWG Meeting	PAD Appendix B – 385	
March 23, 2006	Terrestrial RWG Meeting	PAD Appendix B – 396	
May 31, 2006	Letter to CCT from FERC regarding Consultation with the CCT	PAD Appendix B – 411	
July 18, 2006	Letter to DAHP from Douglas PUD regarding Project Area of Potential Effect	PAD Appendix B – 415	
July 18, 2006	Letter to CCT from Douglas PUD regarding Project Area of Potential Effect	PAD Appendix B – 417	
July 21, 2006	Aquatic RWG Meeting	PAD Appendix B – 419	
July 27, 2006	Cultural RWG Meeting	PAD Appendix B – 468	
July 14, 2006	Recreation RWG Meeting	PAD Appendix B – 476	
July 20, 2006	Terrestrial RWG Meeting	PAD Appendix B – 521	
July 24, 2006	Letter to Douglas PUD from DAHP concurring with Project Area of Potential Effect	PAD Appendix B – 585	
July 25, 2006	Letter to BIA from Douglas PUD regarding Section 106 Consultation	PAD Appendix B – 587	
August 29, 2006	Aquatic RWG Meeting	PAD Appendix B – 589	
September 14, 2006	Aquatic RWG Meeting	PAD Appendix B – 654	
September 7, 2006	Cultural RWG Meeting	PAD Appendix B – 673	
September 12, 2006	Terrestrial RWG Meeting	PAD Appendix B – 679	
Sept - Nov 2006	Wells Project Relicensing Policy Meetings	PAD Appendix B – 738	
September 27, 2006	Phone Conversation with the Umatilla Tribes regarding Request for Policy Outreach Meeting	Communication page	
September 28, 2006	Cultural RWG Meeting	PAD Appendix B – 747	
October 19, 2006	Cultural RWG Meeting	PAD Appendix B – 753	
October 25, 2006	Letter to Douglas PUD from CCT concurring with Project Area of Potential Effect	PAD Appendix B – 773	

Table 2 – Consultation Record Supporting the Proposed Study Plan Document (PSP)		
Date	Consultation Document	Source
December 1, 2006	Douglas PUD files NOI and PAD	Communication page
December 4, 2006	Email regarding Wells Project ILP begins to Aquatic RWG	Communication page
December 12, 2006	Email regarding Wells Project ILP begins to Terrestrial RWG	Communication page
December 12, 2006	Email regarding Wells Project ILP begins to Recreation RWG	Communication page
December 12, 2006	Email regarding Wells Project ILP begins to Cultural RWG	Communication page
December 13, 2006	Email regarding Date change to Cultural RWG	Communication page
December 21, 2006	Email regarding Cultural RWG Meeting Information	Communication page
December 26, 2006	Email regarding Dates for Aquatic RWG Meetings	Communication page
January 10, 2007	Email regarding Cultural Resources Data Review	Communication page
January 12, 2007	Email regarding Cultural Resources Investigation and RWG Agenda	Communication page
January 17, 2007	Cultural RWG Meeting	Meetings page
January 19, 2007	Email regarding Draft Cultural RWG Meeting Notes	Communication page
January 22, 2007	Email regarding Agenda for Terrestrial RWG Meeting	Communication page
January 23, 2007	Email regarding Agenda for Recreation RWG Meeting	Communication page
January 24, 2007	Email regarding Suggested date change for Cultural RWG Meeting	Communication page
January 25, 2007	Email regarding Date changed for Cultural RWG Meeting	Communication page
January 30, 2007	Email regarding White Sturgeon Assessment	Communication page
January 30, 2007	Email regarding FERC issues Scoping Document 1	Communication page
February 2, 2007	Email regarding Final Cultural RWG Meeting Notes	Communication page
February 6, 2007	Terrestrial RWG Meeting	Meetings page
February 7, 2007	Aquatic RWG Meeting	Meetings page
February 8, 2007	Email regarding Draft Terrestrial RWG Meeting Notes	Communication page
February 9, 2007	Email regarding Aquatic Study Plans from PAD	Communication page
February 9, 2007	Recreation RWG Meeting	Meetings page
February 13, 2007	Email regarding Question about Policy Meeting	Communication page
February 13, 2007	Email responding to Question about Policy Meeting	Communication page
February 16, 2007	Email regarding Recreation data question	Communication page
February 16, 2007	Email regarding Response to recreation data question	Communication page
February 16, 2007	Email regarding Final Terrestrial RWG Meeting Notes	Communication page
February 21, 2007	Phone conversation with BLM	Communication page
February 23, 2007	Email regarding Final Recreation RWG Meeting Notes	Communication page
February 23, 2007	Email regarding Final Aquatic RWG Meeting Notes	Communication page

Table 2 – Consultation Record Supporting the Proposed Study Plan Document (PSP)		
February 27, 2007	Email regarding Agenda for Cultural RWG Meeting	Communication page
February 28, 2007	Letter to FERC from Pateros regarding Comments on PAD and SD1	Communication page
March 1, 2007	Fax regarding Douglas PUD and BIA Meeting Notes	Communication page
March 7, 2007	Phone conversation with USFWS	Communication page
March 7, 2007	Email regarding Cultural Resources Scope of Work	Communication page
March 8, 2007	Cultural RWG Meeting	Meetings page
March 9, 2007	Email regarding Draft Cultural RWG Meeting Notes	Communication page
March 16, 2007	Email regarding Final Cultural RWG Meeting Notes	Communication page
March 19, 2007	Letter to FERC from Betty Wagoner regarding Scoping	Communication page
March 22, 2007	Email to FERC from Douglas PUD regarding Sharp-tailed grouse	Communication page
March 27, 2007	Email to FERC from Douglas PUD regarding Mule deer	Communication page
March 29, 2007	Letter to FERC from Friends of Fort Okanogan regarding Comments on relicensing process	Communication page
March 30, 2007	Letter to FERC from Douglas PUD regarding Comments on Scoping Meeting Transcripts	Communication page
March 30, 2007	Letter to FERC from Douglas PUD regarding SD1	Communication page
March 30, 2007	Letter to FERC from WDOE regarding Comments on PAD and SD1	Communication page
March 30, 2007	Letter to FERC from City of Brewster regarding Comments on PAD and SD1	Communication page
March 30, 2007	Letter to FERC from WDFW regarding Comments on PAD and SD1	Communication page
March 30, 2007	Letter to Douglas PUD from FERC regarding Comments on PAD and Study Requests	Communication page
March 30, 2007	Letter to FERC from City of Pateros regarding Comments on PAD and SD1	Communication page
March 30, 2007	Letter to FERC from USFWS regarding Comments on PAD and SD1	Communication page
April 2, 2007	Letter to FERC from BIA regarding Comments on PAD and SD1	Communication page
April 3, 2007	Letter to FERC from City of Brewster regarding Comments on PAD and SD1 (paper filing)	Communication page
April 4, 2007	Updated Letter to FERC from City of Pateros regarding Comments on PAD and SD1	Communication page
April 5, 2007	Email regarding Agenda for Aquatic RWG Meeting	Communication page
April 5, 2007	Email regarding Agenda for Terrestrial RWG Meeting	Communication page
April 6, 2007	Email regarding Cancellation of Recreation RWG Meeting	Communication page
April 6, 2007	Updated Letter (paper copy to FERC) from WDOE regarding Comments on PAD and SD1	Communication page
April 9, 2007	Email regarding Agenda for Cultural RWG Meeting	Communication page
April 9, 2007	Updated Letter (paper copy to FERC) from USFWS regarding Comments on PAD and SD1	Communication page
April 10, 2007	Email regarding Cultural Resources Investigation	Communication page
April 13, 2007	Email regarding Cancellation of Aquatic RWG Meeting	Communication page
April 13, 2007	Email regarding Cancellation of Terrestrial RWG Meeting	Communication page
April 23, 2007	Email regarding Draft Cultural RWG Meeting Notes	Communication page
April 23, 2007	Email to WDFW from Douglas PUD regarding Study Request Meeting	Communication page

Table 2 – Consultation Record Supporting the Proposed Study Plan Document (PSP)		
April 24, 2007	Letter to FERC from Douglas PUD regarding Reply Comments on SD1 and PAD	Communication page
April 25, 2007	Email regarding Final Cultural RWG Meeting Notes	Communication page
April 30, 2007	Email to USFWS from Douglas PUD regarding Study Request Meeting	Communication page
April 30, 2007	Email regarding Final Cultural RWG Meeting Notes	Communication page
April 30, 2007	Email to WDOE regarding Agenda for TDG Meeting	Communication page

Table 3 – Consultation Record Supporting the Revised Study Plan Document (RSP)			
Date	Consultation Document	Source	
May 1, 2007	Summary Notes from Meeting with WDFW regarding Study Requests and Comments on the PAD	RSP Appendix A - 11	
May 16, 2007	Transmittal Letter to FERC from Douglas PUD regarding Proposed Study Plan Document	RSP Appendix A - 15	
May 31, 2007	Email to Stakeholders from Douglas PUD regarding Agenda for Study Plan Meeting	RSP Appendix A - 31	
June 28, 2007	Email to Stakeholders from Douglas PUD regarding Draft Study Plan Meeting Notes	RSP Appendix A - 35	
June 29, 2007	Email to Douglas PUD from City of Brewster regarding Draft Study Plan Meeting Notes	RSP Appendix A - 45	
June 29, 2007	Email to City of Brewster from Douglas PUD regarding Draft Study Plan Meeting Notes	RSP Appendix A - 49	
June 29, 2007	Email to Douglas PUD from City of Brewster regarding Draft Study Plan Meeting Notes	RSP Appendix A - 57	
June 29, 2007	Email to City of Brewster from Douglas PUD regarding Recreation Needs Analysis	RSP Appendix A - 59	
June 29, 2007	Email to Douglas PUD from FERC regarding Draft Study Plan Meeting Notes	RSP Appendix A - 61	
June 29, 2007	Email to FERC from Douglas PUD regarding Draft Study Plan Meeting Notes	RSP Appendix A - 63	
July 2, 2007	Email to FERC from Douglas PUD regarding Updated 230 kV Transmission Line Study Plan	RSP Appendix A - 73	
July 2, 2007	Email to Douglas PUD from FERC regarding Draft Study Plan Meeting Notes	RSP Appendix A - 95	
July 2, 2007	Email to FERC from Douglas PUD regarding Draft Study Plan Meeting Notes	RSP Appendix A - 105	
July 3, 2007	Phone Conversation with WDFW regarding Lamprey Study Plan Methodology	RSP Appendix A - 107	
July 3, 2007	Email to Douglas PUD from FERC regarding Updated 230 kV Transmission Line Study Plan	RSP Appendix A - 111	
July 3, 2007	Email to FERC from Douglas PUD regarding Updated 230 kV Transmission Line Study Plan	RSP Appendix A - 133	
July 9, 2007	Phone Conversation with FERC regarding 230 kV Transmission Line Study Plan	RSP Appendix A - 135	
July 9, 2007	Letter to DAHP and CCT from Douglas PUD regarding Triennial Archaeological Monitoring	RSP Appendix A - 137	
July 11, 2007	Email to Stakeholders from Douglas PUD regarding Final Study Plan Meeting Notes	RSP Appendix A - 153	
July 11, 2007	Email to NPS, City of Brewster, and IAC from Douglas PUD regarding Recreation Needs Analysis	RSP Appendix A - 163	
July 11, 2007	Phone Conversation with WDFW regarding Nuisance Wildlife Control Study	RSP Appendix A - 183	
July 12, 2007	Letter to Douglas PUD from DAHP regarding Triennial Archaeological Monitoring	RSP Appendix A - 185	
July 16, 2007	Letter to Douglas PUD from WDFW regarding White Sturgeon Supplementation Efforts	RSP Appendix A - 187	
July 23, 2007	Email to Douglas PUD from IAC regarding Recreation Needs Analysis	RSP Appendix A - 191	
July 24, 2007	Email to Douglas PUD from NPS regarding Recreation Needs Analysis	RSP Appendix A - 195	
July 26, 2007	Phone Conversation with USFWS regarding 230 kV Transmission Line Study Plan	RSP Appendix A - 199	
July 30, 2007	Phone Conversation with WDFW regarding Downstream Release Location for Tagged Lamprey	RSP Appendix A - 203	
August 10, 2007	Email to Douglas PUD from City of Brewster regarding Recreation Needs Analysis	RSP Appendix A - 205	
August 10, 2007	Letter to FERC from City of Brewster regarding Comments on Proposed Study Plan	RSP Appendix A - 211	
August 14, 2007	Letter to Douglas PUD from Umatilla Tribes regarding Comments on Proposed Study Plan	RSP Appendix A - 213	
August 15, 2007	Letter to FERC from City of Pateros regarding Comments on Proposed Study Plan	RSP Appendix A - 221	
August 15, 2007	Email to Douglas PUD from WDFW regarding Nuisance Wildlife Control Study	RSP Appendix A - 249	

Table 3 – Consultation Record Supporting the Revised Study Plan Document (RSP)		
August 16, 2007	Email to Douglas PUD from Oregon State University regarding Tag Technology for Lamprey	RSP Appendix A - 253
August 17, 2007	Email to Douglas PUD from USGS regarding Tags to Evaluate Juvenile Lamprey Passage	RSP Appendix A - 257
August 22, 2007	Phone Conversation with USFWS regarding letter citation from the Umatilla Tribes	RSP Appendix A - 261

Table 4 – Consultation Record Supporting the Initial Study Report (ISR) Document		
Date	Consultation Document	Source
September 14, 2007	Transmittal Letter to FERC from Douglas PUD regarding Revised Study Plan Document	ISR Appendix E - 11
September 17, 2007	Letter to FERC from NMFS regarding Filing of HCP as Comprehensive Plan	ISR Appendix E - 27
September 17, 2007	Email to USFWS and Yakima Nation from Douglas PUD regarding 2007 Adult Lamprey Passage Study	ISR Appendix E - 30
September 17, 2007	Email to Douglas PUD from USFWS regarding 2007 Adult Lamprey Passage Study	ISR Appendix E - 32
September 17, 2007	Email to USFWS, Yakima Nation and WDFW from Douglas PUD regarding 2007 Adult Lamprey Passage Study	ISR Appendix E - 34
September 17, 2007	Email to Douglas PUD from USFWS regarding 2007 Adult Lamprey Passage Study	ISR Appendix E - 36
September 20, 2007	Email to Douglas PUD from WDFW regarding 2007 Adult Lamprey Passage Study	ISR Appendix E - 38
October 1, 2007	Letter to FERC from City of Pateros regarding Comments on Revised Study Plan	ISR Appendix E - 40
October 11, 2007	Letter to Douglas PUD from FERC regarding Study Plan Determination	ISR Appendix E - 53
October 16, 2007	Letter to NMFS from FERC regarding Filing of HCP as Comprehensive Plan	ISR Appendix E - 63
November 7, 2007	Letter to FERC from City of Pateros regarding Rehearing Request	ISR Appendix E - 66
November 26, 2007	Letter to FERC from Douglas PUD regarding Objection to Rehearing Request	ISR Appendix E - 69
November 27, 2007	Email to Douglas PUD from WDNR regarding Downgrade of Brittle Prickly-Pear	ISR Appendix E - 73
November 27, 2007	Phone Conversation with WDFW regarding 2008 Adult Lamprey Passage Study	ISR Appendix E - 75
November 27, 2007	Phone Conversation with USFWS regarding 2008 Adult Lamprey Passage Study	ISR Appendix E - 78
November 28, 2007	Phone Conversation with WDFW regarding 2008 Adult Lamprey Passage Study	ISR Appendix E - 82
December 10, 2007	FERC Order Granting Rehearing for Further Consideration	ISR Appendix E - 85
January 7, 2008	Email to Cultural RWG regarding Agenda for Cultural RWG Meeting	ISR Appendix E - 87
January 10, 2008	Email to Douglas PUD from Ecology regarding Approval of TDG Model	ISR Appendix E - 91
January 16, 2008	Email to Colville Tribes from Douglas PUD regarding Okanogan Toxins Study	ISR Appendix E - 93
January 17, 2008	FERC Order Dismissing Rehearing Request	ISR Appendix E - 108
January 21, 2008	Email to Recreation RWG regarding Agenda for Recreation RWG Meeting	ISR Appendix E - 114
January 28, 2008	Email to Cultural RWG regarding Cultural RWG Meeting Materials	ISR Appendix E - 117
January 29, 2008	Email to Ecology from Douglas PUD regarding TDG Study	ISR Appendix E - 123
January 30, 2008	Cultural RWG Meeting	ISR Appendix E - 127
February 4, 2008	Email to Ecology from Douglas PUD regarding TDG Modeling	ISR Appendix E - 136
February 7, 2008	Email to Cultural RWG regarding Draft Cultural RWG Meeting Notes	ISR Appendix E - 143
February 19, 2008	Email to Cultural RWG regarding Final Cultural RWG Meeting Notes	ISR Appendix E - 150
February 29, 2008	Recreation RWG Meeting	ISR Appendix E - 162
March 6, 2008	Email to Recreation RWG regarding Draft Recreation RWG Meeting Notes	ISR Appendix E - 180
March 14, 2008	Email to Recreation RWG regarding Final Recreation RWG Meeting Notes	ISR Appendix E - 191
March 31, 2008	Email to Ecology from Douglas PUD regarding the Coastal Zone Management Act	ISR Appendix E - 202

Table 4 – Consultation Record Supporting the Initial Study Report (ISR) Document			
May 27, 2008	Email to WDFW from Douglas PUD regarding Lamprey Spawning Study	ISR Appendix E - 207	
June 5, 2008	Email to Cultural RWG regarding Agenda for Cultural RWG Meeting	ISR Appendix E - 209	
June 6, 2008	Email to Cultural RWG regarding Draft Historic Properties Management Plan	ISR Appendix E - 212	
June 17, 2008	Email to Terrestrial RWG regarding Agenda for Terrestrial RWG Meeting	ISR Appendix E - 215	
June 19, 2008	Email to Aquatic RWG regarding Request for Study Plan Update Meeting	ISR Appendix E - 218	
June 23, 2008	Email to Aquatic RWG regarding Adult Lamprey Passage Study	ISR Appendix E - 220	
July 1, 2008	FERC Order Approving 2007 Recreation Action Plan	ISR Appendix E - 222	
July 15, 2008	Aquatic RWG Meeting	ISR Appendix E - 228	
July 17, 2008	Cultural RWG Meeting	ISR Appendix E - 235	
July 24, 2008	Email to Cultural RWG regarding Draft Cultural RWG Meeting Notes	ISR Appendix E - 243	
July 29, 2008	Email to Recreation RWG regarding Agenda for Recreation RWG	ISR Appendix E - 247	
July 30, 2008	Email to Terrestrial RWG regarding Date Change for Terrestrial RWG Meeting	ISR Appendix E - 250	
August 5, 2008	Email to Cultural RWG regarding Final Cultural RWG Meeting Notes	ISR Appendix E - 253	
August 13, 2008	Email to Cultural RWG regarding Agenda for Cultural RWG Meeting	ISR Appendix E - 257	
August 20, 2008	Email to Aquatic RWG regarding Aquatic RWG Meeting Materials	ISR Appendix E - 260	
August 21, 2008	Email to Recreation RWG regarding Recreation RWG Meeting Materials	ISR Appendix E - 338	
August 21, 2008	Aquatic RWG Meeting	ISR Appendix E - 359	
August 22, 2008	Recreation RWG Meeting	ISR Appendix E - 369	
August 25, 2008	Email to DTA/Douglas PUD from RCO regarding Recreational Needs Analysis	ISR Appendix E - 379	
August 26, 2008	Terrestrial RWG Meeting	ISR Appendix E - 381	
August 29, 2008	Email to Recreation RWG regarding Draft Recreation RWG Meeting Notes	ISR Appendix E - 392	
August 29, 2008	Email to Cultural RWG regarding Cultural RWG Meeting Materials	ISR Appendix E - 396	
September 3, 2008	Cultural RWG Meeting	ISR Appendix E - 401	
September 8, 2008	Email to Terrestrial RWG regarding Draft Terrestrial RWG Meeting Notes	ISR Appendix E - 409	
September 9, 2008	Email to Aquatic RWG regarding Final Aquatic RWG Meeting Notes	ISR Appendix E - 433	
September 10, 2008	Email to Recreation RWG regarding Final Recreation RWG Meeting Notes	ISR Appendix E - 436	
September 15, 2008	Email to Terrestrial RWG regarding Revision to Terrestrial RWG Meeting Notes	ISR Appendix E - 440	
September 18, 2008	Email to Cultural RWG regarding Final Cultural RWG Meeting Notes	ISR Appendix E - 443	
September 22, 2008	Email to USFWS from Douglas PUD regarding revision to Terrestrial RWG Meeting Notes	ISR Appendix E - 447	
September 22, 2008	Email to Terrestrial RWG regarding Final Terrestrial RWG Meeting Notes	ISR Appendix E - 449	
September 22, 2008	Email to Cultural RWG regarding Agenda for Cultural RWG Meeting	ISR Appendix E – 473	
October 9, 2008	Cultural RWG Meeting	ISR Appendix E – 477	

Transmittal Letter to FERC from Douglas PUD regarding Revised Study Plan Document

Public Utility District

No. 1 of Douglas County

1161 Valley Mall Parkway • East Wenatchee, Washington 98802-4497 • 509/884-7191 • FAX 509/884-0553 • www.douglaspud.org

September 14, 2007

Honorable Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington DC 20426

Subject: Wells Hydroelectric Project No. 2149-131

Revised Study Plan Document (Security Level: Public)

OFFICE OF THE SECRETARY

2001 SEP I U A ID: 42

REGULATORY COMMISSION

Dear Secretary Bose:

In accordance with 18 C.F.R. § 5.13, Public Utility District No. 1 of Douglas County, Washington (Douglas PUD), licensee for the Wells Hydroelectric Project (Wells Project), hereby submits one original paper copy and eight compact disk copies of its Revised Study Plan (RSP) for the Wells Project. The RSP is also being distributed to those entities listed on the attached Relicensing Distribution List in accordance with Douglas PUD's Communication Protocol.

The 12 RSP study plans were collaboratively developed by four resource work groups (RWGs) including a Cultural, Recreation, Terrestrial, and Aquatic/Water Quality RWG. Following approval of the 12 study plans by the four RWGs, Douglas PUD included all 12 of the "agreed-upon" study plans in the Pre-Application Document (PAD), which was filed on December 1, 2006. Stakeholder study requests, study comments and PAD comments were addressed during several follow-up RWG meetings and phone conversations. Douglas PUD's responses to stakeholder study requests and PAD comments were included in the Proposed Study Plan (PSP). Following the May 16, 2007 filing of the PSP, several stakeholders filed PSP related comments.

The RSP contains a summary of each of Douglas PUD's revised study plans (Section 2: Summaries of Revised Study Plans). Section 3 (Response to Stakeholder PSP Comments) contains a summary of each stakeholder comment on the PSP along with Douglas PUD's responses thereto. Section 4 (References) includes all of the personal communications and literature cited within the RSP.

Appendix A (Summary of Consultation) in the RSP includes all of the stakeholder comments (letters, e-mails, phone logs and meeting minutes) on the PSP and all of Douglas PUD's documented efforts to resolve differences over studies. The full version of each of the 12 revised study plans can be found in Appendices B-E.

If you have any questions or require further information, please feel free to contact me at (509) 881-2208 or sbickford@dcpud.org.

Sincerely,

Shane Bickford

Supervisor of Relicensing

Cc: Relicensing Distribution List

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Environmental & Permitting Manager P.O. Box 1231 Wenatchee, WA 98807-1231

Chelan County Public Utility District

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City of Bridgeport Steven Jenkins, Mayor P.O. Box 640 Bridgeport, WA 98813

City of Bridgeport Jean Hardie, Administrative Assistant P.O. Box 640 Bridgeport, WA 98813 City of East Wenatchee Steve Lacey, Mayor 271 Ninth Street NE East Wenatchee, WA 98802

City of Pateros Gail Howe, Mayor P.O. Box 8 Pateros, WA 98846 City of Pateros George Brady, City Councilman P.O. Box 8 Pateros, WA 98846

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Columbia River Inter-Tribal Fish Commission Robert Heinith, Hydro Program Coordinator 729 NE Oregon, Suite 200 Portland, OR 97232 Confederated Tribes and Bands of the Yakama Nation Manager of Cultural Resources Program Johnson Meninick P.O. Box 151 Toppenish, WA 98948

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Letter to FERC from NMFS regarding Filing of HCP as Comprehensive Plan

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D.C. 20426 October 16, 2007

OFFICE OF ENERGY PROJECTS

Keith Kirkendall, Chief National Marine Fisheries Service 1201 NE Lloyd Boulevard, Suite 1100 Portland, OR 97232

Reference: Request for treatment of document as a Comprehensive Plan, pursuant to section 10(a)(2)(A) of the Federal Power Act

Dear Mr. Kirkendall:

Thank you for your letter dated September 17, 2007, providing the Federal Energy Regulatory Commission (Commission) with a copy of the "Anadromous Fish Agreement and Habitat Conservation Plan: The Wells Hydroelectric Project (FERC License No. 2149)," dated March 26, 2002. The plan is supported by Documents A through D. Pursuant to section 10(a)(2)(A) of the Federal Power Act (FPA), you request that the document be considered as a comprehensive plan.

As you note in your letter, the plan establishes a beneficial use of the Upper Columbia River through conservation of Chinook salmon, steelhead, sockeye salmon, and coho salmon (Plan Species). The Anadromous Fish Agreement provides for a comprehensive and long-term adaptive management plan for the Plan Species and their habitats.

Based on the staff review, the following document qualifies as a comprehensive plan under section 10(a)(2)(A) of the FPA:

National Marine Fisheries Service. 2002. Anadromous Fish Agreement and Habitat Conservation Plan: The Wells Hydroelectric Project (FERC License No. 2149). U.S. Department of Commerce. March 26, 2002.

Any future river-related plan prepared by the National Marine Fisheries Service must be filed with the Commission in order to be considered in the Commission's section 10(a)(2)(A) of the FPA analysis of hydropower projects in Washington.

Sincerely,

Mark Pawlowski, Chief Hydro East Branch 2

cc: Shane Bickford, Supervisor of Relicensing Public Utility District No. 1 of Douglas County 1151 Valley Mall Parkway East Wenatchee, WA 98802-4497

Public Files

Email to USFWS and Yakima Nation from Douglas PUD regarding 2007 Adult Lamprey Passage Study

"Bao Le" From

> <baol@dcpud.org> 09/17/2007 01:42

"Bob Rose"

 drose@yakama.com>, Τо

Subject Wells Lamprey Passage Study

Gents, to date we have only been able to capture 6 lamprey at Wells Dam. To refresh your memory, our sample size target is 40. This year has been another poor run at Wells Dam and throughout the Columbia Basin. We have had discussions here and with WDFW as to the feasibility of collecting fish at Rocky Reach to supplement our sample size at Wells Dam. They were supportive of this and we both understand the needed sensitivity to the potential data provided by these additional fish. We would like to try and do this as a means to collect additional and badly needed information. If you have any concerns with our proposal, please let me know asap. Thanks. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

Email to Douglas PUD from USFWS regarding 2007 Adult Lamprey Passage Study

----Original Message----

From: Stephen_Lewis@fws.gov [mailto:Stephen_Lewis@fws.gov]

Sent: Monday, September 17, 2007 2:22 PM

To: Bao Le

Cc: Bob Rose; Mary Mayo

Subject: Re: Wells Lamprey Passage Study

I think that may be a good idea in concept, but in doing so, you might be picking off lamprey bound for the Entiat versus above Wells.

S-

Stephen T. Lewis Mid-Columbia Relicensing Coordinator U.S. Fish and Wildlife Service Central Washington Field Office 215 Melody Lane, Suite 119 Wenatchee, WA 98801 phone: (509) 665-3508 Ext. 14

fax: (509) 665-3523

e-mail: Stephen_Lewis@fws.gov

Email to USFWS, Yakima Nation and WDFW from Douglas PUD Regarding 2007 Adult Lamprey Passage Study

----Original Message----

From: Bao Le

Sent: Monday, September 17, 2007 2:53 PM

To: 'Stephen Lewis@fws.gov'

Cc: Bob Rose; Mary Mayo; Molly Hallock Subject: RE: Wells Lamprey Passage Study

Hi Steve, this was a significant part of our discussion with Molly (WDFW) and what we concluded was that conventional wisdom suggests that lamprey do not home but are attracted to the pheromones produced by juveniles. Additionally, our target sample size here is 40 fish which is a fraction of the population of fish passing Reach and therefore not likely to be a huge detriment regardless. If in fact they do home, the information collected on these fishes movements would be very beneficial in planning for a study next year if that is necessary, ie., it would be valuable information if all fish tagged and transported turned and high tailed it back to the Entiat. The reality is that we have counted 27 fish at Wells Dam (including the 6 that have been captured and tagged with serious effort expended). If we want to collect the information that will allow us to have a healthy discussion as to what needs to be done to help improve lamprey passage during the new license term, we may need to entertain alternative sources of fish. Reach is the most reasonable for many obvious reasons. If we're unable to assess whether Reach fish may be a reasonable supplement/surrogate, we should also accept that meeting sample size at Wells given these past few years may be of a very low probability also. Please consider and get back to me asap. Thanks. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

Email to Douglas PUD from USFWS regarding 2007 Adult Lamprey Passage Study

----Original Message----

From: Stephen Lewis@fws.gov [mailto:Stephen Lewis@fws.gov]

Sent: Monday, September 17, 2007 3:24 PM

To: Bao Le

Subject: RE: Wells Lamprey Passage Study

You have convinced me that the benefits outweigh the potential negatives ;-)

S-

Stephen T. Lewis Mid-Columbia Relicensing Coordinator U.S. Fish and Wildlife Service Central Washington Field Office 215 Melody Lane, Suite 119 Wenatchee, WA 98801

phone: (509) 665-3508 Ext. 14

fax: (509) 665-3523

e-mail: Stephen_Lewis@fws.gov

Email to Douglas PUD from WDFW regarding 2007 Adult Lamprey Passage Study

----Original Message----

From: Carmen Andonaegui [mailto:andonca@DFW.WA.GOV]

Sent: Thursday, September 20, 2007 4:54 PM

To: Bao Le

Subject: RE: adult lamprey

Great, Bao. Thanks for the good follow-up. Good luck.

Carmen

>>> "Bao Le" <baol@dcpud.org> 09/20/2007 4:42 PM >>>

Yes, we did. We are augmenting with fish from Reach knowing full well that we'll need to pay special attention to the information that we collect from these fish. We concluded that the way it is looking this year, it was either that or nothing. Call if you have questions.

Thanks. Bao

Bao Le

Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

----Original Message----

From: Carmen Andonaegui [mailto:andonca@DFW.WA.GOV]

Sent: Thursday, September 20, 2007 2:43 PM

To: Bao Le

Subject: adult lamprey

Hi Bao.

Did you and Molly ever touch bases and figure anything out?

Carmen

Letter to FERC from City of Pateros regarding Comments on Revised Study Plan



113 Lakeshore Drive PO Box 8 Pateros, WA 98846

Fax: 509.923.2971

509.923.2571

Email: pateros@swift-stream.com

Phone:

October 1, 2007

Honorary Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

RE: Wells Hydroelectric Project No 2149-131 Reply to Douglas PUD Revised Study Plan

Dear Secretary Bose:

On behalf of the City of Pateros ("the City"), we submit the following reply comments to Douglas County PUD's ("Douglas PUD") Revised Study Plan dated September 14, 2007.

BACKGROUND

In our letter dated February 28, 2007 (and supplemented by further correspondence dated April 2, 2007 and August 15, 2007), the City has requested that Douglas PUD conduct the following studies as part of the Integrated Licensing Process (ILP) for Douglas PUD's Wells Dam Relicensing application:

- 1. <u>Socio-Economic Impacts</u>. A study of the socio-economic impacts of the Wells Project on Okanogan County and the cities of Pateros, Brewster and Bridgeport, all of which are located within the Project boundary.
- 2. Operation and Maintenance of Recreation Facilities. A study of the specific costs for operation and maintenance of city parks.
- 3. <u>Visitor Information Center</u>. A study of the feasibility of a regional Visitor Information Center.

On September 14, 2007, Douglas PUD submitted its Revised Study Plan. However, Douglas PUD continues to assert that it should not be required to conduct \underline{any} of the studies requested by the City as part of the ILP process.

I. Reply Comments to Douglas PUD's Denial of Study Request for Socio-Economic Study

In our initial letter of February 28, 2007, the City provided the information required under 18 CFR § 5.9(b) to support its request for a socio-economic study. After Douglas PUD refused to include a study plan for socio-economic impacts in its June 2007 Draft Study Plan, the City submitted comments on August 15, 2007 further explaining the clear legal and factual basis for the study.

In its September 14, 2007 Revised Study Plan, Douglas PUD continues to refuse to include a socio-economic study in its overall ILP study process. Although Douglas PUD addresses the City's request for a socio-economic study at p. 22-25 of the Plan, it attempts to confuse the issues by re-characterizing the City's arguments and making a number of inaccurate statements.

A. The City has demonstrated a "nexus" between project operations and socio-economic impacts to the communities located within the Wells Project boundary.

During the course of these proceedings, Douglas PUD has claimed that the City has not demonstrated a nexus between the Wells Dam project operations and the socio-economic health of the surrounding communities. While Douglas PUD repeatedly alleges that the construction and operation of Wells Dam has resulted in positive social and economic benefits to the surrounding communities, it refuses to agree that it is also relevant to study the historic and ongoing negative impacts caused by the Wells project.

In our August 15, 2007 letter, the City cited ample authority under the Federal Power Act ("FPA"), the Electric Consumers Protection Act of 1986 ("ECPA") and the National Environmental Protection Act ("NEPA") requiring that FERC consider the socio-economic impacts of granting a new license. This includes the following language in the *Elkem Metals* decision:

The Commission must consider socio-economic impacts in making its licensing decisions, since it is required to consider all aspects of the public interest under Section 10(a)(1) of the FPA. <u>See Udall</u>, 387 U.S. 428, 450 (U.S. 1967).

Elkem Metals, 45 FERC ¶61,044, at p. 61,148 (1988) (emphasis supplied). See also, Brookside Hydroelectric Co., 67 FERC ¶61,041, at p. 61,122 (1994) ("the socio-economic impact on the area involved, including [the intervenor's] business, is relevant in the Commission's consideration of the public interest in

licensing a project.") While Douglas PUD is correct that the *Elkem Metals* case involved a project where the water flows would be increased to mitigate damage to fish runs, the language cited by the courts in these cases could not be any clearer.

In response to these authorities, Douglas PUD now finally acknowledges that "social and economic effects can be considered by FERC in the proper context, but this is subject to limitations". The "limitations" Douglas PUD outlines are essentially that (1) the <u>purpose</u> of any such socio-economic analysis must be to identify socio-economic impacts specifically related to the project and its proposed operations and (2) the scope of the study should be tailored to meet this purpose.

The City agrees that the purpose and scope of the socioeconomic study should be aimed at determining the impacts caused by the project operations. The City also believes that the proposed study plan it identified in its April 2, 2007 letter is in accordance with these objectives. The goals and objectives of the plan were stated as:

- Identify, describe and document factors that influence regional and local economics, including health care, agriculture, schools and other public entities, industry and tourism.
- Identify the socio-economic impacts of the Wells Dam project on Okanogan County and the cities of Pateros, Brewster and Bridgeport.
- Identify future growth opportunities and estimate the impact of Project operations on these resources
- Specifically identify the socio-economic impacts resulting from the City of Pateros' relocation and displacement when Wells Dam was originally built in 1962 and the continuing effects of said relocation and displacement.

See April 2, 2007 City of Pateros letter.

Douglas PUD focuses on the first item to claim that the City's request for a study is too broad. However, there can be no question that it is first necessary to determine the factors that influence the area economies in order to then identify the specific socio-economic impacts of the Wells Dam Project.

Douglas PUD also claims that any effects are limited to "recreation opportunities" and that the City has "effectively conceded" as much. This is simply not true. The statement alluded to by Douglas PUD in the City's August 15, 2007 comments was in relation to a possible mitigation agreement reached between the City and Douglas PUD. The City stated, "The benefits provided to the City under the agreement would likely be tied to recreational-related improvements intended to offset the socio-

economic impacts caused by continued operation of the Wells Dam facility." <u>See City's August 15, 2007 Comments, p. 10.</u> Nothing in that statement concedes that the only detrimental effects of the Wells Dam project are recreation-related.

Indeed, the City has consistently argued that the construction and operation of Wells Dam has had significant adverse impacts on the economies and civic structures of the City of Pateros and surrounding communities. In our April 2, 2007 Study Request, we identified the following direct, indirect and cumulative effects:

- The construction of the dam impacted the City of Pateros directly by flooding the City's downtown area and displacing much of its business, civic and population centers.
- The past, present and future operation of the Dam has and will cause direct, indirect and cumulative effects on the City of Pateros' economic, civic and social conditions including: the loss of area businesses, the loss of revenue (property, sales, excise and hotel/motes tax), changes in the cost of providing services, increased maintenance costs of new park assets, damage to the City's civic and social fabric, the loss of valuable agricultural land and warehouses, the loss of different kinds of recreation opportunities associated with a free-flowing river, and environmental costs.

As this demonstrates, The City has been consistent in its position that the Wells Dam project has negatively impacted the economic and social well-being of Pateros and the surrounding communities.

Douglas PUD concludes the first section of its response by again claiming that "Pateros' study request clearly fails to satisfy FERC's study criterion 5, which requires an explanation of the nexus between project operations and effects on the resources to be studied." This statement simply ignores that the City has already identified the impacts referenced above.

Moreover, Douglas PUD's claim is also contradicted by the fact that \underline{two} different socio-economic studies conducted as part of the Chelan County PUD Rocky Reach relicensing process determined that construction and operation of Rocky Reach Dam has had substantial socio-economic impacts on the City of Entiat, a neighboring city that also lost much of its downtown core to a hydroelectric project. Given the similar situations faced by the two cities, one can reasonably expect that a full-scale study of the Wells Dam project's impacts on the City of Pateros would lead to similar conclusions.

In fact, the December 1, 2000 Final Socioeconomic study conducted by McHugh & Associates for Chelan PUD identified the similarities between Entiat and Pateros in its conclusions:

Of particular interest are the cities of Entiat in Chelan County and Pateros in Okanogan County, both of which experienced dislocations of substantial portions of their downtown areas due to flooding of the lands upstream of the newly constructed dams (Rocky Reach Dam in the case of Entiat and Wells Dam in the case of Pateros).

. . .

Clearly, these communities experience substantial population loss during the initial period of dam construction and operations. They have recovered the pre-dam development population levels, but only through a combination of very slow growth over a long period or annexation of nearby areas.

 \underline{See} Socioeconomic Study of McHugh & Associates, December 1, 2000; p. 2-3, attached as Exhibit A.

Specifically relating to the City of Entiat, the Chelan PUD consultants recognized that many factors influenced Entiat's economic condition during this time, but said the following about the long-term impacts of Rocky Reach Dam:

Nonetheless, the loss of population and property valuation, associated with the dislocation of the downtown core as a result of developing the Rocky Reach Project, was a major turning point in the economic and social history of Entiat leading to longterm economic stagnation.

The loss of an economic base consisting of a vital downtown area as well as stable employment opportunities within a viable industrial structure has led to depressed economic conditions within the Entiat area. A major consequence of this has been the diminished capacity of the public sector to provide adequate services to the area population.

For the city of Entiat and Entiat School District No. 127 this has meant lower property tax collections resulting smaller available resources to fund necessary expenditures. Public utility excise tax receipts received by the city over the years were insufficient to make up the difference for the loss of the property tax base. . . .

 \underline{See} Socioeconomic Study of McHugh & Associates, December 1, 2000, p. 2-3 (emphasis supplied).

McHugh & Associates recognized that lost real estate taxes was one measure of damages associated with the continuing operation of the Rocky Reach Dam:

The methodology for considering possible fiscal impacts on the city of Entiat is based on comparative analysis of property tax base changes for Chelan County as a whole and the city of Cashmere. [Cashmere] was chosen because it was the smallest city in the county with a similar economic base (mostly agriculture-related industries) enjoyed by Entiat prior to the development of the Rocky Reach Project.

. . .

Clearly, over time, the city of Entiat has seen a worsening of its property base relative to what it might have been, if conditions in the economy and property market had followed the pattern experienced by the city of Cashmere and, even more so, by the county as a whole.

. . .

A case could be made that the NPV [net present value] figure of \$506,847 represents the fiscal loss, in terms of operating revenues, to the city of Entiat as a result of the economic dislocations caused by the inundation of the downtown area.

 \underline{See} Socioeconomic Study of McHugh & Associates, December 1, 2000, p. A-46-47 (emphasis supplied).

It is important to reiterate that these conclusions were reached by a consultant retained by the Chelan County PUD to study the impacts of the Rocky Reach project. However, The City of Entiat (and City of Entiat School District #127) also retained another consultant to conduct an independent study the socioeconomic impacts of the project. In April 2003, ECONorthwest issued its study, a copy of which is attached as Exhibit B. The report examines the impacts of the Rocky Reach project in great detail, but the abstract states the following:

The analysis begins by showing that the City and School District were negatively affected by the dam. The economic base on which they depended for revenue was uprooted, and the one-time compensation paid to them by PUD did not begin to cover the stream of revenues that they have foregone for almost 50 years

and will continue to forego. The analysis describes why that stream of lost revenue is a reasonable measure of the damages they have suffered, and estimates the present value of past and potential future lost revenue. The lost revenues result, directly or indirectly, from losses of economic activity and tax base in Entiat.

The City loses revenues (revenues that it otherwise would have expected if the dam had not been built) from four sources: property tax, sales tax, real estate excise tax, and hotel/motel tax. . . .

Our estimates of the average present value (2002 dollars) of the past and future lost revenues are \$13.4 million for the City of Entiat and \$20.5 million for the School District.

April 2003 ECONorthwest Study, page iii (emphasis supplied).

As we have previously noted, the cities of Pateros and Entiat (and to a lesser extent, the city of Brewster) each lost their vibrant downtown cores as a result of the construction of the Wells and Rocky Reach projects. The studies conducted on the Rocky Reach project establish a clear nexus between the construction and ongoing operations of these dams and the social and economic health of the surrounding communities. While a study that specifically studies the socio-economic impacts of the Wells Project is necessary, there can be no question that the Rocky Reach studies provide ample basis under section 5 of FERC's study criterion.¹

B. The original socio-economic impacts of the Wells Project have not been mitigated - and will continue on into the future.

In its Revised Study Plan, Douglas PUD asserts that the original socio-economic impacts caused by the construction of the dam have "already been fully mitigated" and should not be considered again. See *Douglas PUD revised Study Plan, at P. 24.* Douglas PUD supports this claim by reciting how Douglas PUD paid fair market value for the property acquired and hired consulting engineers and planners to assist in the reconfiguration of the cities of Pateros and Brewster.

¹ In its Revised Study Plan, Douglas PUD disingenuously argues that the Chelan PUD/Rocky Reach studies are irrelevant because they were conducted under the Alternative Licensing Process (ALP) rather than the ILP. Douglas PUD claims that the ALP allowed for studies of issues that were not related to the project operations. However, regardless of whether there is a difference in nexus requirements, there is no question that both the McHugh & Associates and ECONorthwest studies found a direct (and indirect) correlation between the Rocky Reach project and the socio-economics of the City of Entiat.

Regardless of such payments, this argument still ignores the fact that Douglas PUD has never paid any money to any of these cities for socio-economic impacts caused by the construction and operation of the dam. As both of the studies conducted on the Rocky Reach Project recognized, purchasing the land to be inundated may have compensated the landowners for the value of their property, but it did not take into consideration the loss of tax base and other economic opportunities caused by the condemnation of property owned in the affected cities.

This very subject was also discussed in the Chelan PUD socio-economic study on the Rocky Reach Project. In that case, the consultants hired by Chelan PUD recognized that the condemnation payments made by the utility did not compensate for economic impacts to the City and School District, stating:

Despite the payments made by the Chelan County PUD to private property owners and to the public sector, the dislocation of the downtown core has had severe consequences. Many individuals and business owners decided to locate elsewhere rather than invest in the development of a new downtown core. Also, existing owners of upland properties at locations that could have formed the basis for a new downtown center had varying levels of interest in selling to recently displaced property owners. . . .

See Socioeconomic Study of McHugh & Associates, December 1, 2000, p. A-59 (emphasis supplied).

The ECONorthwest study further concluded that the impacts caused by the original construction of the Rocky Reach Dam are ongoing and will continue into the future. In addition to the language quoted above, ECONorthwest also concluded:

There is reason to believe that the per capita property tax shortfall will continue into the future. The difference in per capita property taxes, relative to other Chelan County municipalities has increased over the past 40 years and has accelerated over the past decade. The combined impact of rapid population growth in Entiat over the past decade and limited available commercial, industrial, and agricultural land in and around the City are likely to further a situation where Entiat serves as bedroom community for other cities. The fiscal impact to the City is that it will have a growing population to serve, but may have a tax base that grows at a slower rate.

Thus, in addition to being compensated for all past fiscal damages, the City and School District should be compensated for all future damages. If Entiat had been compensated in circa 1960 for the fiscal damage the Rocky Reach Dam caused to the City and School District, there would be no need for this current analysis. It follows that if the City and School District are compensated now for the ongoing damages, there will be no need to calculate damages in 2040 for the years 2004 through 2040. Our conclusion, based on estimates of lost revenues, is that Entiat has been fiscally damaged each of the past 40+ years. If they are compensated today for these future damages, the City and School District will be able to use this money to help mitigate the ongoing damage.

In summary, if Entiat and the School District have been losing revenues in every year from around 1959 to 2002, then in the absence of any compensation by the PUD, they will continue to lose revenue (relative to what they would have had) into the future. Basic economic principles require that any current settlement needs to account for the present value of those future losses.

April 2003 ECONorthwest Study, page 14 (emphasis supplied).

In short, Douglas PUD's claim that the City of Pateros has received compensation for the past, present and ongoing socioeconomic damages is exactly the same argument made by the Chelan PUD in the Rocky Reach relicensing project. Subsequent studies conducted by well-established firms following recognized economic principles concluded otherwise. Given the similarities between the cities of Pateros and Entiat, the same can be expected to hold true in the current proceedings.

C. Socio-economic studies provide relevant information for the FERC's consideration of issuing a new license and are appropriate in relicensing proceedings regardless of whether new facilities are contemplated.

Douglas PUD further attempts to downplay the studies conducted on the Rocky Reach project by claiming, "Ultimately the study cited by Pateros and conducted by Chelan PUD was not used to inform any license decisions and did not result in any terms or conditions for the Rocky Reach license." Revised Study Plan, p. 25.

This disingenuous assertion ignores the fact that after these studies were conducted, the City of Entiat entered into a Settlement Agreement with Chelan PUD for the relicensing of the Rocky Reach project. <u>See</u> Rocky Reach Settlement Agreement dated February 3, 2006, attached as Exhibit C. As part of the Settlement Agreement, the City of Entiat agreed to not contest the Chelan PUD's proposed Environmental Impact Statement, which included a substantial mitigation package for the City of Entiat. These amenities consisted of significant upgrades to Entiat Park, wastewater treatment plant upgrades, design and construction of an Entiatqua Trail link, and implementation of a lease/purchase agreement with the City of Entiat relating to valuable Columbia River waterfront property. <u>See</u> Section 2 of Chelan PUD Final Environmental Impact Statement dated August 4, 2006, at p. 21, attached as Exhibit D. Douglas PUD's assertion that the socioeconomic studies did not play a role in the final license conditions submitted by Chelan PUD is simply not true.

Douglas PUD also claims that the socio-economic studies conducted in other re-licensing cases across the country are distinguishable from the Wells Dam process because "Douglas PUD is not currently proposing to construct any significant new facilities at the Wells Project during the term of the next license."

In the Appalachian Power Company's application for a new license for the Smith Mountain Project in Virginia, FERC Project 2210, the licensee was not proposing to add new facilities. While Douglas PUD claims that the socio-economic analysis was limited, it is important to note the language contained within the February 2007 study itself:

The land use, population, fiscal, and economic analysis conducted in this study is intended to address these issues by providing the basis for understanding the project's effect on the local economy and community. The analysis may help relicensing participants identify enhancement measures that could address any adverse project effects and help ensure that the project continues to contribute to the long-term vitality of the region.

<u>See</u> The City of Pateros's August 15, 2007 Comments, Exhibit C p. iv. The Smith Mountain relicensing process – as well as the Rocky Reach project – demonstrate that other licensees have undertaken socio-economic studies even if there are no significant new facilities planned during the next license.

II. <u>Comments On Refusal To Study Operation and Maintenance Of</u> The City's Recreation Facilities.

In our August 15, 2007 comments, the City stated that it would be willing to accept Douglas PUD's proposal to conduct a Recreation Needs Analysis and Public Access Study, followed by an

evaluation of measures appropriate for meeting the identified needs. The City was willing to agree with this proposal, provided that the obligations of Douglas PUD as set forth above are incorporated in the revised ILP Study Plan document. Based on the language in the Revised Study Plan, it appears that Douglas PUD is in agreement with this plan. With that understanding, the City does not object to Douglas PUD's Revised Study Plan as it relates to recreation facilities.

III. Comments On Refusal To Study Visitor Center.

As stated in our August 15, 2007 comments, the City had been informed by Douglas PUD staff that they intended to recommend that a new Visitor Information Center be built at the current Wells Dam Overlook. Based on this representation, the City did not believe that a formal study of this issue would be required.

However, in the Revised Study Plan, Douglas PUD gives no reassurance that staff will recommend relocating the existing Visitor Center, instead merely stating that it will evaluate the issue after conducting the Recreation Needs Analysis. Given Douglas PUD's apparent unwillingness to commit to the new Visitor Center, the City believes it is appropriate for FERC to require a study of the feasibility of a new regional Visitor Information Center.

CONCLUSION

For the reasons stated above, we believe that FERC should require Douglas PUD to conduct studies of the (1) socio-economic impacts of the Wells Dam project and (2) a regional Visitor Information Center. We believe that both of these studies will provide important information about how the relicensing of the Wells Dam project will impact the City of Pateros and the surrounding communities. We also believe that the results of the study will provide the basis for providing mitigation measures associated with the issuance of a new license to Douglas PUD.

Please let me know if you need any additional information.

Sincerely,

Gail A. Howe

Gail A. Howe, Mayor City of Pateros

Attachments: Pateros Exhibit A, Pateros Exhibit B, Pateros Exhibit C, Pateros Exhibit D

Pateros Exhibits A-D total 757 pages.
These exhibits are available on the Communication – Correspondence Page of Douglas PUD's Relicensing website: www.douglaspud.org/relicensing .

Letter to Douglas PUD from FERC regarding Study Plan Determination

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON D.C. 20426 October 11, 2007

NOTED 0CT 1 6 2007 W.C.D.

OFFICE OF ENERGY PROJECTS

Project No. 2149-131-Washington Wells Hydroelectric Project Public Utility District No. 1 of Douglas County

William C. Dobbins, Manager Public Utility District No. 1 of Douglas County 1151 Valley Mall Parkway East Wenatchee, WA 98802

Reference: Study Plan Determination for Wells Hydroelectric Project

Dear Mr. Dobbins:

This letter contains, pursuant to 18 CFR §5.13(c), my study plan determination for Public Utility District No. 1 of Douglas County's (Douglas PUD) Wells Hydroelectric Project (Wells Project). My determination is based on the staff's review of the revised study'plan and comments on the proposed and revised study plans.

Most study issues have been resolved. I accept the staff's findings on the proposed studies and the issues still in dispute, which are discussed in Appendix A. A list of approved studies is attached as Appendix B.

Background

On May 16, 2007, Douglas PUD filed their proposed study plan that included studies on fish, water quality, cultural, recreation, and terrestrial resources. The Cities of Brewster and Pateros filed comments on the proposed study plan on August 14 and 15, 2007, respectively.

On June 14, 2007, Douglas PUD held a study plan meeting to discuss the study plans. Douglas PUD filed a revised study plan on September 14, 2007. The Confederated Tribes of the Umatilla Indian Reservation (Umatilla) sent a letter to Douglas PUD on August 14, 2007, that included comments on the proposed lamprey

NOTED 0CT 1 6 2007 Wells Hydroelectric Project Project No. 2149-131-Washington

studies and new requests for salmon and steelhead studies. Umatilla did not address the study criteria or file the study requests with the Commission; however, Umatilla's request and Douglas PUD's responses were included in the revised study plan and reviewed by Commission staff. Comments on the revised study plan were filed by the City of Pateros on October 1, 2007.

Study Plan Determination

The study plan filed on September 14, 2007, as modified herein, is approved.

If you have any questions, please contact Bob Easton at (202) 502-6045 or robert.easton@ferc.gov.

Sincerely,

J. Mark Robinson, Director Office of Energy Projects

Enclosures: Appendix A, Study Request Issues

Appendix B, Approved Studies

cc: Public Files

Mailing List

APPENDIX A – STUDY REQUEST ISSUES Staff's Findings/Response to Comments on the Study Plan

The following includes staff's findings on studies proposed by Douglas PUD. Except as explained below, we concur with Douglas PUD's conclusions and basis for its proposed studies and conclude that the study plan filed on September 14, 2007, adequately addresses all study needs at this time.¹

Survival and Rates of Predation for Juvenile Pacific Lamprey Migrating through the Wells Hydroelectric Project (Juvenile Lamprey Study)

As part of the Juvenile Lamprey Study, Douglas PUD proposes to conduct a literature review that will compile all of the available information regarding juvenile lamprey survival at hydroelectric projects in the Columbia River Basin. Douglas PUD indicates that they will conduct a literature review because a juvenile lamprey survival study is infeasible at this time. Because compilation of existing information does not constitute a study, there is no need to approve this portion of the juvenile lamprey study.

The Juvenile Lamprey Study also includes an assessment of the occurrence of juvenile lamprey in the diets of predatory birds and fish. Douglas PUD indicates that the information collected through this study would be used to modify, as appropriate, the ongoing predator control programs in a manner that would maximize protection for outmigrating juvenile lamprey while continuing to ensure protection for juvenile salmonids.

Douglas PUD indicates that evaluation of predation on juvenile lamprey by birds would be assessed as part of the Piscivorous Wildlife Control Study. The information collected through this study would be useful for addressing effects of the wildlife control program on juvenile lamprey. We recommend approval of this study.

To address the effects of predatory fish on juvenile lamprey, Douglas PUD proposes to examine the stomach contents of approximately 20 smallmouth bass and 20 walleye from the Wells tailrace and 500 northern pikeminnow from the Wells tailrace and reservoir. Douglas PUD indicates that fish collection will occur through angling and

¹ None of the comments made by the Umatilla persuaded staff to modify the study plan.

² Douglas PUD indicates that obtaining sufficient numbers of juvenile lamprey to conduct a survival study is not practicable and the technology for tagging juvenile lamprey is in the development stage.

Wells Hydroelectric Project Project No. 2149-131-Washington

coordination with existing programs that already capture these species. Examination of 500 pikeminnow stomachs could provide information that would be useful in assessing the effectiveness of the ongoing pikeminnow removal program and deriving potential modifications to the program. However, the benefit of examining approximately 20 smallmouth bass and walleye stomachs is not apparent. We are not aware of any ongoing predator control activities for these species that could be modified based on these data and the sample sizes for sampling smallmouth bass and walleye appear to be too small to have any statistical validity or value for creating such a program. We conclude that this information is not necessary for our analysis [18 CFR §5.9(b)(4)]; therefore, we do not recommend that Douglas PUD be required to conduct this portion of the proposed study.

An Assessment of Adult Pacific Lamprey Spawning within the Wells Project (Lamprey Spawning Assessment)

Douglas PUD proposes to identify areas within Wells Reservoir that are consistent with spawning habitat requirements for Pacific lamprey and conduct surveys to determine if spawning is occurring in the reservoir. If spawning is observed, Douglas PUD proposes to assess whether Wells Dam operations adversely affect lamprey spawning habitat.

From 1998 to 2005, adult lamprey passage over Wells Dam ranged from 73 to 1,417 fish (annual average was approximately 400). Pacific lamprey spawning has not been documented within Wells Reservoir and Douglas PUD has suggested that spawning habitat within Wells Reservoir may be marginal and patchy. Existing information suggests that the habitat preference of spawning lamprey includes small tributaries consisting of shallow (approximately 1 meter deep) tailouts of pools over large gravel to small cobble substrates. This habitat is generally not available within Wells Reservoir because the vast majority of the reservoir is much deeper than 1 meter.

Based on available information, we conclude that it is unlikely that there would be substantial adult lamprey spawning habitat within Wells Reservoir. Additionally, there are several tributaries upstream of Wells Dam and outside of the project area that are better candidates for providing suitable adult lamprey spawning habitat and we have no reason to conclude that the adult lamprey passing over Wells Dam would be unable to access these areas. Therefore, we conclude that existing information is adequate for our needs and the proposed study is not necessary for our environmental analysis [18 CFR §5.9(b)(4)]. We do not recommend that Douglas PUD be required to conduct the proposed study.

Continued Monitoring of Dissolved Oxygen (DO), pH, and Turbidity in the Wells Forebay and Lower Okanogan River (DO, pH, and Turbidity Study)

Douglas PUD is proposing to conduct two additional years of monitoring DO, pH, and turbidity in the Wells forebay and Lower Okanogan River within the project area. Douglas PUD indicates that monitoring of these parameters began in August 2005 and continued in 2006. They do not indicate if any monitoring was conducted in 2007.

The monitoring data collected in 2005 and 2006 suggest that waters within the Wells Project area are generally in compliance with state standards for DO, pH, and turbidity. All surface water measurements collected had DO values greater than 8.0 milligrams per liter (mg/L), pH was within the specified range, and turbidity was generally low except for a few elevated measurements collected in tributaries to the project reservoir. Douglas PUD states that during times when waters in the project area exceed state numeric criteria, the waters entering the Wells Project area are also out of compliance.

To justify the need for the DO, pH, and turbidity study, Douglas PUD states that additional monitoring is necessary to make a final determination that the project is in compliance with state criteria. We have reviewed the existing information and we conclude that there is little justification for additional monitoring. Various entities, including Chelan PUD and Grant PUD, have recently conducted water quality monitoring in the mid-Columbia River and none of these studies have indicated concerns with DO, pH, or turbidity conditions downstream of Wells Dam. Additionally, long-term monitoring of water quality in areas upstream of the Wells Project, primarily the Okanogan River and Methow River, suggest that tributary flow into the project area meets state criteria for DO, pH, and turbidity under most conditions. Lastly, the site-specific data reported by Douglas PUD indicates that waters in the project area are not exceeding state criteria for DO, pH, or turbidity. Based on this information, we conclude that existing information is adequate for our needs and additional monitoring is not necessary for our analysis [18 CFR §5.9(b)(4)]. We do not recommend approving this study.

Socioeconomic Impact of the Wells Project on Okanogan County and the Cities of Pateros, Brewster, and Bridgeport

The Cities of Pateros (Pateros) and Brewster request that Douglas PUD conduct a study of the socioeconomic impacts of the Wells Project on Okanogan County and the Cities of Pateros, Brewster, and Bridgeport. Pateros states that (a) construction of the

³ High turbidity measurements have been recorded in these areas; however, they appear to be related to background conditions or periods of higher stream flows.

Wells Dam caused a direct impact on the City of Pateros by flooding the city's downtown area and displacing much of its business, civic, and population centers; and (b) the past, present, and future operation of the Wells Dam has and will continue to cause direct, indirect, and cumulative effects on the City of Pateros' economic, civic, and social conditions, including the loss of area businesses and revenue (property, sales, excise and hotel/motel taxes), changes in the cost of providing services, increased maintenance costs of new park assets, damage to the city's civic and social fabric, the loss of valuable agricultural land and warehouses, the loss of different kinds of recreation opportunities associated with a free-flowing river, and environmental costs. Pateros requests that a cost-benefit analysis (or an appropriate variation thereof) be conducted to evaluate the impact that the construction of the Wells project had, and will continue to have, on lost revenues from property, sales, excise and hotel/motel taxes. Pateros would have Douglas PUD identify: (a) factors that influence regional and local economics, including health care, agriculture, schools and other public entities, industry, and tourism; (b) socioeconomic impacts of the Wells Project on Okanogan County and the Cities of Pateros, Brewster, and Bridgeport; (c) future growth opportunities and estimated impacts of project operations on these resources; and (d) past and continuing socioeconomic impacts resulting from the City of Pateros' relocation and displacement when the Wells Dam was originally constructed.

Douglas PUD states that it does not propose to conduct a socioeconomic study, arguing that the information would not be of use during the development of license requirements and because the study would focus on original project impacts that were already mitigated during the term of the original license. Douglas PUD further argues that the purposes of any socioeconomic analysis must be to identify socioeconomic impacts specifically related to the project and its proposed operations. Douglas PUD states that the scope of any socioeconomic effects must be limited to the extent that the project's environmental effects are interrelated to any social/economic impacts on the community. They add that an analysis should not consider those areas of Pateros' socioeconomic conditions for which the city is the responsible entity or which are unrelated to the project, including tax structure, business incentives, and other local economic conditions.

The subjects of Pateros' proposed socioeconomic study are the uncompensated effects of inundation and relocation of parts of the city and forgone tax revenues that would continue into the future because of the lost tax base on lands inundated by the reservoir. As the Commission has explained, the environmental baseline at relicensing is

Wells Hydroelectric Project Project No. 2149-131-Washington

the environment as it exists at the time of relicensing, not pre-project conditions.⁴ Moreover, while the Commission will consider pre-project conditions to help inform the Commission's judgment concerning appropriate mitigation and enhancement measures, it will not require a licensee to re-create or analyze the environmental conditions that existed before the project was built. The Commission evaluates and considers the appropriateness of requiring enhancement measures in the context of today's environment and in relation to today's needs and problems, not in the context of the world as it existed 50 years ago.⁵

The City of Brewster did not address the study criteria [18 CFR §5.9(b)]. Pateros does not explain why its requested additional information is needed [18 CFR §5.9(b)(4)]. The information that Pateros would have Douglas PUD gather and analyze already exists (i.e., demographics, tax statistics, property valuations, etc.). We expect that the existing available information would be analyzed by Douglas PUD in its application, and that the analysis would be done in the context of proposed operational and environmental measures of any future license as noted by Douglas PUD.

Additionally, it is not clear whether the methods described by Pateros would be appropriate [18 CFR §5.9(b)(5)] because a comparison of pre-project conditions to existing conditions would not likely shed any light on the effects of relicensing the project. A "then and now" comparison would reflect how the present differs from the past, but would not necessarily reveal whether the differences are due to the passage of time, regional factors, or other factors outside Douglas PUD's control or related to the project.

While tax-related issues are important for local communities, reviewing all tax information related to the project and surrounding communities is beyond the scope of this licensing. As the Commission has recently stated, it will not usurp the state's taxation function.⁶

Therefore, for the above reasons, including those stated by Douglas PUD, we do not recommend requiring Douglas PUD to conduct a socioeconomic study.

⁴ Order No. 513, 54 Fed. Reg. 23756 (June 2, 1989), FERC Stats. & Regs., Reg. Preambles 1986-1990 ¶ 30,854 at 31,401, citing Confederated Tribes of the Yakima Indian Nation v. FERC, 746 F.2d 466 (9th Cir. 1984), cert. denied, 471 U.S. 1116 (1985).

⁵ 47 FERC 61,225 (1989).

⁶ New York Power Authority, 120 FERC ¶ 61,266 at P.33 (2007).

Visitor Information Center

Pateros requests that Douglas PUD study the feasibility of constructing a new regional Visitor Information Center because Douglas PUD's Revised Study Plan does not provide an assurance that the existing visitor center would be relocated.

As part of its Recreational Needs Analysis, Douglas PUD would identify future recreation needs in the Wells Project area and evaluate existing information, including historic and current Wells Dam Visitor Information Center records. Following completion of the study, the need for reopening or relocating the Wells Dam Visitor Information Center would be evaluated. Consequently, Douglas PUD does not believe a separate feasibility study is warranted.

Pateros also did not include any of the requisite information stipulated in 18 CFR §5.9(b) to justify their request and to assist in our analysis of the recommendation, including the methods for conducting the feasibility assessment [18 CFR §5.9(b)(6)]. Moreover, consideration of the need for this measure is premature. Data collected and analyzed from the Recreational Needs Analysis would identify existing and future recreation needs, as well as, determine whether demand exists to justify the construction or enhancement of recreation facilities, including the Wells Dam Visitor Information Center. We, therefore, do not recommend requiring Douglas PUD to conduct a feasibility study for a new Visitor Information Center.

APPENDIX B APPROVED STUDIES

#	Study Name
1	Cultural Resource Investigation
2	Evaluation of Public Access To and Use of the Wells Reservoir as it Relates to Reservoir Fluctuations, Aquatic Plants, and Substrate Buildup (Public
	Access Study)
3	An Evaluation of Recreational Needs within the Wells Project (Recreational
	Needs Analysis)
4	An Evaluation of the Effects Of and Alternatives To the Existing Bird and
4.7	Mammal Control Programs (Piscivorous Wildlife Control Study)
5	Plant and Wildlife Surveys and Cover Type Mapping for the Wells
,	Hydroelectric Project 230 kV Transmission Corridor (Transmission Line
	Wildlife and Botanical Study)
6	Survival and Rates of Predation for Juvenile Pacific Lamprey Migrating
	through the Wells Hydroelectric Project (Juvenile Lamprey Study)
7	Adult Pacific Lamprey Passage and Behavior Study (Adult Lamprey Passage
	Study)
8	An Investigation into the Total Dissolved Gas Dynamics of the Wells Project
	(Total Dissolved Gas Investigation)
9	Development of a Water Temperature Model Relating Project Operations to
	Compliance with the Washington State and EPA Water Quality Standards
	(Water Temperature Study)
10	Assessment of DDT and PCB in Fish Tissue and Sediment in the lower
	Okanogan River (Okanogan Toxins Study)

Letter to NMFS from FERC regarding Filing of HCP as Comprehensive Plan

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D.C. 20426 October 16, 2007

OFFICE OF ENERGY PROJECTS

Keith Kirkendall, Chief National Marine Fisheries Service 1201 NE Lloyd Boulevard, Suite 1100 Portland, OR 97232

Reference: Request for treatment of document as a Comprehensive Plan, pursuant to section 10(a)(2)(A) of the Federal Power Act

Dear Mr. Kirkendall:

Thank you for your letter dated September 17, 2007, providing the Federal Energy Regulatory Commission (Commission) with a copy of the "Anadromous Fish Agreement and Habitat Conservation Plan: The Wells Hydroelectric Project (FERC License No. 2149)," dated March 26, 2002. The plan is supported by Documents A through D. Pursuant to section 10(a)(2)(A) of the Federal Power Act (FPA), you request that the document be considered as a comprehensive plan.

As you note in your letter, the plan establishes a beneficial use of the Upper Columbia River through conservation of Chinook salmon, steelhead, sockeye salmon, and coho salmon (Plan Species). The Anadromous Fish Agreement provides for a comprehensive and long-term adaptive management plan for the Plan Species and their habitats.

Based on the staff review, the following document qualifies as a comprehensive plan under section 10(a)(2)(A) of the FPA:

National Marine Fisheries Service. 2002. Anadromous Fish Agreement and Habitat Conservation Plan: The Wells Hydroelectric Project (FERC License No. 2149). U.S. Department of Commerce. March 26, 2002.

Any future river-related plan prepared by the National Marine Fisheries Service must be filed with the Commission in order to be considered in the Commission's section 10(a)(2)(A) of the FPA analysis of hydropower projects in Washington.

Sincerely,

Mark Pawlowski, Chief Hydro East Branch 2

cc: Shane Bickford, Supervisor of Relicensing Public Utility District No. 1 of Douglas County 1151 Valley Mall Parkway East Wenatchee, WA 98802-4497

Public Files

Letter to FERC from City of Pateros regarding Rehearing Request

113 Lakeshore Drive PO Box 8 Pateros, WA 98846



Phone: 509.923.2571
Fax: 509.923.2971
E-mail: pateros@swift-stream.com

November 7, 2007

Honorary Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

RE: Wells Hydro electric Project No 2149-131

Reply to Study Plan Determination

Dear Secretary Bose:

On behalf of the City of Pateros, we request a rehearing for a full socioeconomic study of the impact of the Wells Project on our community. We do this after carefully studying the October 11, 2007 order from FERC Energy Projects Director, J. Mark Robinson.

It appears that the FERC reviewer of our request that Douglas PUD conduct this study either missed or ignored the major points of our letter (dated April 2, 2007). We asked for a study of the "cumulative effect" and the "ongoing impacts" of the Wells Hydroelectric Project, not the initial effect of the creation of the Dam. We do not seek a return to "pre-project conditions" but do ask to have ongoing impacts addressed. See our Statement of Issues addendum.

The Study Plan Determination letter (dated October 11, 2007) does expect Douglas PUD to analyze existing information (i.e., demographics, tax statistics, property valuations, etc.) but this requirement is not clearly spelled out and leaves open to question the methodology that will be used by Douglas PUD when addressing this concern.

We ask that FERC either require Douglas PUD to conduct a socioeconomic study, which we have previously asked for, or explain clearly in additional detail how they expect Douglas PUD to address the issues that we have brought up.

Thank you for your concern and please let me know if you need any additional information.

Sincerely,

Gail A Howe

Gail A Howe, Mayor City of Pateros

Enclosure: Addendum – Statement of Issues CC: Bob Easton - robert.easton@ferc.gov

Pateros, Washington — Your Center of Recreation www.pateros.com

Addendum – Statement of Issues

The City of Pateros provides the following information in support of this study request as provided in 18 CRF § 5.9(b):

- 1) Goals, Objectives and Information to be Obtained. The primary goals and objectives of the proposed study include:
 - Identify, describe and document factors that influence regional and local economics, including health care, agriculture, schools and other public entities, industry and tourism.
 - Identify the socio-economic impacts of the Wells Project on Okanogan County and the cities of Pateros, Brewster and Bridgeport.
 - Identify future growth opportunities and estimate the impact of Project operations on these resources.
 - Specifically identify the socio-economic impacts resulting from the City of Pateros' relocation and displacement when Wells Dam was originally built in 1962 and the continuing effects of said relocation and displacement.
- 2) <u>Resource Management Goals</u>. The City of Pateros is one of the municipalities to be studied and has a direct interest in managing the social and economic resources to be analyzed as part of the study.
- 3) <u>Public Interest Considerations.</u> In addition to the City of Pateros' role as a resource agency, the public interest is served by conducting the requested study because the residents of the City of Pateros have been directly impacted by the Wells Project and will continue to be effected during the proposed license term.
- 4) <u>Existing Information</u>. Existing information on this subject include:
 - Population comparisons
 - · Business and commercial data
 - Tax revenue statistics
 - School District enrollment and revenue data
 - Property valuations statistics
 - Per Capita Value and Growth indices
 - 2003 Economic Analysis of the Impact of the Rocky Reach Dam and Reservoir on the City of Entiat (April 2, 2007 letter Exhibit B)
 - Pateros Downtown Business District Plan (draft August 2006)
 - Parks water and wastewater use and utility impacts data (February 28, 2007 letter to FERC)
 - Above information can be provided as needed by the City
- 5) <u>Nexus between Project Operations and Effects</u>. The construction and operation of the Wells Project has had substantial direct, indirect and cumulative effects on Okanogan County and particularly the City of Pateros, including the following:
 - The construction of the Dam impacted the City of Pateros directly by flooding the City's downtown area and displacing much of its business, civic and population centers.
 - The past, present and future operation of the Dam has and will cause direct, indirect and cumulative effects on the City of Pateros' economic, civic and social conditions including: the loss of area businesses, the loss of revenue (property, sales, excise and hotel/motel tax), changes in the cost of providing services, increased maintenance costs of new park assets, damage to the City's civic and social fabric, the loss of valuable agricultural land and warehouses, the loss of different kinds of recreation opportunities associated with a free-flowing river, and environmental costs.
- 6) <u>Study Methodology</u>. The City of Pateros believes that the most appropriate method for studying the effects of the Wells Dam Project is to conduct a benefit-cost analysis or an appropriate variation thereof, evaluating the impacts of the Wells project in terms of lost revenues to the effected parties. The proposed study methodology is consistent with generally accepted practice in the economic and fiscal evaluation community. The Entiat Economic Analysis could be used as a guide for this study, although other factors may also need to be addressed.
- 7) <u>Level of Effort and Cost.</u> Conducting a study as described above will require a substantial amount of information gathering and analysis by qualified socio-economic consultant. The costs involved in a thorough and professional study are necessary and appropriate given the long-term effects of the Project. ECONorthwest, the firm that performed the Entiat study, has indicated that the cost for studying the impacts on the City of Pateros will be less than \$50,000.

Pateros, Washington — Your Center of Recreation www.pateros.com

Letter to FERC from Douglas PUD regarding Objection to Rehearing Request

LAWYERS



Davis Wright Tremaine LLP

ANCHORAGE BELLEVUE LOS ANGELES NEW YORK PORTLAND SAN FRANCISCO SEATTLE SHANGHAI WASHINGTON, D.C.

JAMES B. VASILE

Direct (202) 973-4200

1919 PENNSYLVANIA AVENUE, N.W. FAX (202) 973-4499

jimvasile@dwt.com

WASHINGTON, D.C. 20006-3402 www.dwt.com

November 26, 2007

Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Re: Wells Hydroelectric Project No. 2149-131; Study Plan Determination; Objection to City of Pateros' Rehearing Request

Dear Secretary Bose:

This letter is submitted on behalf of Public Utility District No. 1 of Douglas County, Washington ("Douglas PUD") in response to a purported request for rehearing filed on November 7, 2007 by the City of Pateros ("Pateros"). Pateros' November 7 letter requested a rehearing of the Director of the Office of Energy Projects' October 11, 2007 Study Plan Determination for the relicensing of the Wells Hydroelectric Project. Douglas PUD asks that the Commission reject or dismiss Pateros' request for rehearing because, as briefly discussed below, such a request is not permitted by the licensing regulations or Commission procedure.

First, Part 5 of the FERC regulations implementing the Integrated License Application Process ("ILP"), which governs the Wells Project relicensing proceeding, does not provide an intervening party with a right to rehearing of a study plan determination. FERC regulations limit the right to dispute a study plan determination to Federal agencies with authority to provide mandatory conditions on a license, or any agency or Indian tribe with authority to issue a water quality certification for the project license, with respect to studies pertaining directly to the exercise of their authorities. In addition, when the Commission issued its final rule implementing the ILP, it noted that "[a] potential applicant that believes the ... study plan determination [is] not based on substantial evidence or [is] otherwise improper may file a request for rehearing." There is no basis in either the applicable FERC regulations or FERC's orders implementing the ILP for a rehearing right by an intervening party such as Pateros.

¹ 18 C.F.R. § 5.14 (2007)

² Hydroelectric Licensing Under the Federal Power Act, 104 FERC ¶ 61,109, at P.149 (2003).

Honorable Kimberly D. Bose November 26, 2007 Page 2



Second, the Commission generally does not consider procedural decisions, such as the one complained of here, to be final orders subject to rehearing.³ An order is final, and thereby subject to rehearing, "only when it imposes an obligation, denies a right, or fixes some legal relationship as the consummation of the administration process." Thus, the Commission has declined to accept requests for rehearing of a number of staff procedural actions. The Study Plan Determination issued in this proceeding, with respect to Pateros, is a procedural action similar to those interlocutory actions that are typically exempted from rehearing. Pateros, unlike an applicant who might be required by the Director to expend funds on an ill-conceived study, is not injured by the Study Plan Determination.

Third, Pateros' rehearing request would result in unnecessary delay of the ILP. The Commission has noted that "review of study plan orders could significantly lengthen the licensing process, and thus is to be avoided to the extent possible." The ILP provides for ample opportunities for intervenors to request and make their case for studies, and the addition of a further opportunity for intervenors to request rehearing of the Study Plan Determination would create delay and uncertainty, thus undermining the intent of the ILP.

Accordingly, Douglas PUD respectfully requests that Pateros' request for rehearing be rejected or dismissed. Please contact the undersigned if you have any questions concerning this matter.

Respectfully submitted,

James B. Vasile

Attorneys for Public Utility District No. 1 of Douglas County, Washington

cc:

Service List

J. Mark Robinson

James B Vasile 1 20

Bob Easton

Enclosure: Certificate of Service

 $^{^3}$ See, e.g., Ketchikan Pub. Utils., 121 FERC \P 61,155 (2007).

⁴ Ketchikan Pub. Utils., 121 FERC ¶ 61,155, at P.9 (2007); see also City of Fremont v. FERC, 336 F.3d 910, 913-14 (9th Cir. 2003); Papago Tribal Util. Auth. v. FERC, 628 F.2d 235, 239 (D.C. Cir. 1980).

⁵ See, e.g., Duke Power, 117 FERC ¶ 61,303 (2006) (affirming dismissal as interlocutory of request for rehearing of environmental assessment); Duke Energy Corp., 110 FERC ¶ 61,376 (2005) (dismissing request for rehearing of staff decision not to extend environmental scoping process); California Dep't of Water Resources, 70 FERC ¶ 61,115 (1995) (concluding that staff decision to prepare EA, rather an environmental impact statement, not subject to rehearing).

⁶ Hydroelectric Licensing Under the Federal Power Act, 104 FERC ¶ 61,109, at P.200 (2003).

CERTIFICATE OF SERVICE

I hereby certify that the foregoing document has been served upon each person designated on the official service list compiled by the Secretary in this proceeding via first-class mail.

Dated at Washington, D.C., this 26th day of November, 2007.

James B. Vasile

Davis Wright Tremaine LLP

1919 Pennsylvania Avenue, NW, Suite 200

Washington, DC 20006-3402

(202) 973-4200

Email to Douglas PUD from WDNR regarding Downgrade of Brittle Prickly-Pear

From: MOODY, SANDRA (DNR) [mailto:SANDRA.MOODY@dnr.wa.gov] On Behalf Of DNR RE

Natural Heritage Program

Sent: Tuesday, November 27, 2007 10:50 AM

To: Jim McGee

Subject: RE: brittle prickly-pear (Opuntia fragilis)

Hi Jim,

We have downgraded *Opuntia fragilis* from R1 status to our watch list due to its being more abundant than previously thought.

Sandy Swope Moody Environmental and Grants Coordinator Washington Natural Heritage Program PO Box 47014 Olympia WA 98504-7014 phone 360-902-1697

From: Jim McGee [mailto:JimM@dcpud.org]
Sent: Monday, November 26, 2007 4:09 PM
To: DNR RE Natural Heritage Program

Subject: brittle prickly-pear (Opuntia fragilis)

ΗΙ

The Wells Project reservoir shoreline was search in 2005 for RTE plant species. The botanist doing the work found patches of brittle prickly-pear (*Opuntia fragilis*) on project land. At the time of the survey *Opuntia fragilis* was considered a R1 plant on the Natural Heritage Program list. When I checked the status of (*Opuntia fragilis*), I didn't find it on the list. Is *Opuntia fragilis* no longer considered a R1 plant?

Thank you for your help.

Jim McGee Wildlife Biologist Douglas County PUD 1151 Valley Mall Parkway East Wenatchee, WA 98802 Phone 509-884-7191 Fax 509-884-0553 jmcgee@dcpud.org

Phone Conversation with WDFW regarding 2008 Adult Lamprey Passage Study



Wells Project Relicensing Phone Conversation Summary

Call to: Carmen Andonaegui, WDFW

Call From: Bao Le, DCPUD

Date: 11/27/07

Time: 4:20-4:50pm

Subject: Proposed modifications to the 2008 Wells Lamprey Passage

Study

Summary: I spoke with Carmen, non-game fish biologist for WDFW regarding our proposed changes to the 2008 Wells Project Pacific Lamprey Adult Passage Study. The three major issues discussed were:

- 1. Add an exclusion floor screen at each of the orifices directly below the overflow weir lamprey traps (4 total, 2 in each ladder). These exclusion screens should be benign to HCP plan species and should force lamprey higher into the water column where they can be captured via the overflow weir traps.
- 2. The addition of the exclusion floor screen may introduce a trap delay for tagged lamprey, released in the tailrace and re-ascending the ladder.
- 3. Shift the release location of the 10 adult tagged lamprey from the mid-ladder location (per the study plan) to the Collection Gallery area just inside of the entrance in the lower ladder. We would maintain a release of 30 adults in the tailrace similar to the 2007 assessment.

With regards to #1, Carmen does have concerns about lamprey drop back completely out of the ladder due to the inability to pass via the orifice while exclusion screens are installed. However, in discussions about the other available options which are closing orifices completely or installing large guidance ramps within the fish ladder (largely untested) coupled with recommendations by Chris Peery, University of Idaho lamprey researcher that exclusion screens will likely not cause drop back and is the most appropriate option, Carmen was in support of pursuing this modification.

With regards to #2, Carmen understands the fact that in order to increase lamprey trap efficiency (4 traps caught only 6 fish over 10 weeks of fishing), there may be a trap delay for tagged fish re-ascending the ladder. Given that our 2007 data suggests that from above the trap to the exit (See #3), passage times for tagged adult lamprey are consistent and reasonable suggesting no major impediments or delays, it would not be unreasonable to break the overall project passage time into two metrics (tailrace detection to trap and above trap to exit). Based on this information, the necessity to capture more lamprey at Wells Dam, and the few available options, Carmen acknowledged that a trap delay may be addressed through multiple metrics and that increasing trap efficiency and therefore the use of the exclusion screen is likely the preferred method.

With regards to #3, the data from the 2007 study which suggested that the tagged adult lamprey released mid-ladder (immediately above the broodstock collection facilities) at Wells Dam appeared to negotiate this section of the ladder successfully. Carmen was in support of shifting the in-ladder releases for 2008 (n=10) to the collection gallery area so that data could be collected on what appears to be a critical section of the ladder for lamprey passage.

Carmen also suggested that it would be appropriate to continue to use Rocky Reach fish as a supplement to the Wells trapping effort to ensure sample size is attained. Overall, Carmen was supportive of all three issues but recommended that I speak with Molly, WDFW's lamprey technical expert re: these issues and that Molly call Carmen to brief her after the discussion.

Phone Conversation with USFWS regarding 2008 Adult Lamprey Passage Study



Wells Project Relicensing Phone Conversation Summary

Call to: Steve Lewis, USFWS

Call From: Bao Le

Date: 11/27/07

Time: 2:00-2:30pm and 4:00-4:45pm (2 calls)

Issues Discussed:

1. Proposed modifications to 2008 Pacific lamprey study.

2. USFWS comments to the Draft Bull Trout Management Plan.

3. Final reporting timeline for the 2005-2008 Bull Trout Monitoring and Management Plan.

Summary:

Proposed 2008 Pacific Lamprey Study modifications

I spoke with Steve regarding our proposed changes to the 2008 Wells Project Pacific Lamprey Adult Passage Study. The three major issues discussed were:

- 1. Add an exclusion floor screen at each of the orifices directly below the overflow weir lamprey traps (4 total, 2 in each ladder). These exclusion screens should be benign to HCP plan species and should force lamprey higher into the water column where they can be captured via the overflow weir traps.
- 2. The addition of the exclusion floor screen may introduce a trap delay for tagged lamprey, released in the tailrace and re-ascending the ladder.
- 3. Shift the release location of the 10 adult tagged lamprey from the mid-ladder location (per the study plan) to the Collection Gallery area just inside of the entrance in the lower ladder. We would maintain a release of 30 adults in the tailrace similar to the 2007 assessment.

With regards to #1, Steve understands the issues with adding such a structure but was supportive of pursuing the modification given the fact that currently, not enough lamprey are trapped at Wells Dam to provide statistically significant study results necessary to inform future management decisions. He is also assured by the recommendations of Chris Peery, University of Idaho lamprey researcher that exclusion screens will likely not cause drop back and is the most appropriate option.

With regards to #2, Steve understands the fact that in order to increase lamprey trap efficiency (4 traps caught only 6 fish over 10 weeks of fishing), there may be a trap delay for tagged fish re-ascending the ladder. Given that our 2007 data suggests that from above the trap to the exit (See #3), passage times for tagged adult lamprey are consistent and reasonable suggesting no major impediments or delays, it would not be unreasonable to break the overall project passage time into two metrics, tailrace detection to trap and above trap to exit. Based on this information, the necessity to capture more lamprey at Wells Dam, and the few appropriate options, Steve acknowledged that a trap delay could be addressed through multiple metrics and that increasing trap efficiency and therefore the use of the exclusion screen is a high priority.

With regards to #3, the data from the 2007 study which suggested that the tagged adult lamprey released mid-ladder (immediately above the broodstock collection facilities) at Wells Dam appeared to negotiate this section of the ladder successfully. Steve believes that it makes sense to shift the in-ladder releases for 2008 (n=10) to the collection gallery area so that data could be collected on what appears to be a critical section of the Wells ladder for lamprey passage.

Steve is in support of all proposed modifications and would like to bring these issues to the larger RWG for final approval.

USFWS comments to the Draft Bull Trout Management Plan (BTMP)

Steve and Bao proceeded to go through the comments on the draft bull trout management plan over the phone as both of us agreed that many of the comments provided by Judy DelaVergne (USFWS) were minor and could be easily resolved. All comments were addressed and it was agreed that some editorial comments provided would be integrated. No substantive changes were necessary to the BTMP and an updated draft to the Aquatic Settlement Work Group's next meeting on January 10, 2007 for final approval.

One issue did arise related to the operation of the Twisp Weir and whether this off-Project trap that is operated by WDFW for hatchery evaluation activities may need to be cited or included in the USFWS Section 7

Consultation for the Wells Project Relicensing. Bao will discuss this issue with Shane and provide Steve with further information.

<u>Final reporting timeline for the 2005-2008 Bull Trout Monitoring and Management Plan (WBTMMP)</u>

In the 2005-2008 WBTMMP, the reporting section specifies that Douglas PUD shall provide an annual report by March 31st for activities the preceding year. Typically, the District has provided this report to the USFWS for activities ending December 31 of the preceding year. The 2008 report will be the final report of the 3-year monitoring study and will be a comprehensive three year report and include a take calculation for the entire 6 years of available data on bull trout at Wells Dam (2001-2004 and 2005-2008). Douglas PUD proposes to provide this final comprehensive report to the USFWS in June of 2008 as opposed to March 31, 2008 so that it can integrate data up to March 31, 2008 into the final report. This report will also include the take calculations for the 6 years of bull trout monitoring activities at Wells Dam. Steve was in support of delaying the final report until June so that one comprehensive report could be produced as opposed to several incomplete reports based around arbitrary timelines.

Phone Conversation with WDFW regarding 2008 Adult Lamprey Passage Study



Wells Project Relicensing Phone Conversation Summary

Call to: Molly Hallock

Call From: Bao Le

Date: 11/28/07

Time: 8:30-9:00am

Subject: Proposed modifications to the 2008 Wells Lamprey Passage

Study

Summary: I spoke with Molly Hallock, non-game fish biologist for WDFW regarding our proposed changes to the 2008 Wells Project Pacific Lamprey Adult Passage Study. The three major issues discussed were:

- 1. Add an exclusion floor screen at each of the orifices directly below the overflow weir lamprey traps (4 total, 2 in each ladder). These exclusion screens should be benign to HCP plan species and should force lamprey higher into the water column where they can be captured via the overflow weir traps.
- 2. The addition of the exclusion floor screen may introduce a trap delay for tagged lamprey, released in the tailrace and re-ascending the ladder.
- 3. Shift the release location of the 10 adult tagged lamprey from the mid-ladder location (per the study plan) to the Collection Gallery area just inside of the entrance in the lower ladder. We would maintain a release of 30 adults in the tailrace similar to the 2007 assessment.

With regards to #1, Molly does have concerns about lamprey drop back completely out of the ladder due to the inability to pass via the orifice while exclusion screens are installed. However, in discussions about the other available options which are closing orifices completely or installing large guidance ramps within the fish ladder (largely untested) coupled with recommendations by Chris Peery, University of Idaho lamprey researcher that exclusion screens will likely not cause drop back and is the most appropriate option, Molly was in support of pursuing this modification.

With regards to #2, Molly understands the fact that in order to increase lamprey trap efficiency (4 traps caught only 6 fish over 10 weeks of fishing), there may be a trap delay for tagged fish re-ascending the ladder. Given that our 2007 data suggests that from above the trap to the exit (See #3), passage times for tagged adult lamprey are consistent and reasonable suggesting no major impediments or delays, it would not be unreasonable to break the overall project passage time into two metrics, tailrace detection to trap and above trap to exit. Based on this information, the necessity to capture more lamprey at Wells Dam, and the few appropriate options, Molly acknowledged that a trap delay may be addressed through multiple metrics and that increasing trap efficiency and therefore the use of the exclusion screen is a high priority.

With regards to #3, the data from the 2007 study which suggested that the tagged adult lamprey released mid-ladder (immediately above the broodstock collection facilities) at Wells Dam appeared to negotiate this section of the ladder successfully. Molly was in support of shifting the inladder releases for 2008 (n=10) to the collection gallery area so that data could be collected on what appears to be a critical section of the ladder for lamprey passage.

Molly also concurred that it would be appropriate to continue to use Rocky Reach fish as a supplement to the Wells trapping effort and to capture, transport, tag and release Reach fish throughout the migration season as opposed to waiting until the end of the season (October) as was done in 2007. This would: 1) ensure sample size was met and 2) allow us to release fish during the peak migratory period as opposed to when some fish may be beginning to cease migratory type movements.

Molly will also follow-up with Carmen Andonaegui as to the details and results of this discussion.

FERC Order Granting Rehearing for Further Consideration

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Public Utility District No. 1 of Douglas County, Washington

Project No. 2149-137

ORDER GRANTING REHEARING FOR FURTHER CONSIDERATION

(December 10, 2007)

Rehearing has been timely requested of the October 11, 2007 letter order issued in this proceeding by the Director, of the Commission's Office of Energy Projects. In the absence of Commission action within 30 days, this request for rehearing (and any timely requests for rehearing filed subsequently)¹ would be deemed denied. 18 C.F.R. § 385.713 (2007).

In order to afford additional time for consideration of the matters raised or to be raised, rehearing of the Commission's order is hereby granted for the limited purpose of further consideration, and timely-filed rehearing requests will not be deemed denied by operation of law. Rehearing requests of the above-cited order filed in this proceeding will be addressed in a future order. As provided in 18 C.F.R. § 385.713(d)(2007), no answers to the rehearing requests will be entertained.

Nathaniel J. Davis, Sr., Deputy Secretary.

¹See San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, et al., 95 FERC ¶ 61,173 (2001) (clarifying that a single tolling order applies to all rehearing requests that were timely filed).

Email to Cultural RWG regarding Agenda for Cultural RWG Meeting

From: Scott Kreiter

Sent: Monday, January 07, 2008 2:29 PM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert

Easton; Sally Sovey; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG meeting agenda

Attachments: CRWG_Agenda_013008.pdf; STEPS_FOR_SECTION_106_COMPLIANCE 013008.pdf

Cultural Resource Work Group members -

Please find attached the agenda for the January 30 Cultural Resources Work Group meeting. The meeting will be held from 10:00 AM – noon in Nespelem. Those attending by conference call can find the dial-up number in the agenda.

The main purpose of the meeting is to update the participants on the two studies that are underway. The two studies are: 1) the TCP study (initiated in January, 2007); and 2) the Cultural Resources Investigation / Field Reconnaissance (initiated in July 2007). We will also discuss the Wells ILP Section 106 schedule (attached) and begin discussing Historic Properties Management Plan concepts as time allows.

Please contact me if you have any questions about the meeting.

Thanks. -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD January 30, 2008 10:00 am – 12:00 pm

Meeting Location: Nespelem

Conference Dial-in: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Cultural Resource Investigation

and TCP studies. To begin HPMP discussions.

Time	Topic	Lead
10:00 am	Review agenda and meeting objectives	Scott Kreiter
10:05 am	Review relicensing/Section 106 timeline	Scott Kreiter
10:20 am	Study updates (TCP & Cultural Resource Investigation	CCT
11:00 am	HPMP concepts	Scott Kreiter
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	

WELLS RELICENSING STEPS FOR SECTION 106 COMPLIANCE

January 30, 2008

	TASK	DESCRIPTION	ILP Schedule	Date Accomplished
1	Identify interested parties and stakeholders (36 CFR 800.3(c))	FERC and/or Douglas PUD should identify any tribes, agencies, or other interested parties who have an interest in cultural resources related to the Wells relicensing.	October, 2005: Stakeholder outreach	August 8, 2005: Information Request Letter October 4, 2005: Douglas PUD met with CCT Business Council October 18, 2005: ILP Information Meeting November 18, 2005: First Work Group Meeting
2	Establish policy-level consultation (36 CFR 800.2(c)(ii))	FERC should initiate policy-level consultation with agencies and tribes. FERC may decide to delegate day-to-day consultation to Douglas PUD.	January, 2007: Initial tribal consultation meeting	December 7, 2005: FERC sent delegation letter to RWG May 16, 2006: FERC Initial Tribal Consultation Meeting in Nespelem
3	Define Area of Potential Effect (APE) (36 CFR 800.4(a))	Define the area where cultural resources may be impacted by ongoing project operations. Seek formal concurrence from SHPO and THPO.	<u>January – March, 2006</u> : Pre-ILP consultation	July 18, 2006: Letters to THPO and SHPO seeking concurrence July 25, 2006: SHPO concurrence letter to Douglas PUD October 25, 2006: THPO concurrence letter to Douglas PUD
4	Background research to identify the scope of identification efforts (36 CFR 800.4(a)(2, 3, 4))	A professional archaeological/historic consultant conducts research to summarize previously completed studies in the Project area to obtain an understanding of what is known about historic use in the APE. This information is used to scope additional studies.	March – September, 2006: Gather information for PAD November, 2006: ILP Study Plans Due	December 2006: Wells Cultural Resources Data Review finalized December 2006: Cultural Resources Investigation included in PAD and filed with FERC
5	Study scoping: Identify historic properties (36 CFR 800.4(b)(1))	Develop scope of work for any studies planned to be implemented during the ILP two year study phase.	September 2006 – October 2007: ILP study scoping and FERC Study Plan Determination	May 2007: Scope of work finalized October 11, 2007: FERC issued study plan determination approving study plan
6	Phase I Study – Inventory (36 CFR 800.4(b)(1))	The entire APE is assessed and surveyed for cultural resources by walking transects at pre-determined intervals to identify potential sites. A qualified consultant conducts research to determine if any TCPs exist in the APE.	2008: Conduct 1 st season of studies October 2008: File Initial Study Report	January 2007: TCP study initiated July 2007: Cultural Resources Investigation initiated
7	Phase II Study - Evaluation of site eligibility for the National Register of Historic Places (NRHP) (36 CFR 800.4(c))	The Section 106 parties will determine what level of site evaluation is needed to evaluate NRHP eligibility.	2009: Conduct 2 nd season of studies October, 2009: File Updated Study Report	
8	Assess adverse effects (36 CFR 800.5)	The Section 106 parties will assess the effects of ongoing Project operations on historic properties and develop treatments.	December, 2009: Preliminary Licensing Proposal Due	
9	Historic Properties Management Plan (HPMP)	Douglas PUD will consult with the Section 106 parties to develop a Historic Properties Management Plan for incorporation into the new license.	May, 2010: License Application Filed	
10	Programmatic Agreement (36 CFR 800.14)	FERC develops and distributes a Programmatic Agreement (PA) for signature that commits the Licensee to implement the HPMP. This also documents FERC's completion of Section 106 and allows the SHPO and THPO to sign off on FERC's assessment of Project effects on historic properties.	February, 2011: FERC Issues Draft HPMP with draft NEPA document	

Email to Douglas PUD from Ecology regarding Approval of TDG Model

From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]

Sent: Thursday, January 10, 2008 4:59 PM

To: Bao Le

Cc: Shane Bickford

Subject: Wells TDG model

Hi, Bao - Small progress at this end. Looks like using the TDG model has been approved. I am working on seeing how long it will take to review the data that has been provided and then set up a meeting to discuss it.

FYI: Our engineer has indicated he may want additional information before a meeting is set up....

Thanks for your patience....

Pat

Email to Colville Tribes from Douglas PUD regarding Okanogan Toxins Study

From: Bao Le

Sent: Wednesday, January 16, 2008 10:46 AM

To: 'Bill Towey'

Cc: Mary Mayo; Shane Bickford; Jim Good (good@parametrix.com)

Subject: upcoming Okanogan toxins assessment

Attachments: toxins study plan.doc

Hi Bill, as you're already aware, we're getting ramped up to conduct some water quality monitoring studies in the Okanogan River this year. I wanted to touch base with you regarding the Okanogan Toxins Study where we will be sampling the levels of DDT and PCB in fish tissue and sediment at recreation sites within the Project boundary. Since this was initially an issue raised by you, I wanted to be sure that you had some input in the more detailed development of site selection or recreation sites to be sampled for sediment and fish species that are of concern to the Tribe. Currently, we plan to sample three resident species of fish; carp, mountain whitefish, and smallmouth bass as this is consistent with the Ecology assessment done in 2002 (Serdar). With recreation sites, swimming holes and boat launces up to RM 15.5 (within Project Boundary) will be examined. If you have any additional input, please feel free to give me a call so that we can discuss. I've attached the study plan for reference. Hope you're doing well. Cheers, Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

ASSESSMENT OF DDT AND PCB IN FISH TISSUE AND SEDIMENT IN THE LOWER OKANOGAN RIVER (Okanogan Toxins Study)

WELLS HYDROELECTRIC PROJECT

FERC NO. 2149

May 2007

Prepared by:
Public Utility District No. 1 of Douglas County
East Wenatchee, Washington

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ABSTRACT:

The Public Utility District No. 1 of Douglas County (Douglas PUD) owns and operates the Wells Project and is using the Integrated Licensing Process (ILP) for relicensing as promulgated by Federal Energy Regulatory Commission (FERC) regulations issued July 23, 2003 (18 CFR Part 5). As part of the Wells Project relicensing process, Douglas PUD is required to obtain a water quality certificate pertinent to section 401 of the Clean Water Act. The Washington State Department of Ecology (WDOE) is responsible for the issuance of a 401 certificate as well as administering the state's Water Quality Standards. As part of the 401 certification process, Ecology must assess the effect of a hydroelectric project's operations on the transport and accumulation of toxins within the sediment as they apply to the numeric and narrative criteria of the state standard.

The Aquatic Resource Work Group (RWG), which is composed of stakeholders (including WDOE) and Douglas PUD staff, was formed for the purposes of identifying issues that may require study during the Wells Project relicensing, identified the need to collect more information with regards to DDT and PCB in the lower Okanogan River within the Wells Project boundary and its potential human health effects related to recreational activities. In order to satisfy this request, the Aquatic RWG proposes a study to collect and analyze for the presence of toxins in fish tissue and at specific recreation sites located on the lower Okanogan River. These samples will be collected in an effort to address the human health concerns brought forth by the RWG.

In 2001-2002, WDOE conducted a technical assessment in support of the development of a Total Maximum Daily Load (TMDL) for 1,1,1-trichloro-2,2-bis[p-chlorophenyl]ethane (DDT) and polychlorinated biphenyls (PCBs) in the Lower Okanogan River. For the purposes of the 2001-2002 assessment, the Lower Okanogan River was defined as the portion of the river from the U.S./Canadian border at Lake Osooyos (RM 80.2) downstream to the town of Monse (RM 5.0). During this assessment, various mediums (water, sediment, and fish tissue) at various locations in the Okanogan River were assessed for concentrations of DDT and PCB. This study will augment the previous information collected during the development of the TMDL and will be consistent with the recommendations of the Water Quality Implementation Plan (WDOE, 2006) submitted by WDOE which provides recommendations to assure that DDT and PCB concentrations in the waters and fish tissues from the Okanogan River and its tributaries continue to improve with the goal of meeting the regulatory standards for these persistent bioaccumulative toxins.

Sampling locations for fish during the study will include all accessible reaches of the lower Okanogan River within Project boundary (RM 15.5 to RM 0.0). Sampling sites for sediment will include recreational sites of concern (e.g. swimming areas and boat launches) from the Okanogan River mouth up to RM 15.5. Study implementation is planned for the 2-year ILP study period (2008-2009) with sampling occurring in May 2008. Sampling frequency, timing, and methodology as well as sample analysis will be consistent with the 2001-2002 WDOE TMDL Technical Assessment as outlined in Serdar (2003) and WDOE's "Water Quality Certification for Existing Hydropower Dams: Preliminary Guidance Manual (September 2004)."

A technical report of the study will be produced to assist the Aquatic RWG in determining the concentration of DDT and PCBs in recreational fish species and in swimming areas of the lower Okanogan River within Project boundary. The information may inform the development of an appropriate information and education program to address the human health risks towards recreational use by the public in the lower Okanogan River.

1.0 INTRODUCTION

1.1 General Description of the Wells Hydroelectric Project

The Wells Hydroelectric Project (Wells Project) is located at river mile (RM) 515.8 on the Columbia River in the State of Washington. Wells Dam is located approximately 30 river miles downstream from the Chief Joseph Hydroelectric Project, owned and operated by the United States Army Corps of Engineers (COE), and 42 miles upstream from the Rocky Reach Hydroelectric Project, owned and operated by Public Utility District No. 1 of Chelan County (Chelan PUD). The nearest town is Pateros, Washington, which is located approximately 8 miles upstream from the Wells Dam.

The Wells Project is the chief generating resource for Public Utility District No. 1 of Douglas County (Douglas PUD). It includes ten generating units with a nameplate rating of 774,300 kW and a peaking capacity of approximately 840,000 kW. The design of the Wells Project is unique in that the generating units, spillways, switchyard, and fish passage facilities were combined into a single structure referred to as the hydrocombine. Fish passage facilities reside on both sides of the hydrocombine, which is 1,130 feet long, 168 feet wide, with a crest elevation of 795 feet in height.

The Wells Reservoir is approximately 30 miles long. The Methow and Okanogan rivers are tributaries of the Columbia River within the Wells Reservoir. The Wells Project boundary extends approximately 1.5 miles up the Methow River and approximately 15.5 miles up the Okanogan River. The normal maximum surface area of the reservoir is 9,740 acres with a gross storage capacity of 331,200 acre-feet and usable storage of 97,985 acre feet at elevation of 781. The normal maximum water surface elevation of the reservoir is 781 feet (Figure 1.1-1).

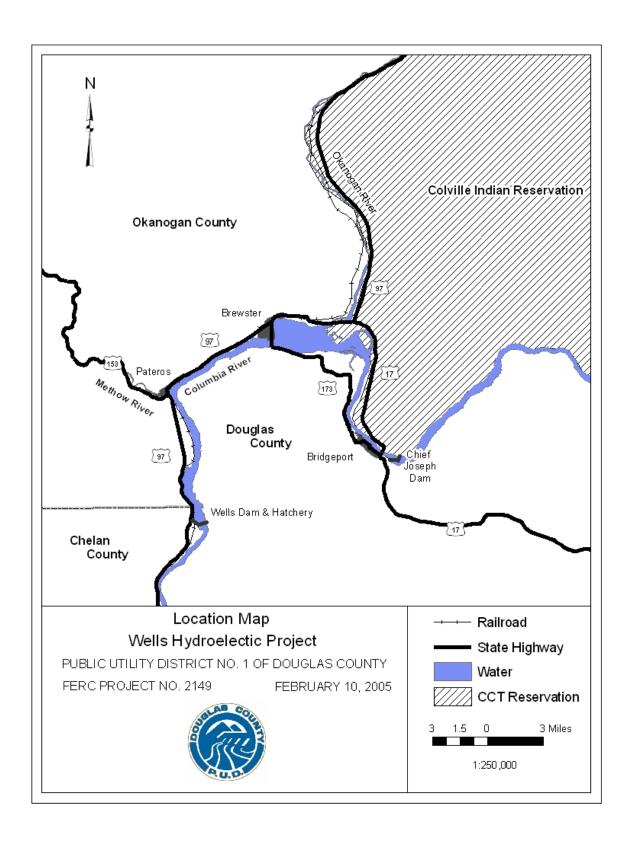


Figure 1.1-1 Location Map of the Wells Project

1.2 Relicensing Process

The current Wells Project license will expire on May 31, 2012. Douglas PUD is using the Integrated Licensing Process (ILP) as promulgated by FERC regulations issued July 23, 2003 (18 CFR Part 5). Various state and federal agencies, tribes, local governments, non-governmental organizations and the general public will participate in the Wells Project ILP. During the ILP, information needs related to the relicensing of the Wells Project will be identified. All study plans intended to meet these information needs will be prepared in a manner that addresses each of the required seven FERC criteria described in 18 CFR § 5.9(b).

18 CFR § 5.9(b) Content of study request. Any information or study request must:

- (1) Describe the goals and objectives of each study and the information to be obtained;
- (2) If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied;
- (3) If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study;
- (4) Describe existing information concerning the subject of the study proposal, and the need for additional information;
- (5) Explain any nexus between project operation and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements;
- (6) Explain how any proposed study methodology is consistent with generally accepted practices in the scientific community or, as appropriate, considers relevant tribal values and knowledge. This includes any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate field season(s) and the duration;
- (7) Describe considerations of level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs.

All study plans submitted to FERC will be reviewed by Douglas PUD and the applicable Resource Work Group(s) to determine if studies proposed will fill the information needs related to the Wells Project Relicensing. Any dispute over alternative study methods, that cannot be reconciled with stakeholders, will be decided by FERC.

2.0 GOALS AND OBJECTIVES

The objective of the study is to determine the concentration of the insecticide 1,1,1-trichloro-2,2-bis[p-chlorophenyl]ethane (DDT) and polychlorinated biphenyl (PCB) in recreational fish species and in swimming areas of the lower Okanogan River (up to RM 15.5) within the Wells Project boundary.

Tasks to be completed toward the achievement of the goal include:

• Collect and analyze sediment samples for DDT and PCBs from specific recreational sites (i.e., swim areas and boat launches) in the lower Okanogan River up to RM 15.5.

• Collect and analyze fish tissue for DDT and PCBs from recreational fish species of interest consumed by tribal and recreational anglers.

The information gathered from this monitoring effort will assist the Aquatic RWG in determining the concentration of DDT and PCBs in recreational fish species and in swimming areas of the lower Okanogan River within the Wells Project boundary. The information may inform the development of an appropriate information and education program to address the human health risks towards recreational use by the public in the lower Okanogan River.

3.0 STUDY AREA

The study area consists of waters within the Okanogan River from its confluence with the Columbia River up to RM 15.5.

4.0 BACKGROUND AND EXISTING INFORMATION

The Okanogan River originates in the Cascade Mountains north of the international border in British Columbia. The Okanogan River is characterized by a series of lakes north of international boundary and a free flowing river flowing out of Osoyoos Lake, which straddles the boundary; 78 miles to its confluence with the Columbia River (WDOE, 2004). The lower 15.5 miles of the Okanogan River before it joins with the Columbia River is considered within the Wells Project boundary.

Beginning in the early 1970s, Canadian investigators began documenting high levels of DDT in fish collected from British Columbia lakes along the mainstem Okanogan River (Northcote et al., 1972). In 1983, WDOE collected data which revealed DDT and PCB contamination in fish from the Okanogan River below the Canada border (Hopkins et al., 1985). Since then a number of WDOE surveys have verified DDT and PCB contamination in the basin (Johnson and Norton, 1990; Davis and Serdar, 1996; Johnson et al., 1997; Serdar et al., 1998, Serdar, 2003).

The WDOE Environmental Assessment Program prepared an assessment of total maximum daily loads (TMDLs) of DDT and PCBs in the lower Okanogan River basin, including Osoyoos Lake. For the purposes of the WDOE assessment, the Lower Okanogan River was defined as the portion of the river from the U.S./Canadian border at Lake Osooyos (RM 80.2) downstream to the town of Monse (RM 5.0). Sampling conducted during 2001-2002 examined DDT and PCB concentrations in the water column of the mainstem Okanogan River, water in tributary streams, sewage treatment plant (STP) effluent and sludge, and cores of bottom sediments. Composite samples of three species of fish – carp (*Cyprinus carpio*), mountain whitefish (*Prosopium williamsoni*), and smallmouth bass (*Micropterus dolomieui*) also were analyzed for DDT and PCBs. Data from these samples were used in conjunction with historical data to develop the TMDLs (Serdar, 2003).

Results of the 2001-2002 sampling (Serdar, 2003) suggest that:

- 1. DDT concentrations in the mainstem water column typically decreased from upstream sites (Okanogan River at Zosel Dam) to downstream sites (Okanogan River at Malott). PCBs were not detected in the mainstem.
- 2. Only small loads of DDT and PCBs are delivered to Osoyoos Lake and the lower Okanogan River through tributary streams and STPs.
- 3. Generally, lipid-normalized t-DDT and t-PCB concentrations in fish tissue decreased from sites upstream to downstream (Oroville, Riverside-Omak, Monse) with the exception of large-sized smallmouth bass which had higher concentrations downstream at the Monse site.
- 4. t-DDT and t-PCB concentration trends decreased in the 1980s followed by steady concentrations in the last decade in the lower Okanogan system.
- 5. DDT concentrations in the Osoyoos Lake core sediments were an order of magnitude higher than core sediments of approximately equal age from the Okanogan River near the mouth (Monse).
- 6. PCB concentrations in core samples were low, with concentrations around 1 ng/g t-PCB. Concentrations from both sites (Osoyoos Lake and lower Okanogan River: Monse) were similar suggesting that low-level PCB sources such as STPs between the lake and the river mouth keep depositional areas enriched with low levels of PCBs. Little is known about sources of PCB contamination in the lower Okanogan River basin, except that no major sources appear evident. It is notable that while PCBs in edible fish tissues may be a human health concern at the levels reported, it is not uncommon to find similar levels in other Washington waters where no discernible sources of PCB exist (Davis and Johnson, 1994).
- 7. Re-suspended Osoyoos Lake sediments account for nearly all of the measured DDT loads in the lower Okanogan River which may explain the disparity between DDT load delivery and measured loads in the water column of the lower mainstem Okanogan River.
- 8. The Colville Tribes conducted a longitudinal transect of DDT in 40 lower Okanogan River sediments from Osoyoos Lake outlet to the mouth in 2001 (Hurst and Stone 2002). Aside from two locations, little DDT was found. 60% of sites had t-DDT less than the detection limit (0.5 ng/g) and another 35% had a concentration of 1-10 ng/g (mostly less than 2 ng/g). Two sites with significant concentrations were found just below the Osoyoos Lake outlet and just downstream of Elgin Creek (RM 28.4).
- 9. Acute toxicity is not considered to be a concern at concentrations in the lower Okanogan River basin.
- 10. According to the report, there are few realistic options for obtaining meaningful reductions in DDT and PCB loading to Osoyoos Lake and the lower Okanogan River. It appears that most loading to fish occurs internally through direct or indirect exposure to sediments. Natural attenuation will eventually reduce levels through dilution and capping, especially downstream of the Similkameen River confluence.

In conjunction with the TMDL technical assessment (2003) and TMDL (2004), WDOE submitted a Detailed Implementation Plan (WDOE, 2006) to EPA as required by the Clean Water Act in July 2006. This report provides direction to assure that DDT and PCB concentrations in the waters and fish tissues from the Okanogan River and its tributaries continue

to improve with the goal of meeting the regulatory standards. The report's main recommendations are the continued monitoring of fish tissues at 5 year intervals and preventative measures that would minimize the amount of contaminants entering the river from the surrounding watershed.

Currently, WDOE is planning a two-year monitoring program (2007-2008) for toxins in the lower Okanogan River as part of a larger statewide aquatic toxins assessment. WDOE's long-term monitoring station, located near Malott (RM 17) just upstream of the Wells Project boundary, also samples monthly for conventional parameters and metals; however, water samples, fish tissue and sediment cores are not collected for analysis of toxins.

4.1 Aquatic Resource Work Group

As part of the preparation for the relicensing of the Wells Project, Douglas PUD established an Aquatic Resource Work Group (RWG) which began meeting informally in November, 2005. This voluntary effort was initiated to provide stakeholders with information about the Wells Project, to collaboratively identify potential resource issues related to Project operations and relevant to relicensing, and to develop preliminary study plans to be included in the Wells Pre-Application Document (PAD).

Through a series of meetings, the Aquatic RWG cooperatively developed a list of Issue Statements, Issue Determination Statements and Agreed Upon Study Plans. An Issue Statement is an agreed upon definition of a resource issue raised by a stakeholder. An Issue Determination Statement reflects the RWG's efforts to review the existing project information and to determine whether an issue matches with FERC's seven criteria and would be useful in making future relicensing decisions. Agreed Upon Study Plans are the finished products of the informal RWG process.

Based upon these meeting and discussions, the Aquatic RWG is proposing to conduct a study to determine the concentration of DDT and PCBs in recreational fish species and in swimming areas of the lower Okanogan River within the Wells Project boundary. This study will help to inform future relicensing decisions through the 401 water quality certification process and will fill data gaps that have been identified by the Aquatic RWG.

4.2 Issue Statement

Issue Statement (PAD Section 6.2.1.4)

Project operations may affect the input, movement, accumulation and retention of toxins (sediment dynamics and water column) originating from the Okanogan River subbasin and their potential effects on aquatic organisms and humans.

Issue Determination Statement (PAD Section 6.2.1.4)

The Okanogan River likely contains toxins within the sediment and in the water column. These pollutants are discharged into the river from mining, industrial and agricultural activities

upstream of the Project boundary. There are numerous reports by the Washington State Department of Ecology and the Colville Tribes documenting the presence and levels of toxins within the Okanogan Basin. Of the five assessments conducted on toxins in the Okanogan River most have focused on the presence of toxins within the water column, sediment and within the fish found in the Okanogan River.

The lower Okanogan DDT PCB Detailed Implementation Plan (WDOE, 2006) submitted to and approved by the Environmental Protection Agency for the purpose of providing direction to assure that DDT and PCB concentrations are reduced to a level that meet regulatory standards recommends continued monitoring of fish tissues from the lower Okanogan River.

The resource work group agrees that a study is needed during the two-year ILP study period. The study would assess the concentration of DDT and PCBs found within fish tissues collected from the lower Okanogan River. This study would also collect sediment samples from specific recreation areas located between the mouth of the Okanogan River upstream to RM 15.5.

5.0 PROJECT NEXUS

The WDOE is responsible for the protection and restoration of the state's waters. WDOE has adopted water quality standards that set limits on pollution in lakes, rivers, and marine waters in order to protect water quality. WDOE's water quality assessment of the state's waterbodies lists the status of water quality for a particular location in one of 5 categories (Category 1-5) recommended by the Environmental Protection Agency (EPA). This assessment represents the integrated report for Sections 303(d) and 305(b) of the Clean Water Act. Categories 1-4 represent the status of waters for the 305(b) report, while Category 5 represents those waters placed on the 303(d) list. Waters placed on Category 5 require the preparation of TMDLs, which are an integral tool in the work to clean up polluted waters.

The lower Okanogan River within the Project boundary was 303(d) listed for high levels of total PCB's, 4,4'-DDE and 4,4'-DDD in fish tissues in 1998. As a result of this listing, a TMDL (WDOE, 2004) was developed to address these impaired parameters in this location. Currently, the EPA-approved 303(d) list submitted in 2004 no longer includes these parameters for the lower Okanogan River as they have been re-assessed as Category 4a (impaired waters with a TMDL) waters in the Washington State Water Quality Assessment 305(b) report. The information resulting from an assessment of fish tissue and sediments in the lower Okanogan River will assist the Aquatic RWG in the development of licensing requirements through the 401 water quality certification process.

6.0 METHODOLOGY

In order to collect information that will be informative of the health risks from recreational activities within the lower Okanogan River sampling stations for fish tissue will be located throughout the lower 15.5 miles of the river. Field sampling will consist of one sampling event in May of 2008 during the spring run-off to be consistent with the 2001-2002 WDOE assessment (sampling during high water).

All methods implemented will be consistent with the 2001-2002 WDOE TMDL Technical Assessment as outlined in Serdar (2003) if appropriate in addressing the objectives of this study. Additionally, any components of the study not clearly specified in Serdar (2003) will be consistent with WDOE's "Water Quality Certification for Existing Hydropower Dams: Preliminary Guidance Manual (September 2004)." Quality assurance plans will meet State and Federal guidelines.

Sediment samples will be collected using standard aquatic toxicology protocol. Fish for fish tissue analysis will be collected either via electrofishing or angling, when appropriate. Fish species of interest will be determined by the Aquatic RWG but should be fish normally consumed by either tribal or local recreational anglers and consistent with WDOE's Detailed Implementation Plan (2006). Biological data (species, length, weight and age) will be collected for all fish samples.

All sediments samples and fish tissue samples will be stored to meet quality specifications prior to transport and delivery to a qualified laboratory for analysis. Parameter analysis will also be consistent with Serdar (2003) and will consist of tests to determine the concentrations of all DDT analogs and PCBs per each sample.

7.0 STAFFING AND EQUIPMENT REQUIREMENTS

Based upon discussions with the Aquatic RWG regarding specific study design and study needs, Douglas PUD will secure the assistance of a qualified consultant to conduct the field portion of the study in addition to a qualified water quality and toxicology laboratory to analyze samples.

The technical skills necessary to complete the study are knowledge of aquatic toxicology with an emphasis on transport and accumulation, water quality sampling equipment and protocol consistent with WDOE's preliminary guidance manual, motor boat operation and safety, data acquisition and management, and Washington State water quality standards.

A Washington State Collection Permit will be required for fish sampling. The consulting firm contracted to implement the field sampling portion of the study will be responsible for obtaining this permit prior to the start of the study.

8.0 BUDGET

The total estimated hours for the Lower Okanogan River DDT/PCB assessment is approximately 185 person hours. The allocation of these hours is approximately 25 hours for study plan development; 36 hours for coordination and permitting; 76 hours for field activities; and 48 hours for data analysis and reporting. Labor costs are estimated to be \$25,000. Equipment costs and expenses related to field activities (sediment sampling equipment, boat use, travel, shipping, etc.) are estimated to be \$6,000. Laboratory costs for the analysis of fish tissue and sediments are estimated to be \$20,000. Total planning level costs for this effort are approximately \$51,000.

9.0 SCHEDULE

Planning for this study will begin in late 2007, shortly after the issuance of FERC's Study Plan Determination in October 2007. Activities to obtain a Washington State Scientific Collectors Permit will be implemented during late 2007. Field sampling will take place during the spring of 2008 with an Initial Study Report due to stakeholders by October 2008. A final report will be provided to FERC and the stakeholders by October 2009.

10.0 REFERENCES

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Serdar, D., D. Davis, and A. Johnson. 1998. <u>DDT in Osoyoos Lake Fish</u>. Washington State Department of Ecology, Olympia, WA. Ecology Pub. No. 98-337.

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WDOE (Washington Department of Ecology). 2004. Lower Okanogan River Basin DDT and PCBs Total Maximum Daily Load. Submittal Report. Department of Ecology, Olympia, WA. Ecology Pub. No. 04-10-043.

FERC Order Dismissing Rehearing Request

122 FERC ¶ 61,032 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;

Suedeen G. Kelly, Marc Spitzer,

Philip D. Moeller, and Jon Wellinghoff.

Public Utility District No. 1 of Douglas County, Washington

Project No. 2149-137

ORDER DISMISSING REHEARING REQUEST

(Issued January 17, 2008)

1. On October 11, 2007, the Director, Office of Energy Projects (Director), issued a study plan determination letter to Public Utility District No. 1 of Douglas County, Washington (District), licensee for the 774.3-megawatt Wells Hydroelectric Project No. 2149, located on the Columbia River in Douglas, Chelan, and Okanogan Counties, Washington. On November 8, 2007, the City of Pateros (City) filed a request for rehearing of the Director's determination letter. In this order, we dismiss the rehearing request as premature.

Background

2. On December 1, 2006, the District filed with the Commission a notice of its intent to apply for a new license for the Wells Project, pursuant to the integrated licensing process (ILP), as well as a pre-application document (PAD). In the PAD, the District provided, along with other material, general information and tables regarding socioeconomic resources in the project area by county. In its preliminary issues and

¹ The ILP was established by the Commission in 2003 with the goal of creating efficiencies by integrating a potential license applicant's pre-filing consultation with the activities of the Commission and other agencies pursuant to the Federal Power Act, the National Environmental Policy Act (NEPA), and other applicable legislation. *See Hydroelectric Licensing Under the Federal Power Act*, Order No. 2002, 68 Fed. Reg. 51,070 (Aug. 25, 2003), FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,150 (2003).

² See 18 C.F.R. § 5.6 (2007) (requiring filing of PAD).

study list, which is a required part of the PAD, the District did not propose to perform a socioeconomic study.³

- 3. On January 29, 2007, Commission staff issued a notice and scoping document for the purpose of obtaining public comment on its initial determination of the issues to be studied in the proposed environmental assessment in the relicensing proceeding, and seeking comments and study requests from interested stakeholders.
- 4. The City filed comments and requested that the District conduct a study of the socioeconomic impacts of the Wells Project on Okanogan County and the Cities of Pateros, Brewster, and Bridgeport. The City requested that the District conduct a costbenefit analysis or similar study, to evaluate the impact that the construction of the Wells Project had on lost revenues from property, sales, excise, and hotel/motel taxes. The City wanted the District to identify: (a) factors that influence regional and local economics, including health care, agriculture, schools and other public entities, industry, and tourism; (b) future growth opportunities and estimated impacts of project operations on these resources; and (c) socioeconomic impacts resulting from the City's relocation and displacement when the Wells Dam was originally constructed and continued effects of the City's relocation and displacement.⁵
- 5. The District declined to propose a socioeconomic study in its proposed study plan, stating that such a study, by focusing on original project impacts (which had been mitigated during the term of the original license), would not be helpful in the development of license conditions on relicensing. The District stated that any socioeconomic analysis should identify socioeconomic impacts specifically related to the project's continued operation, and that it was already addressing such impacts through other studies on recreation uses and needs, recreation access, and shoreline management.
- 6. On October 11, 2007, the Director issued his study plan determination letter, which did not require the District to conduct the socioeconomic study proposed by the City. On November 8, 2007, the City filed a request for rehearing of the Director's study

³ See PAD at 223-26.

⁴ See letters filed by the City on April 4, 2007, at 2-4; August 15, 2007, at 2-12; and October 1, 2007, at 2-10.

⁵ The original license was issued in 1962 (28 FPC 128), and the dam and reservoir were constructed by 1967. Portions of the City needed to be relocated as a result of the construction.

⁶ See the District's Proposed Study Plan, filed May 16, 2007, at 17-18, and Revised Study Plan, filed September 14, 2007, at 22-25.

plan determination. On November 26, 2007, the District filed an objection to the rehearing request.⁷

Discussion

7. As we recently reaffirmed, an order is final, and thus subject to rehearing, only when it imposes an obligation, denies a right, or fixes some legal relationship as the consummation of the administration process. Thus, we have declined to accept requests for rehearing of a number of staff procedural actions. We rely on our staff to run proceedings conducted under delegated authority, just as we do administrative law judges with respect to trial-type hearings, and it is only in very unusual circumstances that we find it appropriate to intervene in those proceedings before we are asked to review a substantive decision.

⁷ Despite its title, the District's filing is in effect an answer to a rehearing request. Rule 713(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.713(d) (2007), provides that no answers to rehearing requests will be entertained. The District has not shown good cause to waive this regulation. Therefore, its pleading is rejected.

⁸ *Ketchikan Public Utilities*, 121 FERC ¶ 61,155 (2007), *citing City of Fremont v. FERC*, 336 F.3d 910, 913-14 (9th Cir. 2003); and *Papago Tribal Utility Authority v. FERC*, 628 F.2d 235, 239 (D.C. Cir. 1980).

⁹ See, e.g., City of Wadsworth, Ohio, 120 FERC ¶ 61,172 (2007) (dismissing request for rehearing of notice of acceptance of applications); Duke Power, 117 FERC ¶ 61,303 (2006) (affirming dismissal as interlocutory of request for rehearing of environmental assessment); Erie Boulevard Hydropower, L.P., 117 FERC ¶ 61,189 at P 75 (2006) (holding that staff letter transmitting historic properties appendix not subject to rehearing); Duke Energy Corp., 110 FERC ¶ 61,376 (2005) (dismissing request for rehearing of staff decision not to extend environmental scoping process); Granite County, Montana, 101 FERC ¶ 61,062 (2002) (dismissing as interlocutory request for rehearing of notice granting late intervention); PacifiCorp, 90 FERC ¶ 61,325 (2000) (affirming notice dismissing as interlocutory request for rehearing of staff orders setting deadlines for filing of responses of information requests and for filing license amendment); City of Hamilton, Ohio (82 FERC ¶ 61,349 (1998) (finding requests for rehearing of order setting matter for trial-type hearing properly dismissed); California Department of Water Resources, 70 FERC ¶ 61,115 (1995) (concluding that staff decision to prepare EA, rather than environmental impact statement, not subject to rehearing).

- 8. As we recently explained in similar circumstances in *Alcoa Generating Inc.*, ¹⁰ the record in this proceeding is still being developed. There will be ample opportunity for the City to comment on the completeness of the material filed by the District, and of the Commission's environmental analysis. After the Commission takes action on the District's application, which has yet to be filed, the City will have a further opportunity to raise any issues it deems appropriate, including matters relating to the sufficiency of the record. We decline to address such issues at this preliminary stage.
- 9. In any event, the City's arguments with respect to requiring the District to perform the City's proposed socioeconomic study are without merit. The reasons given by the Director in his study determination letter for not requiring such a study are reasonable. As the letter explained, the City did not demonstrate, as it is required to do, that the additional information is needed. Much of the information the City seeks already exists (*i.e.*, demographics, tax statistics, property valuations, etc.), and the licensee is expected to analyze this information in its relicense application. Furthermore, as the Director noted, while tax-related issues are important for local communities, reviewing all tax information related to the project and surrounding communities is beyond the scope of this licensing. ¹³

¹⁰ 121 FERC ¶ 61,279 (2007).

In its Addendum – Statement of Issues, the City references a socioeconomic study conducted by the Public Utility District No. 1 of Chelan County in the Rocky Reach Project No. 2145 relicensing. That application was prepared using the Commission's Alternative Licensing Process (ALP) which allows the licensee and stakeholders considerable latitude in designing and conducting studies to the extent the participants (including the licensee) agree. Under the ALP, parties generally reach agreement regarding the studies to be performed. In ILP proceedings like this one, entities must show that the studies they request meet criteria set forth in the Commission's regulations. *See* 18 C.F.R. § 5.9(b)(2007), and the Commission staff ultimately determines which studies will be performed. Thus, while in the Rocky Reach proceeding the parties agreed pursuant to the ALP to conduct a socioeconomic study, here, staff was required to decide the contested issue. In this case, the Director accepted Commission staff's findings that the City did not satisfactorily address the study criteria of section 5.9(b) or demonstrate that additional information on socioeconomics was needed.

¹² See 18 C.F.R. § 5.9(b)(4)(2007).

¹³ See New York Power Authority, 120 FERC \P 61,266 at P 33 (2007) (the Commission is not a taxing authority).

- 10. Moreover, as the Director noted, the City's emphasis on studying the past impacts of project construction is contrary to the Commission's use of the environment as it exists at the time of relicensing as the baseline for NEPA analysis. As the District correctly noted in its study plan, our initial license dealt with the impacts of project construction. Any new license will include environmental measures to deal with the effects of the project during the new license, not those that occurred under the previous license.
- 11. On rehearing, the City states that the Director did not consider that it was asking for a study of the "cumulative effect" and the "ongoing impacts" of the project, not the initial effect of the construction of the dam. However, the City's comments, study request, and rehearing request all refer to the initial construction of the dam and ask that the District identify the socioeconomic impacts from the relocation and displacement of the City when the project was built. In any case, as to the cumulative effect and ongoing impacts of the project on the City, the information requested by the Director in his letter should permit an appropriate analysis of these impacts. The Director's letter stated that staff expects the District to analyze existing available socioeconomic information in the context of the proposed operational and environmental measures of any future license. ¹⁶

The Commission orders:

The rehearing request filed on November 8, 2007, by the City of Pateros, is dismissed.

By the Commission.

(SEAL)

Kimberly D. Bose, Secretary.

¹⁴ See American Rivers v. FERC, 201 F.3d 1186 at 1195-99 (9th Cir. 2000)

¹⁵ See n.6.

¹⁶ On rehearing, the City expresses concern that the requirement is not clearly spelled out and leaves open to question the methodology that will be used by the District. If after reviewing the socioeconomic information filed by the District as part of its license application, the City believes there are deficiencies, it is free to analyze the information and file comments with the Commission at that time. If Commission staff believes, after reviewing the information requested from the District, that the information is inadequate, it may require the District to file additional information pursuant to 18 C.F.R. § 5.21 (2007).

Email to Recreation RWG regarding Agenda for Recreation RWG Meeting

From: Scott Kreiter

Sent: Monday, January 21, 2008 8:00 AM

To: Andy Lampe; Bill Fraser; Bill Towey; Bob Clubb; Bob Dach; Bob Fateley; Brenda Crowell;

Chris Parsons; David Turner; Dennis Beich; Diane Priebe; Gail Howe; George Brady; Gordon Brett; Jean Hardie; Jim Eychaner; Jim Harris; John Devine; Lee Webster; Mary Hunt; Mary Mayo; Michael Linde; Mike Nickerson; Mike Palmer; Neal Hedges; Pat Haley; Pat Irle (pirl461@ecy.wa.gov); Patricia Leppert; Robert Easton; Sally Sovey; Scott Kreiter; Shane

Bickford; Susan Rosebrough; Tony Eldred

Subject: Wells Relicensing: Recreation RWG meeting agenda

Attachments: Recreation_RWG_Agenda_022908.pdf

Recreation Resource Work Group members -

Please find attached the agenda for the February 29 Recreation Resources Work Group meeting. The meeting will be held from 10:00 AM – noon at Bridgeport City Hall. The conference call number is included in the agenda for those attending by phone.

The main purpose of the meeting is to update the RWG on the two recreation studies that were initiated in October. The two studies are: 1) the Recreation Needs Evaluation; and 2) the Reservoir Access Study.

Please contact me if you have any questions about the meeting.

Thanks. -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD February 29, 2008 10:00 am – 12:00 pm

Meeting Location: Bridgeport City Hall

1206 Columbia Ave. Bridgeport, WA

Conference Dial-in #: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Recreation Needs Evaluation and

the Recreation Access Study.

Time	Topic	Lead
10:00 am	Review agenda and meeting objectives	Scott Kreiter
10:05 am	Update on the relicensing schedule	Shane Bickford
10:15 am	Study Updates - Recreation Needs Evaluation - Recreation Access Study	Kelly Bricker Scott Kreiter
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	

Email to Cultural RWG regarding Cultural RWG Meeting Materials

From: Scott Kreiter

Sent: Monday, January 28, 2008 4:31 PM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert

Easton; Sally Sovey; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG meeting materials

Attachments: CRWG_Agenda_013008.pdf; STEPS_FOR_SECTION_106_COMPLIANCE 013008.pdf;

Draft_HPMP_Outline.pdf

Cultural Resource Work Group members -

Please find attached a draft HPMP outline for discussion purposes during our meeting on Wednesday. I've also included the agenda and the Section 106 schedule again...just in case.

See you on Wednesday at 10 AM.

-Scott

From: Scott Kreiter

Sent: Monday, January 07, 2008 2:29 PM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert Easton; Sally Sovey; Scott Kreiter; Shane Bickford; Timothy

Bachelder

Subject: Wells Relicensing: Cultural RWG meeting agenda

Cultural Resource Work Group members -

Please find attached the agenda for the January 30 Cultural Resources Work Group meeting. The meeting will be held from 10:00 AM – noon in Nespelem. Those attending by conference call can find the dial-up number in the agenda.

The main purpose of the meeting is to update the participants on the two studies that are underway. The two studies are: 1) the TCP study (initiated in January, 2007); and 2) the Cultural Resources Investigation / Field Reconnaissance (initiated in July 2007). We will also discuss the Wells ILP Section 106 schedule (attached) and begin discussing Historic Properties Management Plan concepts as time allows.

Please contact me if you have any questions about the meeting.

Thanks. -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD January 30, 2008 10:00 am – 12:00 pm

Meeting Location: Nespelem

Conference Dial-in: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Cultural Resource Investigation

and TCP studies. To begin HPMP discussions.

Time	Topic	Lead
10:00 am	Review agenda and meeting objectives	Scott Kreiter
10:05 am	Review relicensing/Section 106 timeline	Scott Kreiter
10:20 am	Study updates (TCP & Cultural Resource Investigation	CCT
11:00 am	HPMP concepts	Scott Kreiter
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	

WELLS RELICENSING STEPS FOR SECTION 106 COMPLIANCE

January 30, 2008

	TASK	DESCRIPTION	ILP Schedule	Date Accomplished
1	Identify interested parties and stakeholders (36 CFR 800.3(c))	FERC and/or Douglas PUD should identify any tribes, agencies, or other interested parties who have an interest in cultural resources related to the Wells relicensing.	October, 2005: Stakeholder outreach	August 8, 2005: Information Request Letter October 4, 2005: Douglas PUD met with CCT Business Council October 18, 2005: ILP Information Meeting November 18, 2005: First Work Group Meeting
2	Establish policy-level consultation (36 CFR 800.2(c)(ii))	FERC should initiate policy-level consultation with agencies and tribes. FERC may decide to delegate day-to-day consultation to Douglas PUD.	January, 2007: Initial tribal consultation meeting	December 7, 2005: FERC sent delegation letter to RWG May 16, 2006: FERC Initial Tribal Consultation Meeting in Nespelem
3	Define Area of Potential Effect (APE) (36 CFR 800.4(a))	Define the area where cultural resources may be impacted by ongoing project operations. Seek formal concurrence from SHPO and THPO.	January – March, 2006: Pre-ILP consultation	July 18, 2006: Letters to THPO and SHPO seeking concurrence July 25, 2006: SHPO concurrence letter to Douglas PUD October 25, 2006: THPO concurrence letter to Douglas PUD
4	Background research to identify the scope of identification efforts (36 CFR 800.4(a)(2, 3, 4))	A professional archaeological/historic consultant conducts research to summarize previously completed studies in the Project area to obtain an understanding of what is known about historic use in the APE. This information is used to scope additional studies.	March – September, 2006: Gather information for PAD November, 2006: ILP Study Plans Due	December 2006: Wells Cultural Resources Data Review finalized December 2006: Cultural Resources Investigation included in PAD and filed with FERC
5	Study scoping: Identify historic properties (36 CFR 800.4(b)(1))	Develop scope of work for any studies planned to be implemented during the ILP two year study phase.	September 2006 – October 2007: ILP study scoping and FERC Study Plan Determination	May 2007: Scope of work finalized October 11, 2007: FERC issued study plan determination approving study plan
6	Phase I Study – Inventory (36 CFR 800.4(b)(1))	The entire APE is assessed and surveyed for cultural resources by walking transects at pre-determined intervals to identify potential sites. A qualified consultant conducts research to determine if any TCPs exist in the APE.	2008: Conduct 1 st season of studies October 2008: File Initial Study Report	January 2007: TCP study initiated July 2007: Cultural Resources Investigation initiated
7	Phase II Study - Evaluation of site eligibility for the National Register of Historic Places (NRHP) (36 CFR 800.4(c))	The Section 106 parties will determine what level of site evaluation is needed to evaluate NRHP eligibility.	2009: Conduct 2 nd season of studies October, 2009: File Updated Study Report	
8	Assess adverse effects (36 CFR 800.5)	The Section 106 parties will assess the effects of ongoing Project operations on historic properties and develop treatments.	December, 2009: Preliminary Licensing Proposal Due	
9	Historic Properties Management Plan (HPMP)	Douglas PUD will consult with the Section 106 parties to develop a Historic Properties Management Plan for incorporation into the new license.	May, 2010: License Application Filed	
10	Programmatic Agreement (36 CFR 800.14)	FERC develops and distributes a Programmatic Agreement (PA) for signature that commits the Licensee to implement the HPMP. This also documents FERC's completion of Section 106 and allows the SHPO and THPO to sign off on FERC's assessment of Project effects on historic properties.	February, 2011: FERC Issues Draft HPMP with draft NEPA document	

Wells Project Draft HPMP Outline

For discussion at the January 30 CRWG meeting

- 1.0 Introduction
 - 1.1 Project Description and Background
 - 1.2 Scope and Purpose of the HPMP
 - 1.2.1 Cultural Resource Work Group
 - 1.2.2 Area of Potential Effect
 - 1.3 Legislative Mandates and Relicensing Requirements [*Brief overview of NHPA*, with list of applicable laws and regs in an appendix]
- 2.0 Identifying Historic Properties [This section summarizes studies that were used as the basis for this HPMP. Other studies will be summarized in an appendix]
 - 2.1 Historic Properties Studies
 - 2.1.1 Data Review, 2006
 - 2.1.2 Traditional Cultural Properties Study, 2007
 - 2.1.3 Cultural Resources Field Reconniasance and Survey, 2007-2008
- 3.0 Managing Historic Properties
 - 3.1 Coordination [Designates coordinator and training requirements]
 - 3.2 Education and Interpretation
 - 3.2.1 Employee Education Program
 - 3.2.2 Public Education and Interpretation
 - 3.3 HPMP Policies [Programs for management/protection of historic properties]
 - 3.3.1 Management Standards for Historic Properties [This section includes guidelines for how Douglas PUD will protect historic properties when conducting routine activities]
 - 3.3.2 Inadvertent Discoveries and Emergency Situations
 - 3.3.2.1 Protocol for Discovery of Archaeological Resources
 - 3.3.2.2 Protocol for Discovery of Human Remains

3.3.2.3 Protocol for Emergency Situations

- 3.4 Management Standards for Traditional Cultural Properties
- 3.5 Action for Individual Sites
- 3.6 Historic Structures
- 4.0 Consultation [How Douglas PUD will consult during the new license]
- 5.0 HPMP Implementation Schedule
- 6.0 Literature Cited

Appendix A – Consultation Record

Appendix B – Legislative Mandates

Appendix C – Historic Properties Studies Conducted in the Wells Project Area

Appendix D – Historic Properties Identified Within the Wells Project APE

Appendix E – Monitoring Protocol

Appendix F – Treatment for Individual Historic Properties

Email to Ecology from Douglas PUD regarding TDG Study

r om: Bao Le

Sent: Tuesday, January 29, 2008 1:51 PM

To: 'Irle, Pat (ECY)'

Cc: Shane Bickford; Mills, Denise (ECY); Merz, Jonathan (ECY); Bob Clubb

Subject: RE: phone message

Hi Pat, there has not been any changes to this proposal compared to the one submitted earlier. In discussions with IIHR earlier this week they felt that the proposal they provided should sufficiently address the requested items in the email below. Also, please find attached the 2006 Wells Project TDG Report. This report has a thorough presentation of all of the data that will be used, it's location and quality as well as the figures of the project and transect locations for calibration, etc. We discussed this report in the past but I'm providing it again as it serves as the basis in many respects of the proposed work and this report coupled with the IIHR proposal will hopefully suffice. The only area that is yet to be determined is the specific analysis scenarios (Proposed Analysis Scenarios) which will be discussed in the near future as the model calibration/verification is near complete. If you and the engineer review the IIHR proposal in combination with the attached report and have any additional questions that need to be addressed I'd be happy to set up a call with IIHR. Thanks. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]

Sent: Tuesday, January 29, 2008 1:35 PM

To: Bao Le

Subject: RE: phone message

Have there been any changes to this, since the earlier one was submitted? If so, where would I/we find them...

From: Bao Le [mailto:baol@dcpud.org]
Sent: Tuesday, January 29, 2008 10:45 AM

To: Irle, Pat (ECY)

Cc: Shane Bickford; Merz, Jonathan (ECY); Mills, Denise (ECY)

Subject: RE: phone message

Hi Pat, please find attached the Wells Project TDG Study Proposal from the University of Iowa. I think that this document will meet the needs of your engineer's request with regard to the email below. If he/she has any additional questions, please let me know and I will work with Dr. Weber (University of Iowa) to address them in a timely manner. Thanks and hope all is well. Bao

Bao Le

Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]

Sent: Wednesday, January 16, 2008 2:47 PM

To: Bao Le

Cc: Shane Bickford; Merz, Jonathan (ECY)

Subject: RE: phone message

Hi, Bao - As you know, our engineer and management have approved using the model proposed by your consultant. The next step that would be most helpful to our engineer would be to receive a completed study plan on how the model is to be applied to this specific project. Some of the questions are listed below. I can help you address some up them (particularly, objectives) – and answer questions about the rest. If there is some point where the consultant really can't move forward without further discussions, we would be glad to meet. At this point, however, we expect that to occur after the study plan is close to complete.

- Project scope, objectives, and outcomes
- Brief summary of studies done to date
- Proposed analysis scenarios
- Figures of project area. Transects to which the model is to be calibrated.
- Summary of data to be used; e.g., TDG, velocity, flow, or temperature data. Depth and location of data; data quality.
- How model output will be analyzed; how determine quality/accuracy of the results.
- Model calibration and verification procedures.

Thanks, Pat Irle (509) 454-7864

From: Bao Le [mailto:baol@dcpud.org]
Sent: Tuesday, January 15, 2008 4:49 PM

To: Irle, Pat (ECY)
Cc: Shane Bickford
Subject: phone message

Hi Pat, I've been at Wells Dam all day so I was unable to call you back. I'll call you first thing Wednesday morning re: the IIHR comments from your engineer. Hopefully, I can be of some help but it is more likely that a sit down meeting with your engineer, other Ecology staff and Dr. Larry Weber and some of his staff would be the most productive way to address any issues, comments or concerns that Ecology staff may have. Dr. Weber is able to make a trip to Washington for such a meeting. If you and appropriate staff have any days in mind, I think it would be great if we could identify potential dates that would work. Please let me know what your thoughts are. Thanks. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 The TDG Study totals 234 pages

This study is available on the Documents – PUD Relicensing Documents – Study Reports page of Douglas PUD's Relicensing website:

<u>www.douglaspud.org/relicensing</u>.

Cultural RWG Meeting



Cultural Resource Work Group

Date: January 30, 2008

Time: 10:00 am – 12:00 pm

Location: Colville Indian Agency

Directions

Agenda

Sign-In Sheet

Meeting Notes



Directions to Colville Indian Agency

Colville Tribes History/Archaeology Department Colville Indian Agency 13 Moses Street Nespelem, Washington

Heading North: (from Wenatchee)

Follow US 97 north to Orondo.

Turn right on WA-2 toward Waterville.

Follow WA-2 to Coulee City.

Turn onto WA-155.

Follow WA-155 through Grand Coulee and Coulee Dam.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading South: (from Okanogan)

Follow US 97 to WA-155.

Follow WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading East: (from Seattle)

Travel east on I-90.

Go past Cle Elum.

Take Exit 85 toward Wenatchee.

Turn left at stop sign. Turn right onto WA-970. WA-970 merges with US 97.

Follow US 97 (Blewett Pass) north toward Wenatchee.

Merge onto US 2 E toward Wenatchee.

Follow US 2 over Columbia River north of Wenatchee.

At stoplight, turn left onto US-2/US Hwy 97.

Follow US 97 north to Orondo.

Turn right on WA-2 toward Waterville.

Follow WA-2 to Coulee City.

Turn onto WA-155.

Follow WA-155 through Grand Coulee and Coulee Dam.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading West: (from Spokane)

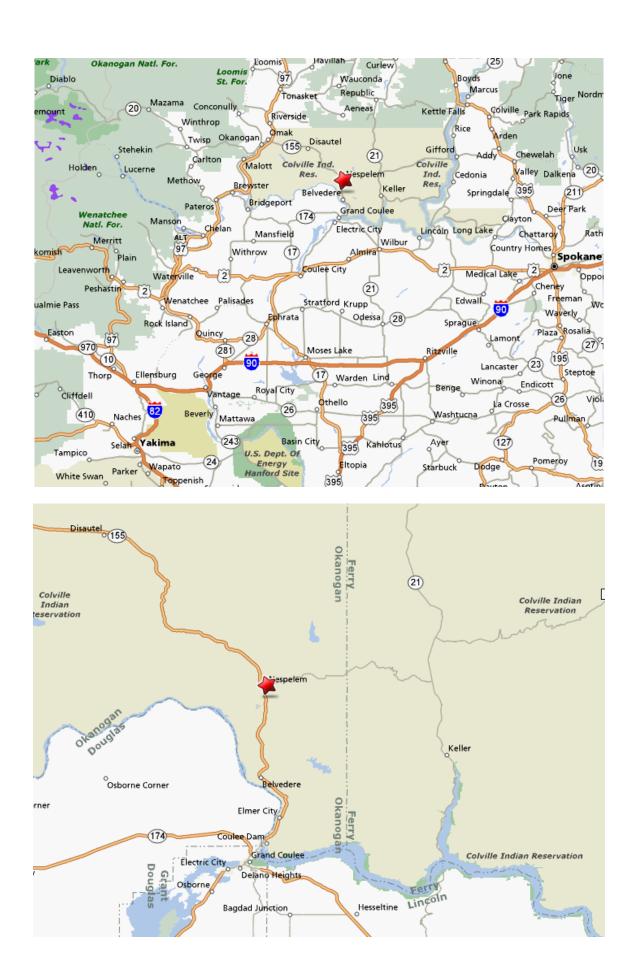
Travel west on US 2 to Wilbur.

At Wilbur, turn north on WA-174 toward Grand Coulee.

Turn north on WA-155.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.



Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD January 30, 2008 10:00 am – 12:00 pm

Meeting Location: Nespelem

Conference Dial-in: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Cultural Resource Investigation

and TCP studies. To begin HPMP discussions.

Time	Topic	Lead
10:00 am	Review agenda and meeting objectives	Scott Kreiter
10:05 am	Review relicensing/Section 106 timeline	Scott Kreiter
10:20 am	Study updates (TCP & Cultural Resource Investigation	CCT
11:00 am	HPMP concepts	Scott Kreiter
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	



Wells Project Relicensing Cultural Resource Work Group

DATE:

January 30, 2008

LOCATION:

Nespelem

nitials	Name	Affiliation Name	Email
	Allyson Brooks	DAHP	allyson.brooks@dahp.wa.gov
1	Bob Clubb	Douglas PUD	rclubb@dcpud.org
	Bob Easton	FERC	Robert.Easton@ferc.gov
\overline{V}	Camille Pleasants	Colville Tribes	camille.pleasants@colvilletribes.com
	Chuck James	BIA	NONE AVAILABLE
<u> </u>	Frank Winchell	FERC	frank.winchell@ferc.gov
<u> </u>	Glenn Hartmann	CRC, Inc.	glenn@wshsinc.com
	Guy Moura	Colville Tribes	guy.moura@colvilletribes.com
	John Devine	DTA	john.devine@devinetarbell.com
	Margaret Berger	CRC, Inc.	Margaret@wshsinc.com
	Richard Bailey	BLM	richard_bailey@blm.gov
<u> </u>	Rob Whitlam	DAHP	rob.whitlam@dahp.wa.gov
and the second second	Sally Sovey	BLM	sally_sovey@or.blm.gov
	Scott Kreiter	Douglas PUD	skreiter@dcpud.org
4	Shane Bickford	Douglas PUD	sbickford@dcpud.org
V	Tim Bachelder	DTA	timothy.bachelder@devinetarbell.com
×	G. J. Bre	IT DEPUD	GBrette DCPUD

Final Meeting Notes

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD January 30, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Cultural Resource Investigation

and TCP studies. To begin HPMP discussions.

Section 106 Timeline

Douglas PUD provided an update on the Section 106 process. The timeline was revised to reflect FERC's study plan determination and the initiation of the field studies. The CRWG suggested that the timeline be revised to reflect that the draft HPMP will be filed with the Draft License Application in December 2009.

Study Updates

The Colville Tribes provided an update on both the TCP Study and the Inventory and Reconnaissance Study. The draft report for the TCP study is nearly complete. The Inventory and Reconnaissance study is well underway, and requires additional field work in the spring. A detailed progress report was provided by the CCT and is included below.

HPMP Concepts

Douglas PUD provided a draft HPMP outline for discussion purposes. Based on CRWG comments, Douglas PUD will revise the outline and begin drafting the HPMP.

Action: Douglas PUD will revise the Section 106 timeline and send it to the CRWG

Action: Douglas PUD will revise the HPMP outline and send it to the CRWG

Action: Douglas PUD will begin drafting the HPMP

Items of Agreement

None

Items of Disagreement

None

Next Meeting

The next meeting will be scheduled following release of a draft HPMP.



The Confederated Tribes of the Colville Reservation P.O. Box 150, Nespelem, WA 99155 (509) 634-2200

FAX: (509) 634-4116



January 30, 2008

Wells Project Report of Progress, Cultural Resources Working Group Update

TRADITIONAL CULTURAL PROPERTY REPORT

The in-house draft TCP report is completed and in the final stages of in-house editing

ARCHAEOLOGICAL FIELD WORK AND REPORTING

Task 1: Background Research

Background research was completed prior to the start of fieldwork. Site files with attendant data were compiled and used to conduct site reconnaissance. The background research additionally assisted field crews with providing National Register of Historic Places (NRHP) eligibility recommendations. However, the background research has not yet been formally integrated with the Berger/Hartmann report. The Excel Spreadsheet of site data has been transferred to an Access database. The project database will require updating throughout the project, all preliminary field data has been added from the 2007 work.

Task 2: Manage GIS-linked Site Form Files Database

The GIS-linked Site Form Files Database has been initiated. As new State of Washington Archaeological Site Inventory Forms are completed, they are saved with the corresponding GPS derived GIS data. Hyperlinks will be used to connect both the completed site forms and site photographs with the GIS data. The Site Condition Forms and Eligibility Recommendation Forms will be linked either separately or, more likely with, the Site Forms.

Task 3: Site Reconnaissance

Site Revisits began on October 2, 2007 and continued until November 8, 2007. During that time, Reconnaissance was completed at 119 (31 along the Okanogan River) of the 170 previously recorded sites in the project area. Site Reconnaissance involved compilation of new State of Washington Archaeological Site Inventory Forms, Site Condition Assessment Forms and National Register of Historic Places (NRHP) eligibility recommendation forms.

Task 4: Intensive Survey, Okanogan River

The right bank has been surveyed. During the Intensive Survey, 31 of 40 previously recorded sites have been visited and updated and nine new archaeological sites were recorded. Of the nine

new sites, seven are historic, one prehistoric and one multi-component (historic and prehistoric). Left bank survey, Cassimer Bar and Washburn Island await spring.

Task 5: Intensive Survey, Allotments

The Allotment Survey will begin during the spring field session.

Task 6: Transmission-Lines Corridor Survey

The Transmission Line Corridor survey is near complete. Less than 12 miles remain of the 41 mile long corridor. Of the remaining distance, less than one mile is within cultivated lands. The majority of the remaining corridor to be surveyed consists of the section that crosses Badger Mountain. To date, nine sites have been recorded in the Transmission Corridor. Of these, seven are historic and two are multi-component (prehistoric and historic).

Task 7: Site Forms and Site Locations

Each archaeological site visited, whether previously recorded or new, was recorded in the field on a State of Washington Archaeological Site Inventory Form. Site boundaries were recorded with GPS using a data dictionary utilizing State of Washington Department of Archaeology and Historic Preservation GIS Data Standards. All GPS data was differentially corrected and exported into GIS. The field forms will be finalized electronically in the office this winter.

Task 8: Evaluation of Project Effects and Site Condition

Field crews carried copies of a Site Condition Assessment form. The forms were completed for each site encountered, recorded, and filed in the site specific folder. A preliminary short list of critically impacted sites will be prepared by February 15, 2008; after all project area sites have been visited, a final short list of prioritized critical sites will be prepared.

Task 9: Eligibility Recommendations

Blank NRHP eligibility forms were carried in the field. The forms were compiled as sites were encountered and recorded. The forms will be used to generate the NRHP recommendations in the draft and final report.

Reporting

Background materials and copies of field forms were delivered to Steve Hamilton to begin report preparation.

Email to Ecology from Douglas PUD regarding TDG Modeling

From: Bao Le

Sent: Monday, February 04, 2008 4:28 PM

To: 'Irle, Pat (ECY)'
Cc: Mary Mayo

Subject: RE: phone message

Hi Pat, I've attached a document that outlines the study plan outline topics in the email below and where information supporting each of these topics may be found in the two documents provided to you (2006 EES TDG Study and the IIHR TDG Model Development Study Proposal) last week. I've tried to include section references and starting page numbers. Hopefully, this will allow your engineer to go right to areas that are of most concern. I think this will also help us to identify items that may need more in depth discussion for our future meeting. Thanks. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]

Sent: Friday, February 01, 2008 1:00 PM

To: Bao Le

Subject: RE: phone message

Sounds good!

From: Bao Le [mailto:baol@dcpud.org]
Sent: Friday, February 01, 2008 11:36 AM

To: Irle, Pat (ECY)
Cc: Shane Bickford

Subject: RE: phone message

Hi Pat, I have a suggestion that might work and save us a meeting.....in your previous email (captured below) you've provided me with a detailed outline about what your engineer would like to see. I could take this outline and specifically reference the areas (by page number and section) where he/she would be able to find this information in either the IIHR Study Proposal and/or the 2006 EES TDG Study. What we could present to him/her would be an outline that would serve as a map/reference document to finding all of the requested information along with the two reports where all the information is available. That might be more efficient than creating a new document from the two which from what we can tell would involve some pretty intensive formatting and quite a bit of extra time. I could certainly have something to you early next week to provide to your engineer. Let me know what you think. Thanks. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802

509-881-2323 (Direct) 509-884-0553 (FAX)

From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]

Sent: Friday, February 01, 2008 10:44 AM

To: Bao Le

Cc: Shane Bickford

Subject: RE: phone message

Okay. How about if I meet with you and Shane (and Beau, to take notes and develop a document) before we head over to Olympia? Do you have time next week, perhaps later in the week?

I've attached a couple of documents that I think show what our engineer would like to see. Maybe we can create an outline based on that and pull into it the information (from existing documents) that the engineer would like to see... and reference the larger sections of the existing documents, as needed.

Thoughts?

P.S. Probably shouldn't include Denise on e-mails about the development of technical documents... Policy, yes, technical, no.

P.P.S. I have a couple of large documents I want to send as examples. However, I am going to send them separately, to see if they will get through...

From: Bao Le [mailto:baol@dcpud.org]
Sent: Tuesday, January 29, 2008 1:51 PM

To: Irle, Pat (ECY)

Cc: Shane Bickford; Mills, Denise (ECY); Merz, Jonathan (ECY); Bob Clubb

Subject: RE: phone message

Hi Pat, there has not been any changes to this proposal compared to the one submitted earlier. In discussions with IIHR earlier this week they felt that the proposal they provided should sufficiently address the requested items in the email below. Also, please find attached the 2006 Wells Project TDG Report. This report has a thorough presentation of all of the data that will be used, it's location and quality as well as the figures of the project and transect locations for calibration, etc. We discussed this report in the past but I'm providing it again as it serves as the basis in many respects of the proposed work and this report coupled with the IIHR proposal will hopefully suffice. The only area that is yet to be determined is the specific analysis scenarios (Proposed Analysis Scenarios) which will be discussed in the near future as the model calibration/verification is near complete. If you and the engineer review the IIHR proposal in combination with the attached report and have any additional questions that need to be addressed I'd be happy to set up a call with IIHR. Thanks. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct)

509-884-0553 (FAX)

From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]

Sent: Tuesday, January 29, 2008 1:35 PM

To: Bao Le

Subject: RE: phone message

Have there been any changes to this, since the earlier one was submitted? If so, where would I/we find them...

From: Bao Le [mailto:baol@dcpud.org]
Sent: Tuesday, January 29, 2008 10:45 AM

To: Irle, Pat (ECY)

Cc: Shane Bickford; Merz, Jonathan (ECY); Mills, Denise (ECY)

Subject: RE: phone message

Hi Pat, please find attached the Wells Project TDG Study Proposal from the University of Iowa. I think that this document will meet the needs of your engineer's request with regard to the email below. If he/she has any additional questions, please let me know and I will work with Dr. Weber (University of Iowa) to address them in a timely manner. Thanks and hope all is well. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]

Sent: Wednesday, January 16, 2008 2:47 PM

To: Bao Le

Cc: Shane Bickford; Merz, Jonathan (ECY)

Subject: RE: phone message

Hi, Bao - As you know, our engineer and management have approved using the model proposed by your consultant. The next step that would be most helpful to our engineer would be to receive a completed study plan on how the model is to be applied to this specific project. Some of the questions are listed below. I can help you address some up them (particularly, objectives) – and answer questions about the rest. If there is some point where the consultant really can't move forward without further discussions, we would be glad to meet. At this point, however, we expect that to occur after the study plan is close to complete.

- Project scope, objectives, and outcomes
- Brief summary of studies done to date
- Proposed analysis scenarios
- Figures of project area. Transects to which the model is to be calibrated.
- Summary of data to be used; e.g., TDG, velocity, flow, or temperature data. Depth and location of data; data quality.

- How model output will be analyzed; how determine quality/accuracy of the results.
- Model calibration and verification procedures.

Thanks, Pat Irle (509) 454-7864

From: Bao Le [mailto:baol@dcpud.org]
Sent: Tuesday, January 15, 2008 4:49 PM

To: Irle, Pat (ECY) **Cc:** Shane Bickford

Subject: phone message

Hi Pat, I've been at Wells Dam all day so I was unable to call you back. I'll call you first thing Wednesday morning re: the IIHR comments from your engineer. Hopefully, I can be of some help but it is more likely that a sit down meeting with your engineer, other Ecology staff and Dr. Larry Weber and some of his staff would be the most productive way to address any issues, comments or concerns that Ecology staff may have. Dr. Weber is able to make a trip to Washington for such a meeting. If you and appropriate staff have any days in mind, I think it would be great if we could identify potential dates that would work. Please let me know what your thoughts are. Thanks. Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

Total Dissolved Gas Model Development Wells Hydroelectric Project FERC Project No. 2149

PROJECT SCOPE, OBJECTIVES, AND OUTCOMES

In the "Proposal for TDG Modeling for the Tailrace of Wells Dam," submitted by IIHR, University of Iowa, they briefly discuss the scope, objective and desired outcome in Section 1 (pgs. 1-2).

BRIEF SUMMARY OF STUDIES DONE TO DATE

There are various areas within the TDG proposal submitted by IIHR that identify studies done to date and relevant experience of the researchers. Several of the areas that address studies done to date are found:

- -Section 6: Summary Statement (pg. 41)
- -Section 8: Relevant IIHR Publications
- -Section 9: Resumes of both principals at IIHR
- -Section 3.3 (pg.19-32) Discuss in detail the work done at Wanapum Dam

PROPOSED ANALYSIS SCENARIOS

As we discussed previously, the specific analysis scenarios after the model has been calibrated/verified have yet to be determined. Sections 4.3.3 and 4.3.5 on pg. 38 of IIHR's proposal detail the proposed number of model runs but do not present specifics.

To better understand the "likely" types of operational scenarios that will be tested, please refer to Section 6: Conclusions of the 2006 EES Wells Project TDG Assessment (pg. 83). In this section, there is a brief summary of the results including the several operational scenarios identified that appeared to minimize the production of TDG at Wells Dam. The numerical model proposed by IIHR will likely assist in verifying the utility of these specific operations to reduce TDG production at Wells Dam toward meeting compliance with the WA State Water Quality Standard.

FIGURES OF PROJECT AREA AND TRANSECT LOCATIONS FOR DATA

To better understand the geographic scope of the Wells Project and the study area, please refer to several figures included in the 2006 EES Wells Project TDG Assessment:

- -Figure 1.1-1 Regional Map with Project Location (pg.2)
- -Figure 1.1-2 Cross Section of a Spillway Unit (pg.3)
- -Figure 1.1-3 Wells Project Turbine and Spillway Configuration (pg.4)

- -Figure 3.0-1 Study area for the 2006 Wells Project TDG Study (pg.10)
- -Figure 4.1-1 Station Deployment Locations for FB and TW 1 and 2 transects (pg. 13)
- -Figure 4.1-2 Station Deployment Location for TW3 transect (pg. 14)
- -Figure 4.3-1 Bathymetry and Station Locations for Hydrodynamic Data (pg. 21)

SUMMARY OF DATA TO BE USED

Please review the 2006 EES Wells Project TDG Assessment for an overview of the data that will be used for the TDG model development. Specifically, review Section 5.0 Results (pg.25), Appendix C TDG Test Treatment Results of the report.

MODEL OUTPUT ANALYSIS

Please review the IIHR TDG Proposal, Section 3.2 (pg. 11) for a detailed description of the proposed IIHR TDG model. This section discusses free surface modeling and bubble transport. Also, see pgs. 21-32, Numerical Results and examples of typical outputs of TDG concentrations and hydrodynamics produced for the Wanapum Dam modeling exercise. These example outputs will likely be similar to what will be provided to Douglas PUD. Pages 26-32 summarize the validation of the model output (using Wanapum as an example) to ensure quality and accuracy of results.

MODEL CALIBRATION AND VERIFICATION PROCEDURES

Please review sections relevant to the model output analysis (above) for more detail related to model validation. Also, please refer to Section 4.3.2 Model Calibration and Valication (pg. 37-38) of the IIHR TDG Proposal for more information on the calibration process.

Email to Cultural RWG regarding Draft Cultural RWG Meeting Notes

From: Scott Kreiter

Sent: Thursday, February 07, 2008 7:49 AM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert

Easton; Sally Sovey; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG Meeting Notes

Attachments: Wells_Cultural_RWG_Notes_013008.pdf; Draft_Wells_HPMP_Outline_013008.pdf

Cultural RWG members,

Please find attached the draft meeting notes from the January 30th meeting. Also attached is the revised HPMP outline. The areas of change are highlighted in yellow. Please provide any comments on the meeting notes by February 14.

Thanks!
-Scott
Scott Kreiter
Douglas County PUD
509-881-2327

Draft Meeting Notes

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD January 30, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Cultural Resource Investigation

and TCP studies. To begin HPMP discussions.

Section 106 Timeline

Douglas PUD provided an update on the Section 106 process. The timeline was revised to reflect FERC's study plan determination and the initiation of the field studies. The CRWG suggested that the timeline be revised to reflect that the draft HPMP will be filed with the Draft License Application in December 2009.

Study Updates

The Colville Tribes provided an update on both the TCP Study and the Inventory and Reconnaissance Study. The draft report for the TCP study is nearly complete. The Inventory and Reconnaissance study is well underway, and requires additional field work in the spring. A detailed progress report was provided by the CCT and is included below.

HPMP Concepts

Douglas PUD provided a draft HPMP outline for discussion purposes. Based on CRWG comments, Douglas PUD will revise the outline and begin drafting the HPMP.

Action: Douglas PUD will revise the Section 106 timeline and send it to the CRWG

Action: Douglas PUD will revise the HPMP outline and send it to the CRWG

Action: Douglas PUD will begin drafting the HPMP

Items of Agreement

None

Items of Disagreement

None

Next Meeting

The next meeting will be scheduled following release of a draft HPMP.



The Confederated Tribes of the Colville Reservation P.O. Box 150, Nespelem, WA 99155 (509) 634-2200

P.O. Box 150, Nespelem, WA 99155 (509) 634-2200 FAX: (509) 634-4116



January 30, 2008

Wells Project Report of Progress, Cultural Resources Working Group Update

TRADITIONAL CULTURAL PROPERTY REPORT

The in-house draft TCP report is completed and in the final stages of in-house editing

ARCHAEOLOGICAL FIELD WORK AND REPORTING

Task 1: Background Research

Background research was completed prior to the start of fieldwork. Site files with attendant data were compiled and used to conduct site reconnaissance. The background research additionally assisted field crews with providing National Register of Historic Places (NRHP) eligibility recommendations. However, the background research has not yet been formally integrated with the Berger/Hartmann report. The Excel Spreadsheet of site data has been transferred to an Access database. The project database will require updating throughout the project, all preliminary field data has been added from the 2007 work.

Task 2: Manage GIS-linked Site Form Files Database

The GIS-linked Site Form Files Database has been initiated. As new State of Washington Archaeological Site Inventory Forms are completed, they are saved with the corresponding GPS derived GIS data. Hyperlinks will be used to connect both the completed site forms and site photographs with the GIS data. The Site Condition Forms and Eligibility Recommendation Forms will be linked either separately or, more likely with, the Site Forms.

Task 3: Site Reconnaissance

Site Revisits began on October 2, 2007 and continued until November 8, 2007. During that time, Reconnaissance was completed at 119 (31 along the Okanogan River) of the 170 previously recorded sites in the project area. Site Reconnaissance involved compilation of new State of Washington Archaeological Site Inventory Forms, Site Condition Assessment Forms and National Register of Historic Places (NRHP) eligibility recommendation forms.

Task 4: Intensive Survey, Okanogan River

The right bank has been surveyed. During the Intensive Survey, 31 of 40 previously recorded sites have been visited and updated and nine new archaeological sites were recorded. Of the nine

new sites, seven are historic, one prehistoric and one multi-component (historic and prehistoric). Left bank survey, Cassimer Bar and Washburn Island await spring.

Task 5: Intensive Survey, Allotments

The Allotment Survey will begin during the spring field session.

Task 6: Transmission-Lines Corridor Survey

The Transmission Line Corridor survey is near complete. Less than 12 miles remain of the 41 mile long corridor. Of the remaining distance, less than one mile is within cultivated lands. The majority of the remaining corridor to be surveyed consists of the section that crosses Badger Mountain. To date, nine sites have been recorded in the Transmission Corridor. Of these, seven are historic and two are multi-component (prehistoric and historic).

Task 7: Site Forms and Site Locations

Each archaeological site visited, whether previously recorded or new, was recorded in the field on a State of Washington Archaeological Site Inventory Form. Site boundaries were recorded with GPS using a data dictionary utilizing State of Washington Department of Archaeology and Historic Preservation GIS Data Standards. All GPS data was differentially corrected and exported into GIS. The field forms will be finalized electronically in the office this winter.

Task 8: Evaluation of Project Effects and Site Condition

Field crews carried copies of a Site Condition Assessment form. The forms were completed for each site encountered, recorded, and filed in the site specific folder. A preliminary short list of critically impacted sites will be prepared by February 15, 2008; after all project area sites have been visited, a final short list of prioritized critical sites will be prepared.

Task 9: Eligibility Recommendations

Blank NRHP eligibility forms were carried in the field. The forms were compiled as sites were encountered and recorded. The forms will be used to generate the NRHP recommendations in the draft and final report.

Reporting

Background materials and copies of field forms were delivered to Steve Hamilton to begin report preparation.

Wells Project Draft HPMP Outline

For discussion at the January 30 CRWG meeting

- 1.0 Introduction
 - 1.1 Project Description and Background
 - 1.2 Scope and Purpose of the HPMP
 - 1.2.1 Cultural Resource Work Group
 - 1.2.2 Area of Potential Effect
 - 1.3 Legislative Mandates and Relicensing Requirements [*Brief overview of NHPA*, with list of applicable laws and regs in an appendix]
- 2.0 Identifying Historic Properties [This section summarizes studies that were used as the basis for this HPMP. Other studies will be summarized in an appendix]
 - 2.1 Historic Properties Studies
 - 2.1.1 Data Review, 2006
 - 2.1.2 Traditional Cultural Properties Study, 2007
 - 2.1.3 Cultural Resources Field Reconniasance and Survey, 2007-2008
- 3.0 Managing Historic Properties
 - 3.1 Coordination [Designates coordinator and training requirements]
 - 3.2 Education and Interpretation
 - 3.2.1 Employee Education Program
 - 3.2.2 Public Education and Interpretation
 - 3.3 HPMP Policies [*Programs for management/protection of historic properties*]
 - 3.3.1 Management Standards for Historic Properties [This section includes guidelines for how Douglas PUD will protect historic properties when conducting routine activities]
 - 3.3.2 Inadvertent Discoveries and Emergency Situations
 - 3.3.2.1 Protocol for Discovery of Archaeological Resources
 - 3.3.2.2 Protocol for Discovery of Human Remains

3.3.2.3 Protocol for Emergency Situations

- 3.4 Management Standards for Traditional Cultural Properties
- 3.5 Action for Individual Sites
- 3.6 Historic Structures
- 4.0 Consultation [How Douglas PUD will consult during the new license]
- 5.0 HPMP Implementation Schedule
- 6.0 Literature Cited

Appendix A – Consultation Record

Appendix B – Legislative Mandates

Appendix C – Historic Properties Studies Conducted in the Wells Project Area

Appendix D – Historic Properties Identified Within the Wells Project APE

Appendix E – Monitoring Protocol

Appendix F – Treatment for Individual Historic Properties

Email to Cultural RWG regarding Final Cultural RWG Meeting Notes

From: Scott Kreiter

Sent: Tuesday, February 19, 2008 9:26 AM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert

Easton; Sally Sovey; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG Final Meeting Notes

Attachments: Wells_Cultural_RWG_Notes_013008.pdf; Draft_Wells_HPMP_Outline_013008.pdf;

WELLS_SECTION_106_SCHEDULE_013008.pdf

Cultural RWG members,

Please find attached the final meeting notes from the January 30th meeting, the revised HPMP outline, and the revised Section 106 Schedule. The areas of change are highlighted in yellow.

Thanks!
-Scott
Scott Kreiter
Douglas County PUD
509-881-2327

Final Meeting Notes

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD January 30, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Cultural Resource Investigation

and TCP studies. To begin HPMP discussions.

Section 106 Timeline

Douglas PUD provided an update on the Section 106 process. The timeline was revised to reflect FERC's study plan determination and the initiation of the field studies. The CRWG suggested that the timeline be revised to reflect that the draft HPMP will be filed with the Draft License Application in December 2009.

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The Colville Tribes provided an update on both the TCP Study and the Inventory and Reconnaissance Study. The draft report for the TCP study is nearly complete. The Inventory and Reconnaissance study is well underway, and requires additional field work in the spring. A detailed progress report was provided by the CCT and is included below.

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Action: Douglas PUD will revise the HPMP outline and send it to the CRWG

Action: Douglas PUD will begin drafting the HPMP

Items of Agreement

None

Items of Disagreement

None

Next Meeting

The next meeting will be scheduled following release of a draft HPMP.



The Confederated Tribes of the Colville Reservation (509) 634-2200

P.O. Box 150, Nespelem, WA 99155

FAX: (509) 634-4116

January 30, 2008

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 - 2.1.4 Evaluation for National Register Eligibility, 2008
- 3.0 Managing Historic Properties
 - 3.1 Coordination [Designates coordinator and training requirements]
 - 3.2 Education and Interpretation
 - 3.2.1 Employee Education Program
 - 3.2.2 Public Education and Interpretation
 - 3.3 HPMP Policies [*Programs for management/protection of historic properties*]
 - 3.3.1 Management Standards for Historic Properties [*This section includes guidelines for how Douglas PUD will protect historic properties when conducting routine activities*]
 - 3.3.2 Management Standards for Traditional Cultural Properties

Note: Comment from RWG was to add a separate section for "new" activities. This is an example table that might be included in Section 3.3.1, which includes all (routine and new) activities.

Activity	Protection Measures
Activities that do not disturb the ground surface (e.g. weed spraying, tree cutting, etc.)	Proceed with activity.
Ground disturbance in areas previously substantially disturbed, or previously surveyed for and found to be devoid of cultural resources.	Proceed with activity.
Replacing existing fences, gates, roads, culverts, irrigation, signs, etc. in same location with same basic footprint.	Proceed with activity.
Encroachment, vandalism and recreation impacts.	Douglas PUD will conduct monthly reservoir shoreline monitoring to identify encroachment by adjacent landowners and larger scale ground disturbances. If effects are identified, Douglas PUD will consult with the SHPO, THPO, and other applicable agencies, pursuant to the process outlined in 36CFR800.
Normal reservoir operations, which may cause shoreline erosion.	In order to identify smaller scale effects, Douglas PUD will conduct archaeological monitoring as described in Appendix E – Wells Reservoir Archaeological Monitoring Program. If effects are identified, Douglas PUD will consult with the SHPO, THPO, and other applicable agencies, pursuant to the process outlined in 36CFR800.
Ground disturbance in areas not previously disturbed and no previous archaeological surveys have been conducted.	Douglas PUD will consult with the SHPO, THPO, and other applicable agencies, pursuant to the process outlined in 36CFR800.
Issuance of permits to adjacent landowners to conduct ground disturbing activities on lands within the APE.	Douglas PUD will not issue permits until the permit applicant has received all required permits from federal, state, or local governments.

3.3.3 Inadvertent Discoveries and Emergency Situations

3.3.3.1 Protocol for Discovery of Archaeological Resources

3.3.3.2 Protocol for Discovery of Human Remains

- 3.3.3.3 Protocol for Emergency Situations [Link to Emergency Action Plan or be sure to include Coordinator in chain of communications]
- 3.4 Action for Individual Sites
- 3.5 Monitoring Protocols (See Appendix E)
- 3.6 Historic Structures
- 3.7 Curation and Document Management
 - 3.7.1 Curation of Archaeological Materials
 - 3.7.2 Archival of Documents and Photographs
- 4.0 Consultation [How Douglas PUD will consult during the new license]
- 5.0 HPMP Implementation Schedule [Include protocol for revising the HPMP, new technologies/directions in historic properties management, etc.]
- 6.0 Literature Cited

Appendix A – Consultation Record

Appendix B – Legislative Mandates

Appendix C – Historic Properties Studies Conducted in the Wells Project Area

Appendix D – Historic Properties Identified Within the Wells Project APE

Appendix E – Monitoring Protocol [Include protocol for anticipated low water events]

Appendix F – Treatment for Individual Historic Properties

WELLS RELICENSING STEPS FOR SECTION 106 COMPLIANCE

January 30, 2008

	TASK	DESCRIPTION	ILP Schedule	Date Accomplished
1	Identify interested parties and stakeholders (36 CFR 800.3(c))	FERC and/or Douglas PUD should identify any tribes, agencies, or other interested parties who have an interest in cultural resources related to the Wells relicensing.	October, 2005: Stakeholder outreach	August 8, 2005: Information Request Letter October 4, 2005: Douglas PUD met with CCT Business Council October 18, 2005: ILP Information Meeting November 18, 2005: First Work Group Meeting
2	Establish policy-level consultation (36 CFR 800.2(c)(ii))	FERC should initiate policy-level consultation with agencies and tribes. FERC may decide to delegate day-to-day consultation to Douglas PUD.	January, 2007: Initial tribal consultation meeting	December 7, 2005: FERC sent delegation letter to RWG May 16, 2006: FERC Initial Tribal Consultation Meeting in Nespelem
3	Define Area of Potential Effect (APE) (36 CFR 800.4(a))	Define the area where cultural resources may be impacted by ongoing project operations. Seek formal concurrence from SHPO and THPO.	January – March, 2006: Pre-ILP consultation	July 18, 2006: Letters to THPO and SHPO seeking concurrence July 25, 2006: SHPO concurrence letter to Douglas PUD October 25, 2006: THPO concurrence letter to Douglas PUD
4	Background research to identify the scope of identification efforts (36 CFR 800.4(a)(2, 3, 4))	A professional archaeological/historic consultant conducts research to summarize previously completed studies in the Project area to obtain an understanding of what is known about historic use in the APE. This information is used to scope additional studies.	March – September, 2006: Gather information for PAD November, 2006: ILP Study Plans Due	December 2006: Wells Cultural Resources Data Review finalized December 2006: Cultural Resources Investigation included in PAD and filed with FERC
5	Study scoping: Identify historic properties (36 CFR 800.4(b)(1))	Develop scope of work for any studies planned to be implemented during the ILP two year study phase.	September 2006 – October 2007: ILP study scoping and FERC Study Plan Determination	May 2007: Scope of work finalized October 11, 2007: FERC issued study plan determination approving study plan
6	Phase I Study – Inventory (36 CFR 800.4(b)(1))	The entire APE is assessed and surveyed for cultural resources consistent with the study plan. A qualified consultant conducts research to determine if any TCPs exist in the APE.	2008: Conduct 1 st season of studies October 2008: File Initial Study Report	January 2007: TCP study initiated July 2007: Cultural Resources Investigation initiated
7	Phase II Study - Evaluation of site eligibility for the National Register of Historic Places (NRHP) (36 CFR 800.4(c))	The Section 106 parties will determine what level of site evaluation is needed to evaluate NRHP eligibility.	2009: Conduct 2 nd season of studies, if needed October, 2009: File Updated Study Report	
8	Assess adverse effects (36 CFR 800.5)	The Section 106 parties will assess the effects of ongoing Project operations on historic properties and develop treatments. A Draft HPMP will be filed with the Draft License Application.	December, 2009: Draft License Application due	
9	Historic Properties Management Plan (HPMP)	Douglas PUD will consult with the Section 106 parties to develop a Historic Properties Management Plan which will be filed with the Final License Application.	May, 2010: Final License Application Filed	
10	Programmatic Agreement (36 CFR 800.14)	FERC develops and distributes a Programmatic Agreement (PA) for signature that commits the Licensee to implement the HPMP. This also documents FERC's completion of Section 106 and allows the SHPO and THPO to sign off on FERC's assessment of Project effects on historic properties.	February, 2011: FERC Issues Draft HPMP with draft NEPA document	

Wells Project Report of Progress Cultural Resources Working Group Update

Provided by Colville Confederated Tribes
At the January 30, 2008 RWG Meeting



The Confederated Tribes of the Colville Reservation P.O. Box 150, Nespelem, WA 99155 (509) 634-2200

(509) 634-2200 FAX: (509) 634-4116



January 30, 2008

Wells Project Report of Progress, Cultural Resources Working Group Update

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Task 4: Intensive Survey, Okanogan River

The right bank has been surveyed. During the Intensive Survey, 31 of 40 previously recorded sites have been visited and updated and nine new archaeological sites were recorded. Of the nine

new sites, seven are historic, one prehistoric and one multi-component (historic and prehistoric). The remainder of the survey will be completed in the spring.

Task 5: Intensive Survey, Allotments

The Allotment Survey will begin during the spring field session.

Task 6: Transmission-Lines Corridor Survey

The Transmission Line Corridor survey is near complete. Less than 12 miles remain of the 41 mile long corridor. Of the remaining distance, less than one mile is within cultivated lands. The majority of the remaining corridor to be surveyed consists of the section that crosses Badger Mountain. To date, nine sites have been recorded in the Transmission Corridor. Of these, seven are historic and two are multi-component (prehistoric and historic).

Task 7: Site Forms and Site Locations

Each archaeological site visited, whether previously recorded or new, was recorded in the field on a State of Washington Archaeological Site Inventory Form. Site boundaries were recorded with GPS using a data dictionary utilizing State of Washington Department of Archaeology and Historic Preservation GIS Data Standards. All GPS data was differentially corrected and exported into GIS. The field forms will be finalized electronically in the office this winter.

Task 8: Evaluation of Project Effects and Site Condition

Field crews carried copies of a Site Condition Assessment form. The forms were completed for each site encountered, recorded, and filed in the site specific folder. A preliminary short list of critically impacted sites will be prepared by February 15, 2008; after all project area sites have been visited, a final short list of prioritized critical sites will be prepared.

Task 9: Eligibility Recommendations

Blank NRHP eligibility forms were carried in the field. The forms were compiled as sites were encountered and recorded. The forms will be used to generate the NRHP recommendations in the draft and final report.

Reporting

Background materials and copies of field forms were delivered to Steve Hamilton to begin report preparation.

Recreation RWG Meeting



Recreation Resource Work Group

Date: February 29, 2008

Time: 10:00 am – 12:00 pm

Location: Bridgeport City Hall

Directions

Agenda

Sign-In Sheet

Meeting Notes



Directions to Bridgeport City Hall

Bridgeport City Hall 1206 Columbia Ave Bridgeport, WA

Heading North: (from Wenatchee)

Follow US 97 through Pateros and to Brewster.

In Brewster, turn right onto WA-173.

Follow WA-173 through Brewster and across the bridge.

After crossing bridge and curving left, continue along WA-173.

WA-173 becomes Maple St.

Follow Maple St. to Columbia Ave.

Turn right on Columbia Ave. and continue to 12th St.

Bridgeport City Hall will be on your right.

Heading South: (from Okanogan)

Follow US 97 to WA-17.

Turn left onto WA-17.

Follow WA-17 across the bridge. Turn right on Foster Creek Ave.

Follow Foster Creek Ave. through Bridgeport. Turn right on 17th St. and left on Columbia Ave.

Follow Columbia Ave. to 12th St.

Bridgeport City Hall will be on your left.

Heading East: (from Seattle)

Travel east on I-90.

Go past Cle Elum.

Take Exit 85 toward Wenatchee.

Turn left at stop sign. Turn right onto WA-970. WA-970 merges with US 97.

Follow US 97 (Blewett Pass) north toward Wenatchee.

Merge onto US 2 E toward Wenatchee.

Follow US 2 over Columbia River north of Wenatchee.

At stoplight, turn left onto US-2/US Hwy 97. Follow US 97 through Pateros and to Brewster.

In Brewster, turn right onto WA-173.

Follow WA-173 through Brewster and across the bridge.

After crossing bridge and curving left, continue along WA-173.

WA-173 becomes Maple St.

Follow Maple St. to Columbia Ave.

Turn right on Columbia Ave. and continue to 12th St.

Bridgeport City Hall will be on your right.

Heading West: (from Spokane)

Travel west on US Hwy 2 to Wilbur.

At Wilbur, turn north on WA-174 through Grand Coulee.

WA-174 becomes WA-17.

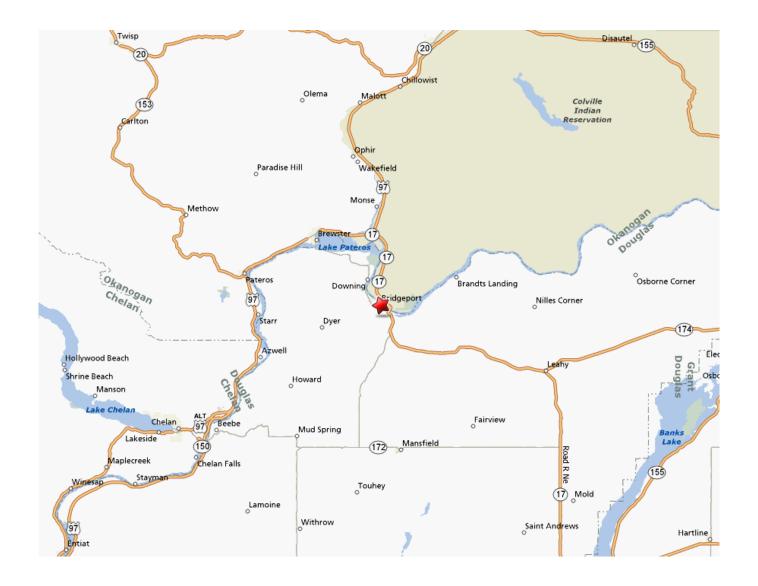
Turn left onto US 97.

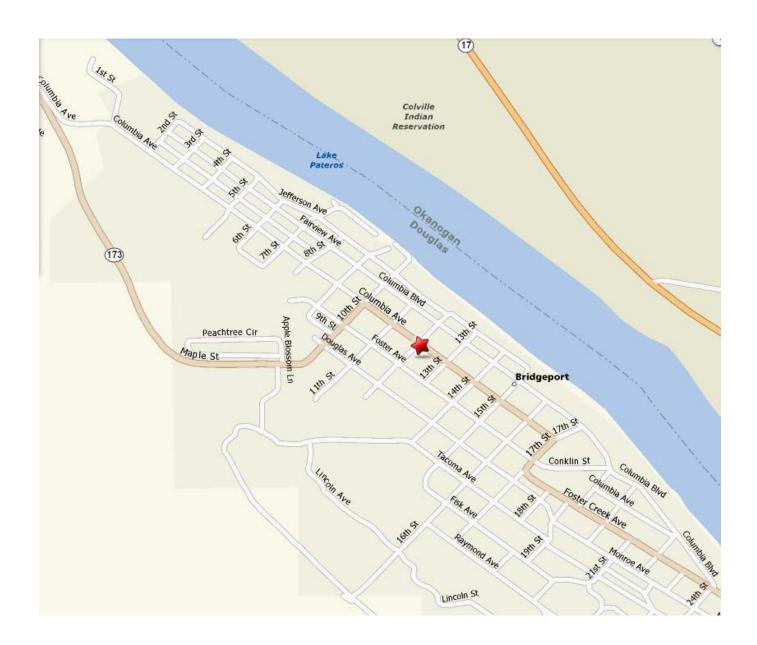
Continue on US 97 through Brewster and Pateros.

At the Wells Dam sign, turn left.

Follow the road down the hill and turn left at intersection.

Follow road toward the Wells Dam gated entrance.





Agenda

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD February 29, 2008 10:00 am – 12:00 pm

Meeting Location: Bridgeport City Hall

1206 Columbia Ave. Bridgeport, WA

Conference Dial-in #: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Recreation Needs Evaluation and

the Recreation Access Study.

Time	Topic	Lead
10:00 am	Review agenda and meeting objectives	Scott Kreiter
10:05 am	Update on the relicensing schedule	Shane Bickford
10:15 am	Study Updates - Recreation Needs Evaluation - Recreation Access Study	Kelly Bricker Scott Kreiter
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	



Wells Project Relicensing Recreation Resource Work Group

DATE:

February 29, 2008

LOCATION:

Bridgeport City Hall

Initials	Name	Affiliation Name	Email
X	Andy Lampe	Okanogan County	alampe@co.okanogan.wa.us
	Bill Fraser	State Parks	bill.fraser@parks.wa.gov
:	Bill Towey	Colville Tribes	bill.towey@colvilletribes.com
X	Bob Clubb	Douglas PUD	rclubb@dcpud.org
	Bob Easton	FERC	Robert.Easton@ferc.gov
	Bob Fateley	City of Brewster	fateley@verizon.net
-	Brenda Crowell	Okanogan County	bcrowell@co.okanogan.wa.us
	Chris Parsons	WDFW	parsocbp@dfw.wa.gov
	Dennis Beich	WDFW	beichdvb@dfw.wa.gov
	Diane Priebe	BLM	diane_priebe@or.blm.gov
X	Gail Howe	City of Pateros	pateros@nwi.net
X	George Brady	City of Pateros	cascadeb@televar.com
	Gordon Brett	Douglas PUD	gbrett@dcpud.org
X	Jean Hardie	City of Bridgeport	bportcty@nwi.net
_X	Jim Eychaner	IAC	jime@iac.wa.gov
	Jim Harris	State Parks	jim.harris@parks.wa.gov
·	John Devine	DTA	john.devine@devinetarbell.com
X	Lee Webster	City of Brewster	brewstermayor@hotmail.com

-	Mary Hunt	Douglas County	mhunt@co.douglas.wa.us
	Mike McKee	WSDOT	mckeem@wsdot.wa.gov
X	Mike Nickerson	State Parks	alta.lake@parks.wa.gov
	Mike Palmer	Colville Tribes	mike.palmer@colvilletribes.com
	Murray McCory	Okanogan County	mmccory@co.okanogan.wa.us
	Neil Hedges	BLM	neal_hedges@or.blm.gov
<u>X</u>	Scott Kreiter	Douglas PUD	skreiter@dcpud.org
X	Shane Bickford	Douglas PUD	sbickford@dcpud.org
<u>X</u> .	Steve Jenkins	City of Bridgeport	bportcty@nwi.net
Phone	Susan Rosebrough	National Parks Service	susan_rosebrough@nps.gov
X	Tony Eldred	WDFW	eldredte@dfw.wa.gov
Additional	Attendees		
Additional Initials	Attendees Name	Affiliation Name	Email
		Affiliation Name	Email
Initials		Affiliation Name FERC DTA	Email
Initials		Affiliation Name FERC DTA	Email
Initials		Affiliation Name FERC DTA	Email
Initials		Affiliation Name FERC DTA	Email
Initials		Affiliation Name FERC DTA	Email
Initials		Affiliation Name FERC DTA	Email

See original w/signatures attached

Recreation W.G. 2-29-08 Gordon Brett ACPUD Tonn Eldred, WDFW Douglas PUD Bos Cluss WA. STATE PARKS MIKE NICKERSON Goul a. Howe City of Paters Derine Toukell & Assoc. Kelly Krils Andrew Campe Ollmagm Courty Scott Kreiter DOPUD Shane Bickford DOPUD J'in Eychanes RCO, Olympia Lee Webster Coty of Brewster. GEOrge BrAdy City of Pateros Jean Hardie Bridgeport Steve Stakins SPIDG-port Phone In Patty Lappart FLAC Susan Mosebergugh NAS Jin Harris WA. St. PKs

Final Meeting Notes

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD February 29, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Recreation Needs Evaluation and

the Recreation Access Study.

Wells ILP Update

Douglas PUD provided an update on the upcoming ILP schedule. Douglas PUD is in the study phase of the ILP. Data collected during the two-year study phase will be used in developing the Draft License Application (DLA) which is due on December 31, 2009.

Recreation Needs Analysis Study Update

Kelly Bricker from Devine Tarbell & Assoc., provided a progress report on the Recreation Needs Analysis (see Attachment A below).

The RWG identified additional literature that may be relevant to the Needs Analysis Study. The RWG also discussed methods for addressing Section 6.1, Step 2 of the Study Plan (*Collect unmet Project Area recreation demand information from visitor surveys, community leaders, and current research*). The primary focus of this step is to address potential use that may not have been collected in the Recreation Use Assessment.

Actions include:

- Reviewing relevant literature;
- Interviewing community leaders identified by each of the Cities;
- Providing questionnaires at the Bridgeport Community Fair on April 26;
- Collect input at a Pateros Parent Advisory Committee (PAC) meeting;
- Collect input at a Brewster PAC meeting.

Recreation Access Study Update

Douglas PUD provided a progress report on the Recreation Access Study (see Attachment B below). Bathymetry collection at each of the boat launches is complete. The backwater analysis, which will be used to evaluate how reservoir operations impact boat launch access, is nearly complete. Next steps include analysis of aquatic plant growth at public access sites, and development of maps showing water depths in the reservoir. The RWG discussed potential options for water depth maps that could be used to improve boater experience on the reservoir.

Action Items:

Action: Douglas PUD will schedule an RWG meeting in June or July to provide another study update prior to the October 30 study report meeting.

Action: Douglas PUD will provide the Water Trail contact information to Kelly Bricker.

Action: Jim Eychaner and Jim Harris will provide the relevant documents to Kelly Bricker for use in the Recreation Needs Assessment.

Action: Kelly Bricker will send the questionnaire to Jean Hardie and Patti Leppert.

Action: Lee Webster will provide the Brewster Recreation Study results to Kelly Bricker.

Action: Douglas PUD will be sure to address non-motorized boat use in the Recreation Access study.

Action: The recreation season used for the Recreation Access Study will be May - November

Next Meeting

The next meeting will be scheduled for late June or early July.

ATTACHMENT A

Wells Recreation Needs Evaluation Progress Report

February 29, 2008

The goal of this study was to research, describe, and quantify recreation and access needs in the Wells Project that should be addressed over the term of the next FERC license. Specific objectives included:

- Summarizing study findings to evaluate recreational use and demand within the Wells
 Project. This summary was based on results of the 2005 Wells Project Recreation Visitor
 Use Assessment and existing information from FERC Form 80s for the Wells Project,
 Interagency Committee for Outdoor Recreation outdoor recreation participation survey,
 WDFW fisherman surveys, WDFW hunter surveys, City of Bridgeport's Marina Park
 information and other relevant recreational survey information.
 - o Assessing the adequacy of existing Wells Project recreation facilities to accommodate current and future recreation demand.
 - Assessing the adequacy of public access and safety at Wells Project recreation facilities.
 - Assessing the adequacy of operations and maintenance at Wells Project recreation facilities.
 - Developing a prioritized list of potential actions to address Wells Project recreation issues. The list included criteria such as demand, effectiveness, feasibility and cost.
- 1) Abstract
 - a) Add additional information when demand study completed
- 2) Section 1.0- Introduction
 - a) Completed
- 3) Section 2.0- Goals and Objectives
 - a) Completed
- 4) Section 3.0- Study Area
 - a) Completed
- 5) Section 4.0- Methodology
 - a) Completed
- 6) Section 5.0- Results
 - a) 5.1- Assess Existing Unmet Demand (Section 6.1 in Study Plan)

- i) 5.1.1- Statewide and Regional Unmet Recreation Demand (Section 6.1, Step 1 in Study Plan)
 - (1) 5.1.1.1- Statewide Unmet Recreation Demand
 - (a) Completed
 - **(b)** Sources Used:
 - (i) 2002-2007 SCORP
 - (ii) SCORP Local Government Survey
 - (iii)Interagency Committee for Outdoor Recreation's (IAC) Statewide Outdoor Recreation Participation Survey
 - (2) 5.1.1.2- Regional Unmet Recreation Demand
 - (a) Incomplete- specific regional information not readily available
- ii) 5.1.2- Project Area Recreation Demand Information from Visitor Surveys, Spot Count Observations, Community Leaders, and Current Research (Section 6.1, Step 2 in Study Plan)
 - (1) 5.1.2.1- Project Area Recreation Demand Information from Visitor Surveys
 - (a) Completed
 - **(b)** Sources Used:
 - (i) 2005 Recreation Visitor Use Assessment
 - (2) 5.1.2.2- Project Area Demand Spot Count Observations
 - (a) Completed
 - **(b)** Sources Used:
 - (i) 2005 Recreation Visitor Spot Count Surveys
 - (3) 5.1.2.3- Interviews with Local Community Leaders
 - (a) Incomplete- in progress
 - (4) 5.1.2.4- Interviews with Fish and Game Officers
 - (a) Incomplete- in progress
 - (5) 5.1.2.5- Research in Hispanic Recreation Needs
 - (a) Completed
 - **(b)** Sources Used:
 - (i) Peer-reviewed research and journal articles
- iii) 5.1.3- Potential Recreation Activities with High Unmet Demand within the Project Area (Section 6.1, Step 3 in Study Plan)
 - (1) Partially Completed
 - (a) High latent demand activities identified for Washington state
 - (b) Will add Project specific information when previous sections of 5.1 complete

- (2) Sources Used to Date:
 - (a) Washington SCORP
- **b**) Section 5.2- Assess Future Recreation Demand (Section 6.2 in Study Plan)
 - i) 5.2.1- Review of Existing Recreation Use Trends (Section 6.2, Step 1 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Washington Department of Fish and Wildlife Fishermen Survey (Michael, 2004)
 - **(b)** Washington Fishing License Sales (communication with Justin McCarron; Southwick Associates, Inc., 2007)
 - (c) Washington Fishing Guide Activity Washington ORV Green Sticker Sales (communication with Carol Turcotte)
 - (d) Washington ORV Green Sticker Sales (Motor Vehicles)
 - (e) Washington Boating Vessel Registrations (DOL Vessel Registration System)
 - **(f)** Great Washington State Birding Trail Brochure Distribution (communication with Christi Norman)
 - (g) Recreation Equipment Sales Trends (Southwick Associates Inc., 2007; Outdoor Industry Foundation, 2006)
 - ii) 5.2.2- Existing Population and Recreation Activity Participation Projections (Section 6.2, Step 2 in Study Plan)
 - (1) Partially Completed
 - (a) Estimated activity participation trends and projections for the Project area
 - (b) This section under construction
 - iii) 5.2.3- Reasonably Foreseeable Events That May Influence Future Use (Section 6.2, Step 3 in Study Plan)
 - (1) Incomplete- Kelly Bricker still discussing with Douglas
 - iv) 5.2.4- Estimate of Future Recreation Use Over the License Period (Section 6.2, Step 4 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Historical Trends
 - **(b)** Future Growth Projections
- c) Section 5.3- Regional Uniqueness and Significance Assessment (Section 6.3 in Study Plan)
 - i) 5.3.1- Visitor Questionnaires (Section 6.3, Step 1 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) 2005 Recreation Visitor Use Assessment

- ii) 5.3.2- Regional Recreation Opportunities (Section 6.3, Step 2 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Douglas PUD
 - (b) 2005 Recreation Visitor Use Assessment
- iii) 5.3.3- Uniqueness of Project-related Recreation Opportunities (Section 6.3, Step 3 in Study Plan)
 - (1) Partially Completed
 - (a) Review of activities offered at Wells and similar locations
 - **(b)** This section under construction
 - (i) Refine activities available at other locations
 - (ii) Discussion of project area uniqueness
- **d)** Section 5.4- Public Access Analysis (Section 6.4 in Study Plan)
 - i) Incomplete
 - (1) To collect this information on site in Washington
- e) Section 5.5- Needs Assessment (Section 6.5 in Study Plan)
 - i) 5.5.1- Project-related Recreation Opportunities at Recreation Resource Areas (Section 6.5, Step 1 in Study Plan)
 - (1) Partially Completed
 - (a) Visitor assessment of facilities completed
 - (b) Need DTA team evaluation of facilities
 - (2) Sources Used:
 - (a) DTA Team
 - **(b)** 2005 Recreation Visitor Use Assessment-facility questions
 - ii) 5.5.2- Summary of Major Recreation Issues (Section 6.5, Step 2 in Study Plan)
 - (1) Partially Completed
 - (a) Visitor responses completed
 - **(b)** Need responses from community leaders
 - (c) Need field evaluation of facilities based on inadequacies identified by visitors and officials
 - (d) Add description about adequacy of existing facilities over the license period
 - (2) Sources Used:
 - (a) 2005 Recreation Visitor Use Assessment
 - **(b)** Community Leaders
 - (c) Field Evaluations
 - iii) 5.5.3- Actions to Address Project-related Issues (Section 6.5, Step 3 in Study Plan)
 - (1) Partially Completed
 - (a) Summary of Hispanic issues completed
 - **(b)** Need to identify and discuss specific actions
 - (c) This section under construction

- iv) 5.5.4- Relicensing Consultation (Section 6.5, Step 4 in Study Plan)
 - (1) Incomplete
 - (a) To be completed at the end of the study
- 7) Section 6.0- Discussion
 - a) To be completed after field evaluation and additional data collection completed
- 8) Section 7.0- Acknowledgements
 - a) Need to add.
- **9)** Section 8.0- References
 - a) Complete unless add additional sources during completion of the study
- 10) Appendices

Literature review of Hispanic recreation needs

ATTACHMENT B

Evaluation of Public Access to the Wells Reservoir as it Relates to Reservoir Fluctuations, Aquatic Plants, and Substrate Buildup

Progress Report February 29, 2008

<u>Contractors</u>: Jacobs (Rolf Wielick, lead); GeoEngineers (backwater analysis); Erlandsen and Associates (drawings and bathymetry)

Goals and Objectives

The goal of this study is to evaluate whether Wells Project recreation facilities (public access facilities) such as docks, boat launches and swimming areas, can be reasonably utilized under various reservoir operating scenarios and conditions. Specific objectives include:

- Evaluate accessibility to boat docks and launches during low reservoir elevations.
- Evaluate how reservoir elevations affect on-water boating experiences.
- Evaluate the effect of aquatic plant growth on accessibility to boat docks, launches and designated swimming areas within the Wells Project (reservoir and tailrace).
- Evaluate whether river substrate is restricting access to boat docks, boat launches and designated swimming areas within the Wells Project (reservoir and tailrace).
- Develop a map showing general types of aquatic plants and where they occur.
- Develop a map showing areas of the reservoir that may be inaccessible during low reservoir elevations.
- Identify measures to improve boat docks and launches and swimming areas as they relate to reservoir fluctuations, aquatic plants and substrate buildup.

Tasks

Task 1: Evaluate Access Related to Reservoir Fluctuations (15% complete)

- Review and summarize hourly elevation data from the Wells forebay to determine how
 often fluctuations occur in the Wells Reservoir. Develop headwater duration curves for
 the years 2003-2007 to better understand the relationship between reservoir fluctuations
 and elapsed time.
- Document and evaluate accessibility to boat docks and launches. Evaluate depths at boat launches and docks to determine at what elevations access sites could become inaccessible due to low water. (Note that the evaluation of the effects of substrate buildup

on access to the reservoir and water related public facilities in these areas will be conducted in connection with this task).

- Using GIS and the existing reservoir bathymetry data, identify potential shallow areas during low reservoir operations. Utilize these maps to evaluate how reservoir fluctuations may affect on-water boating experiences.
- Identify and describe potential options to improve access.

Task 2: Evaluate Access Related to Substrate Buildup (See Task 1)

Task 3: Evaluate Access Related to Aquatic Plants (5% complete)

- Conduct a field survey during August 2008 to evaluate the density and distribution of aquatic plants in relation to specific sites to determine if and how aquatic plants in these areas adversely impact access to the Wells Reservoir and use of public use sites. The field survey shall consist of rough mapping of the extent of any aquatic weed growth at each of the sites using hand-held GPS equipment or other appropriate methods to establish general locations of aquatic plants near the sites. Plant identification shall be accomplished using a line and grapple to allow sampling at each site to assess general plant types.
- Identify and describe potential options to improve access.

Email to Recreation RWG regarding Draft Recreation RWG Meeting Notes

From: Scott Kreiter

Sent: Thursday, March 06, 2008 11:07 AM

To: Andy Lampe; Bill Fraser; Bill Towey; Bob Clubb; Bob Dach; Bob Fateley; Brenda Crowell;

Chris Parsons; David Turner; Dennis Beich; Diane Priebe; Gail Howe; George Brady; Gordon Brett; Jean Hardie; Jim Eychaner; Jim Harris; John Devine; Lee Webster; Mary Hunt; Mary Mayo; Michael Linde; Mike Nickerson; Mike Palmer; Neal Hedges; Pat Haley; Pat Irle (pirl461@ecy.wa.gov); Patricia Leppert; Robert Easton; Sally Sovey; Scott Kreiter; Shane

Bickford; Susan Rosebrough; Tony Eldred

Subject: Wells Relicensing: Recreation RWG draft meeting notes

Attachments: Recreation_RWG_Notes_022908.pdf

Recreation RWG members,

Please find attached the draft meeting notes from the February 29 meeting. Please provide any comments on the meeting notes by March 13.

Thank you! -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Draft Meeting Notes

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD February 29, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Recreation Needs Evaluation and

the Recreation Access Study.

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Douglas PUD provided an update on the upcoming ILP schedule. Douglas PUD is in the study phase of the ILP. Data collected during the two-year study phase will be used in developing the Draft License Application (DLA) which is due on December 31, 2009.

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Action: Douglas PUD will be sure to address non-motorized boat use in the Recreation Access study.

Action: The recreation season used for the Recreation Access Study will be May - November

Items of Agreement

None

<u>Items of Disagreement</u>

None

Next Meeting

The next meeting will be scheduled for late June or early July.

ATTACHMENT A

Wells Recreation Needs Evaluation Progress Report

February 29, 2008

The goal of this study was to research, describe, and quantify recreation and access needs in the Wells Project that should be addressed over the term of the next 50-year FERC license. Specific objectives included:

- Summarizing study findings to evaluate recreational use and demand within the Wells Project. This summary was based on results of the 2005 Wells Project Recreation Visitor Use Assessment and existing information from FERC Form 80s for the Wells Project, Interagency Committee for Outdoor Recreation outdoor recreation participation survey, WDFW fisherman surveys, WDFW hunter surveys, City of Bridgeport's Marina Park information and other relevant recreational survey information.
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 - (1) Partially Completed
 - (a) High latent demand activities identified for Washington state
 - (b) Will add Project specific information when previous sections of 5.1 complete

- (2) Sources Used to Date:
 - (a) Washington SCORP
- **b**) Section 5.2- Assess Future Recreation Demand (Section 6.2 in Study Plan)
 - i) 5.2.1- Review of Existing Recreation Use Trends (Section 6.2, Step 1 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Washington Department of Fish and Wildlife Fishermen Survey (Michael, 2004)
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 - (c) Washington Fishing Guide Activity Washington ORV Green Sticker Sales (communication with Carol Turcotte)
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 - iii) 5.2.3- Reasonably Foreseeable Events That May Influence Future Use (Section 6.2, Step 3 in Study Plan)
 - (1) Incomplete- Kelly Bricker still discussing with Douglas
 - iv) 5.2.4- Estimate of Future Recreation Use Over the License Period (Section 6.2, Step 4 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Historical Trends
 - **(b)** Future Growth Projections
- c) Section 5.3- Regional Uniqueness and Significance Assessment (Section 6.3 in Study Plan)
 - i) 5.3.1- Visitor Questionnaires (Section 6.3, Step 1 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) 2005 Recreation Visitor Use Assessment

- ii) 5.3.2- Regional Recreation Opportunities (Section 6.3, Step 2 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Douglas PUD
 - (b) 2005 Recreation Visitor Use Assessment
- iii) 5.3.3- Uniqueness of Project-related Recreation Opportunities (Section 6.3, Step 3 in Study Plan)
 - (1) Partially Completed
 - (a) Review of activities offered at Wells and similar locations
 - **(b)** This section under construction
 - (i) Refine activities available at other locations
 - (ii) Discussion of project area uniqueness
- **d)** Section 5.4- Public Access Analysis (Section 6.4 in Study Plan)
 - i) Incomplete
 - (1) To collect this information on site in Washington
- e) Section 5.5- Needs Assessment (Section 6.5 in Study Plan)
 - i) 5.5.1- Project-related Recreation Opportunities at Recreation Resource Areas (Section 6.5, Step 1 in Study Plan)
 - (1) Partially Completed
 - (a) Visitor assessment of facilities completed
 - (b) Need DTA team evaluation of facilities
 - (2) Sources Used:
 - (a) DTA Team
 - **(b)** 2005 Recreation Visitor Use Assessment-facility questions
 - ii) 5.5.2- Summary of Major Recreation Issues (Section 6.5, Step 2 in Study Plan)
 - (1) Partially Completed
 - (a) Visitor responses completed
 - **(b)** Need responses from community leaders
 - (c) Need field evaluation of facilities based on inadequacies identified by visitors and officials
 - (d) Add description about adequacy of existing facilities over the license period
 - (2) Sources Used:
 - (a) 2005 Recreation Visitor Use Assessment
 - **(b)** Community Leaders
 - (c) Field Evaluations
 - iii) 5.5.3- Actions to Address Project-related Issues (Section 6.5, Step 3 in Study Plan)
 - (1) Partially Completed
 - (a) Summary of Hispanic issues completed
 - **(b)** Need to identify and discuss specific actions
 - (c) This section under construction

- iv) 5.5.4- Relicensing Consultation (Section 6.5, Step 4 in Study Plan)
 - (1) Incomplete
 - (a) To be completed at the end of the study
- 7) Section 6.0- Discussion
 - a) To be completed after field evaluation and additional data collection completed
- 8) Section 7.0- Acknowledgements
 - a) Need to add.
- **9)** Section 8.0- References
 - a) Complete unless add additional sources during completion of the study
- **10**) Appendices

Literature review of Hispanic recreation needs

ATTACHMENT B

Evaluation of Public Access to the Wells Reservoir as it Relates to Reservoir Fluctuations, Aquatic Plants, and Substrate Buildup

> Progress Report February 29, 2008

<u>Contractors</u>: Jacobs (Rolf Wielick, lead); GeoEngineers (backwater analysis); Erlandsen and Associates (drawings and bathymetry)

Goals and Objectives

The goal of this study is to evaluate whether Wells Project recreation facilities (public access facilities) such as docks, boat launches and swimming areas, can be reasonably utilized under various reservoir operating scenarios and conditions. Specific objectives include:

- Evaluate accessibility to boat docks and launches during low reservoir elevations.
- Evaluate how reservoir elevations affect on-water boating experiences.
- Evaluate the effect of aquatic plant growth on accessibility to boat docks, launches and designated swimming areas within the Wells Project (reservoir and tailrace).
- Evaluate whether river substrate is restricting access to boat docks, boat launches and designated swimming areas within the Wells Project (reservoir and tailrace).
- Develop a map showing general types of aquatic plants and where they occur.
- Develop a map showing areas of the reservoir that may be inaccessible during low reservoir elevations.
- Identify measures to improve boat docks and launches and swimming areas as they relate to reservoir fluctuations, aquatic plants and substrate buildup.

Tasks

Task 1: Evaluate Access Related to Reservoir Fluctuations (15% complete)

- Review and summarize hourly elevation data from the Wells forebay to determine how often fluctuations occur in the Wells Reservoir. Develop headwater duration curves for the years 2003-2007 to better understand the relationship between reservoir fluctuations and elapsed time.
- Document and evaluate accessibility to boat docks and launches. Evaluate depths at boat launches and docks to determine at what elevations access sites could become inaccessible due to low water. (Note that the evaluation of the effects of substrate buildup

on access to the reservoir and water related public facilities in these areas will be conducted in connection with this task).

- Using GIS and the existing reservoir bathymetry data, identify potential shallow areas during low reservoir operations. Utilize these maps to evaluate how reservoir fluctuations may affect on-water boating experiences.
- Identify and describe potential options to improve access.

Task 2: Evaluate Access Related to Substrate Buildup (See Task 1)

Task 3: Evaluate Access Related to Aquatic Plants (5% complete)

- Conduct a field survey during August 2008 to evaluate the density and distribution of aquatic plants in relation to specific sites to determine if and how aquatic plants in these areas adversely impact access to the Wells Reservoir and use of public use sites. The field survey shall consist of rough mapping of the extent of any aquatic weed growth at each of the sites using hand-held GPS equipment or other appropriate methods to establish general locations of aquatic plants near the sites. Plant identification shall be accomplished using a line and grapple to allow sampling at each site to assess general plant types.
- Identify and describe potential options to improve access.

Email to Recreation RWG regarding Final Recreation RWG Meeting Notes

From: Scott Kreiter

Sent: Friday, March 14, 2008 10:21 AM

To: Andy Lampe; Bill Fraser; Bill Towey; Bob Clubb; Bob Dach; Bob Fateley; Brenda Crowell;

Chris Parsons; David Turner; Dennis Beich; Diane Priebe; Gail Howe; George Brady; Gordon Brett; Jean Hardie; Jim Eychaner; Jim Harris; John Devine; Lee Webster; Mary Hunt; Mary Mayo; Michael Linde; Mike Nickerson; Mike Palmer; Neal Hedges; Pat Haley; Pat Irle (pirl461@ecy.wa.gov); Patricia Leppert; Robert Easton; Sally Sovey; Scott Kreiter; Shane

Bickford; Susan Rosebrough; Tony Eldred

Subject: Wells Relicensing: Recreation RWG Final Meeting Notes

Attachments: Final_Recreation_RWG_Notes_022908.pdf

Wells Recreation RWG,

Please find attached the final meeting notes from the February 29 Recreation RWG meeting.

Please contact me if you have any questions.

Thanks. -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Final Meeting Notes

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD February 29, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide an update on the Recreation Needs Evaluation and

the Recreation Access Study.

Wells ILP Update

Douglas PUD provided an update on the upcoming ILP schedule. Douglas PUD is in the study phase of the ILP. Data collected during the two-year study phase will be used in developing the Draft License Application (DLA) which is due on December 31, 2009.

Recreation Needs Analysis Study Update

Kelly Bricker from Devine Tarbell & Assoc., provided a progress report on the Recreation Needs Analysis (see Attachment A below).

The RWG identified additional literature that may be relevant to the Needs Analysis Study. The RWG also discussed methods for addressing Section 6.1, Step 2 of the Study Plan (*Collect unmet Project Area recreation demand information from visitor surveys, community leaders, and current research*). The primary focus of this step is to address potential use that may not have been collected in the Recreation Use Assessment.

Actions include:

- Reviewing relevant literature;
- Interviewing community leaders identified by each of the Cities;
- Providing questionnaires at the Bridgeport Community Fair on April 26;
- Collect input at a Pateros Parent Advisory Committee (PAC) meeting;
- Collect input at a Brewster PAC meeting.

Recreation Access Study Update

Douglas PUD provided a progress report on the Recreation Access Study (see Attachment B below). Bathymetry collection at each of the boat launches is complete. The backwater analysis, which will be used to evaluate how reservoir operations impact boat launch access, is nearly complete. Next steps include analysis of aquatic plant growth at public access sites, and development of maps showing water depths in the reservoir. The RWG discussed potential options for water depth maps that could be used to improve boater experience on the reservoir.

Action Items:

Action: Douglas PUD will schedule an RWG meeting in June or July to provide another study update prior to the October 30 study report meeting.

Action: Douglas PUD will provide the Water Trail contact information to Kelly Bricker.

Action: Jim Eychaner and Jim Harris will provide the relevant documents to Kelly Bricker for use in the Recreation Needs Assessment.

Action: Kelly Bricker will send the questionnaire to Jean Hardie and Patti Leppert.

Action: Lee Webster will provide the Brewster Recreation Study results to Kelly Bricker.

Action: Douglas PUD will be sure to address non-motorized boat use in the Recreation Access study.

Action: The recreation season used for the Recreation Access Study will be May - November

Next Meeting

The next meeting will be scheduled for late June or early July.

ATTACHMENT A

Wells Recreation Needs Evaluation Progress Report

February 29, 2008

The goal of this study was to research, describe, and quantify recreation and access needs in the Wells Project that should be addressed over the term of the next FERC license. Specific objectives included:

- Summarizing study findings to evaluate recreational use and demand within the Wells
 Project. This summary was based on results of the 2005 Wells Project Recreation Visitor
 Use Assessment and existing information from FERC Form 80s for the Wells Project,
 Interagency Committee for Outdoor Recreation outdoor recreation participation survey,
 WDFW fisherman surveys, WDFW hunter surveys, City of Bridgeport's Marina Park
 information and other relevant recreational survey information.
 - o Assessing the adequacy of existing Wells Project recreation facilities to accommodate current and future recreation demand.
 - Assessing the adequacy of public access and safety at Wells Project recreation facilities.
 - Assessing the adequacy of operations and maintenance at Wells Project recreation facilities.
 - Developing a prioritized list of potential actions to address Wells Project recreation issues. The list included criteria such as demand, effectiveness, feasibility and cost.
- 1) Abstract
 - a) Add additional information when demand study completed
- 2) Section 1.0- Introduction
 - a) Completed
- 3) Section 2.0- Goals and Objectives
 - a) Completed
- 4) Section 3.0- Study Area
 - a) Completed
- 5) Section 4.0- Methodology
 - a) Completed
- 6) Section 5.0- Results
 - a) 5.1- Assess Existing Unmet Demand (Section 6.1 in Study Plan)

- i) 5.1.1- Statewide and Regional Unmet Recreation Demand (Section 6.1, Step 1 in Study Plan)
 - (1) 5.1.1.1- Statewide Unmet Recreation Demand
 - (a) Completed
 - **(b)** Sources Used:
 - (i) 2002-2007 SCORP
 - (ii) SCORP Local Government Survey
 - (iii)Interagency Committee for Outdoor Recreation's (IAC) Statewide Outdoor Recreation Participation Survey
 - (2) 5.1.1.2- Regional Unmet Recreation Demand
 - (a) Incomplete- specific regional information not readily available
- ii) 5.1.2- Project Area Recreation Demand Information from Visitor Surveys, Spot Count Observations, Community Leaders, and Current Research (Section 6.1, Step 2 in Study Plan)
 - (1) 5.1.2.1- Project Area Recreation Demand Information from Visitor Surveys
 - (a) Completed
 - **(b)** Sources Used:
 - (i) 2005 Recreation Visitor Use Assessment
 - (2) 5.1.2.2- Project Area Demand Spot Count Observations
 - (a) Completed
 - **(b)** Sources Used:
 - (i) 2005 Recreation Visitor Spot Count Surveys
 - (3) 5.1.2.3- Interviews with Local Community Leaders
 - (a) Incomplete- in progress
 - (4) 5.1.2.4- Interviews with Fish and Game Officers
 - (a) Incomplete- in progress
 - (5) 5.1.2.5- Research in Hispanic Recreation Needs
 - (a) Completed
 - **(b)** Sources Used:
 - (i) Peer-reviewed research and journal articles
- iii) 5.1.3- Potential Recreation Activities with High Unmet Demand within the Project Area (Section 6.1, Step 3 in Study Plan)
 - (1) Partially Completed
 - (a) High latent demand activities identified for Washington state
 - (b) Will add Project specific information when previous sections of 5.1 complete

- (2) Sources Used to Date:
 - (a) Washington SCORP
- **b**) Section 5.2- Assess Future Recreation Demand (Section 6.2 in Study Plan)
 - i) 5.2.1- Review of Existing Recreation Use Trends (Section 6.2, Step 1 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Washington Department of Fish and Wildlife Fishermen Survey (Michael, 2004)
 - **(b)** Washington Fishing License Sales (communication with Justin McCarron; Southwick Associates, Inc., 2007)
 - (c) Washington Fishing Guide Activity Washington ORV Green Sticker Sales (communication with Carol Turcotte)
 - (d) Washington ORV Green Sticker Sales (Motor Vehicles)
 - (e) Washington Boating Vessel Registrations (DOL Vessel Registration System)
 - (f) Great Washington State Birding Trail Brochure Distribution (communication with Christi Norman)
 - (g) Recreation Equipment Sales Trends (Southwick Associates Inc., 2007; Outdoor Industry Foundation, 2006)
 - ii) 5.2.2- Existing Population and Recreation Activity Participation Projections (Section 6.2, Step 2 in Study Plan)
 - (1) Partially Completed
 - (a) Estimated activity participation trends and projections for the Project area
 - (b) This section under construction
 - iii) 5.2.3- Reasonably Foreseeable Events That May Influence Future Use (Section 6.2, Step 3 in Study Plan)
 - (1) Incomplete- Kelly Bricker still discussing with Douglas
 - iv) 5.2.4- Estimate of Future Recreation Use Over the License Period (Section 6.2, Step 4 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Historical Trends
 - **(b)** Future Growth Projections
- c) Section 5.3- Regional Uniqueness and Significance Assessment (Section 6.3 in Study Plan)
 - i) 5.3.1- Visitor Questionnaires (Section 6.3, Step 1 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) 2005 Recreation Visitor Use Assessment

- ii) 5.3.2- Regional Recreation Opportunities (Section 6.3, Step 2 in Study Plan)
 - (1) Completed
 - (2) Sources Used:
 - (a) Douglas PUD
 - **(b)** 2005 Recreation Visitor Use Assessment
- iii) 5.3.3- Uniqueness of Project-related Recreation Opportunities (Section 6.3, Step 3 in Study Plan)
 - (1) Partially Completed
 - (a) Review of activities offered at Wells and similar locations
 - **(b)** This section under construction
 - (i) Refine activities available at other locations
 - (ii) Discussion of project area uniqueness
- **d)** Section 5.4- Public Access Analysis (Section 6.4 in Study Plan)
 - i) Incomplete
 - (1) To collect this information on site in Washington
- e) Section 5.5- Needs Assessment (Section 6.5 in Study Plan)
 - i) 5.5.1- Project-related Recreation Opportunities at Recreation Resource Areas (Section 6.5, Step 1 in Study Plan)
 - (1) Partially Completed
 - (a) Visitor assessment of facilities completed
 - (b) Need DTA team evaluation of facilities
 - (2) Sources Used:
 - (a) DTA Team
 - **(b)** 2005 Recreation Visitor Use Assessment-facility questions
 - ii) 5.5.2- Summary of Major Recreation Issues (Section 6.5, Step 2 in Study Plan)
 - (1) Partially Completed
 - (a) Visitor responses completed
 - **(b)** Need responses from community leaders
 - (c) Need field evaluation of facilities based on inadequacies identified by visitors and officials
 - (d) Add description about adequacy of existing facilities over the license period
 - (2) Sources Used:
 - (a) 2005 Recreation Visitor Use Assessment
 - **(b)** Community Leaders
 - (c) Field Evaluations
 - iii) 5.5.3- Actions to Address Project-related Issues (Section 6.5, Step 3 in Study Plan)
 - (1) Partially Completed
 - (a) Summary of Hispanic issues completed
 - (b) Need to identify and discuss specific actions
 - (c) This section under construction

- iv) 5.5.4- Relicensing Consultation (Section 6.5, Step 4 in Study Plan)
 - (1) Incomplete
 - (a) To be completed at the end of the study
- 7) Section 6.0- Discussion
 - a) To be completed after field evaluation and additional data collection completed
- 8) Section 7.0- Acknowledgements
 - a) Need to add.
- **9)** Section 8.0- References
 - a) Complete unless add additional sources during completion of the study
- **10**) Appendices

Literature review of Hispanic recreation needs

ATTACHMENT B

Evaluation of Public Access to the Wells Reservoir as it Relates to Reservoir Fluctuations, Aquatic Plants, and Substrate Buildup

> Progress Report February 29, 2008

<u>Contractors</u>: Jacobs (Rolf Wielick, lead); GeoEngineers (backwater analysis); Erlandsen and Associates (drawings and bathymetry)

Goals and Objectives

The goal of this study is to evaluate whether Wells Project recreation facilities (public access facilities) such as docks, boat launches and swimming areas, can be reasonably utilized under various reservoir operating scenarios and conditions. Specific objectives include:

- Evaluate accessibility to boat docks and launches during low reservoir elevations.
- Evaluate how reservoir elevations affect on-water boating experiences.
- Evaluate the effect of aquatic plant growth on accessibility to boat docks, launches and designated swimming areas within the Wells Project (reservoir and tailrace).
- Evaluate whether river substrate is restricting access to boat docks, boat launches and designated swimming areas within the Wells Project (reservoir and tailrace).
- Develop a map showing general types of aquatic plants and where they occur.
- Develop a map showing areas of the reservoir that may be inaccessible during low reservoir elevations.
- Identify measures to improve boat docks and launches and swimming areas as they relate to reservoir fluctuations, aquatic plants and substrate buildup.

Tasks

Task 1: Evaluate Access Related to Reservoir Fluctuations (15% complete)

- Review and summarize hourly elevation data from the Wells forebay to determine how
 often fluctuations occur in the Wells Reservoir. Develop headwater duration curves for
 the years 2003-2007 to better understand the relationship between reservoir fluctuations
 and elapsed time.
- Document and evaluate accessibility to boat docks and launches. Evaluate depths at boat launches and docks to determine at what elevations access sites could become inaccessible due to low water. (Note that the evaluation of the effects of substrate buildup

on access to the reservoir and water related public facilities in these areas will be conducted in connection with this task).

- Using GIS and the existing reservoir bathymetry data, identify potential shallow areas during low reservoir operations. Utilize these maps to evaluate how reservoir fluctuations may affect on-water boating experiences.
- Identify and describe potential options to improve access.

Task 2: Evaluate Access Related to Substrate Buildup (See Task 1)

Task 3: Evaluate Access Related to Aquatic Plants (5% complete)

- Conduct a field survey during August 2008 to evaluate the density and distribution of aquatic plants in relation to specific sites to determine if and how aquatic plants in these areas adversely impact access to the Wells Reservoir and use of public use sites. The field survey shall consist of rough mapping of the extent of any aquatic weed growth at each of the sites using hand-held GPS equipment or other appropriate methods to establish general locations of aquatic plants near the sites. Plant identification shall be accomplished using a line and grapple to allow sampling at each site to assess general plant types.
- Identify and describe potential options to improve access.

Email to Ecology from Douglas PUD regarding the Coastal Zone Management Act

----Original Message---From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]
Sent: Monday, March 31, 2008 11:50 AM
To: Beau Patterson
Subject: RE: Permit application

Hi, Beau No, it's the FERC license application.
So, it's a while off...
Hope that helps,
Pat
----Original Message---From: Beau Patterson [mailto:beaup@dcpud.org]
Sent: Monday, March 31, 2008 11:05 AM
To: Irle, Pat (ECY)
Subject: Permit application

Hello Pat,

Thank you very much for your letter response on March 28, 2008, to my email request for a determination regarding application of the Coastal Zone Management Act to the Wells Hydroelectric Project.

I have one question I would like to clarify. You indicated that Ecology presently believes that effects to coastal resources will be addressed in the 401 certification, but that under CZMA regulations, Ecology has 30 days after receiving notice of a permit application to make a determination.

Is the referenced permit application, Douglas PUD's request for 401 Water Quality Certification?

Thank you very much for clarifying that one item for me.

Regards,

Beau Patterson
Environmental Relicensing Specialist
Public Utility District #1 of Douglas County
1151 Valley Mall Parkway
East Wenatchee, Washington 98802-4497
(509) 881-2338 (direct)
(509) 884-0553 (FAX)



STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

March 28, 2008

Douglas County P.U.D. 1151 Valley Mall Parkway East Wenatchee, WA 98802

RE: Wells Hydroelectric Project No. 2149

Coastal Zone Management Act (CZMA)

Dear Mr. Beau Patterson:

On March 4, 2008, you submitted, by e-mail, a request on behalf of the Douglas County Public Utility District (PUD), for Ecology to make a determination regarding applying the Coastal Zone Management Act (CZMA) to the Wells Hydroelectric Project.

Ecology presently believes that all effects to coastal resources of concern to Ecology will be adequately addressed in the 401 certification. However, under the CZMA regulations, Ecology has 30 days after receiving notice of a permit application to make a determination. We plan to wait until that time to make a final determination.

Please contact me at (509) 454-7864, if you have any questions.

Sincerely,

Patricia S. Irle

Hydropower Projects Manager

Cc: Loree' Randall, Ecology HQ SEA

Denise Mills, Ecology CRO WQ

Jon Merz, CRO WQ Brian Faller, AAG NOTED MAR 3 I 2008 From: Beau Patterson

Sent: Tuesday, March 25, 2008 8:53 AM

To: 'Irle, Pat (ECY)'

Cc: Randall, Loree' (ECY); Marti, Jeff (ECY); Merz, Jonathan (ECY)

Subject: RE: Wells CZM

Hi Pat – thank you all for your efforts on this.

From: Irle, Pat (ECY) [mailto:PIRL461@ECY.WA.GOV]

Sent: Tuesday, March 25, 2008 8:50 AM

To: Beau Patterson

Cc: Randall, Loree' (ECY); Marti, Jeff (ECY); Merz, Jonathan (ECY)

Subject: RE: Wells CZM

Hi, Beau - I will be working with Denise Mills to prepare a response...

From: Randall, Loree' (ECY)

Sent: Monday, March 24, 2008 12:19 PM **To:** Beau Patterson; Marti, Jeff (ECY)

Subject: RE: Wells CZM

Mr. Patterson, Your emails have been forwarded to the Water Quality Program at Ecology's Central Regional office and the Attorney General's office for a response.

From: Beau Patterson [mailto:beaup@dcpud.org]

Sent: Mon 3/24/2008 12:13 PM

To: Marti, Jeff (ECY)

Cc: Randall, Loree' (ECY); Iran461@ecy.wa.gov

Subject: Wells CZM

```
Hello Mr. Marti,
On July 2, 2003, you wrote:
----Original Message----
From: Marti, Jeff [mailto:jema461@ECY.WA.GOV]
Sent: Wednesday, July 02, 2003 12:01 PM
To: Osborn, Jeff
Cc: 'Chris Hall'; Rankin, Linda
Subject: Rocky Reach CZM
Jeff, I have consulted with Linda Rankin, federal consistency coordinator for the
Department of
Ecology. This is confirmation that a Coastal Zone Management Consistency Statement
will not
be required for the Rocky Reach Hydroelectric Project.
Jeff Marti
Water Resources Program
Department of Ecology
```

P.O. Box 47600

Olympia, WA 98504-7600

ph: 360-407-6636 fax: 360-407-6574 jema461@ecy.wa.gov http://www.ecy.wa.gov

I have been unable to reach Ms. Loree' Randall, either from the Ecology website link, direct email, or telephone, since beginning attempts on March 4. I am hoping you will provide me the same type of email confirmation that a Coastal Zone Management Consistency Statement will not be required for the Wells Hydroelectric Project, as you provided to Chelan PUD in 2003. The Wells Hydroelectric Project is located upriver from the Rocky Reach Project, on the Columbia River in Chelan, Douglas and Okanogan Counties.

Your response will be greatly appreciated.

Sincerely,

Beau Patterson

Email to WDFW from Douglas PUD regarding Lamprey Spawning Study

----Original Message----

From: Molly Hallock [mailto:hallomh@DFW.WA.GOV]

Sent: Tuesday, May 27, 2008 3:14 PM

To: Bao Le

Subject: Re: lamprey spawning

I understand Bao. I haven't spoken with Curt recently, but I imagine getting into the rivers has been a bit tough. Glad you have been out checking. Maybe it will work out next year for some of your crew to come over so they can learn how to do the surveying instead of you. And, yes, I am not surpised that you aren't finding anything. It is a long shot, but you don't know until you look. I know you know what you are looking for. I am wondering about the timing. Do you know of anyone/agency that is going to try to survey for lamprey redds specifically on the east side of the Cascades?

Who is filling in for Carmen?

Molly

>>> "Bao Le" <baol@dcpud.org> 05/27/2008 2:45 PM >>>

Hi Molly, I just wanted to let you know that we were unable to coordinate with Curt this spring to visit some of his sites for Pacific lamprey spawning. As you can imagine, staff on both sides are really slammed and on this end, people had difficulty identifying dates within their schedules that worked with Curt's proposed schedule. If it is any consolation, I have been the only surveyor of what marginal lamprey habitat has been identified within the Wells Project boundary and I feel that I am sufficiently trained in identification. Anybody else who finds the time in their schedule to join me, will also be trained by me.

It's likely no surprise to you but I have not found anything remotely resembling lamprey nests. Currently, high water in the Methow and Okanogan make those sites inaccessible. Those sites will likely be accessed again as soon as the water settles. Please let me know if you have any concerns about this. Thanks. Bao

Bao Le

Sr. Aquatic Resource Biologist

Douglas PUD

1151 Valley Mall Pkwy.

East Wenatchee, WA 98802

509-881-2323 (Direct)

509-884-0553 (FAX)

Email to Cultural RWG regarding Agenda for Cultural RWG Meeting

From: Scott Kreiter

Sent: Thursday, June 05, 2008 4:20 PM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert

Easton; Sally Sovey; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG meeting agenda

Attachments: Wells Cultural RWG Agenda 071708.pdf

Wells Cultural Resource Work Group members:

Please find attached the agenda for the July 17 Cultural Resources Work Group meeting in Nespelem. The meeting is scheduled for 9:00 – noon. Conference call information is included in the agenda.

The purpose of the meeting is to discuss the draft Traditional Cultural Properties (TCP) report, which you should receive in the mail today or tomorrow. Written comments for the TCP report are due on June 24.

We will also be discussing the draft Wells Project HPMP. This draft is based on the outline that was developed at our January 30, 2008 meeting. You will receive the draft HPMP tomorrow by email.

Please contact me if you have any questions.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD July 17, 2008 9:00 am – 12:00 pm

Meeting Location: Nespelem, WA

Conference Dial-in: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To discuss the draft Traditional Cultural Properties Study

report and the draft Historic Properties Management Plan.

Time	Topic	Lead
9:00 am	Review agenda and meeting objectives	Scott Kreiter
9:05 am	Review relicensing/Section 106 timeline	Scott Kreiter
9:20 am	TCP Report comments and discussion Investigation	Group
10:20 am	HPMP comments and discussion	Group
11:20 am	Update on Field Reconnaissance and Inventory	Scott Kreiter
11:40 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	

Email to Cultural RWG regarding Draft Historic Properties Management Plan

From: Scott Kreiter

Sent: Friday, June 06, 2008 11:32 AM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert

Easton; Sally Sovey; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Draft Historic Properties Management Plan

Attachments: Draft_HPMP_Outline 013008.pdf; Wells Project HPMP Draft 060608.doc

Wells Cultural Resources Work Group Members:

Please find attached the first draft of the Wells Project Historic Properties Management Plan (HPMP). Most of the sections from the Work Group's HPMP outline (also attached) have been populated. The remaining sections and appendices will be populated after study results come in.

Please bring your comments to the July 17th CRWG meeting for discussion.

As always, feel free to contact me if you have comments or questions.

See you in July. -Scott

Scott Kreiter Douglas County PUD 509-881-2327 This document contains privileged information and has been removed from this correspondence.

Email to Terrestrial RWG regarding Agenda for Terrestrial RWG Meeting

From: Scott Kreiter

Sent: Tuesday, June 17, 2008 2:59 PM

To: Beau Patterson; Bill Towey; Bob Clubb; Bob Dach; Bob Easton; Brenda Crowell; Dan Trochta; Dave

Volsen; David Turner; Dennis Beich; Dinah Demers; Gordon Brett; Jim McGee; John Devine; Marc Hallett; Mary Hunt; Mary Mayo; Matt Monda; Neal Hedges; Patricia Leppert; Patrick Verhey; Sally

Sovey; Scott Kreiter; Shane Bickford; Steve Lewis; Tony Eldred

Cc: 'Ron Tressler'

Subject: Wells Relicensing: Terrestrial Resources Work Group Agenda

Attachments: Terrestrial RWG Agenda 073108.pdf

Wells Relicensing Terrestrial Work Group:

Thank you for your quick response. It appears the best date for most for a Terrestrial Resources Work Group meeting is July 31. The meeting will be held at Douglas PUD in East Wenatchee from 10 AM – Noon. Details for attending by conference call are included in the attached agenda.

Contact me if you have any questions.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

From: Scott Kreiter

Sent: Friday, June 13, 2008 7:50 AM

To: 'Ron Tressler'; Beau Patterson; Bill Towey; Bob Clubb; Bob Dach; Bob Easton; Brenda Crowell; Dan Trochta; David Turner; Dennis Beich; Dinah Demers; Gordon Brett; Jim McGee; John Devine; Marc Hallett; Mary Hunt; Mary Mayo; Matt Monda; Neal Hedges; Patricia Leppert; Patrick Verhey; Sally Sovey; Scott Kreiter; Shane Bickford; Steve Lewis; Tony Eldred **Subject:** Wells Relicensing: Terrestrial Resources Work Group

Wells Relicensing Terrestrial Work Group:

It has been a while since we last met, but Wells Relicensing is still moving along and studies are well underway. We would like to schedule a meeting in July to provide a status report on the following two terrestrial resource studies:

- 1. An Evaluation of the Effects of and Alternatives to the Existing Bird and Mammal Control Programs (Pisciverous Wildlife Control Study); and
- 2. Plant and Wildlife Surveys and Cover Type Mapping for the Wells Hydroelectric Project 230kV Transmission Corridor (Transmission Line Wildlife and Botanical Study)

We are proposing to schedule this meeting from 10 AM – noon on July 28, 30, or 31, in East Wenatchee. Please let me know if any of these dates do not work for you.

Thank you.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Terrestrial Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD July 31, 2008 10:00 am – 12:00 pm

Meeting Location: Douglas PUD, East Wenatchee, WA

Conference Dial-in: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide relicensing study updates and preliminary findings.

Time	Topic	Lead
10:00 am	Review agenda and meeting objectives	Scott Kreiter
10:10 am	Wells Relicensing update and upcoming schedule	Shane Bickford
10:20 am	Piscivorous Wildlife Control Study	Jim McGee
11:00 am	Transmission Line Wildlife and Botanical study	Parametrix
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	

Email to Aquatic RWG regarding Request for Study Plan Update Meeting

From: Bao Le

Sent: Thursday, June 19, 2008 8:38 AM

To: Art Viola; Bill Towey; Bob Clubb; Bob Dach; Bob Heinith; Bob Jateff; Bob Rose; Brad

James; Bryan Nordlund; Carl Merkle; David Turner (david.turner@ferc.gov); Dennis Beich; Joe Miller; Joe Peone; John Devine; Jonathan Merz; Karen Kelleher; Keith Kirkendall; Mark Miller; Mary Mayo; Molly Hallock; Pat Irle; Patrick Verhey; Robert Easton; Shane Bickford;

Steve Lewis; Steve Parker; Tony Eldred (eldredte@dfw.wa.gov)

Subject: Wells Relicensing Study Update Meeting

Aquatic RWG members, as many of you know, Douglas PUD is currently engaged in the implementation of various aquatic studies related to the Wells Relicensing Process. We would like to propose a date (in August) to meet with any of you who are interested to provide an update of study progress/results. Some of our studies will have been completed while others will still be in the implementation phase. We feel that a continued commitment to remaining engaged with all of you has provided tremendous benefits for all of us. I would like to propose the dates of August 12-14, 19-21 as potential days in which to meet here at Douglas PUD. If you are interested, please let me know if one of these days would be available to do so. Feel free to call with questions.

Best Regards, Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX) Email to Aquatic RWG regarding Adult Lamprey Passage Study

From: Bao Le

Sent: Monday, June 23, 2008 10:31 AM

To: Art Viola; Bill Towey; Bob Clubb; Bob Dach; Bob Heinith; Bob Jateff; Bob Rose; Brad

James; Bryan Nordlund; Carl Merkle; David Turner (david.turner@ferc.gov); Dennis Beich; Joe Miller; Joe Peone; John Devine; Jonathan Merz; Karen Kelleher; Keith Kirkendall; Mark Miller; Mary Mayo; Molly Hallock; Pat Irle; Patrick Verhey; Robert Easton; Shane Bickford;

Steve Lewis; Steve Parker; Tony Eldred (eldredte@dfw.wa.gov)

Cc: 'jmurauskas@lgl.com'

Subject: Conference Call to discuss upcoming Adult Pacific Lamprey Passage Study at Wells Dam

Aquatic RWG members, Douglas PUD will begin implementing another year of adult Pacific lamprey passage studies at Wells Dam beginning in August. As you all know, we conducted a study last year at Wells Dam and although we were unable to collect as many lamprey as we would have liked, we were able to make some interesting observations with regard to lamprey passage behavior at the Wells Dam fish ladder structures. From what we have learned from the two studies done in the past, we are proposing to implement several minor changes to this year's study to ensure that we collect the most pertinent data to inform the Wells Relicensing Process and the scope of future activities related to lamprey passage. We would like to present these proposed changes to the Aquatic RWG for approval via conference call on July 8th, 2008 from 1-2 pm. Please let me know if you are interested in attending and if this date is available. If you are interested but the date is not available, please provide me with some alternative dates.

Best Regards, Bao

Bao Le Sr. Aquatic Resource Biologist Douglas PUD 1151 Valley Mall Pkwy. East Wenatchee, WA 98802 509-881-2323 (Direct) 509-884-0553 (FAX)

FERC Order Approving 2007 Recreation Action Plan

UNITED STATES OF AMERICA 124 FERC ¶ 62,001 FEDERAL ENERGY REGULATORY COMMISSION

Public Utility District No.1 of Douglas County

Project No. 2149-140

ORDER APPROVING RECREATION ACTION PLAN UPDATE

(Issued July 01, 2008)

On December 26, 2007, Public Utility District No. 1 of Douglas County (licensee) filed a recreation action plan update (plan) for the Wells Hydroelectric Project (FERC No. 2149). The project is located on the Columbia River in Douglas and Okanogan Counties, Washington.

BACKGROUND

By order issued August 12, 1987, the Commission approved the public use and recreation action plan for the project, required by article 51 of the project license.² The 1987 order requires the licensee to re-evaluate the project's recreation facilities every five years to determine if the facilities are meeting the recreational demands of the area, and to file updates with the Commission.³

PROPOSAL

The licensee states that it is requesting approval of its plan that has been developed after extensive consultation with various stakeholders and interested parties. The plan includes descriptions of: (1) the regional setting and the immediate vicinity with regard to recreational opportunities; (2) existing recreational opportunities at the project; (3) statewide, mid-Columbia River, and project-area trends in recreational use; (4) regional and project-area recreational needs; and (5) an action plan and associated costs.

¹ The previous plan was approved by Order Approving Recreation Action Plan Update and Amending Recreation Action Plan Under Article 51, issued November 26, 2003 (105 FERC ¶ 62,130).

² Article 51 was added to the license in 1982 by Order Amending License (20 FERC ¶ 62,577).

³ See Order Approving Public Use and Recreation Action Plan (40 FERC ¶ 62,157).

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The plan provides for proposed improvements to existing recreational facilities at the Wells Project, including facilities in or near the Cities of Pateros, Brewster, and Bridgeport. In addition, the licensee proposes to design, construct and operate a new boat launch at Carpenter Island below Wells Dam. Improvements are also proposed at Peninsula Park and Memorial Park in Pateros, Columbia Cove Park in Brewster, and Marina Park in Bridgeport. The plan further includes financial and technical assistance to the Friends of Fort Okanogan for media materials, such as brochures, to promote their upcoming 2011 Fort Okanogan Bicentennial.

Numerous proposed improvements are specifically enumerated in Table ES-1 of the plan, entitled: 2007 RAP Update Actions and Cost Estimates for 2007-2012. The total estimated cost to implement these improvements is \$4,264,000. The locations where these improvements would be implemented either are entirely inside or outside the project boundary, or traverse the boundary, as indicated in Table ES-1. All of the improvements would be implemented within the next five years.

CONSULTATION

Before filing its plan, the licensee consulted with the National Park Service; Washington State Parks and Recreation Commission; Washington Division of Fish and Wildlife; Washington Department of Transportation; Cities of Brewster, Bridgeport, and Pateros; Port of Chelan County; Friends of Fort Okanogan; and Okanogan Historical Society. The licensee conducted numerous meetings and used other forms of consultation with the cities regarding the plan. The licensee also provided a draft of the plan to these entities for their comments and recommendations prior to filing it with the Commission.

The Cities of Pateros, Brewster, and Bridgeport commented on the plan, as did the Friends of Fort Okanogan, and the Port of Chelan County. The plan adequately addresses the comments that are relevant to the project. In sections 7.2 and 7.3 of the plan, the licensee agrees to complete most of the recommendations of Brewster and Bridgeport (with associated improvements to cost \$394,000) within the five-year period covered by the plan. In section 7.4 of the plan, the licensee also agrees to most of Pateros' recommendations (with associated improvements to cost \$1,070,000), and addresses those recommendations not agreed to at this time, in a section-7.4 table, entitled: *Douglas County Response to the November 13, 2007, City of Pateros Letter Regarding the Revised Draft 2007 Recreation Action Plan Update*.

Generally, the licensee states that while present data does not support the need for certain improvements to recreational resources, studies will be completed during the relicensing process that will provide for an in-depth analysis of future recreational needs

-3-

in the project area. The licensee also states that while all recommendations were not agreed to, it has committed to major improvements and maintenance actions over the five-year period, during which the relicensing process will take place as well. Further, the licensee states that for future long-term needs, the licensing process will provide these local cities an avenue for further consideration of any remaining issues.

By letters to the Commission dated January 31, 2008, and February 11, 2008, the City of Pateros and the Okanogan County Board of Commissioners (OCB), respectively, state that the plan should not be approved until remaining issues between the two entities are resolved. Both letters are essentially identical, expressing the same concerns and recommendations.

The City of Pateros and the OCB identify the remaining unresolved issues as follows:

- (1) Due to a national security-related closure of the visitor center at the Wells Dam in 2001, a new center should be built away from the dam.
- (2) In 2007, the licensee conducted a recreational use assessment and found that public recreational use at the Wells reservoir is "miniscule" compared to downstream project reservoirs. The licensee has not conducted adequate recreational use surveys and, therefore, did not have the appropriate survey data from which to plan recreational development.
- (3) References to "informal boat launches" should be deleted from the plan. These launch sites are not identified as public sites, and offer no amenities. Also, public use is essentially discouraged at these sites.
- (4) The licensee's commissioners, on December 17, 2007, prohibited the development of all new boat docks on the reservoir, except those within the Pateros city limits. The licensee should fund the development of a new marina within Pateros' limits to mitigate for the loss of business and access to the reservoir as a result of this new restriction.

DISCUSSION AND CONCLUSION

The licensee has spent the last two decades cooperating with local city and county governments to develop and improve public recreational opportunities at and around the project. This effort has contributed to tourism and economic growth in the immediate region. Also, this effort is consistent with the intent of the project license, particularly

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article 51, and the Commission's regulations.⁴ The recreational improvements that have been developed over the years by the licensee, in cooperation with the localities, have benefited the recreating public and the December 26 plan carries this commitment by the licensee and localities into the relicense period.

Overall, the cities and county governments have indicated the value of working together with the licensee in improving and adding to the enjoyment of project recreational resources, both for tourists and residents. The licensee acknowledges its ongoing commitment to public recreation, as evidenced by its financial commitment, and the leadership role it has taken in the planning and implementation of recreational opportunities.

The plan provides for a variety of proposed recreational improvements over the next five years, with estimated costs totaling \$4,264,000. This financial commitment to enhance recreational experiences in the project area would be distributed among the Cities of Pateros, Brewster, and Bridgeport.

While the licensee indicates it does not support the need for certain improvements at this time, it acknowledges that these issues will be considered during the project relicensing process in the context of an in-depth analysis of future recreational needs in the project area. The licensee states that it has committed to major improvements and maintenance actions over a five-year period. The plan fulfills the requirements of the 1987 order and we agree that any future refinement of the plan is best considered during the ongoing relicensing process. The plan should be approved.

The Director Orders:

(A) Public Utility District No.1 of Douglas County's recreation action plan update filed on December 26, 2007, containing specified improvements to project recreational resources, is approved and made part of the license for the project.

⁴ Licensees are encouraged to cooperate with appropriate Federal, state, and local agencies, and other interested entities, to determine public recreation needs, and to cooperate in the preparation of plans to meet these needs (18 C.F.R. § 2.7).

Project No. 2149-140

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(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of this order, pursuant to 18 C.F.R. § 385.713.

Robert J. Fletcher Chief, Land Resources Branch Division of Hydropower Administration and Compliance

Aquatic RWG Meeting



Aquatic Resource Work Group

Date: July 15, 2008

Time: 9:00 am – 10:00 am

Location: Conference Call

Agenda

Sign-In Sheet

Meeting Notes



Agenda

Aquatic Resources Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD July 15, 2008

Meeting Location: Conference Call Hosted By Douglas PUD

Conference Call: 9:00 am – 10:00 am

Conference Call Number: 509-881-2990, X327831

Meeting Coordinators: Bao Le (503) 309-9423

Meeting Goals: 1. Discuss and approve the proposed changes in methodology to

the 2008 Wells Pacific Lamprey Passage Study.

Proposed Changes: 1. Increase the number of fish captured at Wells Dam and ensure

that the target sample size is met to provide accurate passage

metrics.

2. Obtain more accurate residence and passage metrics from the

tailrace and lower fishway.



Wells Project Relicensing Aquatic Resource Work Group

DATE:

July 15, 2008

LOCATION:

Conference Call

Initials	Name	Affiliation Name	Email
	Art Viola	WDFW	violaaev@dfw.wa.gov
BL	Bao Le	Long View Assoc.	ble@longviewassociates.com
	Bill Towey	Colville Tribes	bill.towey@colvilletribes.com
136	Bob Clubb	Douglas PUD	rclubb@dcpud.org
	Bob Easton	FERC	Robert.Easton@ferc.gov
	Bob Jateff	WDFW	jatefrjj@dfw.wa.gov
mphone	Bob Rose	Yakama Nation	brose@yakama.com
·	Brad James	WDFW	jamesbwj@dfw.wa.gov
	Bryan Nordlund	NOAA Fisheries	bryan.nordlund@noaa.gov
	Dennis Beich	WDFW	beichdvb@dfw.wa.gov
	Joe Miller	WDFW	millejlm@dfw.wa.gov
	Joe Peone	Colville Tribes	joe.peone@colvilletribes.com
	John Devine	DTA	john.devine@devinetarbell.com
	Jonathan Merz	WDOE	jome461@ecy.wa.gov
	Keith Kirkendall	NOAA Fisheries	keith.kirkendall@noaa.gov
	Mark Miller	USFWS	mark_miller@fws.gov
phone	Molly Hallock	WDFW	hallomh@dfw.wa.gov
phone phone	Pat Irle	WDOE	pirl461@ecy.wa.gov
SB	Shane Bickford	Douglas PUD	sbickford@dcpud.org

	Steve Lewis	USFWS	stephen_lewis@fws.gov
	Steve Parker	Yakama Nation	parker@yakama.com
Addition	al Attendees		
Initials	Name	Affiliation Name	Email
on plane	Patrick Verhey	WAFW	
			· · · · · · · · · · · · · · · · · · ·

Meeting Notes Summary

Aquatic Resources Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD July 15, 2008

Meeting Coordinator: Bao Le, (503) 309-9423

Meeting Objectives: 1. Discuss and approve the proposed changes in

methodology to the 2008 Wells Pacific Lamprey Passage

Study (2008 Adult Lamprey Passage Study).

Action Items:

1. Provide Aquatic RWG members with the memo detailing proposal to use an ethanol/clove oil mixture for radio-telemetry surgeries in support of the 2008 Adult Lamprey Passage Study.

Discussion Topics:

Proposed Changes in Methodology to the 2008 Adult Lamprey Passage Study

1. Increase the number of fish captured and tagged at Wells Dam

- o Increase trapping efficiency (perforated floor plate installed in bottom of weir orifices at trapping pools during winter of '07/'08);
- o Decrease trap escapement (one-way entrance to trap, modification to be installed during July 2008);
- o Supplement catch at Wells with lamprey transported from Rocky Reach Dam (2007 results indicate similar behavior to fish trapped at Wells Dam);

2. Obtain more accurate residence and passage metrics from the tailrace and lower fishway

- o Decrease or eliminate mid-ladder releases (data from 2007 indicated that lamprey passage through this portion of Wells Dam is both timely and efficient);
- o Increase releases into the tailrace and collection gallery (increased sample size below the fishway will help to better understand entrance efficiency and behavior in the lower fishway);

- o Add a release location to the collection gallery (increased sample size inside the lower fishway will help to better understand passage efficiency and behavior in the lower fishway);
- o Enhance the ability to detect tagged fish in the areas of interest
 - Relocated the side gate antenna to mid-collection gallery at a location that will provide insight to route of travel through the gallery and above diffuser grating;
 - Split the AWS antennas to separate channels as to distinguish between detections in the lower and upper AWS/collection gallery;
 - Test/adjust all antennas as to optimize detection abilities throughout the project;
 - Increase occurrence of nighttime deep-water mobile surveys to obtain more data from tailrace and entrances.
- 3. During surgical procedures (tag implantation), utilize an ethanol and clove oil mixture in water to facilitate quicker sedation and recovery times

Items of Agreement:

The Aquatic RWG approved of all of the above proposed changes to the 2008 Adult Lamprey Passage Study.

Cultural RWG Meeting



Cultural Resource Work Group

Date: July 17, 2008

Time: 9:00 am – 12:00 pm

Location: Colville Indian Agency

Directions

Agenda

Sign-In Sheet

Meeting Notes



Directions to Colville Indian Agency

Colville Tribes History/Archaeology Department Colville Indian Agency 13 Moses Street Nespelem, Washington

Heading North: (from Wenatchee)

Follow US 97 north to Orondo.

Turn right on WA-2 toward Waterville.

Follow WA-2 to Coulee City.

Turn onto WA-155.

Follow WA-155 through Grand Coulee and Coulee Dam.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading South: (from Okanogan)

Follow US 97 to WA-155.

Follow WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading East: (from Seattle)

Travel east on I-90.

Go past Cle Elum.

Take Exit 85 toward Wenatchee.

Turn left at stop sign. Turn right onto WA-970. WA-970 merges with US 97.

Follow US 97 (Blewett Pass) north toward Wenatchee.

Merge onto US 2 E toward Wenatchee.

Follow US 2 over Columbia River north of Wenatchee.

At stoplight, turn left onto US-2/US Hwy 97.

Follow US 97 north to Orondo.

Turn right on WA-2 toward Waterville.

Follow WA-2 to Coulee City.

Turn onto WA-155.

Follow WA-155 through Grand Coulee and Coulee Dam.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading West: (from Spokane)

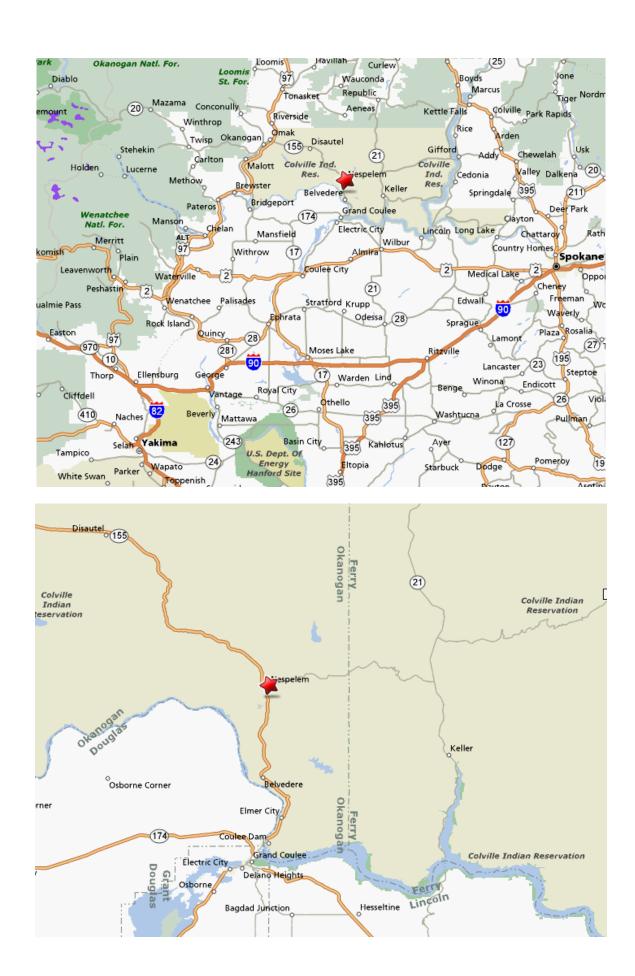
Travel west on US 2 to Wilbur.

At Wilbur, turn north on WA-174 toward Grand Coulee.

Turn north on WA-155.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.



Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD July 17, 2008 9:00 am – 12:00 pm

Meeting Location: Nespelem, WA

Conference Dial-in: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To discuss the draft Traditional Cultural Properties Study

report and the draft Historic Properties Management Plan.

Time	Topic	Lead
9:00 am	Review agenda and meeting objectives	Scott Kreiter
9:05 am	Review relicensing/Section 106 timeline	Scott Kreiter
9:20 am	TCP Report comments and discussion Investigation	Group
10:20 am	HPMP comments and discussion	Group
11:20 am	Update on Field Reconnaissance and Inventory	Scott Kreiter
11:40 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	



Wells Project Relicensing Cultural Resource Work Group

DATE:

July 17, 2008

LOCATION:

Nespelem

	Initials	Name	Affiliation Name	Email
		Allyson Brooks	DAHP	allyson.brooks@dahp.wa.gov
	BC	Bob Clubb	Douglas PUD	rclubb@dcpud.org
		Bob Easton	FERC	Robert.Easton@ferc.gov
	<u> </u>	Camille Pleasants	Colville Tribes	camille.pleasants@colvilletribes.com
		Chuck James	BIA	chuckjames@comcast.net
Phone	FW	Frank Winchell	FERC	frank.winchell@ferc.gov
Phone	614	Glenn Hartmann	Western Shore	glenn@wshsinc.com
com)	44	Guy Moura	Colville Tribes	guy.moura@colvilletribes.com
		John Devine	DTA	john.devine@devinetarbell.com
	· ·	Richard Bailey	BLM	richard_bailey@blm.gov
		Rob Whitlam	DAHP	rob.whitlam@dahp.wa.gov
		Karen Kelleher	BLM	karen_kelleher@blm.gov
	SK	Scott Kreiter	Douglas PUD	skreiter@dcpud.org
Phone	3	Shane Bickford	Douglas PUD	sbickford@dcpud.org
prono	TB	Tim Bachelder	DTA	timothy.bachelder@devinetarbell.com
	4/4/	Gordon Brott	Douglas AUD	GBrette Depudias
	83	Shawner	COT. H/A	Shawner bearcub e colviletibes com

Final Meeting Notes

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD July 17, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To discuss the draft Traditional Cultural Properties Study report and the draft Historic Properties Management Plan

Section 106 Timeline

Douglas PUD provided an update on the Section 106 process. The timeline was revised to reflect the submittal of the draft Traditional Cultural Properties (TCP) study report and the Site Revisit and Archaeological Survey report. Douglas PUD also provided an overview of the upcoming ILP Initial Study Report meeting scheduled for October 30, 2008.

TCP Report

The workgroup members provided comments on the draft TCP report. The following issues were discussed:

- The issue of formal NRHP eligibility determinations versus managing TCPs on a caseby-case basis. Rob Whitlam provided an overview of current directions by the NRHP in Washington DC regarding TCP eligibility. Until clear guidance is provided by the NRHP, the DAHP will be seeking guidance from the NRHP for any TCP eligibility nominations.
- The Work Group members favored the recommended approach of managing TCPs on a case-by-case basis through consultation with the CCT History and Archaeology Program.

Action: The CCT will make edits to the document and submit the TCP report as a final document.

HPMP

The workgroup members provided comments on the draft HPMP. Major comments included:

- Adding more specifics on training and qualifications for the HPMP Coordinator;
- Workgroup review of training modules and public education measures;
- Adding an annual meeting to discuss Douglas PUD's upcoming work plan;
- Describe how departments at Douglas PUD will comply with the HPMP process;
- Include detail on how different levels of ground disturbance are determined;
- Update the inadvertent discovery section;
- Flesh out the implementation schedule and include a kickoff meeting following issuance of the new license as well as schedule for periodic HPMP revisions.

Additional comments will be reflected in the next draft of the HPMP.

Action: Douglas PUD will revise the HPMP and send it to the CRWG for review.

Action: Douglas PUD will provide FERC with past cultural resource reports for their library.

Next Meeting

The next meeting is scheduled for September 3 from 9AM - Noon.

Email to Cultural RWG regarding Draft Cultural RWG Meeting Notes

From: Scott Kreiter

Sent: Thursday, July 24, 2008 11:52 AM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Karen Kelleher; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob

Whitlam; Robert Easton; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG draft meeting notes

Attachments: Wells_Cultural_RWG_Notes_071708.pdf

Cultural RWG members:

Please find attached the draft meeting notes from the July 17 meeting. Please provide any comments by July 31. Don't forget to mark your calendars for our next meeting scheduled for September 3, 9AM – Noon.

We're making good progress! Thanks.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

Draft Meeting Notes

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD July 17, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To discuss the draft Traditional Cultural Property

report, the Site Revisit and Archaeological Survey report and the draft Historic Properties Management Plan.

Section 106 Timeline

Douglas PUD provided an update on the Section 106 process. The timeline was revised to reflect the submittal of the draft Traditional Cultural Properties (TCP) study report and the Site Revisit and Archaeological Survey report. Douglas PUD also provided an overview of the upcoming ILP Initial Study Report meeting scheduled for October 30, 2008.

TCP Report

The workgroup members provided comments on the draft TCP report. The following issues were discussed:

- The issue of formal NRHP eligibility determinations versus managing TCPs on a caseby-case basis. Rob Whitlam provided an overview of current directions by the NRHP in Washington DC regarding TCP eligibility. Until clear guidance is provided by the NRHP, the DAHP will be seeking guidance from the NRHP for any TCP eligibility nominations.
- The Work Group members favored the recommended approach of managing TCPs on a case-by-case basis through consultation with the CCT History and Archaeology Program.

Action: The CCT will make edits to the document and submit the TCP report as a final document.

<u>HPMP</u>

The workgroup members provided comments on the draft HPMP. Major comments included:

- Adding more specifics on training and qualifications for the HPMP Coordinator;
- Workgroup review of training modules and public education measures;
- Adding an annual meeting to discuss Douglas PUD's upcoming work plan;
- Describe how departments at Douglas PUD will comply with the HPMP process;
- Include detail on how different levels of ground disturbance are determined;
- Update the inadvertent discovery section;
- Flesh out the implementation schedule and include a kickoff meeting following issuance of the new license as well as schedule for periodic HPMP revisions.

Additional comments will be reflected in the next draft of the HPMP.

Action: Douglas PUD will revise the HPMP and send it to the CRWG for review.

Action: Douglas PUD will provide FERC with past cultural resource reports for their library.

Next Meeting

The next meeting is scheduled for September 3 from 9AM - Noon.

Email to Recreation RWG regarding Agenda for Recreation RWG

From: Scott Kreiter

Sent: Tuesday, July 29, 2008 3:23 PM

To: Scott Kreiter; 'Andy Lampe'; 'Bill Fraser'; 'Bill Towey'; Bob Clubb; 'Bob Dach'; 'Bob Fateley';

'Brenda Crowell'; 'Chris Parsons'; 'David Turner'; 'Dennis Beich'; 'Diane Priebe'; 'Gail Howe'; 'George Brady'; Gordon Brett; 'Jean Hardie'; 'Jim Eychaner'; 'Jim Harris'; 'John Devine'; 'Karen Kelleher'; 'Lee Webster'; 'Mary Hunt'; Mary Mayo; 'Michael Linde'; 'Mike Nickerson'; 'Mike Palmer'; 'Neal Hedges'; 'Pat Haley'; Pat Irle (pirl461@ecy.wa.gov); 'Patricia Leppert'; 'Patrick

Verhey'; 'Robert Easton'; Shane Bickford; 'Susan Rosebrough'; 'Tony Eldred'

Cc: 'Bricker, Kelly'

Subject: Wells Relicensing: Recreation Work Group Meeting

Attachments: Recreation_RWG_Agenda_082208.pdf

Wells Recreation Work Group:

Please find attached the agenda for the August 22 Recreation Work Group meeting. Note that the meeting will be held in the afternoon from 1:00 - 3:00.

Feel free to contact me if you have any questions.

Thank you. -Scott

From: Scott Kreiter

Sent: Wednesday, July 16, 2008 10:27 AM

To: Andy Lampe; Bill Fraser; Bill Towey; Bob Clubb; Bob Dach; Bob Fateley; Brenda Crowell; Chris Parsons; David Turner; Dennis Beich; Diane Priebe; Gail Howe; George Brady; Gordon Brett; Jean Hardie; Jim Eychaner; Jim Harris; John Devine; Karen Kelleher; Lee Webster; Mary Hunt; Mary Mayo; Michael Linde; Mike Nickerson; Mike Palmer; Neal Hedges; Pat Haley; Pat Irle (pirl461@ecy.wa.gov); Patricia Leppert; Patrick Verhey; Robert Easton; Scott Kreiter; Shane Bickford; Susan Rosebrough; Tony Eldred

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Subject: Wells Relicensing: Recreation Work Group Meeting

Wells Recreation Work Group:

Please hold the date of August 22 for a Recreation Work Group meeting. The meeting will be held from 1:00 – 3:00 PM in Bridgport.

The purpose of the meeting will be to discuss the results of the two recreation studies. An agenda will be sent soon.

Thank you. -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 22, 2008 1:00 pm – 3:00 pm

Meeting Location: Bridgeport City Hall

1206 Columbia Ave. Bridgeport, WA

Conference Dial-in #: 360-407-3780 PIN# 326131

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary results for the Recreation Access Study

and the Recreation Needs Evaluation

Time	Topic	Lead
1:00 pm	Review agenda and meeting objectives	Scott Kreiter
1:05 pm	Update on the relicensing schedule	Shane Bickford
1:15 pm	Recreation Access Study Update	Scott Kreiter
1:45 pm	Recreation Needs Evaluation	Kelly Bricker
2:45 pm	Action Items and next steps	Scott Kreiter
3:00 pm	Adjourn	

Email to Terrestrial RWG regarding Date Change for Terrestrial RWG Meeting

From: Scott Kreiter

Sent: Wednesday, July 30, 2008 3:00 PM

To: Scott Kreiter; Beau Patterson; 'Bill Towey'; Bob Clubb; 'Bob Dach'; 'Bob Easton'; 'Brenda

Crowell'; 'Dan Trochta'; 'Dave Volsen'; 'David Turner'; 'Dennis Beich'; 'Dinah Demers'; Gordon Brett; Jim McGee; 'John Devine'; 'Karen Kelleher'; 'Marc Hallett'; 'Mary Hunt'; Mary Mayo; 'Matt Monda'; 'Neal Hedges'; 'Patricia Leppert'; 'Patrick Verhey'; Shane Bickford; 'Steve Lewis';

'Tony Eldred'

Cc: 'Mike Hall'; Colin Worsley

Subject: Wells Relicensing: Terrestrial RWG Meeting 08-26-08

Attachments: Terrestrial_Agenda_082608.pdf

Wells Relicensing Terrestrial Work Group:

Thank you for your prompt feedback. It appears that the best date for the Terrestrial RWG meeting is August 26, from 10 am – noon.

Please mark your calendars. A revised agenda is attached.

Thank you. -Scott

Scott Kreiter Douglas County PUD 509-881-2327

From: Scott Kreiter

Sent: Tuesday, July 29, 2008 11:32 AM

To: Beau Patterson; Bill Towey; Bob Clubb; Bob Dach; Bob Easton; Brenda Crowell; Dan Trochta; Dave Volsen; David Turner; Dennis Beich; Dinah Demers; Gordon Brett; Jim McGee; John Devine; Karen Kelleher; Marc Hallett; Mary Hunt; Mary Mayo; Matt Monda; Neal Hedges; Patricia Leppert; Patrick Verhey; Scott Kreiter; Shane Bickford;

Steve Lewis; Tony Eldred

Subject: RESCHEDULE: Terrestrial RWG Meeting 7-31-08

Importance: High

Wells Relicensing Terrestrial Work Group:

To better accommodate participant schedules, we would like to cancel this Thursday's (July 31) meeting and reschedule for a date in August.

Please let us know your availability on the following dates: **August 11 - 14**, and **August 25 - 28**. Once we receive feedback, we will select a date that works for as many participants as possible.

I apologize for any inconvenience this may cause.

Thank you! -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Terrestrial Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 26, 2008 10:00 am – 12:00 pm

Meeting Location: Douglas PUD, East Wenatchee, WA

Conference Dial-in: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide relicensing study updates and preliminary findings.

Time	Topic	Lead
10:00 am	Review agenda and meeting objectives	Scott Kreiter
10:10 am	Wells Relicensing update and upcoming schedule	Shane Bickford
10:20 am	Piscivorous Wildlife Control Study	Jim McGee
11:00 am	Transmission Line Wildlife and Botanical study	Parametrix
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	

Email to Cultural RWG regarding Final Cultural RWG Meeting Notes

From: Scott Kreiter

Sent: Tuesday, August 05, 2008 9:30 AM

To: Scott Kreiter; Bob Clubb; 'Camille Pleasants'; 'Chuck James'; David Turner

(david.turner@ferc.gov); 'Frank Winchell'; Glenn Hartmann (glenn@crcwa.com); Gordon

Brett; 'Guy Moura'; 'John Devine'; 'Karen Kelleher'; Margaret Berger

(margaret@crcwa.com); Mary Mayo; 'Richard Bailey'; 'Rob Whitlam'; 'Robert Easton';

Shane Bickford; 'Timothy Bachelder'

Subject: Wells Relicensing: Cultural RWG final meeting notes

Attachments: Wells_Cultural_RWG_Notes_071708_Final.pdf

Cultural RWG members:

Attached are the final meeting notes from the July 17 work group meeting. No comments were received.

Thank you. -Scott

From: Scott Kreiter

Sent: Thursday, July 24, 2008 11:52 AM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Karen Kelleher; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert Easton; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG draft meeting notes

Cultural RWG members:

Please find attached the draft meeting notes from the July 17 meeting. Please provide any comments by July 31. Don't forget to mark your calendars for our next meeting scheduled for September 3, 9AM – Noon.

We're making good progress! Thanks.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

Final Meeting Notes

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD July 17, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To discuss the draft Traditional Cultural Properties Study

report and the draft Historic Properties Management Plan

Section 106 Timeline

Douglas PUD provided an update on the Section 106 process. The timeline was revised to reflect the submittal of the draft Traditional Cultural Properties (TCP) study report and the Site Revisit and Archaeological Survey report. Douglas PUD also provided an overview of the upcoming ILP Initial Study Report meeting scheduled for October 30, 2008.

TCP Report

The workgroup members provided comments on the draft TCP report. The following issues were discussed:

- The issue of formal NRHP eligibility determinations versus managing TCPs on a caseby-case basis. Rob Whitlam provided an overview of current directions by the NRHP in Washington DC regarding TCP eligibility. Until clear guidance is provided by the NRHP, the DAHP will be seeking guidance from the NRHP for any TCP eligibility nominations.
- The Work Group members favored the recommended approach of managing TCPs on a case-by-case basis through consultation with the CCT History and Archaeology Program.

Action: The CCT will make edits to the document and submit the TCP report as a final document.

HPMP

The workgroup members provided comments on the draft HPMP. Major comments included:

- Adding more specifics on training and qualifications for the HPMP Coordinator;
- Workgroup review of training modules and public education measures;
- Adding an annual meeting to discuss Douglas PUD's upcoming work plan;
- Describe how departments at Douglas PUD will comply with the HPMP process;
- Include detail on how different levels of ground disturbance are determined;
- Update the inadvertent discovery section;
- Flesh out the implementation schedule and include a kickoff meeting following issuance of the new license as well as schedule for periodic HPMP revisions.

Additional comments will be reflected in the next draft of the HPMP.

Action: Douglas PUD will revise the HPMP and send it to the CRWG for review.

Action: Douglas PUD will provide FERC with past cultural resource reports for their library.

Next Meeting

The next meeting is scheduled for September 3 from 9AM - Noon.

Email to Cultural RWG regarding Agenda for Cultural RWG Meeting

From: Scott Kreiter

Sent: Wednesday, August 13, 2008 1:24 PM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Karen Kelleher; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam;

Robert Easton; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG meeting agenda (09-03-08)

Wells Cultural Resource Work Group members:

Please click <u>here</u> for the agenda for the September 3 Cultural Resources Work Group meeting in Nespelem. The meeting is scheduled for 9:00 – noon. Conference call information is included in the agenda.

The purpose of the meeting is to discuss the draft Site Revisit and Survey report, which you should have received in the mail. We will also discuss revisions to the HPMP, which we are working to update now.

Please contact me if you have any questions.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD September 3, 2008 9:00 am – 12:00 pm

Meeting Location: Nespelem, WA

Conference Dial-in: (360) 407-3780 PIN#: 779783#

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To: 1) comment on the draft Cultural Resources Site Revisit &

Intensive Archaeological Survey report and; 2) discuss the

revised draft Historic Properties Management Plan

Time	Topic	Lead
9:00 am	Review agenda and meeting objectives	Scott Kreiter
9:10 am	Discuss the draft Site Revisit and Survey Report (Please bring your comments)	Group
10:10 am	Studies complete - Next steps	Group
10:45 am	HPMP comments and discussion	Group
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	

Email to Aquatic RWG regarding Aquatic RWG Meeting Materials

Subject: FW: Aquatic Studies Update Meeting: August 21, 2008

Attachments: Aquatic_Study_Update_Presentation_final [Compatibility Mode].pdf;

Wells_Aquatic_Studies_Summaries.pdf; Study Update Agenda.pdf

From: Bao Le [mailto:ble@longviewassociates.com]

Sent: Wednesday, August 20, 2008 3:47 PM

To: 'Art Viola'; 'Bill Towey'; Bob Clubb; 'Bob Jateff'; 'Bob Rose'; Brad Hawkins; 'Brad James'; 'Bryan Nordlund'; 'Carmen Andonaegui'; 'David Turner'; 'Dennis Beich'; 'Joe Miller'; 'Joe Peone'; 'John Devine'; 'Jonathan Merz'; 'Keith Kirkendall'; 'Mark Miller'; 'Molly Hallock'; 'Pat Irle'; 'Robert Easton'; Shane Bickford; 'Steve Lewis'; 'Steve Parker'

Subject: Updated Handouts for Aquatic RWG Relicensing Studies Update Meeting, Aug 21, 2008

Aquatic RWG members, please find attached updated handouts for the Aquatic Studies Update Meeting to be held at Douglas PUD tomorrow from 10am-3pm. Minor edits were made to the summaries and presentation documents. The agenda which has not changed, is attached for your convenience. For those attending in person, we will have copies of all handouts at the meeting. Feel free to call if you have questions. Thanks. Bao

Bao Le Long View Associates 7504 Icicle Rd. Leavenworth, WA 98826 503-309-9423

From: Bao Le [mailto:ble@longviewassociates.com]

Sent: Monday, August 18, 2008 11:07 AM **To:** 'Patrick Verhey'; 'Tony Eldred'; Mary Mayo

Subject: FW: Aguatic Studies Update Meeting: August 21, 2008

Hi guys, you were not on the my old, outdated Aquatic RWG mailing list. It is now updated. Sorry about that. See info below for upcoming meeting. Thanks. Bao

Bao Le Long View Associates 7504 Icicle Rd. Leavenworth, WA 98826 503-309-9423

From: Bao Le [mailto:ble@longviewassociates.com]

Sent: Monday, August 18, 2008 10:44 AM

To: 'Art Viola'; 'Bill Towey'; 'Bob Clubb'; 'Bob Jateff'; 'Bob Rose'; 'Brad Hawkins'; 'Brad James'; 'Bryan Nordlund'; 'Carmen Andonaegui'; 'David Turner (david.turner@ferc.gov)'; 'Dennis Beich'; 'Joe Miller'; 'Joe Peone'; 'John

Devine'; 'Jonathan Merz'; 'Keith Kirkendall'; 'Mark Miller'; 'Molly Hallock'; 'Pat Irle'; 'Robert Easton

(Robert.Easton@ferc.gov)'; 'Shane Bickford'; 'Steve Lewis'; 'Steve Parker'

Subject: Aquatic Studies Update Meeting: August 21, 2008

Aquatic RWG members, please find attached an agenda, abstract summaries, and presentations for the upcoming Studies Update Meeting at Douglas PUD from 10am-3pm on August 21. Please let me know if you have any questions. If you have not already let me know whether you'll be attending by phone or in person,

please do so as soon as possible.

Best Regards, Bao

Bao Le Long View Associates 7504 Icicle Rd. Leavenworth, WA 98826 503-309-9423

SURVIVAL AND RATES OF PREDATION FOR JUVENILE PACIFIC LAMPREY MIGRATING THROUGH COLUMBIA RIVER HYDROELECTRIC PROJECTS

(Juvenile Lamprey Study)

Study Goal

• Collect up-to-date information on the survival and the rates of predation of juvenile Pacific lamprey macropthalmia migrating through Columbia River hydroelectric Projects and collect site specific information on rates of predation on juvenile lamprey in the waters immediately upstream and downstream of Wells Dam.

Study Objectives

- Conduct a literature review on juvenile lamprey survival and predation studies conducted at Columbia River hydroelectric projects;
- Conduct an analysis on the stomach contents of predatory fish and birds to assess the location and level of predation that may be occurring on juvenile Pacific lamprey in the Wells forebay and tailrace.

Literature Review

- 31 reports were evaluated during the literature review.
- The review supported the common views that:
 - Technology is limiting the ability of researchers to measure the effects of dams on macropthalmia.
 - Passage at hydroelectric facilities may be problematic including:
 - Passage through Turbines
 - Impingement on submerged bar screens
 - Increased predation at dams

Site Specific Stomach Analysis

- Very few juvenile lamprey were observed in the stomachs of pikeminnow collected from the forebay and tailrace of the Wells Project;
- Differences between forebay and tailrace were not detectable;
- Rates of predation by birds was the highest of all the predators sampled but the sample size for the bird samples was small (N=11).

Species	Number sampled	Number with food items present	Number with lamprey present	Number with other fish present	Number with other organic items present	Number with inorganic items present
California gull	2	2	0	2	0	0
Caspian tern	1	1	0	1	0	0
Double-crested cormorant	5	5	1	4	5	2
Ring-billed gull	3	3	1	3	1	0
Northern pikeminnow	1,022	444	3	154	307	23
Smallmouth bass	19	9	0	8	3	0
Walleye	1	0	0	0	0	0
Grand Total	1,053	464	5	172	316	25

Species	Percent with food items present	Percent with lamprey present	Percent with other fish present	Percent with other organic items present	Percent with inorganic items present
California gull	100.0%	0.0%	100.0%	0.0%	0.0%
Caspian tern	100.0%	0.0%	100.0%	0.0%	0.0%
Double-crested cormorant	100.0%	20.0%	80.0%	100.0%	40.0%
Ring-billed gull	100.0%	33.3%	100.0%	33.3%	0.0%
Pikeminnow	43.4%	0.3%	15.1%	30.0%	2.3%
Smallmouth bass	47.4%	0.0%	42.1%	15.8%	0.0%
Walleye	0.0%	0.0%	0.0%	0.0%	0.0%
Grand Total	44.1%	0.5%	16.3%	30.0%	2.4%

Conclusions

- Pikeminnow predation on juvenile lamprey is likely not substantial at this time;
- Predation differences between the forebay and tailrace are not detectable in pikeminnow based on these results;
- Piscivorous fish predation (bass and walleye) of juvenile lamprey in the Wells Project does not appear to be significant, though a greater sample size would be required to make any conclusions;
- Bird predation of juvenile lamprey in the Wells Project may be significant, though a greater sample size would be required to make any conclusions;
- The lack of trapping and tagging technology to produce reliable survival estimates will continue to limit the ability to quantify the impacts of hydroelectric operations on juvenile lamprey populations

ADULT PACIFIC LAMPREY PASSAGE AND BEHAVIOR STUDY

(Adult Lamprey Passage Study)

Study Objectives

- Conduct literature review;
- Identify methods for capturing adult Pacific lamprey;
- Document timing and abundance;
- Determine whether adult lamprey are bypassing the adult counting windows at Wells Dam;
- Estimate passage metrics.

Literature Review

- Provided insight to commonalities among adult Pacific lamprey behavior and interactions at hydroelectric dams throughout the Columbia and Snake rivers.
 - fishway entrance efficiency is generally low (≤ 50%).
 - project passage times are comparatively slow throughout the basin.
 - problematic areas occur at entrances, within confined portions of the fishways and at counting windows.

Capture Methods

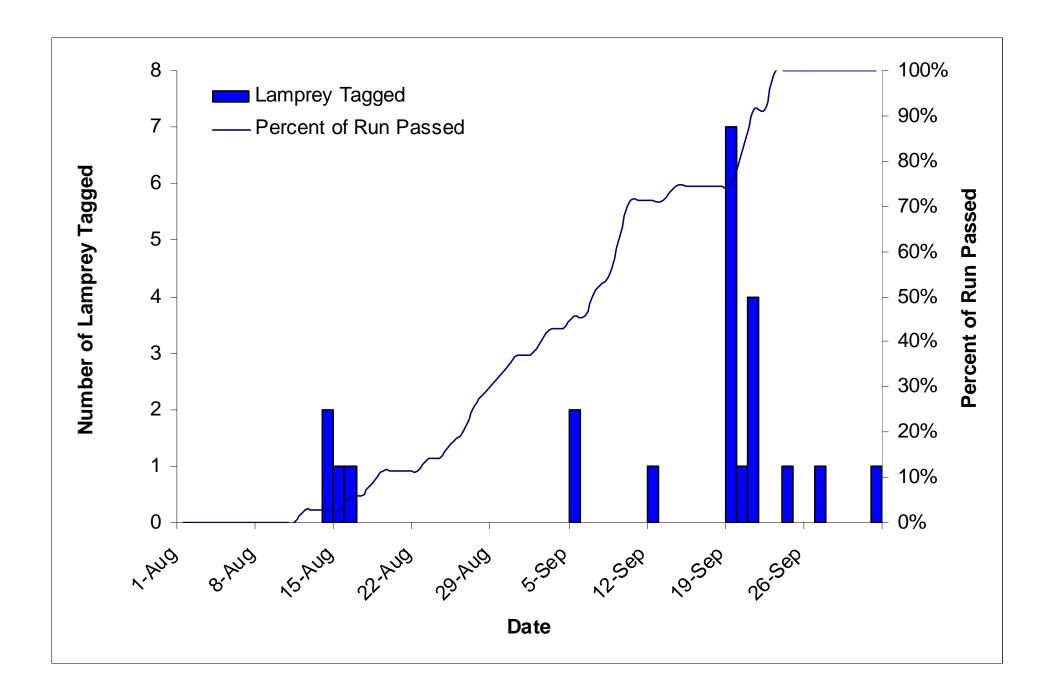


Timing and Abundance

Year	Start date	25%	50%	75%	Finish date	Total lamprey	Length of run	Average fish/day
1998	30-Jun	27-Aug	5-Sep	14-Sep	30-Sep	343	92	3.7
1999	31-May	1-Sep	9-Sep	12-Sep	11-Oct	73	133	0.5
2000	22-Jul	25-Aug	2-Sep	16-Sep	20-Oct	155	90	1.7
2001	4-Jul	26-Aug	16-Sep	24-Sep	11-Nov	262	130	2.0
2002	31-May	2-Sep	9-Sep	19-Sep	8-Nov	342	161	2.1
2003	27-Jun	6-Sep	7-Oct	28-Oct	15-Nov	1,410	141	10.0
2004	4-May	19-Aug	12-Sep	11-Oct	14-Nov	647	194	3.3
2005	28-Apr	22-Aug	6-Sep	27-Sep	3-Nov	214	189	1.1
2006	4-May	19-May	15-Aug	20-Sep	29-Sep	21	148	0.1
2007	12-Aug	27-Aug	7-Sep	14-Sep	23-Sep	35	42	0.8
Min	28-Apr	19-May	15-Aug	12-Sep	23-Sep	21	42	0.1
Max	12-Aug	6-Sep	7-Oct	28-Oct	15-Nov	1,410	194	10.0
Median	13-Jun	26-Aug	8-Sep	19-Sep	27-Oct	238	137	1.9
Average	12-Jun	17-Aug	8-Sep	24-Sep	22-Oct	350	132	2.6
Stand Dev.	36	32	13	15	21	416	47	2.9

Collection and Tagging

- 4 Wells Dam traps checked 112 times each over 10-week trapping period ending third week of October (56 days of effort per trap).
- 6 lamprey captured at Wells Dam traps which resulted in decision to trap concurrently at RRH (September 20 to October 20) to reach proposed sample size (n=40)
- 15 additional lamprey captured at RRH, transported and tagged at Wells Dam (September 20 to October 3).
- 15/21 fish tagged late in the run which could have affected migratory performance



Count Windows Bypass

- 11 tagged lamprey passed counting facility
- 9 detected by video bypass antenna (3 detected for less than 20 seconds)
- 8 fish were not counted at the window
- Majority of tagged lamprey are interacting with the video bypass system if not utilizing it as an alternative passage route
- Not a passage issue but an enumeration issue

Passage metrics

- Entrance efficiency
 - 7 of 9 tagged fish approached entrances, 1 successful entrance
- -Lower fishway (n = 1)
 - 32:41, including 6:07 (lower), 5:53 (upper), and 20:10 (at below trap antenna)
- Upper fishway (n = 11)
 - 2:48-29:05, median = 7:53

Conclusions

- The adult lamprey run at Wells Dam was relatively small in 2007 (N=35);
- The traps used at Wells in 2007 were marginally effective at capturing lamprey (N=6). Fish from Rocky Reach had to be used for the study (N=15);
- Most fish were tagged late in the run which may have influenced their overall performance;
- The sample size for the study was very small.

Conclusions

- Based upon small numbers of fish, adult lamprey may be having difficulty negotiating the fishway entrances;
- Pacific lamprey are passing the lower and upper fishways at high rates, in a reasonable amount of time, and with negligible drop back within the ladder;
- A high proportion of Pacific lamprey are bypassing the adult counting windows, thus biasing the adult fishway counts (low).

Future Work

• In an effort to meet the remaining objectives of the study, Douglas PUD is currently conducting a second adult lamprey passage study (2008) using new trapping methods.

• 16 fish have already been tagged and released at Wells Dam in 2008 (the run is just starting at Wells).

Assessment of DDT and PCB in Fish Tissue and Sediment in the Lower Okanogan River

(Okanogan Toxins Study)

Study Goal

• Goal: to determine the concentrations of DDT/PCB in recreational fish species and in swimming areas of the lower Okanogan River (15.5) within the Wells Project.

Okanogan Toxins Study Objectives

- Collect and analyze sediment samples for DDT and PCBs from recreation sites in the Lower Okanogan River.
- Collect and analyze fish tissue for DDT and PCBs from recreational species of interest consumed by tribal and recreational anglers.
- Use this information to inform the development of human health risks education for recreational use.

DDT and PCBs Study Preliminary Implementation

- 60 personnel days were spent on fish collection, 5 times the planned effort.
- Mountain whitefish were not caught.
- Moderate numbers of carp were collected and only in lower and middle reaches.
- Bass sample sizes were achieved (main tribal and recreational resident fish species of interest in the Okanogan River).
- Fish tissue samples are now undergoing lab analyses for DDT and PCBs.

DDT and PCBs Study Preliminary Results

- The total organic carbon content and sediment moisture content were higher in downstream sampling locations.
- PCBs were undetected in all samples at the 3.9 to 4.0 μg/kg reporting limits.

DDT and PCBs Study Preliminary Results

• Total DDT:

Near Chilliwist Creek mouth: below reporting limits

Below Wakefield Bridge: below reporting limits

Near Crazy Rapids pump house: 2.2 µg/kg

RM 8: $4.7 \,\mu g/kg$

Near Monse Bridge boat ramp: 19.3 µg/kg

• DDT concentrations were simlar to the 8.3 to 23 μ g/kg reported by Ecology (Serdar 2003) for the Upper and Middle reaches of the Okanogan River.

Future Work

- Data quality review for sediment sample results.
- Lab analyses completed for fish tissue samples.
- Data quality review for tissue sample results.
- Results from 2008 need to be compared to previous studies in the Okanogan
- Draft study report to the PUD by September 1.
- Final report will be provide in the ISR.

AN INVESTIGATION INTO THE TOTAL DISSOLVED GAS DYNAMICS OF THE WELLS PROJECT

(Total Dissolved Gas Study)

Study Goal

• Goal: to better define the relationship between spill operations at Wells Dam and resultant downstream total dissolved gas pressures and, if needed, identify possible measures to improve operational performance related to TDG.

Study Task

• Task: Development of a TDG numeric model for Wells Dam.

The model will be used to gain a better understanding of the effect of spill type and plant operations on the production, transport and mixing of TDG in the Wells Dam tailrace.

Total Dissolved Gas Model Development

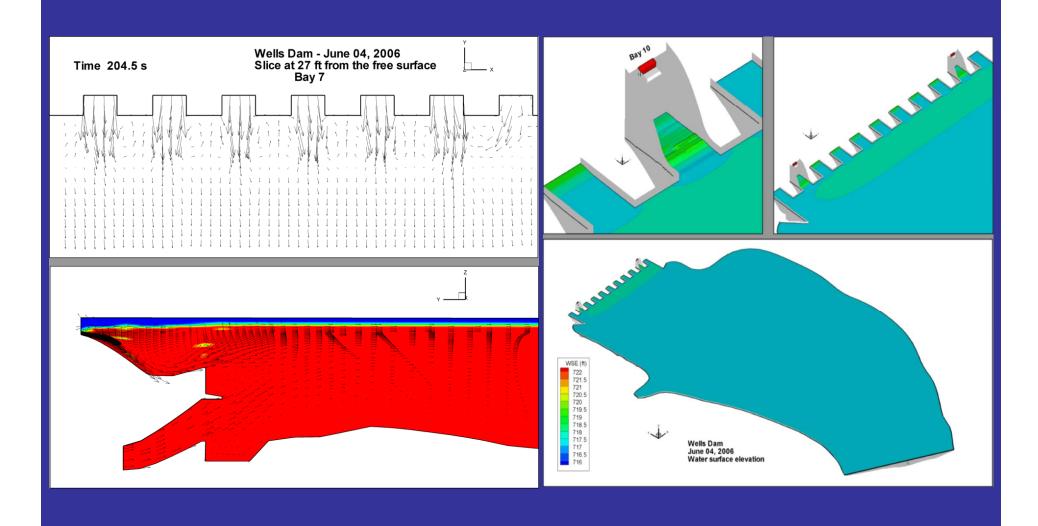
- IIHR-Hydroscience & Engineering is developing a numerical model to characterize the hydrodynamics and three-dimensional distribution of TDG in the Wells Dam tailrace.
- IIHR is using data collected by Douglas PUD during 2005, 2006 and 2007 to tune the model.

Methodology

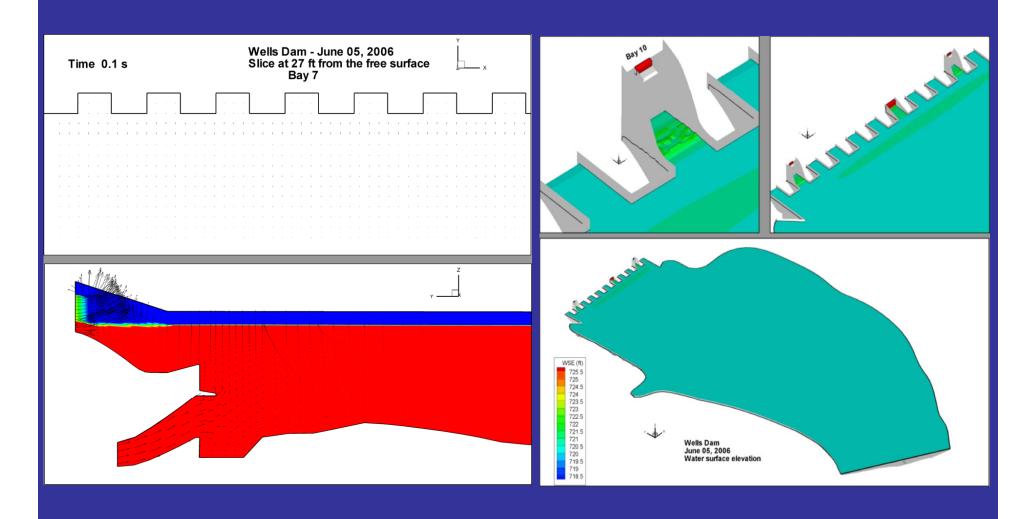
- Two models are being used in the IIHR study:
 - A volume of fluid (VOF) model to predict the flow regime and the free surface characteristics.
 - A rigid-lid model that calculates the TDG considering the bubble/liquid mass transfer, function of the gas volume fraction and bubble size. The free surface shape and upstream velocity profiles derived from the VOF model are input into this model.

Numerical Simulations

- Calibration: the model is calibrated against velocity and TDG data collected at three transects on June 4 and June 5, 2006.
- Validation: the model is validated against TDG measurements for three different spillway conditions tested in 2006.
- Testing: after calibration and validation, the model will be tested to cover a range of spillway operating conditions to scope the sensitivity of the TDG as a function of project operations.



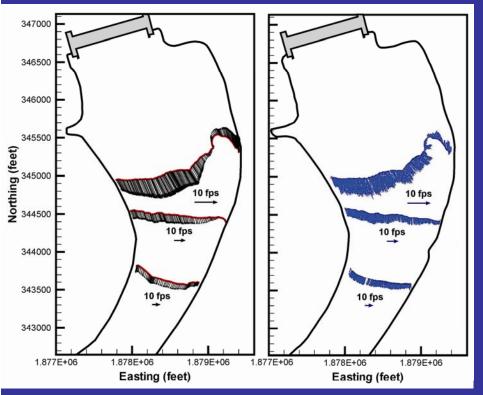
VOF model – June 4, 2006. Spread flow.

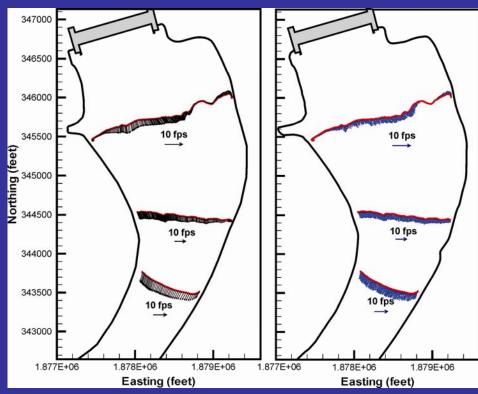


VOF model –June 5, 2006. Full open gate.

Hydrodynamic validation rigid-lid model

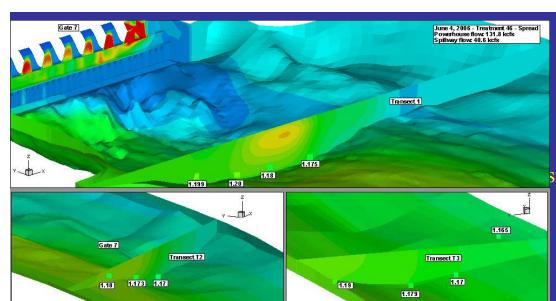
Black vectors: predicted velocities Blue vectors: field data





June 5, 2006. Spread flow.

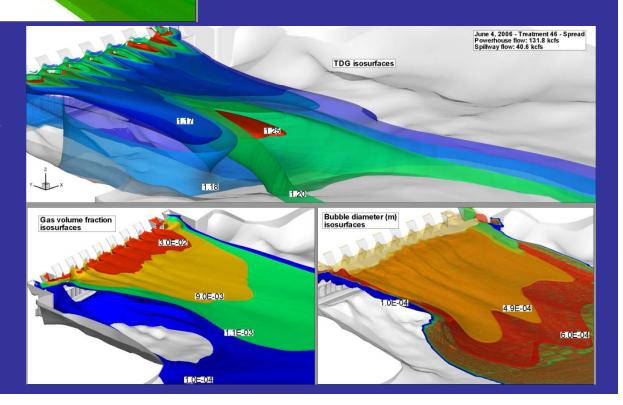
June 4, 2006. Full open gate.

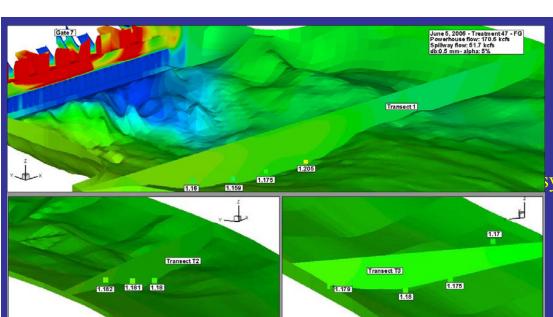


symbols: field data colored by TDG concentration

TDG validation rigid-lid model

June 4, 2006. Spread flow.

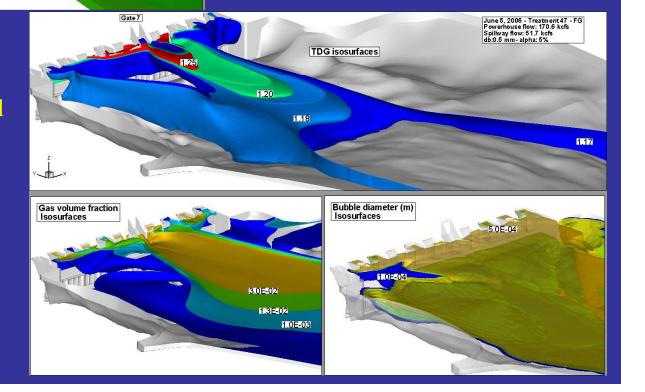


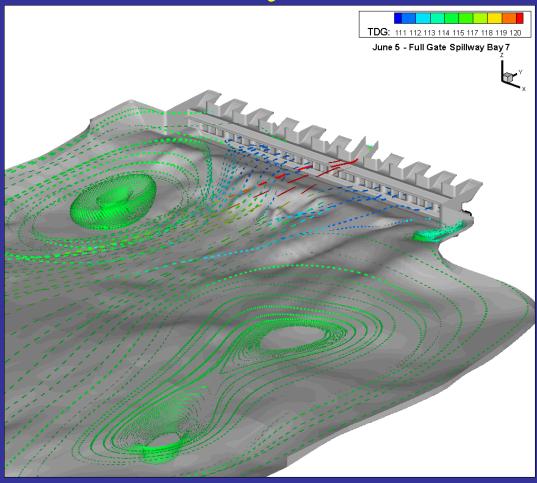


symbols: field data colored by TDG concentration

TDG validation rigid-lid model

June 5, 2006. Full open gate.





TDG validation rigid-lid model

June 5, 2006. Full open gate.

Future Work

- Flooding in Iowa and the complexity of the model have delayed completion of the model.
- Phase II model testing will evaluate the TDG performance of nine different operational scenarios at spill levels approaching 7Q10 flow.
- An interim report will be provide in the ISR due to FERC on Oct. 15, 2008
- The final report will be available in December 2008.

DEVELOPMENT OF A WATER TEMPERATURE MODEL RELATING PROJECT OPERATIONS TO COMPLIANCE WITH THE WASHINGTON STATE AND EPA WATER QUALITY STANDARDS

(Water Temperature Study)

Background

- Ecology is responsible for administering the State Water Quality Standards and for the issuance of 401 water quality certificates for FERC hydroelectric relicensing processes in the state of Washington.
- To assess compliance, Ecology needs to know if Wells Project causes increases of more than 0.3 °C above criteria temperatures for various classes of aquatic life.

Study Goal

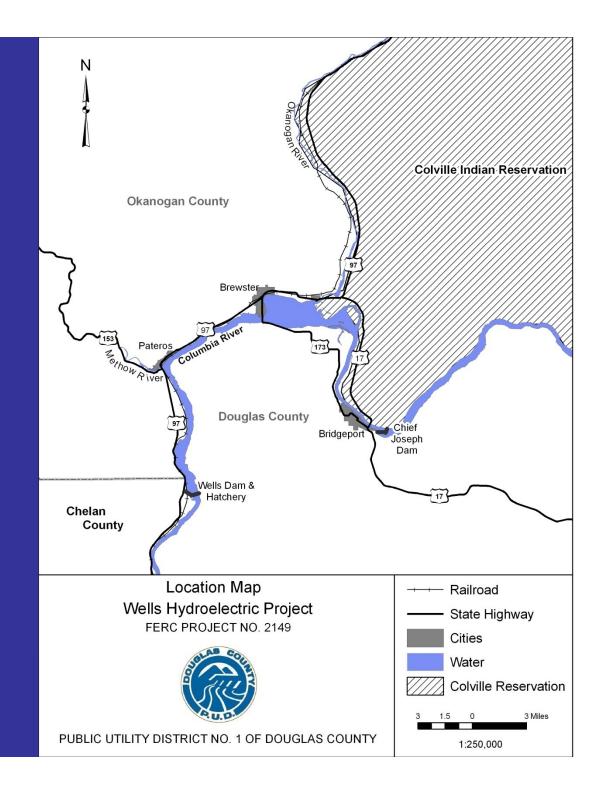
• The objective of the study is to develop a temperature model (e.g., CE-QUAL-W2) to assess the effects of Wells Project operations on water temperatures at Wells Dam and within the Wells Reservoir as they relate to compliance with the Washington State Water Quality Standards and the 401 certification process.

APPROACH

- Develop 2-D (longitudinal and vertical) models of:
 - Existing conditions ("With Project")
 - "Without Project" conditions
- Compare results with actual observations from various locations within the reservoir
- Use calibrated model to evaluate "compliance" with the temperature standard
- Use Corps of Engineers model CE-QUAL-W2

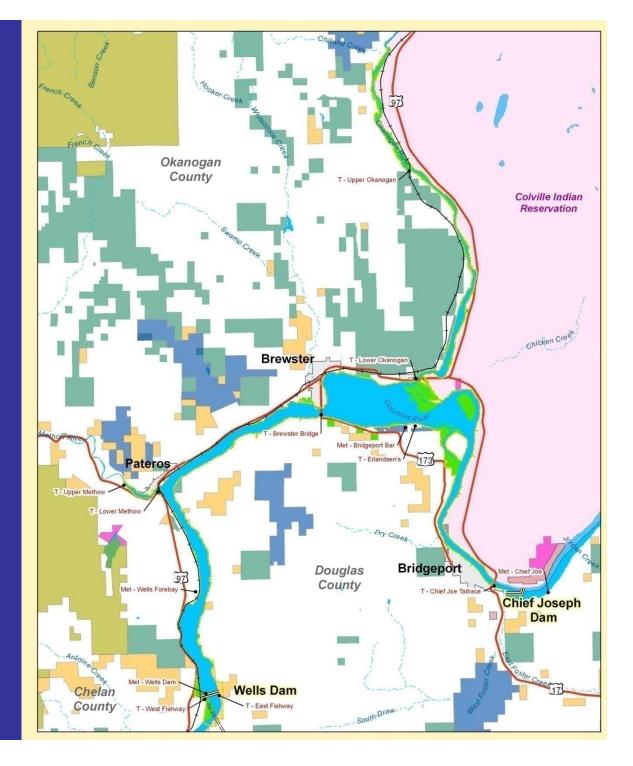
STUDY AREA

- 30 miles of Columbia River
- 15.5 miles of Okanogan River
- 1.5 miles of Methow River



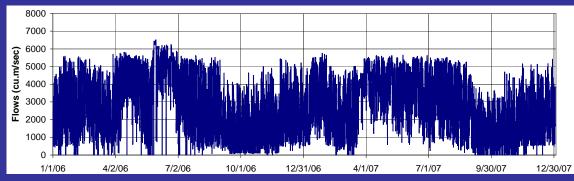
MODEL DATA

- Bathymetry
- Flows and stage
- Water temperature
- Meteorology

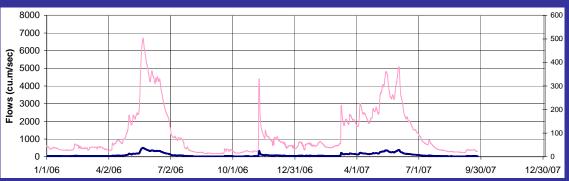


Project Flows and Temperatures

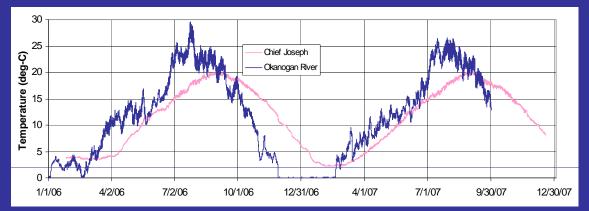
Chief Joseph Flows (95% of Wells)



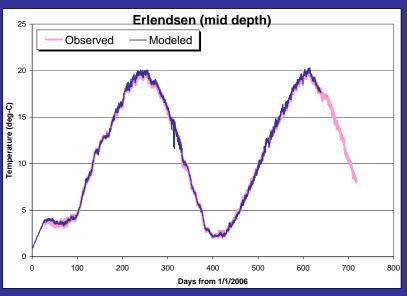
Okanogan River Flow (3% of Wells)

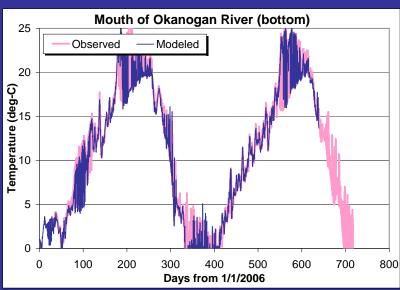


Temperatures

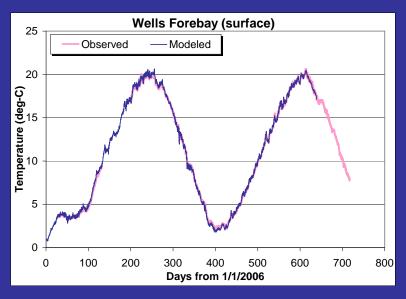


Model Calibration

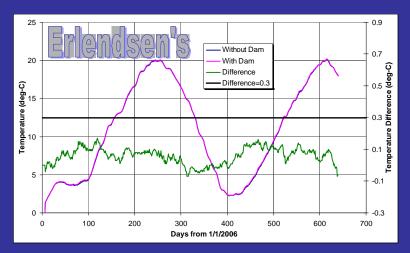


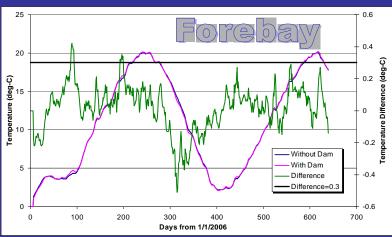


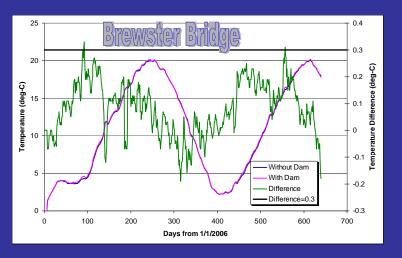


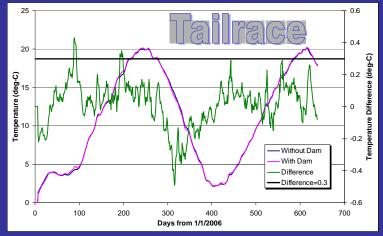


7_DADMax Temperatures









SUMMARY

- The 2D model is developed and calibrated.
- The 2D model is developed for both the "with" and "without Project" conditions.
- Preliminary Results indicate very small changes in temperatures in the Columbia, Okanogan and Methow rivers, and general compliance with temperature criteria.
- The results in the lower Methow and Okanogan rivers show mixing in the lower reaches with the Columbia River.
- Evaluation of compliance with the standards is still pending.

Future Work

• The 7DADMax and Exceedance Curves still need to be developed for the Okanogan rivers and then compared to the temperature compliance standards.

• Draft Report will be delivered to the Douglas PUD by August 21, 2008.

• The Final Report will be included into the ISR filed with FERC on October 15, 2008.

Continued Monitoring of DO, pH, and Turbidity in the Wells Forebay and Lower Okanogan River

(DO, pH, and Turbidity Study)

- Study not Required by FERC -

DO, pH, and Turbidity Study Goal and Methods

- Goal: to continue monitoring DO, pH, and turbidity in select sites of Wells Project and support the CWA §401 water quality certification.
- Hydrolab Minisonde5 instruments equipped with pH, DO and turbidity probes were installed in protective housings attached to bridge pilings in the Okanogan River at Highway 97 (RM 0.5), Monse (RM 5.0) and Malott (RM 17.0) and in the Columbia River in the forebay of Wells Dam (RM 515.6).
- Recording at 30-min intervals since 5/6/08.

DO, pH, and Turbidity Study Implementation

• Six instrument servicing events thus far: data downloading, maintenance, calibration, QC measurements, battery replacements.

• Access difficulties, log jam, and faulty batteries have resulted in some gaps in the monitoring records.

DO, pH, and Turbidity Study Preliminary DO Results

- DO concentrations have ranged from 9 to 11 mg/L in the late spring with excursions below the 8.0 mg/L standard starting in early July as snowmelt runoff receded and the river warmed. DO levels in the Okanogan River are entering the Wells Project below the 8.0 mg/L standard.
- Minimum daily DO concentrations have been below 8.0 mg/L since early July at Malott (RM 17 above the Wells Project) and at Monse (RM 5 in the Wells Project).

DO, pH, and Turbidity Study Preliminary pH Results

- Okanogan River pH is slightly alkaline: 7.4 to 8.6 at Highway 97, 7.1 to 8.7 at Monse, and 7.2 to 8.7 at Malott.
- Upstream from the Wells Project at Malott (RM 17) the pH has exceeded 8.5 daily since July 24 particularly during late afternoon to nighttime hours.
- Within the Wells Project, only occasional readings greater than the 8.5 standard have been measured at Highway 97 (RM 0.5) and at Monse (RM 5.0).

DO, pH, and Turbidity Study Preliminary Turbidity Results

- Results have been complicated by loss of equipment, limited access due to flooding and loss of data due to operator error and faulty batteries.
- 0.1 to 400 NTU at Highway 97

Future Work

- Continue monitoring through October, 2008.
- Data quality review will take place in November 2008.
- Further examination of data pertaining to the water quality standards and final report due by the end of 2008.
- An interim report for the ISR will include data up to August 5, 2008.
- Final report will be available in December 2008

AN ASSESSMENT OF ADULT PACIFIC LAMPREY SPAWNING WITHIN THE WELLS PROJECT

(Lamprey Spawning Assessment)

- Study not Required by FERC -

Study Goal and Objectives

• Goal: Assess the level of spawning activity by adult Pacific lamprey in the Wells Project and whether Wells Dam operations are affecting this activity.

• Objectives:

- Identify areas within the Wells Project where suitable spawning habitat may exist for adult Pacific lamprey.
- Survey these areas for use.
- If spawning is observed, assess whether impacts from operations exist.

Identify Suitable Spawning Habitat

- GIS analysis using existing bathymetry and orthophotography to identify all habitat less than 10 ft depth at full reservoir elevation (781 above msl).
- Preliminary site validation:
 Initial Habitat Suitability Criteria: gravel dominant substrate, flow present, adequate velocity, reach greater than 10 feet in length.

4 Sites Identified as Suitable

- C1: west shore of Columbia River (RM 534) downstream of Okanogan River confluence, 1 mile long.
- C2: west shore of Columbia River (RM 536) upstream of Okanogan River confluence, 0.5 miles long.
- MR: pool-riffle habitat near Project boundary on the Methow River (RM 1.4).
- OR: riffle-run habitat on the upper Okanogan River (RM 14.5).

Spawning Habitat Sites

C1 OR MR

Spawning Ground Surveys

- April 25-August 5, 2008.
- Sites C1, C2, MR, OR were surveyed 13, 14, 6, and 4 times respectively.
- Range of water temperatures (8.5°C-21.5°C) and flows (.001-19.5 kcfs) during the study period.
- No activity observed (lamprey, nests, test digs).

Impact Assessment

• No spawning or signs of spawning observed, therefore no impact assessment conducted.

• Note that both the MR and OR sites were located in upper Project boundary which is riverine and unaffected by Project operations.

Conclusions

- Available Pacific lamprey spawning habitat in the Wells Project is limited and of marginal quality.
- Surveys were conducted over appropriate time period and environmental conditions as suggested by the literature.
- Pacific lamprey passing Wells Dam appear to be spawning above Project boundary where conditions are more suitable.

SURVIVAL AND RATES OF PREDATION FOR JUVENILE PACIFIC LAMPREY MIGRATING THROUGH COLUMBIA RIVER HYDROELECTRIC PROJECTS

(Juvenile Lamprey Study)

In 2008, a juvenile Pacific lamprey (*Lampetra tridentata*) predation study was conducted at the Wells Hydroelectric Project (Wells Project) in accordance with the ILP. The goal of the study was to collect up-to-date information on the survival and the rates of predation of juvenile Pacific lamprey macropthalmia migrating through Columbia River hydroelectric Projects and collect site specific information on rates of predation on juvenile lamprey in the waters immediately upstream and downstream of Wells Dam. Specific objectives of the study include: 1) Conduct a literature review on juvenile lamprey survival and predation studies conducted at Columbia River hydroelectric projects; and 2) conduct an analysis on the stomach contents of predatory fish and birds to assess the location and level of predation that may be occurring on juvenile Pacific lamprey in the Wells forebay and tailrace.

Although there is a growing body of information on adult Pacific lamprey and their interactions at hydroelectric projects, relatively little information exists related to the survival of outmigrating juvenile lamprey (macropthalmia) at hydroelectric projects. A review of the recent body of literature related to juvenile lamprey survival passing through hydroelectric projects concludes that there is currently a lack of methodologies and technologies to effectively quantify the level of survival of juvenile lamprey migrating through a hydroelectric facility. In other words, no studies currently exist that document the level of survival attributed to a project's operations, nor does an accepted technology currently exist that would achieve this level of assessment for juvenile lamprey.

In lieu of directly measuring survival for juvenile lamprey passing through the Wells Project, the Aquatic RWG proposed to conduct an updated literature review regarding juvenile lamprey survival at hydroelectric projects in the Columbia River Basin. Additionally, a field study was implemented during the Integrated Licensing Process (ILP) study period to assess the significance of juvenile lamprey in the diets of predatory fishes and birds present in the Wells forebay and tailrace. Stomach samples of both predatory fishes and birds were obtained through pre-existing activities that were already collecting such specimens (An evaluation of the effects and alternatives to the existing piscivorous bird and mammal control program (Terrestrial Issue, PAD Section 6.2.3.1)).

An extensive literature review was conducted (numerous search engines yielding a total of 2,380 entries on a keyword search for "lamprey"). A majority of entries addressed adult lamprey and sea lamprey. Thirty one reports were further evaluated in support of the literature review objective. These reports support the notion that information on the juvenile Pacific lamprey outmigration in the Columbia River is limited, largely due to the lack of technology to meet research needs. Eleven birds and over one thousand piscivorous fishes were collected for stomach analysis during the study. Seven lamprey

were collected out of all of the predatory fish and birds sampled, including one double-crested cormorant which had three lamprey (of five sampled), one ring-necked gull which had one lamprey (of three sampled), and three pikeminnow which each had one lamprey (of 1,022 sampled). These results suggest that:

- Pikeminnow predation on juvenile lamprey is likely not substantial at this time;
- Differences between juvenile lamprey predation in the Wells forebay and the Wells tailrace are not detectable in pikeminnow based on these results;
- Piscivorous fish predation (bass and walleye) of juvenile lamprey in the Wells Project does not appear to be significant, though a greater sample size would be required to make any conclusions;
- Bird predation of juvenile lamprey in the Wells Project may be significant, though a greater sample size would be required to make any conclusions;
- The lack of trapping and tagging technology to produce reliable survival estimates will continue to limit the ability to quantify the impacts of hydroelectric operations on juvenile lamprey populations in the Columbia River.

ADULT PACIFIC LAMPREY PASSAGE AND BEHAVIOR STUDY

(Adult Lamprey Passage Study)

In 2007, an adult Pacific lamprey (*Lampetra tridentata*) passage and behavior study was conducted at Wells Dam in accordance with the ILP. The goal of this study is to evaluate the effect of the Wells Project and its operations on adult Pacific lamprey upstream migration and behavior as it relates to fishway passage, timing, and downstream passage events (drop back) through the dam. This information will be used to help identify potential areas of passage impediment within the Wells fishways. Specific objectives of the study include: 1) Conduct a literature review of existing adult Pacific lamprey passage studies at Columbia and Snake river dams; 2) identify methods for capturing adult Pacific lamprey at Wells Dam; 3) document the timing and abundance of radiotagged lamprey passage through Wells Dam; 4) determine whether adult lamprey are bypassing the adult counting windows at Wells Dam; 5) where sample size is adequate, estimate passage metrics including fishway passage times and efficiencies, residence time between detection zones, and downstream passage events (drop back); and 6) if necessary, identify potential areas of improvement to existing upstream fish passage facilities for the protection and enhancement of adult lamprey at the Wells Project.

A review of past adult lamprey passage studies indicated commonalities among lamprey behavior at hydroelectric projects and trapping methodologies were developed to capture adult lamprey at Wells Dam. During the 2007 study, 21 lamprey were captured, surgically radio-tagged, and released. Of these fish, 10 were released into the tailrace and 11 fish were released into the fishway between mid-August and early October. One tailrace-released fish was recaptured and re-released into the fishway, bringing total ladder releases to twelve. Ten of the twelve (83%) lamprey released into the middle fishway successfully ascended, with a median upper fishway passage time of 7.9 hours. Seven of the ten (70%) lamprey released into the tailrace were detected at the outside of a

fishway entrance. Only one of these seven (14%) lamprey entered into the collection gallery and ascended the fishway with a lower fishway passage time of 6.1 hours and upper fishway passage time of 5.9 hours. This fish, along with at least one mid-ladder release, traveled through some portion of the auxiliary water supply (AWS) chamber. Including one tailrace-released fish, 6 of 11 (55%) tagged-lamprey that ascended the upper fishway were detected inside the video bypass area. Three of the eleven (27%) fish that exited the ladder passed through the upper fish ladder without being observed at the counting window. No drop backs were detected by fish that exited the fishway. These results suggest that: 1) lamprey are passing the upper fishway at high rates, in a reasonable amount of time, and with negligible drop back within the ladder; and 2) some lamprey are bypassing the adult counting windows.

ASSESSMENT OF DDT AND PCB IN FISH TISSUE AND SEDIMENT IN THE LOWER OKANOGAN RIVER (Okanogan Toxins Study)

In 2008, an Okanogan River Toxins Study was conducted at the Wells Hydroelectric Project (Wells Project) in accordance with the ILP. The goal of the study was to determine the concentration of the insecticide 1,1,1-trichloro-2,2-bis[p-chlorophenyl]ethane (DDT) and polychlorinated biphenyl (PCB) in recreational fish species and in swimming areas of the lower Okanogan River (up to RM 15.5) within the Wells Project boundary. Fish tissue of recreational fish species and sediment samples at specific recreational sites were collected and are being analyzed. The information may inform the development of an appropriate information and education program to address the human health risks towards recreational use by the public in the lower Okanogan River.

Fish species targeted for analyses were common carp (Cyprinus carpio), mountain whitefish (Prosopium williamsoni), and smallmouth bass (Micropterus dolomieui). These species were selected for sampling because they have historically been sampled by the Washington Department of Ecology and because these fish represent different feeding behaviors and habitat uses. Approximately 60 personnel days (483 hours), approximately five times the effort anticipated by the Quality Assurance Project Plan, was expended in fish collection efforts. Four angling events to collect mountain whitefish in early and mid June were not successful in capturing any of this species, and additional sampling efforts in July were also not successful during the use of trot lines or beach seining. Several collection efforts through July, employing beach seines, trot lines and angling gear were successful in collecting small numbers of carp from the middle and lower reaches and bass from all three reaches in the lower Okanogan River. Fish were weighed and measured to allow for comparisons to fish collected in the Total Maximum Daily Load Technical (TMDL) Assessment conducted by Ecology (2003). Filet samples from the fish were delivered to Analytical Resources, Incorporated in Seattle, Washington, for analyses of DDT and PCBs.

Sediment sampling locations were selected during a site reconnaissance to target accessible recreation sites along the lower Okanogan River within the Wells Project

boundary (RM 15.5 to RM 0.0). To characterize the surface sediments most likely to be encountered by recreational river users, three grab samples were collected from the upper 10 cm of the sediments at each site with a vanVeen grab sampler. At each site, an aliquot of sediment from each grab sample was placed in a stainless steel bowl, thoroughly homogenized by stirring, placed in sample containers, transported on ice to the analytical laboratory, and analyzed for total organic carbon (TOC), grain size, total solids, PCB (Aroclors), and DDT analogs.

Laboratory analyses have been completed for sediments collected near the Monse Bridge boat launch (SED1, RM 5), an informal swimming area and boat launch below Crazy Rapids pump house (SED2, RM 6), an informal recreation site on the west shore near RM 8 (SED3), an informal swimming area and sand beach on the east shore below the railroad bridge (SED4, RM 10), and an informal swimming area at the mouth of Chilliwist Creek (SED5, RM 14). The organic content of sediments increased from 0.1 percent at SED5 downstream to 1.2 percent at SED1, and total solids content decreased from 74 percent at SED5 downstream to 48 percent at SED1. Silt and clay fractions comprised 40 percent of the sediment at SED1 but were not measureable at SED4 and SED5. The remaining sediment was predominantly sand with finer sands found downstream and medium sand sampled upstream. All PCBs were undetected in all samples at the 3.9 to 4.0 µg/kg reporting limits. DDT analogs were not detected in samples from the SED4 and SED5 upper reach locations. At SED3, 4-4'-DDE was detected at 3.2 µg/kg and 4-4'-DDD was detected at 1.5 µg/kg. Only 4-4'-DDE was detected at SED2, at 2.2 µg/kg. At SED1, 4-4'-DDE was detected at 14 µg/kg, 4-4'-DDD was detected at 3.6 µg/kg, and 4-4'-DDT was detected at 1.7 µg/kg. Total DDT analog concentrations were 19.3 µg/kg at SED1, 2.2 µg/kg at SED2, 4.7 µg/kg at SED3, and undetected at the upper two sampling locations. These results are similar to the range of 8.3 to 23 µg/kg detected in the upper 32 cm of a 2001 sediment core collected for the TMDL study, where total concentrations were 8.8 µg/kg in the upper 2 cm and increased to 23 µg/kg in sediments from 30 to 32 cm deep.

The final results from this study will be available in October 2008.

AN INVESTIGATION INTO THE TOTAL DISSOLVED GAS DYNAMICS OF THE WELLS PROJECT (Total Dissolved Gas Investigation)

In 2008, a Total Dissolved Gas (TDG) Investigation is being conducted at the Wells Hydroelectric Project (Wells Project) in accordance with the ILP. The goal of the study is to better define the relationship between spill operations at Wells Dam and the resultant downstream total dissolved gas pressures and, if needed, identify possible measures to improve operations performance related to TDG.

Elevated supersaturation of the TDG has deleterious effects on fish and other aquatic life. Douglas PUD has initiated a series of assessments aimed at gaining a better understanding of the effect of spill operations on the production, transport and mixing of TDG at Wells Dam. IIHR-Hydroscience & Engineering is developing a numerical study

to understand the underlying phenomena leading to TDG supersaturation and evaluate the effectiveness of spill type and plant operations in reducing TDG.

Two models are being used in the IIHR study; a volume of fluid (VOF) model and a rigid-lid model. The VOF method predicts the flow regime and the hydraulic free surface characteristics, recognizing that a spillway jet may plunge to depth in the tailrace or remain closer to the surface depending upon the spillway geometry and the tailwater elevation.

The rigid-lid two-phase flow model characterizes the hydrodynamics and predicts the three-dimensional distribution of TDG in the tailrace. The free surface shape and upstream velocity profiles derived from the VOF model are input into this model. The model calculates the TDG concentration considering the air entrainment, the mass transfer between bubbles and water, degasification at the free surface, and bubble size. The bubble size and the air volume fraction at the inlet and a bubble turbulence constant are external inputs to the model.

The model predictions are compared against velocity and TDG data collected at three transects from spill tests conducted on June 4 and June 5, 2006. Once calibrated, the predictive ability of the model is validated by running the model for three different operational conditions tested in 2006. After calibration and validation, nine additional runs are performed to scope the sensitivity of TDG production in the tailrace as a function of project operations.

Hydrodynamics

VOF computations for all the runs (validation, calibration and testing) were completed. The computed free surface shape was used to create rigid-lid grids to run the TDG model. Good agreement between measured and predicted velocities was observed for June 4 and June 5, 2006.

TDG Model

The TDG model is being calibrated. A sensitivity analysis of the TDG distribution as a function of gas volume fraction and bubble size is being performed.

The TDG model for the Wells Project is currently still under development with additional model calibration and verification taking place through October 2008. Preliminary results from this study will be available in October 2008.

DEVELOPMENT OF A WATER TEMPERATURE MODEL RELATING PROJECT OPERATIONS TO COMPLIANCE WITH THE WASHINGTON STATE AND EPA WATER QUALITY STANDARDS

(Water Temperature Study)

In 2008, a Water Temperature Study was conducted at the Wells Hydroelectric Project (Wells Project) in accordance with the ILP. The goal of the study was to develop a temperature model (CE-QUAL-W2) to assess the effects of Wells Project operations on water temperatures at Wells Dam and within the Wells Reservoir as they relate to compliance with the Washington State Water Quality Standards and the 401 certification process.

In support of the Clean Water Act Section 401 Certification process, the Washington State Department of Ecology (Ecology) must assess compliance with State water temperature criteria, and needs to know whether the Wells Hydroelectric Project (Wells Project) causes the 7-day average of maximum daily water temperatures (7-DADmax) to increase significantly compared to "without-Project" conditions. When the water body's temperature is naturally greater than maximum values recommended for various classes of aquatic life (Ecology, 2006), or within 0.3°C of those values, then the Project should not cause the temperatures to increase by more than 0.3°C.

In this study, we present the development and calibration of a 2D hydraulic and water temperature model of the Wells Project, and apply this and a second model of "without Project" conditions to examine the change in temperature conditions within the Project's boundaries. The model includes about 30 miles along the Columbia River, the lower 15.5 miles of the Okanogan River, and the lower 1.5 miles of the Methow River. Data were collected for 2006 and 2007, and used to develop and calibrate the model. The data include a detailed bathymetric survey, observed flows and temperatures, and meteorological data (air temperature, wind, and solar radiation). The calibrated model was presented to Ecology for review.

The results indicate that temperature increases in the Columbia River are less than 0.3°C, and meet the State's temperature criteria for all aquatic life. The temperatures in the lower Okanogan and Methow rivers are still being reviewed. The Okanogan River in particular is a very complex area with extremely warm mid-summer flows entering upstream of the Wells Project boundary (at Malott) and a complex interaction of Columbia and Okanogan river water taking place within the lower few miles of the Okanogan River. This interaction results in up to 5°C of cooling in the lower extent of the Okanogan River during the summer months.

CONTINUED MONITORING OF DO, pH, AND TURBIDITY IN THE WELLS FOREBAY AND LOWER OKANOGAN RIVER (DO, pH and Turbidity Study)

In 2008, a dissolved oxygen (DO), pH, and Turbidity Study was conducted at the Wells Hydroelectric Project (Wells Project) in accordance with the ILP. The goal of the study was to continue monitoring dissolved oxygen DO, pH, and turbidity in the Wells Dam forebay and Lower Okanogan River within the Wells Project boundary.

Hydrolab Minisonde5 instruments equipped with DO, pH, and turbidity sensors were installed in protective housings and activated to begin recording water quality measurements on May 5, 2008. The instrument housings were attached to bridge pilings at the Malott Bridge (RM 17.0), Monse (RM 5.0) and Highway 97 (RM 0.5) in the lower Okanogan River. Similar instrumentation operating in the Wells Dam forebay on the Columbia River (RM 516) completed the network of four continuous monitoring instruments recording at 30-minute intervals. The Malott monitoring site is upstream of the Wells Project boundary and data collected at this site is representative of water quality conditions entering the Wells Project.

There have been six instrument servicing events since installation in early May, each event included downloading data, calibrating and performing maintenance on the instruments, performing quality control checks including Winkler's titrations for dissolved oxygen determination, and replacing batteries. High river flows and log jams limiting access to the instruments and battery failures resulted in some data gaps when the instruments were not operational.

The pH measurements thus far have ranged from 7.39 to 8.61 units at the Highway 97 bridge, 7.07 to 8.68 at Monse Bridge, and 7.23 to 8.70 at Malott Bridge. There were only a few excursions of pH outside the 6.5 to 8.5 range of water quality standards. The only extensive period of pH excursions occurred at the Malott Bridge between July 24 and August 5 when diurnal occurrences of higher late afternoon to nighttime pH reached as high as 8.70. Because the higher pH occurred mostly upstream from the Wells Project area at Malott, reservoir operations were not considered to be a contributing factor in the pH excursions during this monitoring period.

DO measurements of at least 9 to 10 mg/L early in the monitoring season dropped to below the 8.0 mg/L water quality standard in the summer as snowmelt runoff receded and water temperatures warmed. This observation included the site above the Wells Project at Mallott and at the Monse site within the project at RM 5.0. In addition, there appeared to be daily minimum DO readings that occassionally dropped below 8.0 mg/L at the Highway 97 Bridge site at RM 0.5.

Turbidity ranged from 0.1 NTU to 647 NTU at Highway 197, 489 NTU at Monse, and 400 NTU at Malott.

Water quality data for the Wells forebay site is currently being analyzed with additional sampling taking place through October 2008. Preliminary results from this study will be available in October 2008.

AN ASSESSMENT OF ADULT PACIFIC LAMPREY SPAWNING WITHIN THE WELLS PROJECT (Lamprey Spawning Assessment)

In 2008, an adult Pacific lamprey (*Lampetra tridentata*) spawning assessment was conducted at the Wells Hydroelectric Project (Wells Project) in accordance with the ILP. The goal of the study was to assess the level of spawning activity by adult Pacific lamprey in the Wells Project and whether Wells Dam operations are affecting this activity. Specific objectives of the study include: 1) Identify areas within the Wells Project where suitable spawning habitat may exist for adult Pacific lamprey; 2) survey these areas of spawning habitat for use by lamprey to confirm suitability; and 3) if spawning is observed, assess whether the operations of Wells Dam are having adverse effects on these spawning areas (i.e., dewatering, flow alterations, scour, etc.).

Wells Project bathymetry and high resolution orthophotography were spatially analyzed using a Geographic Information System (GIS) to identify preliminary spawning habitat. Four field surveys were conducted to verify the suitability of preliminary spawning habitat. Criteria for acceptance as suitable spawning habitat during field verification consisted of appropriate substrate (gravel dominant), the presence of water velocity, and a minimum reach length of 10 feet. Four reaches were concluded to have suitable spawning habitat for Pacific lamprey; two in the Columbia River (C1 and C2), one in the Methow River (MR), and one in the Okanogan River.

A total of 14 field visits were conducted between the April 25th and August 5th, 2008. Sites C1, C2, MR, OR were surveyed 13, 14, 6, and 4 times respectively. Surveys were conducted over a wide range of water temperatures (8.5°C-21.5°C) and flows (.001-19.5 kcfs). Tributary sites (MR, OR) were frequently inaccessible during the survey period due to high flows from spring run-off. During the study, no Pacific lamprey or signs of Pacific lamprey spawning (fish, nest construction activity, test digs, or nests) were observed. Since no Pacific lamprey or signs of Pacific lamprey spawning were observed, an assessment of the Wells Project operations and its potential effects on these areas was not conducted.

In consideration of the scientific literature (Close et al., Jackson et al., 1997, Kan, 1975, and Pletcher, 1963) that describes suitable spawning habitat for Pacific lamprey, the suitable habitat identified within the Wells Project can best be described as marginal. This conclusion is supported by extensive spawning ground surveys over the time period and during water quality conditions that typically define the Pacific lamprey spawning period.

Wells Dam is located at RM 515.6 on the Columbia River and is the 9th hydroelectric dam that would need to be negotiated by Pacific lamprey utilizing the Methow and

Okanogan watersheds for reproduction. As a result of this, Pacific lamprey passage numbers at Wells Dam are extremely low averaging 350 fish per year since 1998 when counting began with only 21 and 35 fish counted in 2006 and 2007, respectively. It is likely that the small numbers of Pacific lamprey that spawn in the Okanogan and Methow rivers migrate upstream of the Wells Project boundary in these tributary systems where the environment is more riverine and the availability of appropriate habitat types, substrate, and appropriate flows for spawning are more readily available.



Agenda

Aquatic Resources Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 21, 2008 10:00 am – 3:00 pm

Meeting Location: Douglas PUD

1151 Valley Mall Pkwy. East Wenatchee, WA 98802

Conference Call-In: (509) 881-2990, X327831

Meeting Coordinators: Bao Le (503) 309-9423

Meeting Goals: 1. Provide a progress update on the Aquatic Resources studies

being implemented in support of the Wells Project Relicensing.

TimeTopicLead10:00 amWelcome and IntroductionsBao Le

10:05 am Meeting Goal and Objectives Bao Le

10:10 am Progress Update Presentations/Discussion Group

Juvenile Lamprey Predation
 Adult Lamprey Passage

3. Okanogan Toxins Study

4. TDG Study

5. Water Temperature Study

6. DO, pH, Turbidity Study (not FERC required)

7. Lamprey Spawning Assessment (not FERC required)

12:00 pm Lunch – Provided by Douglas PUD

1:00 pm Continue discussions Group

2:50 pm Action Items and Next Steps Bao Le

3:00 pm Adjourn

Email to Recreation RWG regarding Recreation RWG Meeting Materials

From: Scott Kreiter

Sent: Thursday, August 21, 2008 1:24 PM

Bob Clubb; 'Jim Eychaner'; 'John Devine'; Mary Mayo; 'Patricia Leppert'; 'Susan Rosebrough'; Shane Bickford; 'Mike Palmer' To:

Cc: 'Bricker, Kelly'

Subject: Recreation RWG Handouts

Attachments: Recreation_RWG_Agenda_082208.pdf; Recreation_Access_Study_Summary.pdf;

Recreation Needs Assessment Summary.pdf

Please find attached the handouts for tomorrow's Wells Recreation Work Group meeting at 1:00.

Scott Kreiter **Douglas County PUD** 509-881-2327

These handouts are for the conference call-in members of the RWG

Agenda

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 22, 2008 1:00 pm – 3:00 pm

Meeting Location: Bridgeport City Hall

1206 Columbia Ave. Bridgeport, WA

Conference Dial-in #: 360-407-3780 PIN# 326131

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary results for the Recreation Access Study

and the Recreation Needs Evaluation

Time	Topic	Lead
1:00 pm	Review agenda and meeting objectives	Scott Kreiter
1:05 pm	Update on the relicensing schedule	Shane Bickford
1:15 pm	Recreation Access Study Update	Scott Kreiter
1:45 pm	Recreation Needs Evaluation	Kelly Bricker
2:45 pm	Action Items and next steps	Scott Kreiter
3:00 pm	Adjourn	

EVALUATION OF PUBLIC ACCESS TO AND USE OF THE WELLS RESERVOIR AS IT RELATES TO RESERVOIR FLUCTUATIONS, AQUATIC PLANTS AND SUBSTRATE BUILDUP (PUBLIC ACCESS STUDY)

Summary of Preliminary Results

ABSTRACT

Public access to, and use of, the Wells Reservoir can be affected by reservoir fluctuations and the growth of aquatic plants. Reservoir fluctuations, influenced by operational changes at Wells Dam and the amount of inflow from upstream dams and tributaries to the Wells Reservoir, can affect the ability to both utilize public access sites as well as general navigation of the reservoir. The degree of impact is dependent on the configuration, location, and usage of each recreation site. As expected, access restrictions are more pronounced at lower than normal forebay elevations at Wells Dam, generally below El. 777. Since the Wells Dam forebay is above El. 777 over 97 percent of the time, the incidents of access impact due to reservoir fluctuations is quite low when compared to normal reservoir operations.

The buildup of sediment can also reduce public access to the reservoir particularly in locations subject to upstream bed load movement within the inundated tributaries. The two sites most affected by sediment buildup include the Monse and Methow River boat launches where sediment buildup is pronounced and can reduce access for larger motorized boats.

Aquatic plants can be a seasonal impediment to public access including limiting the use of shoreline areas and several boat launches during the later parts of summer. Several swimming areas can also be affected depending upon the time of year and elevation of the reservoir. Aesthetics and safety within the swimming area can also be impacted by excessive aquatic plant growth.

GOALS AND OBJECTIVES

The goal of this study is to evaluate whether Wells Project recreation facilities (public access facilities) such as docks, boat launches and swimming areas, can be reasonably utilized under various reservoir operating scenarios and conditions. Specific objectives include:

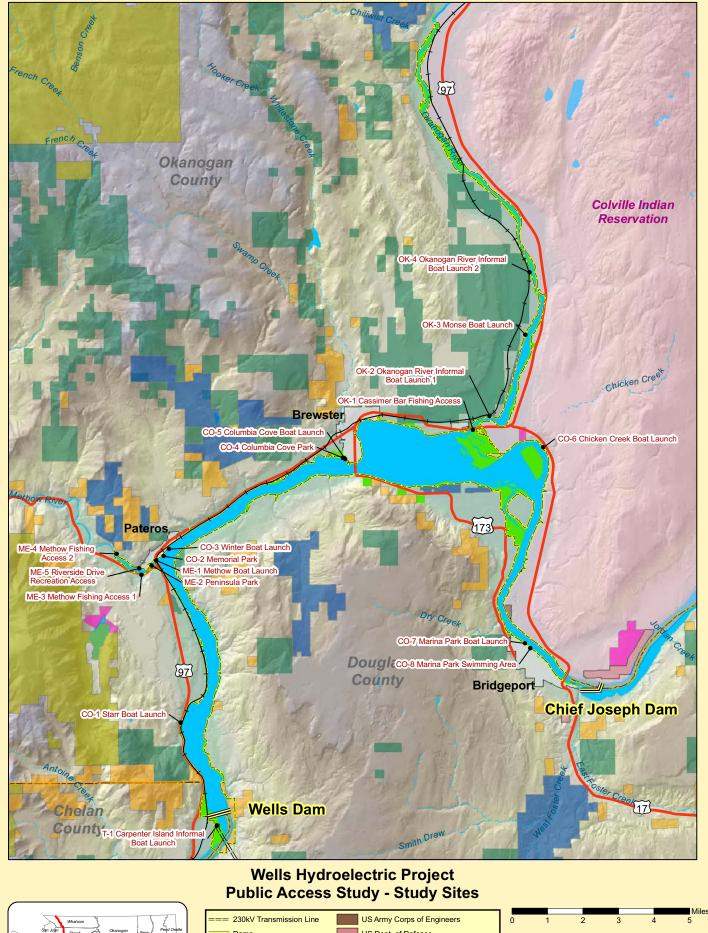
- Evaluate accessibility to boat docks and launches during low reservoir elevations.
- Evaluate how reservoir elevations affect on-water boating experiences.

- Evaluate the effect of aquatic plant growth on accessibility to boat docks, launches and designated swimming areas within the Wells Project (reservoir and tailrace).
- Evaluate whether river substrate is restricting access to boat docks, boat launches and designated swimming areas within the Wells Project (reservoir and tailrace).
- Develop a map showing general types of aquatic plants and where they occur.
- Develop a map showing areas of the reservoir that may be inaccessible during low reservoir elevations.
- Identify measures to improve boat docks and launches and swimming areas as they relate to reservoir fluctuations, aquatic plants and substrate buildup.

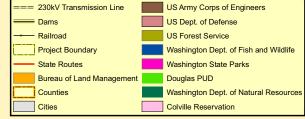
Study Sites

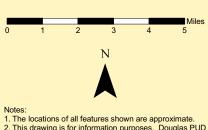
Study Sites

Site	v		Approx.	
Designation	Site Description	River	River Mile	Primary Usage(s)
Columbia Ri	ver Sites			
CO-1	Starr Boat Launch	Columbia	518.3	Trailerable Boat Launching
CO-2	City of Pateros Memorial Park (Docks)	Columbia	523.8	Boat Docking
CO-3	Winter Boat Launch	Columbia	523.9	Trailerable Boat Launching
CO-4	City of Brewster Columbia Cove Park (Dock and Swimming Area)	Columbia	529.7	Boat Docking and Swimming
CO-5	City of Brewster Columbia Cove Park (Boat Launch)	Columbia	529.8	Trailerable Boat Launching
CO-6	Chicken Creek Boat Launch	Washburn Pond	537.3	Trailerable Boat Launching
CO-7	City of Bridgeport Marina Park (Boat Launch)	Columbia	543.1	Trailerable Boat Launching
CO-8	City of Bridgeport Marina Park (Swimming Area)	Columbia	543.3	Swimming
T-1	Carpenter Island Informal Boat Launch	Columbia	515.4	Trailerable Boat Launching
Methow Rive	er Sites			
ME-1	Methow Boat Launch	Methow	0.4	Trailerable Boat Launching
ME-2	City of Pateros Peninsula Park	Methow	0.5	Swimming
ME-3	Methow Fishing Access 1 (South Side of River)	Methow	1.2	Small Boat/Raft Launching and Bank Fishing
ME-4	Methow Fishing Access 2 (North Side of River)	Methow	1.5	Small Boat/Raft Launching and Bank Fishing
ME-5	Riverside Drive Recreation Access (At Tennis Courts, North Side of River)	Methow	0.9	Small Boat/Raft Launching and Bank Fishing
Okanogan Ri	iver Sites			
OK-1	Cassimer Bar Fishing Access	Okanogan	1.3	Bank Fishing
OK-2	Okanogan River Informal Boat Launch 1	Okanogan	2.1	Trailerable Boat Launching
OK-3	Monse Boat Launch	Okanogan	5.2	Trailerable Boat Launching
OK-4	Okanogan River Informal Boat Launch 2	Okanogan	6.8	Trailerable Boat Launching









1. The locations of all features shown are approximate.
2. This drawing is for information purposes. Douglas PUD can not guarantee the accuracy and content of this map.

METHODOLOGY

Evaluate Access Related to Reservoir Fluctuations

To evaluate access related to reservoir fluctuations, the steps described below were performed:

- A headwater duration curve for the years 2003-2007 was developed using hourly elevation data from the Wells forebay to determine how often fluctuations occur.
- A backwater model (HEC-RAS) was used to determine specific elevations at recreation access sites during typical seasonal river flows
- Depths at boat launches and docks were evaluated to determine at what elevations access sites could become inaccessible due to low water.
- The effects of substrate buildup on access to the reservoir was evaluated.
- Reservoir bathymetry data were used to identify potential shallow areas in order to evaluate how reservoir fluctuations may affect on-water boating experiences.

Evaluate Access Related to Aquatic Plants

To evaluate access related to aquatic plants, the steps described below were performed:

- A field survey was conducted to map the extent of any aquatic weed growth using hand-held GPS equipment and detailed aerial photo imagery to establish general locations of aquatic plants near the sites.
- Plant identification was accomplished using a line and grapple.
- In areas where aquatic plants were determined to be potentially restricting access to the Wells Reservoir, potential options to improve access were identified and described.

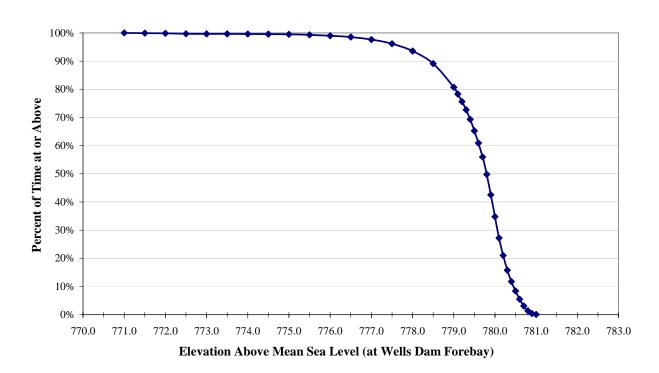
Results

Headwater Duration Curve

The headwater duration curve demonstrates that the reservoir is operated for a vast majority of the time above El. 775 with over 95 percent of its operations above El. 778 and 50 percent of its operations above El. 780.

Wells Reservoir (Lake Pateros)

2003 - 2007 (5 Years)

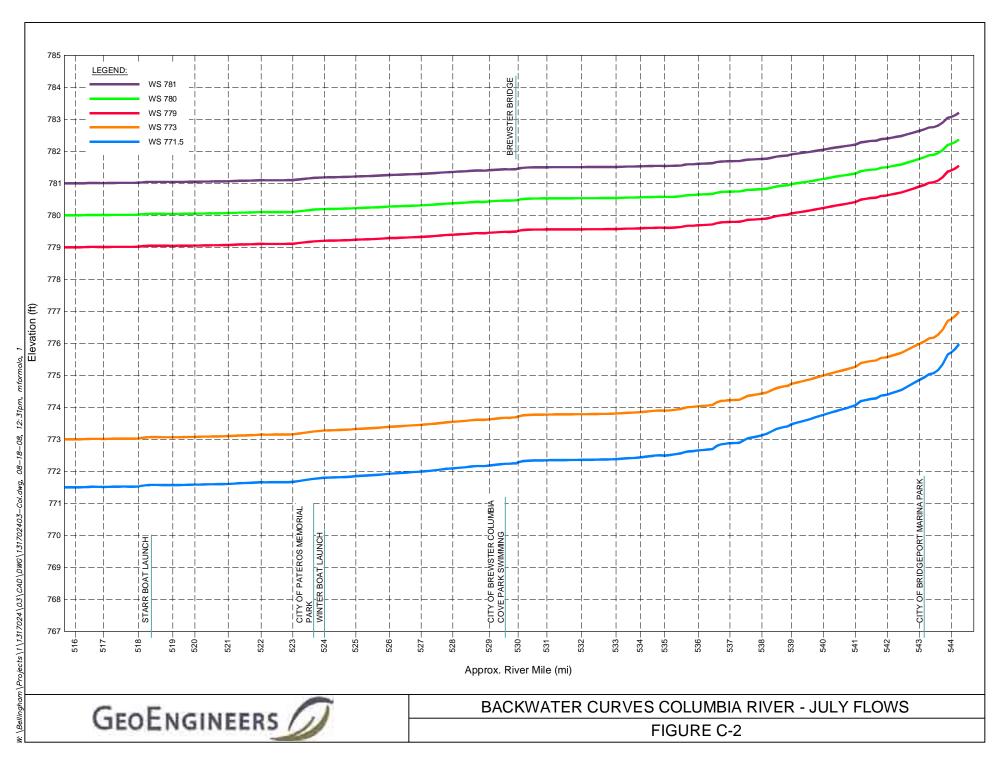


Boat Launch Evaluation Criteria

Boat Launch/Dock Site Access Evaluation Criteria

Criteria Description	Criteria
Preferred Ramp Slope	12-16 percent
Minimum Launch Depth	3 feet above the toe of the hardened (concrete) ramp surface and 4 feet above channel bottom (boats up to 26 feet in length)
Minimum Channel Depth	4 feet (boats up to 26 feet in length)
Minimum Channel Width	50 feet (at 5 mph)
46 110 1 5 45 1 177	1001 1007 1001 1011 7377 1000

(California Dept. of Boating and Waterways, 1991; and COE, 2004; and Ohio DNR, 2003)



AUTOCONTROL CONTROL CO

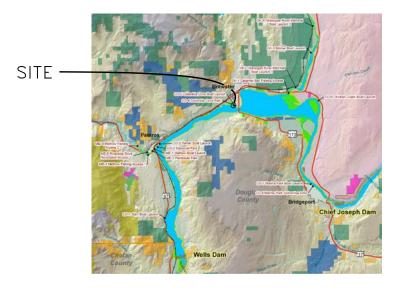
<u>PLAN</u>

NOTES:

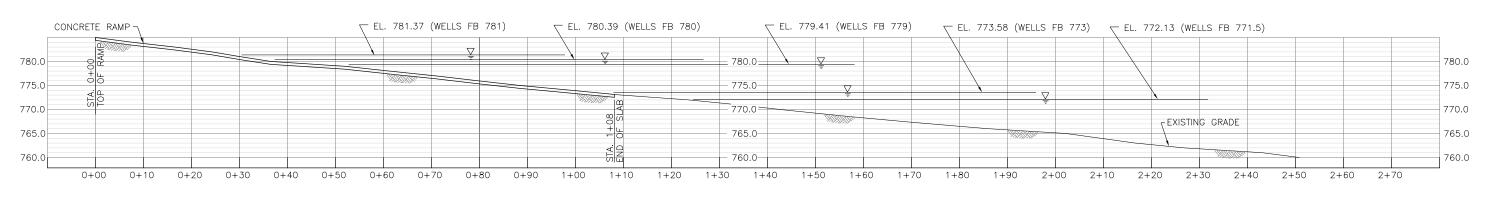
1. WATER SURFACE ELEVATIONS SHOWN ARE AVERAGE VALUES FOR FOUR PERIODS DURING THE BOATING SEASON; MAY—JUNE, JULY, AUGUST, AND SEPTEMBER—NOVEMBER FOR THE WELLS DAM FOREBAY ELEVATIONS INDICATED.

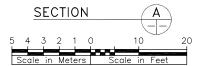
AT THIS SITE, THE RANGE OF ELEVATIONS ARE AS FOLLOWS:

WELLS FOREBAY EL.	STUDY SITE WATER SURF	ACE EL. RANGE
781	781.56 — 781.17	(0.39 FT)
780	780.59 — 780.18	(0.41 FT)
779	779.63 - 779.19	(0.44 FT)
773	773.87 - 773.27	(0.60 FT)
771.5	772 45 - 771 80	(0.65 FT)



INDEX MAP





RIVER



WELLS HYDROELECTRIC PROJECT PUBLIC ACCESS STUDY

> STUDY SITE CO-5 COLUMBIA COVE BOAT LAUNCH PLAN AND SECTION

LN CHECKED: DLA DATE: 8/2008 REVISO II JACOBS PLATE A4 CALE: AS SHOWN SHT.

Summary of the site access evaluations as related to reservoir fluctuations.

Summary - Site Access at Various Wells Reservoir Elevations

Site Designation	Site Description	Wells Dam Forebay Elevation Below Which Site Access is Negatively Impacted (For Average Flows Except as Noted)	Percentage of Time Wells Forebay Above Elevation
Columbia Ri	ver Sites		
CO-1	Starr Boat Launch	El. 777.9	95 %
CO-2	City of Pateros Memorial Park (Docks)	No access restrictions at ends of docks	100 %
CO-3	Winter Boat Launch	El. 778.3	91 %
CO-4	City of Brewster Columbia Cove Park (Dock and Swimming Area)	Dock – No access restrictions El. 776 - Swimming area	100 % 99 %
CO-5	City of Brewster Columbia Cove Park (Boat Launch)	El. 775.5	99 %
CO-6	Chicken Creek Boat Launch	Not Applicable – Fluctuations in reservoir do not directly impact access due to isolation of site from main reservoir.	Not Applicable
CO-7	City of Bridgeport Marina Park (Boat Launch)	El. 776	99 %
CO-8	City of Bridgeport Marina Park (Swimming Area)	El. 776.5	98 %
Methow Rive	er Sites		
ME-1	Methow Boat Launch	El. 777.8	95 %
ME-2	City of Pateros Peninsula Park (Swimming Area)	El. 775.9	99 %
ME-3	Methow Fishing Access 1	Reservoir fluctuations do not negatively impact access.	Not Applicable
ME-4	Methow Fishing Access 2	Reservoir fluctuations do not negatively impact access.	Not Applicable
ME-5	Riverside Drive Recreation Access (At Tennis Courts, North Side of River)	Reservoir fluctuations do not negatively impact access.	Not Applicable
Okanogan R	iver Sites		
OK-1	Cassimer Bar Fishing Access	Reservoir fluctuations do not negatively impact access.	Not Applicable
OK-2	Okanogan River Informal Boat Launch 1	El. 777.3	96 %
OK-3	Monse Boat Launch	El. 780 (Average Seasonal Flow) El. 780.5 (Low Seasonal Flow)	35 % 8 %
OK-4	Okanogan River Informal Boat Launch 2	El. 773 (Average Seasonal Flow) El. 776.3 (Low Seasonal Flow)	99 % 98 %

Evaluation of Access Related to Substrate Buildup

- Substrate buildup was observed at three of the reservoir study sites: ME-1 (Methow boat launch), OK-3 (Monse boat launch), and CO-5 (Columbia Cove boat launch).
- At both the Methow and the Monse boat launches, the buildup of sediments in the ramp area from upstream bed load movement is reducing access to the ramp.
- At the Methow Launch, a bar has formed over the years between the launch and the main channel of the Methow River.
- At the Monse launch, the eddy caused by the bridge abutment deposits bed load in the launch area.
- It is difficult to estimate the deposition rate at these sites without further study, but a considerable amount of bed load moves down both the Methow and Okanogan rivers contributing to these problems.
- At the Columbia Cove launch, rocks have deposited on the ramp making launching more difficult at low reservoir levels.

Evaluation of Access Related to Reservoir Fluctuations – Shallow Areas

- A complete set of maps identifying areas of shallow, medium, and deep areas was developed.
- Reservoir fluctuations occur without warning. Boaters should exercise caution when boating on the reservoir.
- Recommendations include signage at boat launches educating boaters of potential reservoir fluctuations.

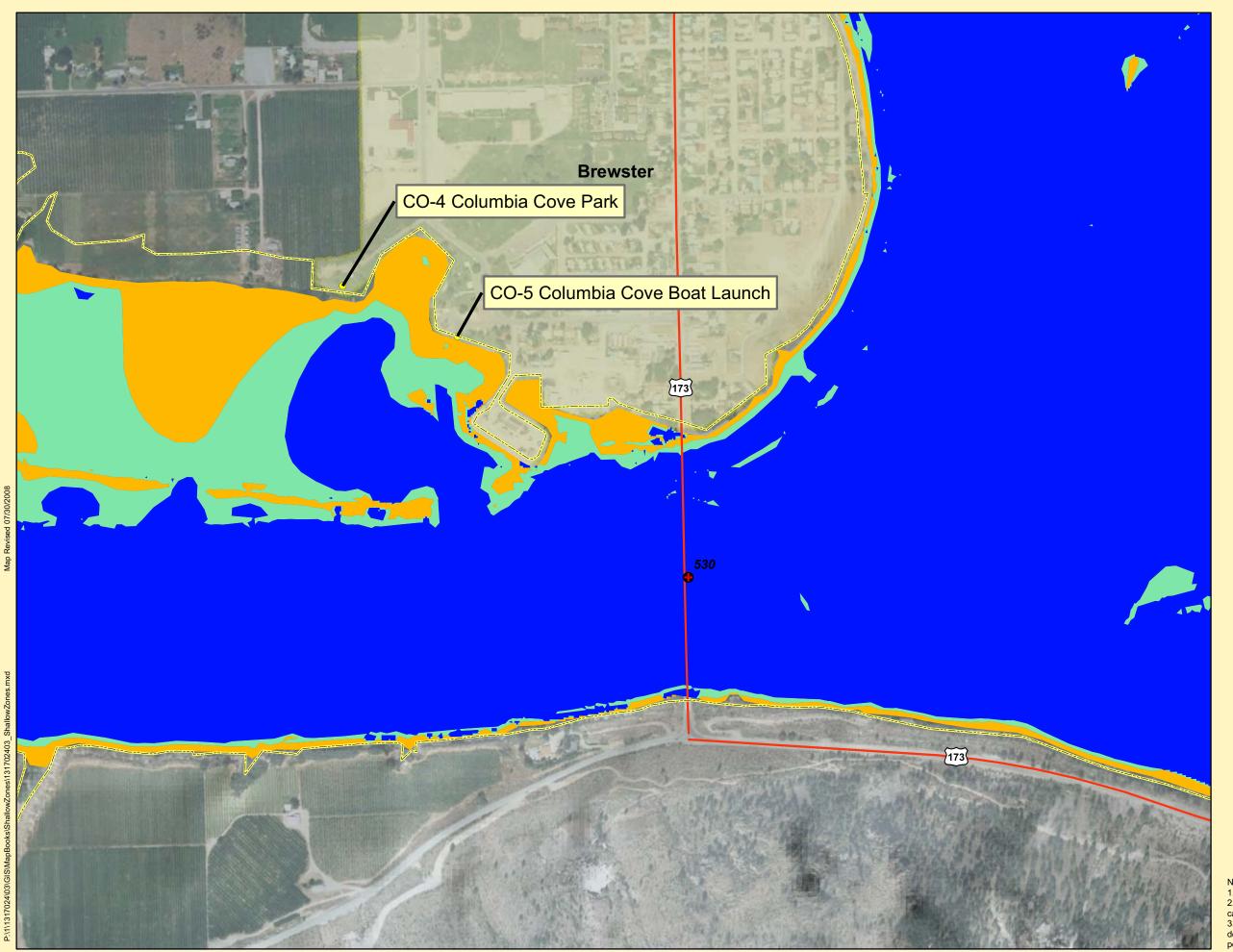


PLATE B17

BOAT ACCESSIBILITY

SHALLOW WATER (0-15 ft)

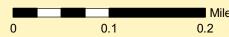
■ MODERATE DEPTH (15-25 ft)

DEEP WATER (>25 ft)

EXPLANATION

- RIVER MILE
- PROJECT FEATURES
- STATE ROUTES
- ---- STREAMS-RIVERS
- CITIES
- PROJECT BOUNDARY

Reference surface elevation is 781 ft (NGVD29)



1 inch equals 0.1 miles









- Notes:

 1. The locations of all features shown are approximate.

 2. This drawing is for information purposes. Douglas PUD #1 can not guarantee the accuracy and content of this map.

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Evaluate Access Related to Aquatic Plants

Evaluation of Access at Sites Related to Aquatic Plants

In general, most of the substantial plant growths observed during the June survey were low growing and sparse, and thus unlikely to have any significant impacts on public access.

Summary - Site Access at Various Wells Reservoir Elevations

Site Designation	Site Description	Plant growth observed	Proportion of Eurasian water milfoil
Columbia Ri	ver Sites		
CO-1	Starr Boat Launch	Native – Access not restricted immediately at the launch. Moderate restriction at approach to/from launch.	Low
CO-2	City of Pateros Memorial Park (Docks)	Native – No restriction	Low
CO-3	Winter Boat Launch	Non-native – No restriction	High
CO-4	City of Brewster Columbia Cove Park (Dock and Swimming Area)	Dock Area: Native – No restriction Swimming Area: No restriction	Low
CO-5	City of Brewster Columbia Cove Park (Boat Launch)	Native – No restriction	Low
CO-6	Chicken Creek Boat Launch	Not assessed, non-motorized access only.	Not Applicable
CO-7	City of Bridgeport Marina Park (Boat Launch)	Non-native – No restriction	High
CO-8	City of Bridgeport Marina Park (Swimming Area)	Native - Restricted	Low
Methow Rive	er Sites		
ME-1	Methow Boat Launch	Native – No restriction	Low
ME-2	City of Pateros Peninsula Park	Native – No restriction	Low
ME-3	Methow Fishing Access 1 (South Side of River)	Native – No restriction	Low
ME-4	Methow Fishing Access 2 (North Side of River)	No plant growth (main channel of Methow River) – No restriction	
ME-5	Riverside Drive Recreation Access	Native – No restriction	Low
Okanogan R	iver Sites		
OK-1	Cassimer Bar Fishing Access	Native – Moderate restriction (fishing)	Low
OK-2	Okanogan River Informal Boat Launch 1	Native – No restriction	Low
OK-3	Monse Boat Launch	Native – No restriction	Low
OK-4	Okanogan River Informal Boat Launch 2	Native – No restriction	Low

WELLS RECREATION NEEDS ASSESSMENT INTERIM STUDY REPORT FINDINGS SUMMARY

August 22, 2008

I. STUDY OBJECTIVES

- Objective 1. Summarizing prior study findings to evaluate recreational use and demand within the Wells Project. This summary was based on results of the 2005 Wells Project Recreation Visitor Use Assessment, existing information from FERC Form 80s for the Wells Project, Interagency Committee for Outdoor Recreation outdoor recreation participation survey, WDFW fisherman surveys, WDFW hunter surveys, City of Bridgeport's Marina Park surveys, and other relevant recreational information.
- Objective 2. Assessing the needs of Hispanic use of recreational facilities and resource areas.
- Objective 3. Assessing the adequacy of existing recreation facilities at the Wells Project to accommodate current and future recreation demand.
- Objective 4. Assessing the adequacy of public access at Wells Project recreation facilities.
- Objective 5. Assessing the adequacy of facility maintenance at Wells Project recreation sites.
- Objective 6. Developing a prioritized list of potential actions to address Wells Project recreation needs. The list included criteria such as demand, effectiveness, feasibility, and cost.

II. ASSESSMENT OF UNMET DEMAND (Objective 1)

Reviewed 2002 SCORP

- o High latent demand relative to Wells Project recreation
 - Walking and hiking
 - Nature activities
 - Sightseeing
 - Bike riding
 - Picnicking
 - Water activities
 - Fishing
 - Camping
 - Hunting
- Based on visitor comments, the most common activities reported by respondents in the Wells Project 2005 visitor survey were:
 - Fishing (bank, dock, jetty)
 - Boating/Swimming/Water Activities
 - Hiking/Walking
 - Picnicking

- Camping
- Enhancement recommendations by the Interagency Committee for Outdoor Recreation (Recreation & Conservation Office):
 - o Trails and paths for walking and biking
 - Manage dispersed shoreline camping
 - o Improve access for water recreation
 - o Improve opportunities for non-consumptive interaction with nature including fish and wildlife.

Wells Project Visitors (Objective 1, 3, 4, 5):

- o Majority felt no other activities or services needed to be offered (62 percent)
- o Less than 50% felt that changes were needed
 - Areas emphasized for change included improving or adding facilities such as picnic areas, restrooms, and boat launches
- 75% felt directional and information signs and interpretive opportunities were adequate
- O Visitors generally satisfied with their experience, overall found minimal current unmet recreational demand

Community Use Summary (Objectives 1, 2, 3, 4, 5):

Brewster:

- o Majority of respondents used RV Campground, boat ramp, playground
- o Most popular activities were swimming and fishing
- o Trash identified by 4 respondents
- o Some indication of some signage needed in Spanish
- o Some indication of increased security/lighting at facilities

Bridgeport:

- o Playground was the most utilized facility, followed by the trail and overlook
- o Responses were mixed regarding more educational information and the availability of information
- o Most popular activities were swimming and fishing
- o Individual comments regarding activities included the following:
 - Attract visitors with fishing tournaments
 - Facility is good and very helpful to promote family activities
 - Unpredictable water levels
 - Better bathroom facilities
 - More areas for hiking
 - More surveillance
 - More information about maintaining the areas clean
 - Signage stating not to throw garbage and to care
 - Use the fish hatchery on the river in Bridgeport,
 - Increase the bathroom facilities
 - Build sidewalks along the banks of the river at marina park
 - Signs not adequate for people driving
 - Spread the facilities that are in Bridgeport, have edu. programs in schools
 - Raise awareness of Bridgeport and all its resource
 - More information in Spanish

Spot Count Observations (Objectives 3, 4):

- o Highest on weekends and holidays; exceptional high use during opening day fishing at boat launches;
- Vast majority of estimated recreation use occurred during the peak season, May-September, occurred at Bridgeport Marina Park (30 percent of Wells estimated visitation);
- o Brewster Columbia Cove Park received the next highest estimated visitation.

*Summary of Fish and Game: still working on this (Objective 3, 4).

Summary of Hispanic Recreation Literature Review (Objective 2):

- Recreate in larger family groups
- Place high value on social qualities of their recreation experience
- Swimming highly important
- Utilize outdoor cooking facilities
- Focus should be on opportunities to hike, camp, participate in recreation near bodies of water
- Information from family and friends, print media
- Sensitive to fees

Summary of high unmet demand (Objectives 3, 4, 5):

- Improved fishing access on the Okanagan River access, improved fishing/boating;
 may lessen access burden on the Brewster access for boat fishing during peak times
- Improved restroom facilities and picnic areas to meet interest of different cultural groups

III. FUTURE RECREATION DEMAND (Objective 3)

Reviewed trends:

- WDFW fishing survey
 - o Fish for relaxation, to be with family and friends, sport, fun
 - o Trout and salmon popular species
 - o Salmon anglers spend more per trip
- Washington Fishing License sales
 - On the rise over the past three years statewide, relatively stable in Okanogan, Douglas and Chelan counties
- Washington Guide Activity
 - o 10 outfitters operating within Okanogan, Chelan, and Douglas counties; 6 focus on guided fishing trips
 - o 9 outfitters a multitude of experiences
 - o 9 whitewater rafting outfitters
 - o Slight growth since 2005, 466 to 501 in state
- ORV Green Sticker Sales
 - o ORV use and growth will likely continue, however may be tempered by the increased fuel costs
- Boating Vessel Trends
 - o Relatively stable, will be interesting to see the impact of fuel costs
- Great Washington State Birding Trail

- o Appears to be interest with 64,500 maps distributed for this location. Results of survey not completed to date
- Outdoor Industry of America 2007 Results
 - o Human powered outdoor recreation (camping, biking, trail, and paddle) are important financially to the State of Washington

Estimate of Future Use (Objective 3)

- Focused on the population growth of Chelan, Okanagan, and Douglas counties, with some reference to Seattle area.
- Motorboating (wakeboarding / waterskiing) may increase in popularity but could be tempered by escalating fuel costs; motorboating activities were identified by 9 percent of the visitors to the Wells Project
- Fishing may increase 7 to 36 percent depending on population growth
- The Greater Columbia River Water Trail, may influence the type of activities taking place on the Wells Reservoir. Presently, very little activity in paddle sports was observed. However, with the advent of the water trail and publicity, as well as increased fuel costs, paddle sports may increase in this area as they have done in other areas of the state.

IV. REGIONAL UNIQUENESS AND SIGNIFICANCE (Objective 3)

- Destination camping areas within a ten mile radius of the Wells Project area, that are not associated with the Wells Project include:
 - o Alta Lake State Park
 - o Bridgeport State Park
- Day use area:
 - o Fort Okanagan State Park
- Regional recreational opportunities exist that offer fishing, boating, swimming, camping, picnicking and hiking

What is unique in the region regarding the Wells Recreation opportunities? The availability of low-density experiences

V. PUBLIC ACCESS ANALYSIS (Objective 4)

Facilities Evaluation

All of the recreation facilities and sites are within the FERC Wells Project Boundary; and most of the facilities are either located on Douglas PUD land or lands associated with towns and cities along the Wells Reservoir. Despite varying entities that operate and maintain the Wells Project recreation facilities, all of the facilities should be subject to the same level of routine, day-to-day maintenance activities. Routine maintenance is considered short-term maintenance activities and defined as repair, prevention, and cyclic maintenance, as compared to long-term maintenance (replacement and rehabilitation of facilities). Routine maintenance is discussed below by "short-term" and "annual" maintenance. The following Tables (1 & 2) outline the key types of routine maintenance that should be undertaken at each facility (depending upon the site amenities offered at each location).

Operations and Maintenance Recommendations (Objective 5)

Table 1. Routine Short-Term Maintenance Recommendations for the Wells Project Recreation Facilities.

SHORT-TERM MAINTENANCE (includes those activities that occur on almost a daily or weekly basis, and are the responsibility of Operator)

Utilities - Maintenance of all utilities (water, septic system, garbage removal, propane, etc.).

Cleaning - Operator shall clean all Facilities regularly in accordance with accepted site cleaning practices.

Vandalism - Graffiti or signs placed by the public will be removed and the Facilities restored by Operator at its cost within one week after Operator becomes aware of the graffiti. Operator shall take reasonable measures to prevent vandalism in the Facilities.

Other Minor Short-term Maintenance - Operator shall perform all minor maintenance work on an as-needed basis. Such duties shall include, but not be limited to: replacing leaky and broken bathroom fixtures; applying disinfectant and deodorants in toilets; straightening sign posts; tightening door hinges; removing all nails, ropes, poles, and wire from trees and Facilities; and straightening and replacing barriers along roadways and spurs, painting picnic tables, cleaning fire pits, cleaning and repair of fish cleaning stations, etc.

Boat Handling Docks - Operator shall be responsible for the installation and for removal of the docks. In addition, the moving hardware on boat docks, especially floating docks (e.g. hinges, pins, etc.) that link boat dock sections together should be inspected regularly to ensure safe operation of the docks. Running strips or bumpers around the boat-dock contact points should also be regularly inspected to ensure the parts are all well fastened and functioning properly.

Table 2. Annual Maintenance Recommendations for the Wells Project Recreation Facilities.

ANNUAL MAINTENANCE (includes those activities that are expected to occur on an annual or semi-annual schedule, and are the responsibility of Operator)

Equipment - Operator should inspect the conditions of all facilities prior to "opening day" each year. The facilities included in this provision are: picnic tables; cooking grills; water hydrants; boat docks; benches; fee collection stations; changing rooms; picnic shelters, fire rings; drinking fountains; trash receptacles; signs (entrance, directional, and informational); fish-cleaning stations; lights/lamps (indoor and outdoor); restroom/comfort stations; and playground equipment.

Recommended Schedule of Annual Maintenance - Maintenance Activity (Target Date for Action)

- Straighten all barriers (Prior to Opening day)
- Paint interior of all restrooms with paint approved (At end of 3 year period)
- Paint or stain all bulletin boards with paint or stain approved (At end of 3 year period)
- Paint entrance signs with paint approved (At end of 3 year period)
- Paint/stain all exterior wood surfaces excluding roofs, of all restrooms with paint or stain approved (At end of 3 year period)
- Paint all picnic tables with paint approved (At end of 3 year period)
- Install and remove boat dock (Beginning and end of operating season)
- Winterize and de-winterize water supply system (Beginning and end of operating season)
- Pump vault toilets (As needed, but at least at end of operating season)

VI. RECREATION ISSUES FOR RESOURCE AREAS (Objectives 2-5)

Majority of respondents were satisfied with existing facilities (77 percent); number of improvements recommended was relatively low.

Many respondents would prefer to experience a semi-primitive setting. Ninety-one percent enjoyed their trip and expect to come back in the future.

The following is a list of improvements suggested by respondents regarding questions relative to facilities.

Brewster:

- Clean bathrooms; interest in full RV hook-up and shade
- Provision of tent camping sites
- Expand boat ramp/launch

Bridgeport:

- Expand boat ramp/launch
- More space at marina

Pateros Resource Area:

- Maintenance on toilet/showers
- ADA compliance

Okanagan:

Improve boat launch at Monse

VII. SUMMARY OF ACTIONS TO ADDRESS PROJECT-RELATED ISSUES (Objective 6)

- Operations and maintenance as described above
- Adapt or reconstruct facilities at the end of their useful life to meet ADA standards for accessibility, including picnic tables, restrooms, boat launch access, and parking areas
- Consider the development of the Columbia River Water Trail in the provision of easy access and tent camping for non-motorized paddling; support via signage and information.
- Consider unique cultural recreation needs, including signage and the provision of greater picnic facilities for increased family group size.
- Consider boat access improvement on the Okanagan River which may alleviate crowding at certain times of the year at the Brewster boat launch.
- Monitor trends via the FERC Form 80 reporting to identify emerging uses as a result of the water trail or other influences on the economy.

Aquatic RWG Meeting



Aquatic Resource Work Group

Date: August 21, 2008

Time: 10:00 am - 3:00 pm

Location: Douglas PUD

Directions

Agenda

Sign-In Sheet

Meeting Notes



Directions to Douglas PUD

Douglas PUD 1151 Valley Mall Parkway East Wenatchee, WA 98802 509-884-7191

Heading North: (from Quincy)

Travel north on WA 28 to East Wenatchee.

At the second stoplight, Top Foods will be on your left. Proceed through this stoplight and stay in the <u>right</u> lane.

Follow sign to West 28 – do not cross the bridge.

Turn right at the Ninth St. NE exit. The 7-Eleven will be on your left.

At this four-way stop, turn left onto Valley Mall Parkway.

Douglas PUD is located at the north end of Valley Mall Parkway.

Heading South: (from Brewster)

Travel south on US 97.

Continue straight onto WA 28 (Sunset Hwy). The Columbia River will be on your right.

Follow WA 28 (Sunset Hwy) toward East Wenatchee. Douglas PUD will be on your left near downtown.

Turn left onto Valley Mall Parkway.

Turn left into the Douglas PUD parking lot.

Heading East: (from Seattle)

Travel east on I-90.

Go past Cle Elum.

Take Exit 85 toward Wenatchee.

Turn left at stop sign. Turn right onto WA-970. WA-970 merges with US 97.

Follow US 97 (Blewett Pass) north toward Wenatchee.

Merge onto US 2 E toward Wenatchee.

Follow US 2 over Columbia River north of Wenatchee. At stoplight, turn right onto WA 28 (Sunset Hwy). Follow WA 28 (Sunset Hwy) toward East Wenatchee. Douglas PUD will be on your left near downtown.

Turn left onto Valley Mall Parkway.

Turn left into the Douglas PUD parking lot.

Heading West: (from Spokane)

Travel west on I-90. Go past Moses Lake.

Take Exit 151 toward WA 281 N/Quincy/Wenatchee.

Turn right onto WA 281 N. Follow WA 281 N to Quincy.

At stoplight, a gas station will be on your left.

Turn left onto WA 28 W.

Follow WA 28 to East Wenatchee.

At the second stoplight, Top Foods will be on your left. Proceed through this stoplight and stay in the <u>right</u> lane.

Follow sign to West 28 – do not cross the bridge.

Turn right at the Ninth St. NE exit. The 7-Eleven will be on your left.

At this four-way stop, turn left onto Valley Mall Parkway.

Douglas PUD is located at the north end of Valley Mall Parkway.

From Pangborn Memorial Airport: (East Wenatchee) When leaving the parking lot, turn left onto Airport Way.

At stop sign, turn left onto Grant Rd.

Follow Grant Rd. toward downtown East Wenatchee.

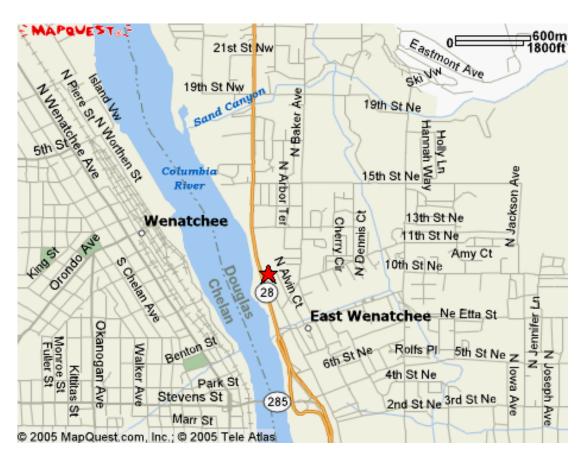
You will pass Safeway and Les Schwab Tires. At stoplight, turn right onto Valley Mall Parkway. Travel along Valley Mall Parkway past downtown.

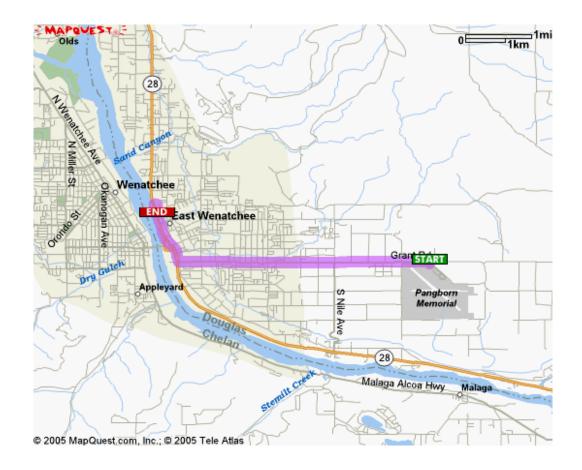
Douglas PUD is located at the north end of Valley Mall Parkway.

Maps Attached:











Douglas PUD 1151 Valley Mall Parkway East Wenatchee, WA 98802 509-884-7191



Agenda

Aquatic Resources Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 21, 2008 10:00 am – 3:00 pm

Meeting Location: Douglas PUD

1151 Valley Mall Pkwy. East Wenatchee, WA 98802

Meeting Coordinators: Bao Le (503) 309-9423

Meeting Goals: 1. Provide a progress update on the Aquatic Resources studies

being implemented in support of the Wells Hydroelectric Project

Relicensing.

Time 10:00 am	Topic Welcome and Introductions	Lead Bao Le
10:05 am	Meeting Goal and Objectives	Bao Le
10:10 am	Progress Update Presentations/Discussion A. Pacific Lamprey 1. Juvenile Predation 2. Adult Spawning 3. Adult Passage B. Water Quality 1. Continued DO, pH, Turbidity 2. Okanogan Toxins Study 3. TDG Model 4. Temperature Model	Group

12:00 pm Lunch – Provided by Douglas PUD

1:00 pm	Continue discussions	Group
2:50 pm	Action Items and Next Steps	Bao Le
3:00 pm	Adjourn	



Wells Project Relicensing Aquatic Resource Work Group

DATE:

August 21, 2008

LOCATION:

Douglas PUD

Initials	Name	Affiliation Name	Email
-0/1	Art Viola	WDFW	violaaev@dfw.wa.gov
6	Bao Le	Long View Assoc.	ble@longviewassociates.com
	Bill Towey	Colville Tribes	bill.towey@colvilletribes.com
Jel .	Bob Clubb	Douglas PUD	rclubb@dcpud.org
· · · · · · · · · · · · · · · · · · ·	Bob Easton	FERC	Robert.Easton@ferc.gov
	Bob Jateff	WDFW	jatefrjj@dfw.wa.gov
	Bob Rose	Yakama Nation	brose@yakama.com
	Brad James	WDFW	jamesbwj@dfw.wa.gov
	Bryan Nordlund	NOAA Fisheries	bryan.nordlund@noaa.gov
Touk	Dennis Beich Joe Miller	WDFW	beichdvb@dfw.wa.gov kortuj wk millejlm@dfw.wa.gov
	Joe Peone	Colville Tribes	joe.peone@colvilletribes.com
on phone	John Devine	DTA	john.devine@devinetarbell.com
	Jonathan Merz	WDOE	jome461@ecy.wa.gov
Jan C	Josh Murauskas	Douglas PUD	jmurauskas@dcpud.org
	Keith Kirkendall	NOAA Fisheries	keith.kirkendall@noaa.gov
	Mark Miller	USFWS	mark_miller@fws.gov
on phone	Molly Hallock	WDFW	hallomh@dfw.wa.gov
tsi	Pat Irle	WDOE	pirl461@ecy.wa.gov

SB	Shane Bickford	Douglas PUD	sbickford@dcpud.org
	Steve Lewis	USFWS	stephen_lewis@fws.gov
	Steve Parker	Yakama Nation	parker@yakama.com
Additional	Attendees		
Initials	Name	Affiliation Name	Email
12	Tory & leberal	WOFW	
	<u> </u>		
		,	

Meeting Notes

Aquatic Resources Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 21, 2008

Meeting Coordinator: Bao Le (503) 309-9423

Meeting Objectives: 1. Provide stakeholders with a progress report on the

Aquatic Resource studies being implemented in support of

the Wells Project Relicensing.

Action Items:

1. Add new WDFW member, Jeff Korth to the distribution lists for the Wells Aquatic Resource Work Group (RWG) and the Wells Aquatic Settlement Work Group (Mary).

2. Email to Jeff Korth the Off-License Settlement Agreement and the six Aquatic Resource Management Plans (Bao).

Aquatic Resource Studies Update Presentations

Prior to the meeting, members of the Aquatic RWG were provided with an Aquatic Resource Studies Update presentation. At the meeting, Douglas PUD and Long View staff presented progress updates of the six Aquatic Resource studies being implemented in support of the Wells Project Relicensing. These six studies are:

- 1. Juvenile Lamprey Predation Study
- 2. Adult Lamprey Passage Study
- 3. Okanogan Toxins Study
- 4. TDG Study
- 5. Water Temperature Study
- 6. DO, pH, Turbidity Study (not FERC required)
- 7. Lamprey Spawning Assessment (not FERC required)

Aquatic RWG members engaged in discussions after each presentation. All members present and on the phone were appreciative of the opportunity to learn more about study progress and generally satisfied with study implementation. There were no substantive comments related to any of the studies.

The next meeting of the Aquatic RWG will take place during the FERC Initial Study Report Meeting on October 30, 2008 at Douglas PUD.

Recreation RWG Meeting



Recreation Resource Work Group

Date: August 22, 2008

Time: 1:00 pm - 3:00 pm

Location: Bridgeport City Hall

Directions

Agenda

Sign-In Sheet

Meeting Notes



Directions to Bridgeport City Hall

Bridgeport City Hall 1206 Columbia Ave Bridgeport, WA

Heading North: (from Wenatchee)

Follow US 97 through Pateros and to Brewster.

In Brewster, turn right onto WA-173.

Follow WA-173 through Brewster and across the bridge.

After crossing bridge and curving left, continue along WA-173.

WA-173 becomes Maple St.

Follow Maple St. to Columbia Ave.

Turn right on Columbia Ave. and continue to 12th St.

Bridgeport City Hall will be on your right.

Heading South: (from Okanogan)

Follow US 97 to WA-17.

Turn left onto WA-17.

Follow WA-17 across the bridge. Turn right on Foster Creek Ave.

Follow Foster Creek Ave. through Bridgeport. Turn right on 17th St. and left on Columbia Ave.

Follow Columbia Ave. to 12th St.

Bridgeport City Hall will be on your left.

Heading East: (from Seattle)

Travel east on I-90.

Go past Cle Elum.

Take Exit 85 toward Wenatchee.

Turn left at stop sign. Turn right onto WA-970. WA-970 merges with US 97.

Follow US 97 (Blewett Pass) north toward Wenatchee.

Merge onto US 2 E toward Wenatchee.

Follow US 2 over Columbia River north of Wenatchee.

At stoplight, turn left onto US-2/US Hwy 97. Follow US 97 through Pateros and to Brewster.

In Brewster, turn right onto WA-173.

Follow WA-173 through Brewster and across the bridge.

After crossing bridge and curving left, continue along WA-173.

WA-173 becomes Maple St.

Follow Maple St. to Columbia Ave.

Turn right on Columbia Ave. and continue to 12th St.

Bridgeport City Hall will be on your right.

Heading West: (from Spokane)

Travel west on US Hwy 2 to Wilbur.

At Wilbur, turn north on WA-174 through Grand Coulee.

WA-174 becomes WA-17.

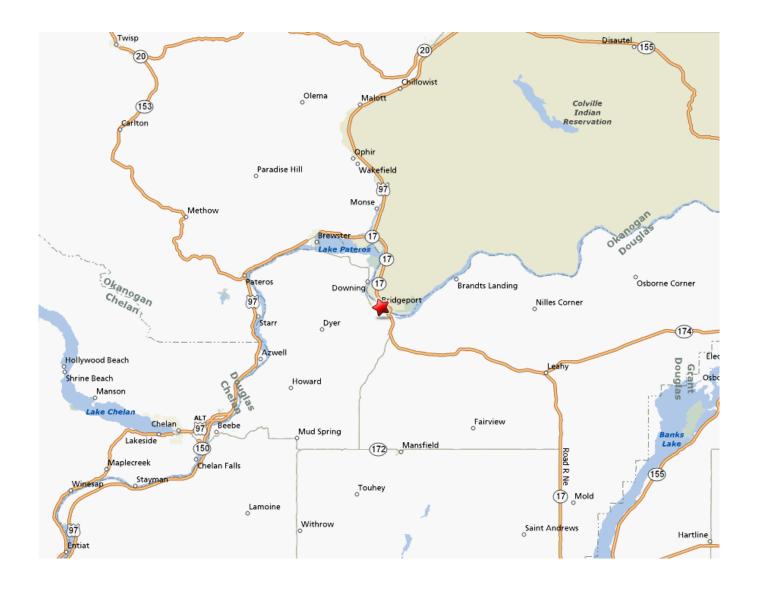
Turn left onto US 97.

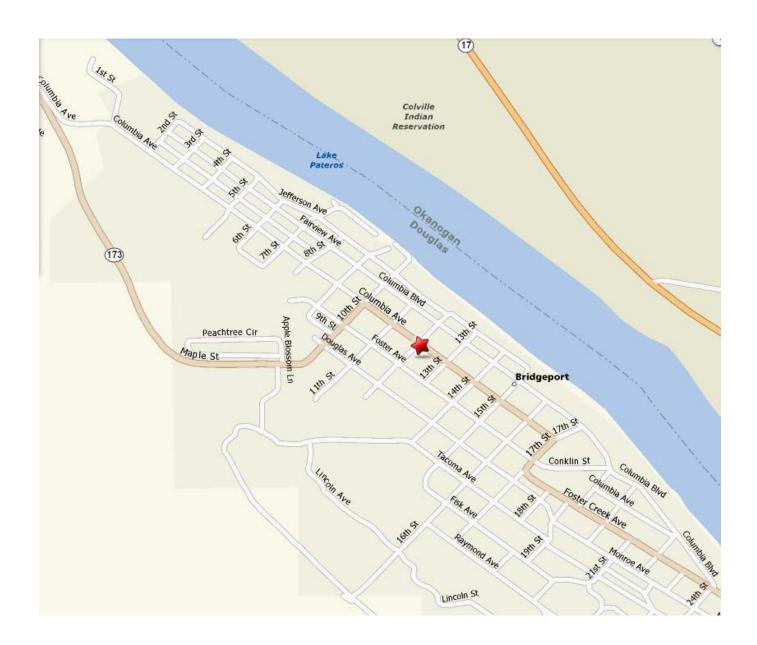
Continue on US 97 through Brewster and Pateros.

At the Wells Dam sign, turn left.

Follow the road down the hill and turn left at intersection.

Follow road toward the Wells Dam gated entrance.





Agenda

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 22, 2008 1:00 pm – 3:00 pm

Meeting Location: Bridgeport City Hall

1206 Columbia Ave. Bridgeport, WA

Conference Dial-in #: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary results for the Recreation Access Study

and the Recreation Needs Evaluation

Time	Topic	Lead
1:00 pm	Review agenda and meeting objectives	Scott Kreiter
1:05 pm	Update on the relicensing schedule	Shane Bickford
1:15 pm	Recreation Access Study Update	Scott Kreiter
1:45 pm	Recreation Needs Evaluation	Kelly Bricker
2:45 pm	Action Items and next steps	Scott Kreiter
3:00 pm	Adjourn	



Wells Project Relicensing Recreation Resource Work Group

DATE:

August 22, 2008

LOCATION:

Bridgeport City Hall

Initials	Name	Affiliation Name	Email
	Andy Lampe	Okanogan County	alampe@co.okanogan.wa.us
	Bill Fraser	State Parks	bill.fraser@parks.wa.gov
	Bill Towey	Colville Tribes	bill.towey@colvilletribes.com
BC (pho	Bob Clubb	Douglas PUD	rclubb@dcpud.org
	Bob Easton	FERC	Robert.Easton@ferc.gov
<u> </u>	Bob Fateley	City of Brewster	fateley@verizon.net
	Brenda Crowell	Okanogan County	bcrowell@co.okanogan.wa.us
	Dennis Beich	WDFW	beichdvb@dfw.wa.gov
	Diane Priebe	BLM	diane_priebe@or.blm.gov
<u>Q</u>	Gail Howe	City of Pateros	pateros@nwi.net swift-stream.com
\frac{\frac}}}}}}{\frac}{\frac}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac}{\frac{\frac}}}}}}{\frac}}}}}}}{\frac{\frac	George Brady	City of Pateros	cascadeb@televar.com
	Gordon Brett	Douglas PUD	gbrett@dcpud.org
X	Jean Hardie	City of Bridgeport	bportcty@nwi.net
phone	Jim Eychaner	RCO	jime@rco.wa.gov
	Jim Harris	State Parks	jim.harris@parks.wa.gov
—/	John Devine	DTA	john.devine@devinetarbell.com
	Lee Webster	City of Brewster	brewstermayor@hotmail.com
	Mary Hunt	Douglas County	mhunt@co.douglas.wa.us

		Mike McKee	WSDOT	mckeem@wsdot.wa.gov
		Mike Palmer	Colville Tribes	mike.palmer@colvilletribes.com
		Murray McCory	Okanogan County	mmccory@co.okanogan.wa.us
	SL	Scott Kreiter	Douglas PUD	skreiter@dcpud.org
	813	Shane Bickford	Douglas PUD	sbickford@dcpud.org
	500	Steve Jenkins	City of Bridgeport	bportcty@nwi.net
on	the phone	Susan Rosebrough	National Parks Service	susan_rosebrough@nps.gov
	42	Tony Eldred	WDFW	eldredte@dfw.wa.gov
	Additional	Attendees		
	Initials	Name	Affiliation Name	Email
	PL (phone) Pa	ctricia Leppart	FERC	
	Psi	pot we	Ey	pirt 461 a ecy. wagov
	PMV	Patrick Verhey	WDFU	verhepmvædtwa-gov
	phone	Kelly Bricker	DTA	
		Morris Shool	WA. ST. PK.	Beinge PORTIONA. GOV

Final Meeting Notes

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 22, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary results for the Recreation Access Study

and the Recreation Needs Evaluation to members of the

Recreation RWG

Wells ILP Update

Douglas PUD provided an update on the Wells Project ILP. The study phase of the ILP is nearly complete. Both of the recreation studies should be finalized by October 2008. The Initial Study Report is due to be filed with FERC on October 15th. The Initial Study Report Meeting is scheduled for October 30th.

Recreation Access Study Update

Douglas PUD provided a progress report on the Recreation Access Study. The report included an overview of methods and preliminary results which were summarized in a handout..

The following comments by the work group will be addressed in the report:

- Chicken Creek Boat Launch is inaccessible during late summer and fall months due to seasonal fluctuations in Washburn Pond. The launch could be improved by adding 8-10 feet of length.
- Aquatic plant growth is not represented correctly for the Peninsula Park swimming area. Plant growth is often a problem there later in the summer.
- The Columbia River system is highly regulated, and reservoir elevations are dependent on operations by upstream dams. Discussion on this should be included in the report, including whether there are feasible methods for providing the public with updates on current reservoir elevations.

Recreation Needs Analysis Study Update

Kelly Bricker from Devine Tarbell & Associates, provided a progress report on the Recreation Needs Analysis. The report included an overview of methods and preliminary results which were summarized in a handout.

The following comments by the work group will be addressed in the report:

- Jim Eychaner will provide additional sources for RV sales and boat sales.
- The Brewster Recreation Survey should be referenced in the report.
- Fish cleaning stations should be identified as a potential need at key recreation facilities.

• Boat docks should be listed separately from boat launch access within the ADA assessment section of the report.

Action Items:

Complete reports will be distributed to FERC and the public on October 15th. Comments on the reports will be filed with FERC as part of the formal Integrated Licensing Process.

There were no action items in addition to those described above.

Email to DTA/Douglas PUD from RCO regarding Recreation Needs Analysis

From: Bricker, Kelly [mailto:Kelly.Bricker@DevineTarbell.com]

Sent: Monday, August 25, 2008 8:59 AM

To: Scott Kreiter

Subject: FW: some data links for you

Hi Scott.

Thank you...I also heard back from Jim with the following, will try to work on this during this week...all the best,

Kel

From: Eychaner, Jim (RCO) [mailto:Jim.Eychaner@rco.wa.gov]

Sent: Friday, August 22, 2008 5:23 PM

To: Bricker, Kelly

Subject: RE: some data links for you

Kelly, one of my key comments on the draft (outline) of the needs assessment is that it starts out with a list of activities with "latent" demand, and subsequently ignores most of the activities on the list and introduces others not on the list with no apparent justification. I'd prefer a consistent approach throughout, where the "high latent demand" activities are discussed and identified as appropriate/inappropriate for the project and why. The future recreation demand piece starting on page 3 is especially piecemeal, with far too much emphasis on fishing and the sudden introduction of ORV stickers when ORV use is not mentioned anywhere else.

I would like to request a discussion of the "enhancements" we published in our 2002 SCORP document. That is, taking each element and discussing the available data and coming to a conclusion based on the data.

Thank you.

Jim Eychaner

From: Bricker, Kelly [mailto:Kelly.Bricker@DevineTarbell.com]

Sent: Friday, August 22, 2008 3:22 PM

To: Eychaner, Jim (RCO)

Subject: RE: some data links for you

Thanks very much!

From: Eychaner, Jim (RCO) [mailto:Jim.Eychaner@rco.wa.gov]

Sent: Friday, August 22, 2008 3:56 PM

To: Bricker, Kelly

Subject: some data links for you

Office of Financial Management Data Book http://www.ofm.wa.gov/databook/environment/vt01.asp

Boat sales http://www.wsg.washington.edu/mas/econcomdev/retailsales.html

Jim Eychaner

Terrestrial RWG Meeting



Terrestrial Resource Work Group

Date: August 26, 2008

Time: 10:00 am – 12:00 pm

Location: Douglas PUD

Directions

Agenda

Sign-In Sheet

Meeting Notes



Directions to Douglas PUD

Douglas PUD 1151 Valley Mall Parkway East Wenatchee, WA 98802 509-884-7191

Heading North: (from Quincy)

Travel north on WA 28 to East Wenatchee.

At the second stoplight, Top Foods will be on your left. Proceed through this stoplight and stay in the <u>right</u> lane.

Follow sign to West 28 – do not cross the bridge.

Turn right at the Ninth St. NE exit. The 7-Eleven will be on your left.

At this four-way stop, turn left onto Valley Mall Parkway.

Douglas PUD is located at the north end of Valley Mall Parkway.

Heading South: (from Brewster)

Travel south on US 97.

Continue straight onto WA 28 (Sunset Hwy). The Columbia River will be on your right.

Follow WA 28 (Sunset Hwy) toward East Wenatchee. Douglas PUD will be on your left near downtown.

Turn left onto Valley Mall Parkway.

Turn left into the Douglas PUD parking lot.

Heading East: (from Seattle)

Travel east on I-90.

Go past Cle Elum.

Take Exit 85 toward Wenatchee.

Turn left at stop sign. Turn right onto WA-970. WA-970 merges with US 97.

Follow US 97 (Blewett Pass) north toward Wenatchee.

Merge onto US 2 E toward Wenatchee.

Follow US 2 over Columbia River north of Wenatchee. At stoplight, turn right onto WA 28 (Sunset Hwy). Follow WA 28 (Sunset Hwy) toward East Wenatchee. Douglas PUD will be on your left near downtown.

Turn left onto Valley Mall Parkway.

Turn left into the Douglas PUD parking lot.

Heading West: (from Spokane)

Travel west on I-90. Go past Moses Lake.

Take Exit 151 toward WA 281 N/Quincy/Wenatchee.

Turn right onto WA 281 N. Follow WA 281 N to Quincy.

At stoplight, a gas station will be on your left.

Turn left onto WA 28 W.

Follow WA 28 to East Wenatchee.

At the second stoplight, Top Foods will be on your left. Proceed through this stoplight and stay in the <u>right</u> lane.

Follow sign to West 28 – do not cross the bridge.

Turn right at the Ninth St. NE exit. The 7-Eleven will be on your left.

At this four-way stop, turn left onto Valley Mall Parkway.

Douglas PUD is located at the north end of Valley Mall Parkway.

From Pangborn Memorial Airport: (East Wenatchee) When leaving the parking lot, turn left onto Airport Way.

At stop sign, turn left onto Grant Rd.

Follow Grant Rd. toward downtown East Wenatchee.

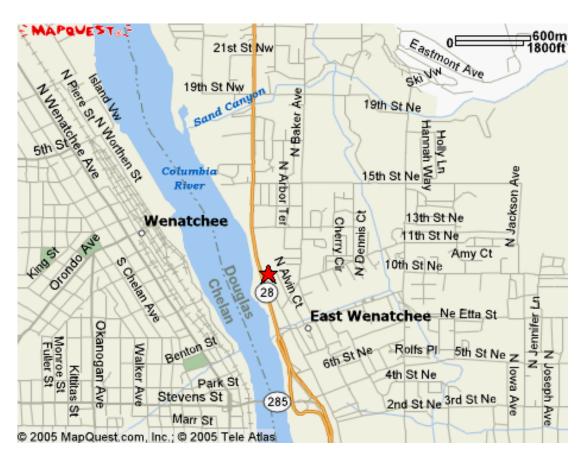
You will pass Safeway and Les Schwab Tires. At stoplight, turn right onto Valley Mall Parkway. Travel along Valley Mall Parkway past downtown.

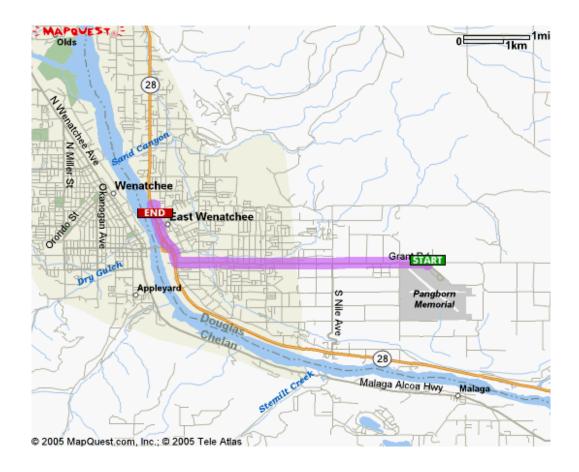
Douglas PUD is located at the north end of Valley Mall Parkway.

Maps Attached:











Douglas PUD 1151 Valley Mall Parkway East Wenatchee, WA 98802 509-884-7191

Agenda

Terrestrial Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 26, 2008 10:00 am – 12:00 pm

Meeting Location: Douglas PUD, East Wenatchee, WA

Conference Dial-in: 509-881-2990 PIN# 327831

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide relicensing study updates and preliminary findings.

Time	Topic	Lead
10:00 am	Review agenda and meeting objectives	Scott Kreiter
10:10 am	Wells Relicensing update and upcoming schedule	Shane Bickford
10:20 am	Piscivorous Wildlife Control Study	Jim McGee
11:00 am	Transmission Line Wildlife and Botanical study	Parametrix
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	



Wells Project Relicensing Terrestrial Resource Work Group

DATE:

August 26, 2008

LOCATION:

Douglas PUD

Initials	Name Beau Patterson	Affiliation Name	Email depud. org beauf edfw. war gov pattebap@dfw.wa.gov
	Bill Towey	Colville Tribes	bill.towey@colvilletribes.com
Que	Bob Clubb	Douglas PUD	rclubb@dcpud.org
	Bob Easton	FERC	Robert.Easton@ferc.gov
	Brenda Crowell	Okanogan County	bcrowell@co.okanogan.wa.us
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PHONE	David Turner	FERC	david.turner@ferc.gov
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	Dinah Demers	Colville Tribes	dinah.demers@colvilletribes.com
	Gordon Brett	Douglas PUD	gbrett@dcpud.org
	Jeff Korth-	WDFW	korthjwk@dfw.wa.gov
JAM7	Jim McGee	Douglas PUD	jmcgee@dcpud.org
	John Devine	DTA	john.devine@devinetarbell.com
<u> </u>	Karen Kelleher	BLM	karen_kelleher@blm.gov
//M/	Marc Hallet	WDFW	hallemh@dfw.wa.gov
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Shane Bickford Douglas PUD sbickford@dcpud.org

Steve Lewis USFWS stephen_lewis@fws.gov

Tony Eldred WDFW eldredte@dfw.wa.gov

Additional Attendees

Initials Name Affiliation Name Email

PMY Patrick Verhey WDFW Verhepmv & Jfw. wa.go

MH Mike Hall Patametrix Mhall parametrix.com

COLIN WORSLEY PARAMETRIX CWOTSley & parametrix.com

patricia.leppert@ferc.gov

skreiter@dcpud.org

FERC

Douglas PUD

Patricia Leppert

Scott Kreiter

Final Meeting Notes

Terrestrial Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 26, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary relicensing study results to members of

the Terrestrial RWG

Wells ILP Update

Douglas PUD provided an update on the Wells Project ILP. The first season study phase of the ILP is nearly complete. The Piscivorous Wildlife Control Study will be finalized by October, 2008. The Transmission Line Wildlife and Botanical Study will be finalized in November, 2008. The Initial Study Report is due to be filed with FERC on October 15th. The Initial Study Report Meeting is scheduled for October 30th.

Piscivorous Wildlife Control Study

Douglas PUD (Jim McGee) provided the group with a progress report on the Piscivorous Wildlife Control Study which is being prepared by the USDA. The report included an overview of methods and preliminary results which were summarized in a handout (attached).

The following comments by the work group will be addressed in the report:

• Include total hatchery fish production and predation projections in report, and remove any hatchery fish production or predation estimates from Pond #1 as these release estimates are believed to be inaccurate by WDFW hatchery staff.

Transmission Line Wildlife and Botanical Study

Mike Hall and Colin Worsley of Parametrix provided a progress report on the Transmission Line Wildlife and Botanical Report. The report included an overview of methods and preliminary results which were summarized in a handout.

The following comments by the work group will be addressed in the report:

- Add a description of the transmission line features and dimensions.
- The Transmission Line Wildlife and Botanical report literature review section should discuss recommended specifications in: Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006, including a basic description of the existing 230kV line.
- Raptor survey reports from Chelan PUD's Burch Mountain transmission line project will be sent to Parametrix.

Action Items:

Complete reports will be distributed to FERC and the public on October 15th. Comments on the reports will be filed with FERC as part of the formal Integrated Licensing Process.

There are no action items in addition to those described above.

Email to Recreation RWG regarding Draft Recreation RWG Meeting Notes

From: Scott Kreiter

Sent: Friday, August 29, 2008 3:55 PM

To: Andy Lampe; Bill Fraser; Bill Towey; Bob Clubb; Bob Dach; Bob Fateley; Brenda Crowell;

David Turner; Dennis Beich; Diane Priebe; Gail Howe; George Brady; Gordon Brett; Jean Hardie; Jim Eychaner; Jim Harris; John Devine; Karen Kelleher; Lee Webster; Mary Hunt; Mary Mayo; Michael Linde; Mike Palmer; Morris Shook; Pat Haley; Pat Irle; Patricia Leppert; Patrick Verhey; Robert Easton; Scott Kreiter; Shane Bickford; Susan Rosebrough; Tony

Eldred

Cc: 'Bricker, Kelly'

Subject: Wells Relicensing: Recreation RWG draft meeting notes

Attachments: Recreation_RWG_Notes_082208.pdf

Recreation RWG members:

Please find attached the draft meeting notes from the August 22 meeting. Please provide any comments by September 5.

Thank you.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

Draft Meeting Notes

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 22, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary results for the Recreation Access Study

and the Recreation Needs Evaluation to members of the

Recreation RWG

Wells ILP Update

Douglas PUD provided an update on the Wells Project ILP. The study phase of the ILP is nearly complete. Both of the recreation studies should be finalized by October 2008. The Initial Study Report is due to be filed with FERC on October 15th. The Initial Study Report Meeting is scheduled for October 30th.

Recreation Access Study Update

Douglas PUD provided a progress report on the Recreation Access Study. The report included an overview of methods and preliminary results which were summarized in a handout..

The following comments by the work group will be addressed in the report:

- Chicken Creek Boat Launch is inaccessible during late summer and fall months due to seasonal fluctuations in Washburn Pond. The launch could be improved by adding 8-10 feet of length.
- Aquatic plant growth is not represented correctly for the Peninsula Park swimming area. Plant growth is often a problem there later in the summer.
- The Columbia River system is highly regulated, and reservoir elevations are dependent on operations by upstream dams. Discussion on this should be included in the report, including whether there are feasible methods for providing the public with updates on current reservoir elevations.

Recreation Needs Analysis Study Update

Kelly Bricker from Devine Tarbell & Associates, provided a progress report on the Recreation Needs Analysis. The report included an overview of methods and preliminary results which were summarized in a handout.

The following comments by the work group will be addressed in the report:

- Jim Eychaner will provide additional sources for RV sales and boat sales.
- The Brewster Recreation Survey should be referenced in the report.
- Fish cleaning stations should be identified as a potential need at key recreation facilities.

• Boat docks should be listed separately from boat launch access within the ADA assessment section of the report.

Action Items:

Complete reports will be distributed to FERC and the public on October 15th. Comments on the reports will be filed with FERC as part of the formal Integrated Licensing Process.

There are no action items in addition to those described above.

Email to Cultural RWG regarding Cultural RWG Meeting Materials

From: Scott Kreiter

Sent: Friday, August 29, 2008 4:01 PM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Karen Kelleher; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob

Whitlam; Robert Easton; Scott Kreiter; Shane Bickford; Timothy Bachelder

Cc: Mary Mayo

Subject: Wells Relicensing: Revised Draft HPMP

Attachments: Wells HPMP Revised 090308.pdf

Wells Relicensing Cultural Resources Work Group:

Please find attached a revised draft of the Wells Project HPMP. We will walk through the changes at our meeting on September 3. New text is highlighted in the document.

As a reminder, the agenda (with call-in number) can be found here.

Have a good holiday weekend.

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD September 3, 2008 9:00 am – 12:00 pm

Meeting Location: Nespelem, WA

Conference Dial-in: (360) 407-3780 PIN#: 779783#

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To: 1) comment on the draft Cultural Resources Site Revisit &

Intensive Archaeological Survey report and; 2) discuss the

revised draft Historic Properties Management Plan

Time	Topic	Lead
9:00 am	Review agenda and meeting objectives	Scott Kreiter
9:10 am	Discuss the draft Site Revisit and Survey Report (Please bring your comments)	Group
10:10 am	Studies complete - Next steps	Group
10:45 am	HPMP comments and discussion	Group
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	

HISTORIC PROPERTIES MANAGEMENT PLAN WELLS HYDROELECTRIC PROJECT FERC NO. 2149

DRAFT – Revised September 3, 2008

Prepared for:
Public Utility District No. 1 of Douglas County
East Wenatchee, Washington

This document contains privileged information and has been removed from this correspondence.

Cultural RWG Meeting



Cultural Resource Work Group

Date: September 3, 2008

Time: 9:00 am – 12:00 pm

Location: Colville Indian Agency

Directions

Agenda

Sign-In Sheet

Meeting Notes



Directions to Colville Indian Agency

Colville Tribes History/Archaeology Department Colville Indian Agency 13 Moses Street Nespelem, Washington

Heading North: (from Wenatchee)

Follow US 97 north to Orondo.

Turn right on WA-2 toward Waterville.

Follow WA-2 to Coulee City.

Turn onto WA-155.

Follow WA-155 through Grand Coulee and Coulee Dam.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading South: (from Okanogan)

Follow US 97 to WA-155.

Follow WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading East: (from Seattle)

Travel east on I-90.

Go past Cle Elum.

Take Exit 85 toward Wenatchee.

Turn left at stop sign. Turn right onto WA-970. WA-970 merges with US 97.

Follow US 97 (Blewett Pass) north toward Wenatchee.

Merge onto US 2 E toward Wenatchee.

Follow US 2 over Columbia River north of Wenatchee.

At stoplight, turn left onto US-2/US Hwy 97.

Follow US 97 north to Orondo.

Turn right on WA-2 toward Waterville.

Follow WA-2 to Coulee City.

Turn onto WA-155.

Follow WA-155 through Grand Coulee and Coulee Dam.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.

Heading West: (from Spokane)

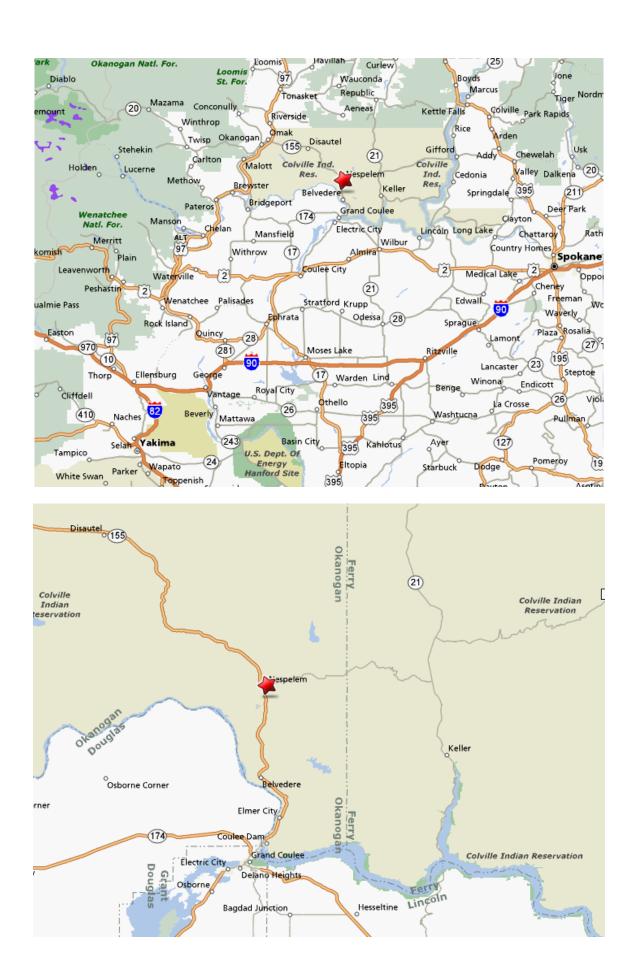
Travel west on US 2 to Wilbur.

At Wilbur, turn north on WA-174 toward Grand Coulee.

Turn north on WA-155.

Continue on WA-155 to Nespelem and the Colville Indian Agency.

The building location is north of the Trading Post.



Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD September 3, 2008 9:00 am – 12:00 pm

Meeting Location: Nespelem, WA

Conference Dial-in: (360) 407-3780 PIN#: 779783#

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To: 1) comment on the draft Cultural Resources Site Revisit &

Intensive Archaeological Survey report and; 2) discuss the

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9:00 am	Review agenda and meeting objectives	Scott Kreiter
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10:45 am	HPMP comments and discussion	Group
11:45 am	Action Items and next steps	Scott Kreiter
12:00 pm	Adjourn	



Wells Project Relicensing Cultural Resource Work Group

DATE:

September 3, 2008

LOCATION:

Nespelem

Initials	Name	Affiliation Name	Email
	Allyson Brooks	DAHP	allyson.brooks@dahp.wa.gov
Phone	Bob Clubb	Douglas PUD	rclubb@dcpud.org
	Bob Easton	FERC	Robert.Easton@ferc.gov
	Camille Pleasants	Colville Tribes	camille.pleasants@colvilletribes.com
	Chuck James	BIA	chuckjames@comcast.net
Phone Phone	Frank Winchell	FERC	frank.winchell@ferc.gov
Phone	Glenn Hartmann	Western Shore	glenn@wshsinc.com
	Guy Moura	Colville Tribes	guy.moura@colvilletribes.com
·	John Devine	DTA	john.devine@devinetarbell.com
	Richard Bailey	BLM	richard_bailey@blm.gov
Phone	Rob Whitlam	DAHP	rob.whitlam@dahp.wa.gov
	Karen Kelleher	BLM	karen_kelleher@blm.gov
SK	Scott Kreiter	Douglas PUD	skreiter@dcpud.org
Phone	Shane Bickford	Douglas PUD	sbickford@dcpud.org
Phone	Tim Bachelder	DTA	timothy.bachelder@devinetarbell.com
+	Gordon Brett	Douglas PLD	Shawner bearus @ colorilletribes con
X	Shawner Bearins	CCT	Shawner bearus @ color Hetribes co

Final Meeting Notes

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD September 3, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To 1) comment on the draft Cultural Resources Site Revisit

and Intensive Archaeological Survey report and; 2) discuss the

revised draft Historic Properties Management Plan

Draft Site Revisit and Survey Report

The workgroup members provided comments on the draft Site Revisit and Survey report. The following issues were discussed:

- A summary table should be added summarizing the total number of sites, site type, eligibility recommendation, etc.
- The RWG agreed that no additional studies are needed as part of the ILP, and that further discussions should focus on management measures through development of the HPMP.

Action: The CCT will make edits to the document based upon comments and feedback received during the meeting. The CCT will then submit the report to Douglas PUD as a final document.

HPMP

The workgroup members provided comments on the draft HPMP. Major comments included:

- Adding an author to the document;
- Revise the summary of the Site Revisit and Intensive Survey (page 7);
- Clarify that the HPMP Coordinator will make decisions regarding whether an action is a ground disturbing activity (page 8);
- Add an appendix for categorical exclusions;
- Add language for hazardous waste training requirements (page 12);
- Add language regarding evaluation of the dam when it reaches age 50 (page 13);
- Add language regarding informal dispute resolution (page 13).

Additional comments will be reflected in the next draft of the HPMP.

Action: Douglas PUD will revise the HPMP and send it to the CRWG for review prior to the next meeting.

Action: The RWG members will review site forms for the 40 priority sites prior to the next meeting. Douglas PUD will send a list of sites and forms.

Action: Douglas PUD will prepare a description of how cultural resources will continue to be managed during the remainder of the current license term.

Items of agreement

The Cultural RWG agreed that no further ILP studies are required to address cultural resources. The focus of the group will now turn to development of site-specific management measures through development of the HPMP.

Items of disagreement

None.

Next Meeting

The next meeting is scheduled for October 9 from 9AM - Noon.

Email to Terrestrial RWG regarding Draft Terrestrial RWG Meeting Notes

Scott Kreiter From:

Sent: Monday, September 08, 2008 11:14 PM

To:

Scott Kreiter; Beau Patterson; 'Bill Towey'; Bob Clubb; 'Bob Dach'; 'Bob Easton'; 'Brenda Crowell'; 'Dan Trochta'; 'Dave Volsen'; 'David Turner'; 'Dennis Beich'; 'Dinah Demers'; Gordon Brett; Jim McGee; 'John Devine'; 'Karen Kelleher'; 'Marc Hallett'; 'Mary Hunt'; Mary Mayo; 'Matt Monda'; 'Neal Hedges'; 'Patricia Leppert'; 'Patrick Verhey'; Shane Bickford;

'Steve Lewis'; 'Tony Eldred'

Subject: Wells Relicensing: Terrestrial RWG Meeting Notes

Terrestrial_RWG_Notes_082608.pdf; Hatchery Predation Summary.pdf; T-line wildlife and Attachments:

botanical survey summary.pdf

Wells Relicensing Terrestrial Work Group:

Please find attached the notes from the August 26, 2008 Terrestrial RWG meeting. Please contact me with comments by September 15.

Thank you. -Scott

Scott Kreiter **Douglas County PUD** 509-881-2327

Draft Meeting Notes

Terrestrial Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 26, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary relicensing study results to members of

the Terrestrial RWG

Wells ILP Update

Douglas PUD provided an update on the Wells Project ILP. The first season study phase of the ILP is nearly complete. The Piscivorous Wildlife Control Study will be finalized by October, 2008. The Transmission Line Wildlife and Botanical Study will be finalized in November, 2008. The Initial Study Report is due to be filed with FERC on October 15th. The Initial Study Report Meeting is scheduled for October 30th.

Piscivorous Wildlife Control Study

Douglas PUD (Jim McGee) provided the group with a progress report on the Piscivorous Wildlife Control Study which is being prepared by the USDA. The report included an overview of methods and preliminary results which were summarized in a handout (attached).

The following comments by the work group will be addressed in the report:

• Include total hatchery fish production and predation projections in report, and remove any hatchery fish production or predation estimates from Pond #1 as these release estimates are believed to be inaccurate by WDFW hatchery staff.

Transmission Line Wildlife and Botanical Study

Mike Hall and Colin Worsley of Parametrix provided a progress report on the Transmission Line Wildlife and Botanical Report. The report included an overview of methods and preliminary results which were summarized in a handout.

The following comments by the work group will be addressed in the report:

- Add a description of the transmission line features and dimensions.
- The report should discuss whether the transmission line features meet standards for birds, and how the Avian Protection Plan addresses future management.
- Raptor survey reports from Chelan PUD's Burch Mountain transmission line project will be sent to Parametrix.

Action Items:

Complete reports will be distributed to FERC and the public on October 15th. Comments on the reports will be filed with FERC as part of the formal Integrated Licensing Process.

There are no action items in addition to those described above.

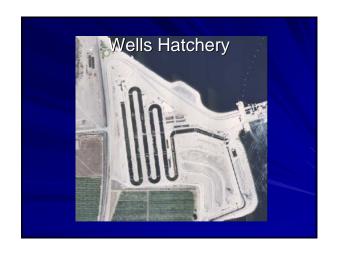
AN EVALUATION OF THE EFFECTS OF AND ALTERNATIVES TO THE EXISTING BIRD AND MAMMAL CONTROL PROGRAMS (Piscivorous Wildlife Control Study)

Study goal

■ The goals of this study were to evaluate existing practices and alternatives, and inform future management decisions related to future piscivorous wildlife control measures at the Wells Project and associated hatchery rearing facilities.

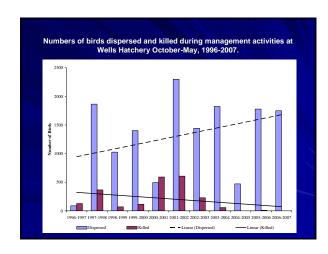
Objectives

- Identify and count the current and historic numbers and species of birds and mammals feeding on fish at the Project hatcheries and in the Wells tailrace:
- Assess the potential impacts of mortality caused by piscivorous birds and mammals to ESA listed, sensitive and recreationally important species;
- Describe each of the existing piscivorous wildlife control measures, including species targeted, reasons for control, frequency of control and effectiveness of the control method;
- Evaluate alternatives, including the costs and benefits of each measure recommended. The study will provide alternative methods of preventing predation of fish at the Wells Project and in hatchery rearing ponds.

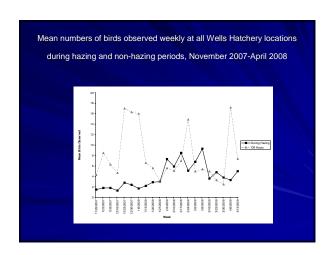




Observations			
 Daytime Hazing Observed 2,288 birds attempting to use the Wells Hatchery. Dispersed 2,274 birds in 810 hazing events (324 vehicle and 486 pyrotechnics). 	 Nighttime – no hazing Observed 6,839 birds using the Wells hatchery without hazing. 		







Wells Hatchery, Doug	las County Washingto	n November	2007-May 2008
Trong riatoriory, Bodg	ac county, rracining	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2007 May 2000.
Species	Foraging attempts	Fish caught	Unknown caugh
Great Blue Heron	522	16	329
Common Merganser	87	0	51
Hooded Merganser	53	0	27
Double-crested Cormorant	34	23	8
Osprey	27	26	(
Belted Kingfisher	26	1	14
Bufflehead	10	0	(
Pied-billed Grebe	9	0	:
Mallard	6	1	(
Common Loon	6	0	:
Common Goldeneye	2	0	:
Total	782	67	436

	om Ponds 1-4 at Wells Hatchery, n, November 2007-May 2008.
POND	Percent Loss
DP1	0.6%
DP2	0.5%
DP3	12.8%
DP4	0.5%

Furbearer Observations
■1 to 4 Raccoon observed 15 times ■1 otter observed 4 times – caught 2 fish

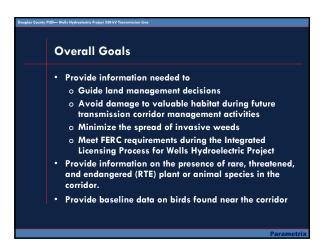
What do we know?

- Local populations of birds altered their daily use of hatchery ponds to avoid hazing.
- The amount of loss in Pond 3 can not be attributed only to bird predation.
- Otter predation was negligible.

Methow Hatchery

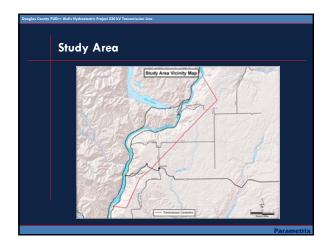
- Only birds observed foraging in raceways entered through open doors on covers.
- Mink tracks were observed outside of the fence although not documented in ponds or raceways.

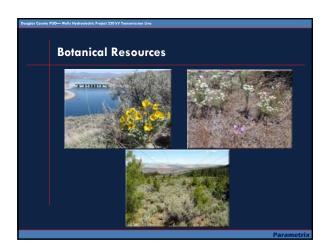




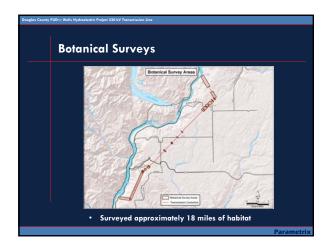
Rare, Threatened, and Endangered Species

- Listed as threatened or endangered under ESA
- Proposed or candidate for listing under ESA
- State listed as threatened or endangered
- State listed as candidate (wildlife only)
- State listed as sensitive (plants only)
- State listed as Review List 1 (plants only)

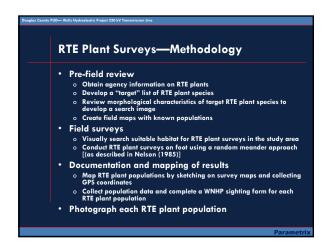


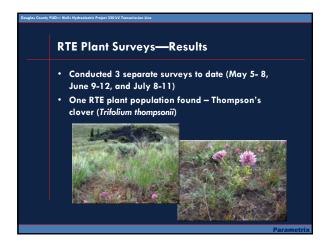


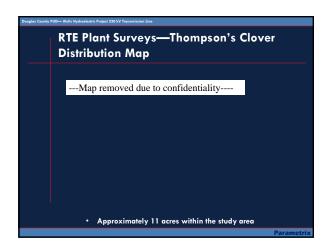
Botanical Study Objectives Identify and document any RTE plant species in the study area. Identify and document any invasive plant species in the study area. Identify and classify the specific vegetation cover types in the study area. Generate detailed information on the species composition and classification of these plant communities and their structures. Create a detailed GIS cover type map of the study area showing the locations of these plant communities, their distribution, areas of coverage, and note locations of habitats of special concern or unique areas observed.

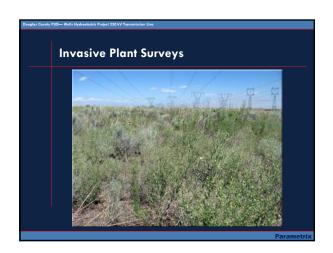


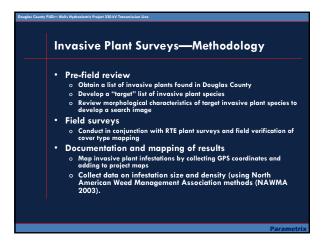


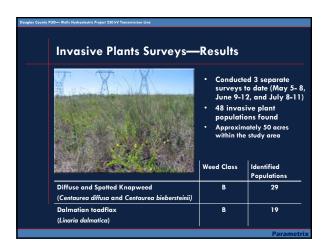


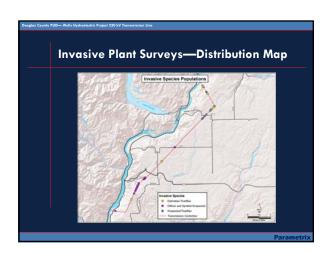


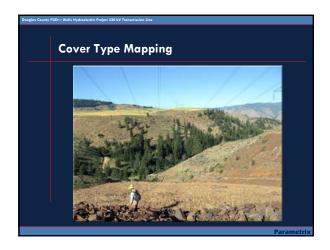


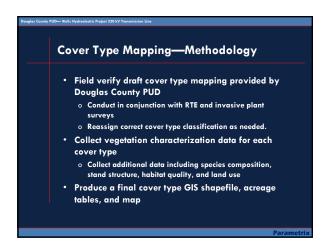


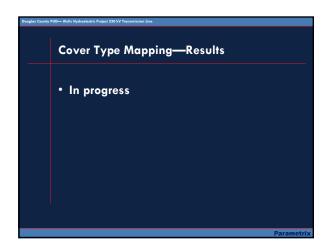




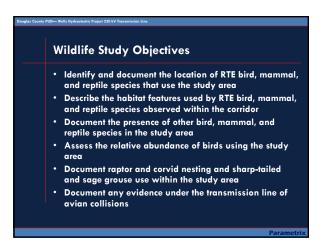




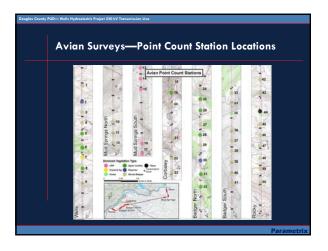


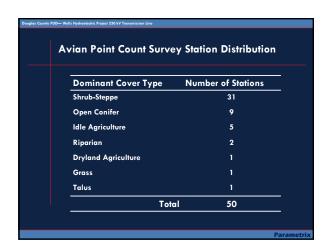


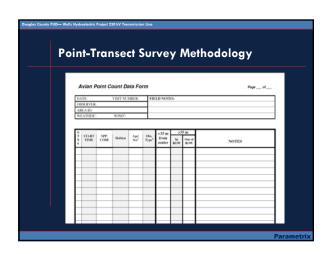


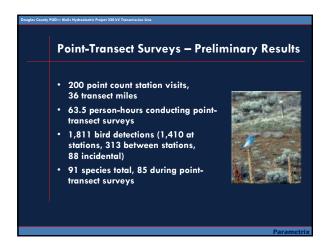


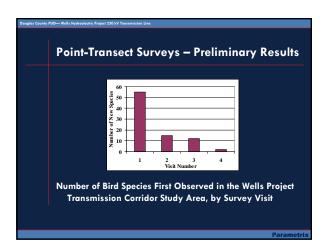
Avian Survey Methodology: Point-Transect Surveys Conducted standard 5-minute point count surveys at stations Recorded bird observations while walking routes between point count stations Between 15 minutes before sunrise and 4 hours after sunrise Breeding season surveys: 6-8 May 19-22 May 17-19 June Four additional surveys to be conducted in September and October to capture the variability of the fall avian migration

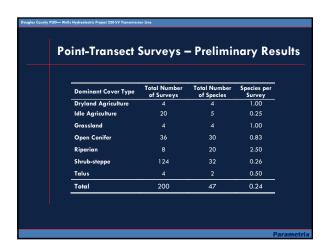


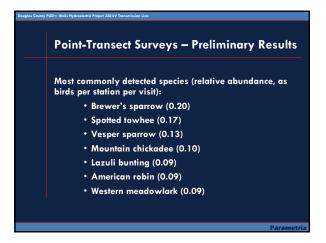






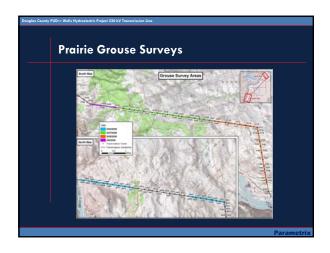


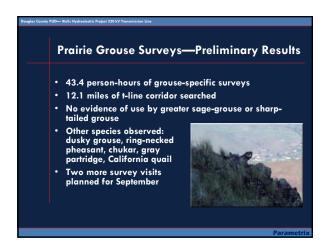


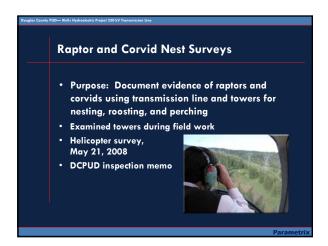


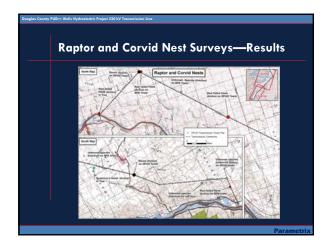


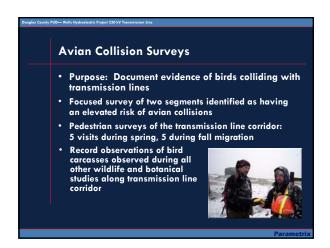
Prairie Grouse Surveys Primary purpose: To collect information on the use of the transmission corridor by greater sage-grouse and sharp-tailed grouse Also record observations of dusky grouse and other game bird species (turkey, ring-necked pheasant, chukar, gray partridge, California quail) Walk transmission line corridor and record evidence of use by gallinaceous birds Collect incidental observations during other surveys

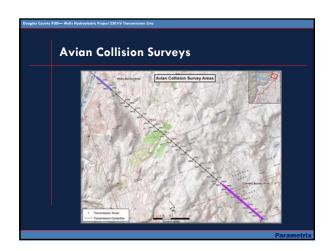


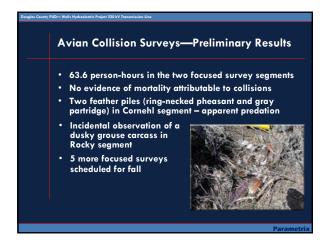


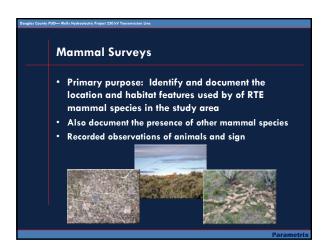


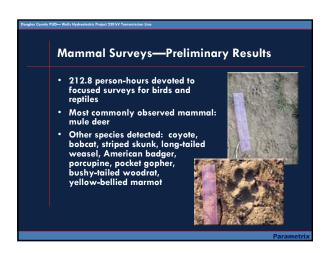


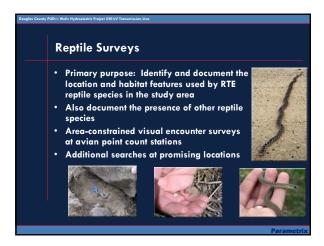


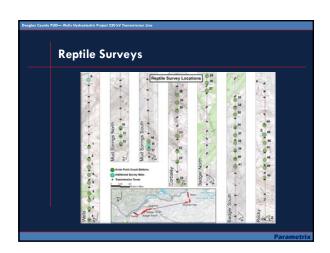


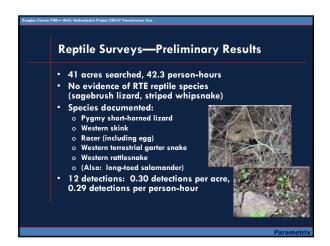


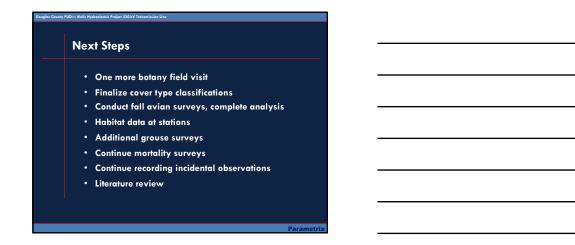












Email to Aquatic RWG regarding Final Aquatic RWG Meeting Notes

From: Bao Le [ble@longviewassociates.com]

Sent: Tuesday, September 09, 2008 2:41 PM

To: 'Art Viola'; Beau Patterson; bill.towey@colvilletribes.com; Bob Clubb; 'Bob Jateff'; Bob Rose;

'Brad James'; 'Bryan Nordlund'; David Turner (david.turner@ferc.gov); 'Dennis Beich'; Irle, Pat

(ECY); 'Joe Peone'; 'John Devine'; 'Jon Merz'; Josh Murauskas; 'Keith Kirkendall';

korthjwk@dfw.wa.gov; 'Mark Miller'; Mary Mayo; Molly Hallock; Patrick Verhey; Robert Easton (robert.easton@ferc.gov); Shane Bickford; Stephen Lewis (Stephen_Lewis@fws.gov); 'Steve

Parker'; Tony Eldred

Subject: Final Meeting Notes Summary: Aquatic Studies Update, August 21, 2008

Attachments: ARWG Meeting_Notes_Summary_08_21_08.pdf

Aquatic RWG members, please find attached a final meeting notes summary from the August 21, 2008 meeting to present and discuss the progress of aquatic studies being implemented in support of the Wells Project Relicensing. Please let me know if you have any questions.

Regards, Bao

Bao Le Long View Associates 7504 Icicle Rd. Leavenworth, WA 98826 503-309-9423

Meeting Notes

Aquatic Resources Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 21, 2008

Meeting Coordinator: Bao Le (503) 309-9423

Meeting Objectives: 1. Provide stakeholders with a progress report on the

Aquatic Resource studies being implemented in support of

the Wells Project Relicensing.

Action Items:

1. Add new WDFW member, Jeff Korth to the distribution lists for the Wells Aquatic Resource Work Group (RWG) and the Wells Aquatic Settlement Work Group (Mary).

2. Email to Jeff Korth the Off-License Settlement Agreement and the six Aquatic Resource Management Plans (Bao).

Aquatic Resource Studies Update Presentations

Prior to the meeting, members of the Aquatic RWG were provided with an Aquatic Resource Studies Update presentation. At the meeting, Douglas PUD and Long View staff presented progress updates of the six Aquatic Resource studies being implemented in support of the Wells Project Relicensing. These six studies are:

- 1. Juvenile Lamprey Predation Study
- 2. Adult Lamprey Passage Study
- 3. Okanogan Toxins Study
- 4. TDG Study
- 5. Water Temperature Study
- 6. DO, pH, Turbidity Study (not FERC required)
- 7. Lamprey Spawning Assessment (not FERC required)

Aquatic RWG members engaged in discussions after each presentation. All members present and on the phone were appreciative of the opportunity to learn more about study progress and generally satisfied with study implementation. There were no substantive comments related to any of the studies.

The next meeting of the Aquatic RWG will take place during the FERC Initial Study Report Meeting on October 30, 2008 at Douglas PUD.

Email to Recreation RWG regarding Final Recreation RWG Meeting Notes

From: Scott Kreiter

Sent: Wednesday, September 10, 2008 9:36 AM

To: Scott Kreiter; 'Andy Lampe'; 'Bill Fraser'; 'Bill Towey'; Bob Clubb; 'Bob Dach'; 'Bob Fateley';

'Brenda Crowell'; 'David Turner'; 'Dennis Beich'; 'Diane Priebe'; 'Gail Howe'; 'George Brady'; Gordon Brett; 'Jean Hardie'; 'Jim Eychaner'; 'Jim Harris'; 'John Devine'; 'Karen Kelleher'; 'Lee Webster'; 'Mary Hunt'; Mary Mayo; 'Michael Linde'; 'Mike Palmer'; 'Morris Shook'; 'Pat Haley';

'Pat Irle'; 'Patricia Leppert'; 'Patrick Verhey'; 'Robert Easton'; Shane Bickford; 'Susan

Rosebrough'; 'Tony Eldred'

Subject: Wells Relicensing: Recreation RWG final meeting notes

Attachments: Final_Recreation_RWG_Notes_082208.pdf

Recreation RWG members:

Please find attached the final meeting notes from the August 22 meeting. No comments were received.

Thank you. -Scott

From: Scott Kreiter

Sent: Friday, August 29, 2008 3:55 PM

To: Andy Lampe; Bill Fraser; Bill Towey; Bob Clubb; Bob Dach; Bob Fateley; Brenda Crowell; David Turner; Dennis Beich; Diane Priebe; Gail Howe; George Brady; Gordon Brett; Jean Hardie; Jim Eychaner; Jim Harris; John Devine; Karen Kelleher; Lee Webster; Mary Hunt; Mary Mayo; Michael Linde; Mike Palmer; Morris Shook; Pat Haley; Pat Irle; Patricia Leppert; Patrick Verhey; Robert Easton; Scott Kreiter; Shane Bickford; Susan Rosebrough; Tony Eldred

Cc: 'Bricker, Kelly'

Subject: Wells Relicensing: Recreation RWG draft meeting notes

Recreation RWG members:

Please find attached the draft meeting notes from the August 22 meeting. Please provide any comments by September 5.

Thank you.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

Final Meeting Notes

Recreation Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 22, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary results for the Recreation Access Study

and the Recreation Needs Evaluation to members of the

Recreation RWG

Wells ILP Update

Douglas PUD provided an update on the Wells Project ILP. The study phase of the ILP is nearly complete. Both of the recreation studies should be finalized by October 2008. The Initial Study Report is due to be filed with FERC on October 15th. The Initial Study Report Meeting is scheduled for October 30th.

Recreation Access Study Update

Douglas PUD provided a progress report on the Recreation Access Study. The report included an overview of methods and preliminary results which were summarized in a handout..

The following comments by the work group will be addressed in the report:

- Chicken Creek Boat Launch is inaccessible during late summer and fall months due to seasonal fluctuations in Washburn Pond. The launch could be improved by adding 8-10 feet of length.
- Aquatic plant growth is not represented correctly for the Peninsula Park swimming area. Plant growth is often a problem there later in the summer.
- The Columbia River system is highly regulated, and reservoir elevations are dependent on operations by upstream dams. Discussion on this should be included in the report, including whether there are feasible methods for providing the public with updates on current reservoir elevations.

Recreation Needs Analysis Study Update

Kelly Bricker from Devine Tarbell & Associates, provided a progress report on the Recreation Needs Analysis. The report included an overview of methods and preliminary results which were summarized in a handout.

The following comments by the work group will be addressed in the report:

- Jim Eychaner will provide additional sources for RV sales and boat sales.
- The Brewster Recreation Survey should be referenced in the report.
- Fish cleaning stations should be identified as a potential need at key recreation facilities.

• Boat docks should be listed separately from boat launch access within the ADA assessment section of the report.

Action Items:

Complete reports will be distributed to FERC and the public on October 15th. Comments on the reports will be filed with FERC as part of the formal Integrated Licensing Process.

There were no action items in addition to those described above.

Email to Terrestrial RWG regarding Revision to Terrestrial RWG Meeting Notes

Subject: FW: Wells Relicensing: Terrestrial RWG Meeting Notes

Attachments: Terrestrial_RWG_Notes_082608.pdf; Hatchery Predation Summary.pdf; T-line wildlife and

botanical survey summary.pdf







Terrestrial_R Hatchery T-line wildlife Notes_082608tion Summaryand botanical ...

----Original Message----

From: Dan_Trochta@fws.gov [mailto:Dan_Trochta@fws.gov]

Sent: Monday, September 15, 2008 11:55 AM

To: Scott Kreiter

Subject: Re: Wells Relicensing: Terrestrial RWG Meeting Notes

Scott, I reviewed the August 26, 2008 Terrestrial RWG Meeting Notes and have one comment. Revise the second bullet under Transmission Line Wildlife and Botanical Study to read: The report should discuss whether the transmission line features meet standards to protect birds from collisions and electrocutions as specified in Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. The report should also discuss how the Avian Protection Plan addresses future management.

09/08/2008 11:14 "Scott Kreiter" <scottk@dcpud.org

"Scott Kreiter" <scottk@dcpud.org>, Beau Patterson" <beaup@dcpud.org>, PM
Bill "towey@colvilletribes.com>, "Bob Clubb" <BobC@dcpud.org>, "Bob Dach"
<rldach@yahoo.com>, "Bob Easton" <Robert.Easton@ferc.gov>, "Brenda
Crowell" <bcrowell@co.okanogan.wa.us>, "Dan Trochta" <dan_trochta@fws.gov>,
"Dave Volsen" <volsedpv@dfw.wa.gov>, "David Turner" <david.turner@ferc.gov>, "Dennis
Beich"beichdvb@dfw.wa.gov>, "Dinah Demers" <dinah.demers@colvilletribes.com>, "Gordon
Brett" <gordonb@dcpud.org>, Jim McGee" <JimM@dcpud.org>, "John
Devine" <john.devine@devinetarbell.com>, "Karen Kelleher" <Karen_Kelleher@blm.gov>, "Marc
Hallett" <hallemh@dfw.wa.gov>, "Mary Hunt" <mhunt@co.douglas.wa.us>, "Mary Mayo"
<MaryM@dcpud.org>, "Matt Monda" <mondamjm@dfw.wa.gov>, "Neal Hedges"
<neal_hedges@or.blm.gov>, "Patricia Leppert"patricia.leppert@ferc.gov>,
"Patrick Verhey" <verhepmv@dfw.wa.gov>, "Shane Bickford" <ShaneB@dcpud.org>, "Steve
Lewis" <stephen_lewis@fws.gov>, "Tony Eldred" <eldredte@dfw.wa.gov>

cc Subject Wells Relicensing: Terrestrial RWG Meeting Notes

Wells Relicensing Terrestrial Work Group:

Please find attached the notes from the August 26, 2008 Terrestrial RWG meeting. Please contact me with comments by September 15.

Thank you. -Scott

Scott Kreiter

Douglas County PUD

509-881-2327

(See attached file: Terrestrial_RWG_Notes_082608.pdf)(See attached file: Hatchery Predation Summary.pdf)(See attached file: T-line wildlife and botanical survey summary.pdf)

Email to Cultural RWG regarding Final Cultural RWG Meeting Notes

From: Scott Kreiter

Sent: Thursday, September 18, 2008 2:02 PM

To: Scott Kreiter; Bob Clubb; 'Camille Pleasants'; 'Chuck James'; David Turner

(david.turner@ferc.gov); 'Frank Winchell'; Glenn Hartmann (glenn@crcwa.com); Gordon

Brett; 'Guy Moura'; 'John Devine'; 'Karen Kelleher'; Margaret Berger

(margaret@crcwa.com); Mary Mayo; 'Richard Bailey'; 'Rob Whitlam'; 'Robert Easton';

Shane Bickford; 'Timothy Bachelder'

Subject: Wells Relicensing: Cultural RWG Final meeting notes

Attachments: Wells_Cultural_RWG_Notes_090308 (final).pdf

Cultural RWG members:

Please find attached the final meeting notes from the September 3 meeting. No comments were received on the draft.

Thank you. -Scott

From: Scott Kreiter

Sent: Wednesday, September 10, 2008 4:55 PM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Karen Kelleher; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob Whitlam; Robert Easton; Scott Kreiter; Shane Bickford;

Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG draft meeting notes

Cultural RWG members:

Please find attached the draft meeting notes from the September 3 meeting. Please provide any comments by September 17.

Don't forget to mark your calendars for our next meeting scheduled for October 9, 9AM - Noon.

Thanks.

-Scott

Scott Kreiter Douglas County PUD 509-881-2327

Final Meeting Notes

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD September 3, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To 1) comment on the draft Cultural Resources Site Revisit

and Intensive Archaeological Survey report and; 2) discuss the

revised draft Historic Properties Management Plan

Draft Site Revisit and Survey Report

The workgroup members provided comments on the draft Site Revisit and Survey report. The following issues were discussed:

- A summary table should be added summarizing the total number of sites, site type, eligibility recommendation, etc.
- The RWG agreed that no additional studies are needed as part of the ILP, and that further discussions should focus on management measures through development of the HPMP.

Action: The CCT will make edits to the document based upon comments and feedback received during the meeting. The CCT will then submit the report to Douglas PUD as a final document.

HPMP

The workgroup members provided comments on the draft HPMP. Major comments included:

- Adding an author to the document;
- Revise the summary of the Site Revisit and Intensive Survey (page 7);
- Clarify that the HPMP Coordinator will make decisions regarding whether an action is a ground disturbing activity (page 8);
- Add an appendix for categorical exclusions;
- Add language for hazardous waste training requirements (page 12);
- Add language regarding evaluation of the dam when it reaches age 50 (page 13);
- Add language regarding informal dispute resolution (page 13).

Additional comments will be reflected in the next draft of the HPMP.

Action: Douglas PUD will revise the HPMP and send it to the CRWG for review prior to the next meeting.

Action: The RWG members will review site forms for the 40 priority sites prior to the next meeting. Douglas PUD will send a list of sites and forms.

Action: Douglas PUD will prepare a description of how cultural resources will continue to be managed during the remainder of the current license term.

Items of agreement

The Cultural RWG agreed that no further ILP studies are required to address cultural resources. The focus of the group will now turn to development of site-specific management measures through development of the HPMP.

Items of disagreement

None.

Next Meeting

The next meeting is scheduled for October 9 from 9AM - Noon.

Email to USFWS from Douglas PUD regarding Revision to Terrestrial RWG Meeting Notes

Subject: FW: Wells Relicensing: Terrestrial RWG Meeting Notes

----Original Message----

From: Scott Kreiter

Sent: Monday, September 22, 2008 1:42 PM

To: 'Dan_Trochta@fws.gov'

Cc: Shane Bickford; Mary Mayo; Beau Patterson; Jim McGee Subject: RE: Wells Relicensing: Terrestrial RWG Meeting Notes

Dan,

Thank you for your phone call today to follow up on this. This email is just a quick summary of our conversation to finish out the record. Please reply if I misrepresent anything here.

We agreed on the following:

- 1. The EA (Exhibit E) is an appropriate place to analyze collision/electrocution potential.
- 2. The License Application or the appropriate management plan should include discussion of collision/electrocution for any new Wells Project transmission lines.
- 3. The Transmission Line Wildlife and Botanical report literature review section should discuss recommended specifications in: Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006, including a basic description of the existing 230kV line.

Thanks. -Scott

----Original Message----

From: Scott Kreiter

Sent: Wednesday, September 17, 2008 3:34 PM

To: 'Dan_Trochta@fws.gov' Cc: Shane Bickford; Mary Mayo

Subject: RE: Wells Relicensing: Terrestrial RWG Meeting Notes

Dan,

Thank you for your comment. The issue you raise here may be more appropriately addressed in the Exhibit E - Environmental Analysis, of the license application (i.e. the EA).

Within the scope of the study plan, Parametrix looked for evidence of collisions, but was not asked to analyze collision/electrocution potential. However, Parametrix will include brief discussion on this issue in the literature review section of the report, including discussion of electrocution/collision potential as described in Douglas PUD's Avian Protection Plan. But the study plan did not include objectives for analyzing collision/electrocution potential.

Considering this, would it be acceptable to you if we defer this analysis to the EA? Please feel free to contact me and/or Shane if you would like to discuss.

Thanks.

-Scott

Email to Terrestrial RWG regarding Final Terrestrial RWG Meeting Notes

From: Scott Kreiter

Sent: Monday, September 22, 2008 2:00 PM

To: Beau Patterson; Bill Towey; Bob Clubb; Bob Dach; Bob Easton; Brenda Crowell; Dan Trochta;

Dave Volsen; David Turner; Dennis Beich; Dinah Demers; Gordon Brett; Jeff Korth; Jim McGee; John Devine; Karen Kelleher; Marc Hallett; Mary Hunt; Mary Mayo; Matt Monda; Patricia Leppert; Patrick Verhey; Scott Kreiter; Shane Bickford; Steve Lewis; Tony Eldred

Cc: 'Mike Hall'

Subject: Wells Relicensing: Terrestrial RWG Meeting Notes (Final)

Attachments: Terrestrial RWG Notes 082608.pdf; Hatchery Predation Summary.pdf; T-line wildlife and

botanical survey summary.pdf

Wells Relicensing Terrestrial Work Group:

Please find attached the final August 26, 2008 Terrestrial Work Group meeting notes.

Thank you. -Scott

Scott Kreiter Douglas County PUD 509-881-2327

From: Scott Kreiter

Sent: Monday, September 08, 2008 11:14 PM

To: Scott Kreiter; Beau Patterson; 'Bill Towey'; Bob Clubb; 'Bob Dach'; 'Bob Easton'; 'Brenda Crowell'; 'Dan Trochta'; 'Dave Volsen'; 'David Turner'; 'Dennis Beich'; 'Dinah Demers'; Gordon Brett; Jim McGee; 'John Devine'; 'Karen Kelleher'; 'Marc Hallett'; 'Mary Hunt'; Mary Mayo; 'Matt Monda'; 'Neal Hedges'; 'Patricia Leppert'; 'Patrick

Verhey'; Shane Bickford; 'Steve Lewis'; 'Tony Eldred' **Subject:** Wells Relicensing: Terrestrial RWG Meeting Notes

Wells Relicensing Terrestrial Work Group:

Please find attached the notes from the August 26, 2008 Terrestrial RWG meeting. Please contact me with comments by September 15.

Thank you. -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Final Meeting Notes

Terrestrial Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD August 26, 2008

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To provide preliminary relicensing study results to members of

the Terrestrial RWG

Wells ILP Update

Douglas PUD provided an update on the Wells Project ILP. The first season study phase of the ILP is nearly complete. The Piscivorous Wildlife Control Study will be finalized by October, 2008. The Transmission Line Wildlife and Botanical Study will be finalized in November, 2008. The Initial Study Report is due to be filed with FERC on October 15th. The Initial Study Report Meeting is scheduled for October 30th.

Piscivorous Wildlife Control Study

Douglas PUD (Jim McGee) provided the group with a progress report on the Piscivorous Wildlife Control Study which is being prepared by the USDA. The report included an overview of methods and preliminary results which were summarized in a handout (attached).

The following comments by the work group will be addressed in the report:

• Include total hatchery fish production and predation projections in report, and remove any hatchery fish production or predation estimates from Pond #1 as these release estimates are believed to be inaccurate by WDFW hatchery staff.

Transmission Line Wildlife and Botanical Study

Mike Hall and Colin Worsley of Parametrix provided a progress report on the Transmission Line Wildlife and Botanical Report. The report included an overview of methods and preliminary results which were summarized in a handout.

The following comments by the work group will be addressed in the report:

- Add a description of the transmission line features and dimensions.
- The Transmission Line Wildlife and Botanical report literature review section should discuss recommended specifications in: Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006, including a basic description of the existing 230kV line.
- Raptor survey reports from Chelan PUD's Burch Mountain transmission line project will be sent to Parametrix.

Action Items:

Complete reports will be distributed to FERC and the public on October 15th. Comments on the reports will be filed with FERC as part of the formal Integrated Licensing Process.

There are no action items in addition to those described above.

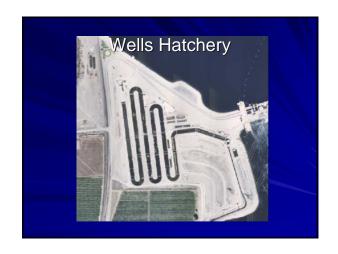
AN EVALUATION OF THE EFFECTS OF AND ALTERNATIVES TO THE EXISTING BIRD AND MAMMAL CONTROL PROGRAMS (Piscivorous Wildlife Control Study)

Study goal

■ The goals of this study were to evaluate existing practices and alternatives, and inform future management decisions related to future piscivorous wildlife control measures at the Wells Project and associated hatchery rearing facilities.

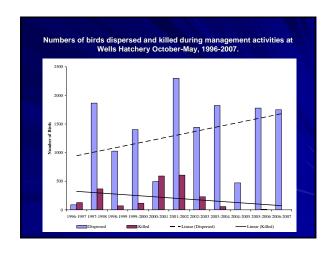
Objectives

- Identify and count the current and historic numbers and species of birds and mammals feeding on fish at the Project hatcheries and in the Wells tailrace:
- Assess the potential impacts of mortality caused by piscivorous birds and mammals to ESA listed, sensitive and recreationally important species;
- Describe each of the existing piscivorous wildlife control measures, including species targeted, reasons for control, frequency of control and effectiveness of the control method;
- Evaluate alternatives, including the costs and benefits of each measure recommended. The study will provide alternative methods of preventing predation of fish at the Wells Project and in hatchery rearing ponds.

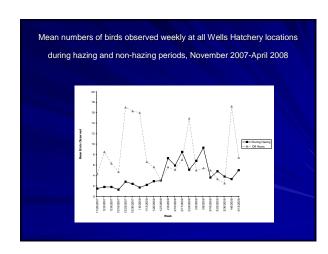




Observations				
 Nighttime – no hazing Observed 6,839 birds using the Wells hatchery without hazing. 				







Wells Hatchery, Doug	las County Washingto	n November	2007-May 2008
Wells Hatchery, Doug	ido Codrity, Washingto	on, recordinger	2007 May 2000.
Species	Foraging attempts	Fish caught	Unknown caugh
Great Blue Heron	522	16	329
Common Merganser	87	0	51
Hooded Merganser	53	0	27
Double-crested Cormorant	34	23	8
Osprey	27	26	C
Belted Kinglisher	26	1	14
Bufflehead	10	0	C
Pied-billed Grebe	9	0	2
Mallard	6	1	C
Common Loon	6	0	3
Common Goldeneye	2	0	2
Total	782	67	436

	om Ponds 1-4 at Wells Hatchery, n, November 2007-May 2008.
POND	Percent Loss
DP1	0.6%
DP2	0.5%
DP3	12.8%
DP4	0.5%

Furbearer Observations 1 to 4 Raccoon observed 15 times 1 otter observed 4 times – caught 2 fish

What do we know?

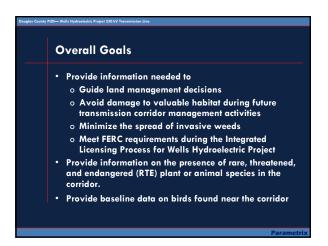
- Local populations of birds altered their daily use of hatchery ponds to avoid hazing.
- The amount of loss in Pond 3 can not be attributed only to bird predation.
- Otter predation was negligible.

Methow Hatchery

- Only birds observed foraging in raceways entered through open doors on covers.
- Mink tracks were observed outside of the fence although not documented in ponds or raceways.

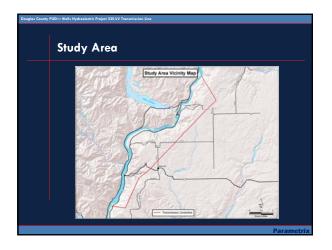
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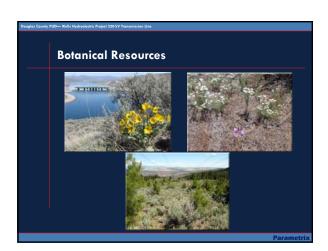




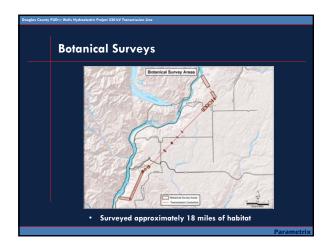
Rare, Threatened, and Endangered Species

- Listed as threatened or endangered under ESA
- Proposed or candidate for listing under ESA
- State listed as threatened or endangered
- State listed as candidate (wildlife only)
- State listed as sensitive (plants only)
- State listed as Review List 1 (plants only)

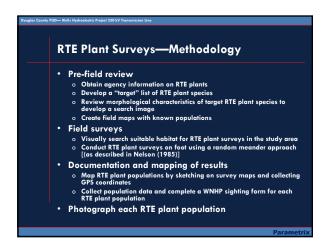


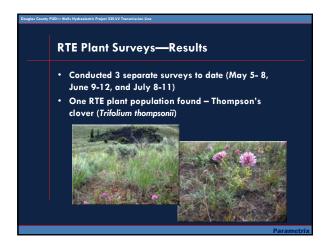


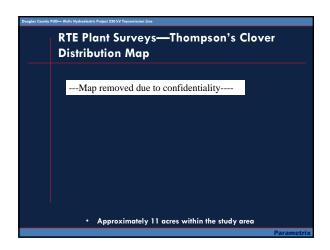
Botanical Study Objectives Identify and document any RTE plant species in the study area. Identify and document any invasive plant species in the study area. Identify and classify the specific vegetation cover types in the study area. Generate detailed information on the species composition and classification of these plant communities and their structures. Create a detailed GIS cover type map of the study area showing the locations of these plant communities, their distribution, areas of coverage, and note locations of habitats of special concern or unique areas observed.

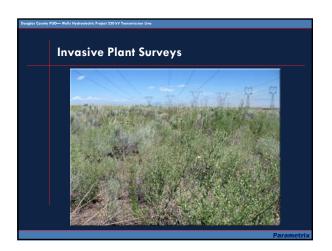


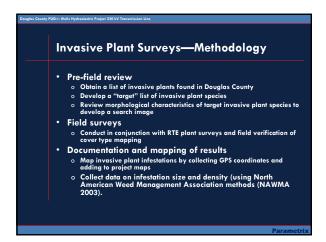


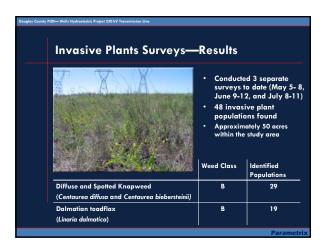


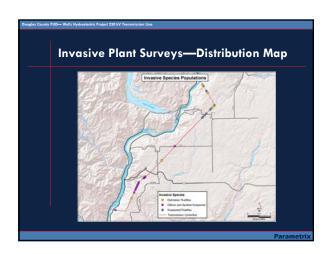


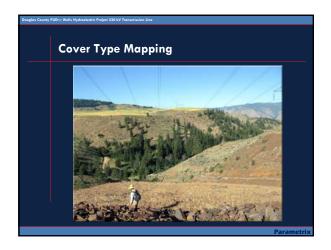


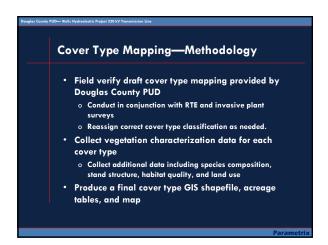


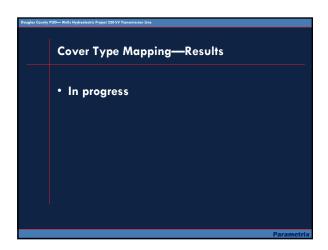




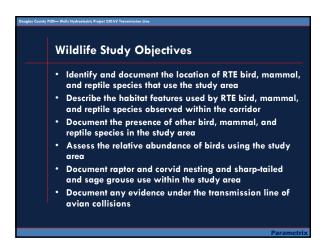




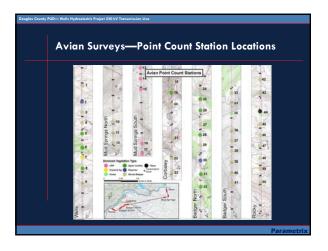


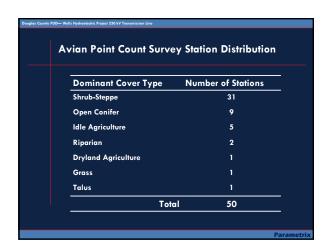


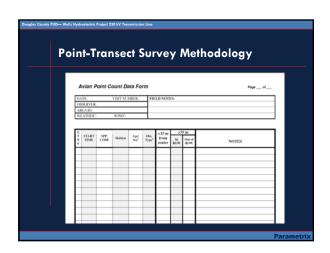


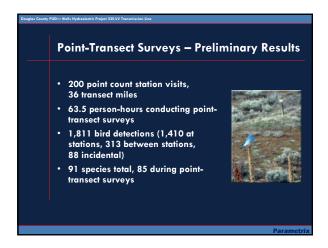


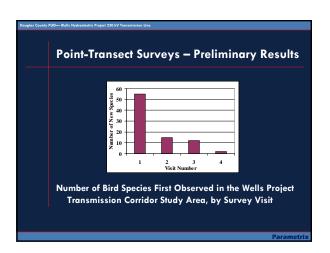
Avian Survey Methodology: Point-Transect Surveys Conducted standard 5-minute point count surveys at stations Recorded bird observations while walking routes between point count stations Between 15 minutes before sunrise and 4 hours after sunrise Breeding season surveys: 6-8 May 19-22 May 17-19 June Four additional surveys to be conducted in September and October to capture the variability of the fall avian migration

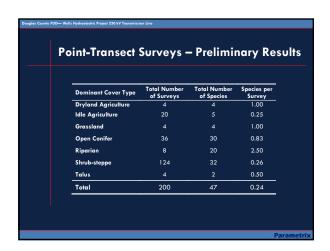


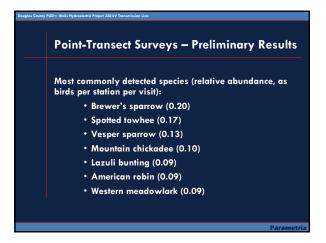


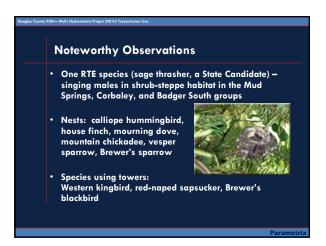




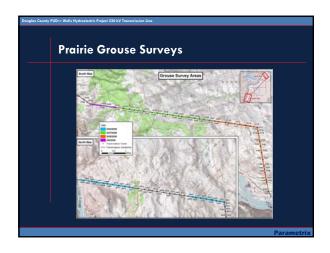


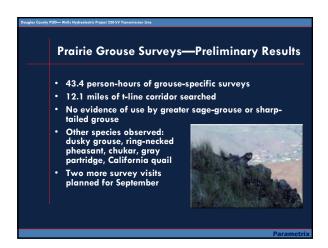


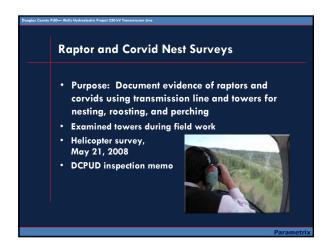


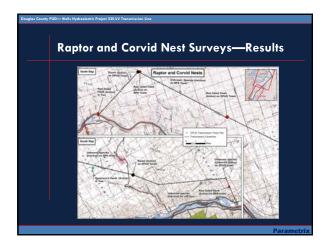


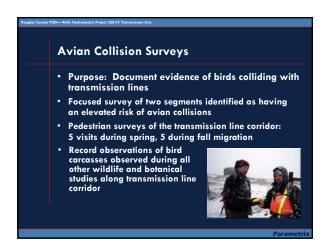
Prairie Grouse Surveys Primary purpose: To collect information on the use of the transmission corridor by greater sage-grouse and sharp-tailed grouse Also record observations of dusky grouse and other game bird species (turkey, ring-necked pheasant, chukar, gray partridge, California quail) Walk transmission line corridor and record evidence of use by gallinaceous birds Collect incidental observations during other surveys

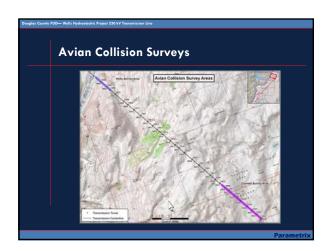


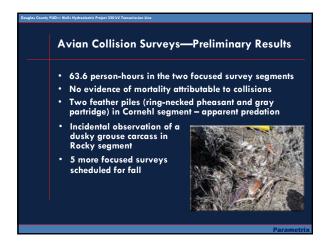


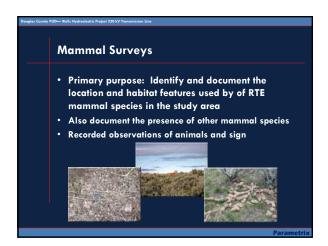


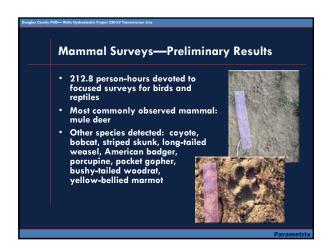


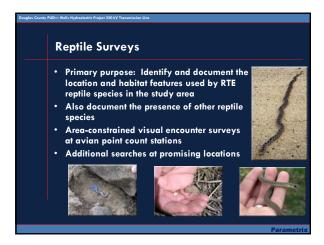


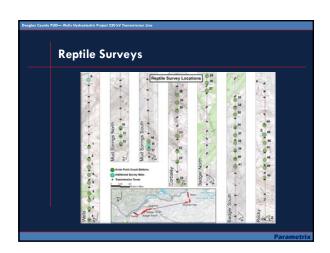


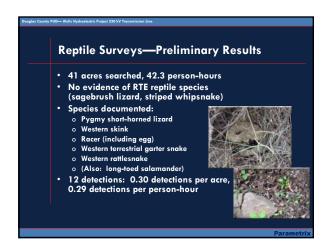












as Count	sty PUD— Wells Hydroelectric Project 230 kV Transmission Line
	Next Steps
	One more botany field visit
	Finalize cover type classifications
	Conduct fall avian surveys, complete analysis
	Habitat data at stations
	Additional grouse surveys
	Continue mortality surveys
	Continue recording incidental observations
	Literature review
	Parametri

Email to Cultural RWG regarding Agenda for Cultural RWG Meeting

From: Scott Kreiter

Sent: Friday, September 26, 2008 3:20 PM

To: Bob Clubb; Camille Pleasants; Chuck James; David Turner (david.turner@ferc.gov); Frank

Winchell; Glenn Hartmann (glenn@crcwa.com); Gordon Brett; Guy Moura; John Devine; Karen Kelleher; Margaret Berger (margaret@crcwa.com); Mary Mayo; Richard Bailey; Rob

Whitlam; Robert Easton; Scott Kreiter; Shane Bickford; Timothy Bachelder

Subject: Wells Relicensing: Cultural RWG Meeting Agenda

Attachments: Wells_Cultural_RWG_Agenda_100908.pdf

Wells Cultural Resource Work Group Members:

Please find attached the agenda for the October 9 field trip. We will meet at Columbia Cove boat launch in Brewster at 9:00 AM and return at 3:00 PM. Lunches will be provided by Douglas PUD.

A map to the boat launch is included in the attached agenda.

Please contact me if you have any questions.

Thank you! -Scott

Scott Kreiter Douglas County PUD 509-881-2327

Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD October 9, 2008 9:00 am – 3:00 pm

Meeting Location: Wells Reservoir – Meet at Columbia Cove Boat Launch in

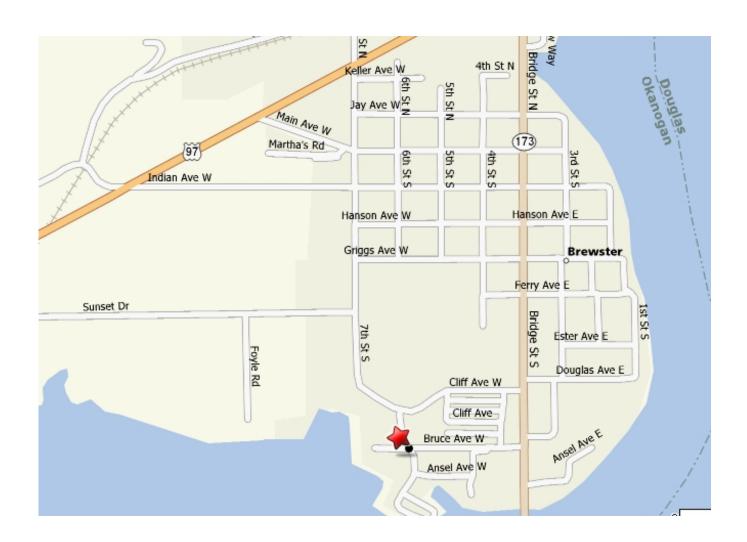
Brewster, WA

Meeting Coordinator: Scott Kreiter (509) 881-2327

Meeting Objective: To visit the priority sites identified in the Site Revisit and

Inventory Report

Time	Topic	Lead
9:00 am	Meet at boat launch	Group
9:10 am	Leave boat launch	Group
12:00	Lunch (Provided by Douglas PUD)	Group
2:45 pm	Action items and next steps	Scott Kreiter
3:00 pm	Arrive at boat launch - Adjourn	Group



Cultural RWG Meeting



Cultural Resource Work Group

Date: October 9, 2008

Time: 9:00 am - 3:00 pm

Location: Brewster

Columbia Cove Boat Launch—Near Columbia

Cove Community Center

Directions

Agenda



Directions to Columbia Cove Community Center

Columbia Cove Community Center 601 West Cliff Ave. Brewster, WA

Heading North: (from Wenatchee)

Follow US 97 through Pateros and to Brewster.

Turn right on Bridge St.

Follow Bridge St. through Brewster.

Turn right on Cliff Ave.

Heading South: (from Okanogan)

Follow US 97 to Brewster. Turn left on Bridge St.

Follow Bridge St. through Brewster.

Turn right on Cliff Ave.

Heading East: (from Seattle)

Travel east on I-90. Go past Cle Elum.

Take Exit 85 toward Wenatchee.

Turn left at stop sign.
Turn right onto WA-970.
WA-970 merges with US 97.

Follow US 97 (Blewett Pass) north toward Wenatchee.

Merge onto US 2 E toward Wenatchee.

Follow US 2 over Columbia River north of Wenatchee.

At stoplight, turn left onto US-2/US Hwy 97. Follow US 97 through Pateros and to Brewster.

Turn right on Bridge St.

Follow Bridge St. through Brewster.

Turn right on Cliff Ave.

Heading West: (from Spokane)

Travel west on US Hwy 2 to Wilbur.

At Wilbur, turn north on WA-174 through Grand Coulee.

WA-174 becomes WA-17.

Turn left onto US 97.

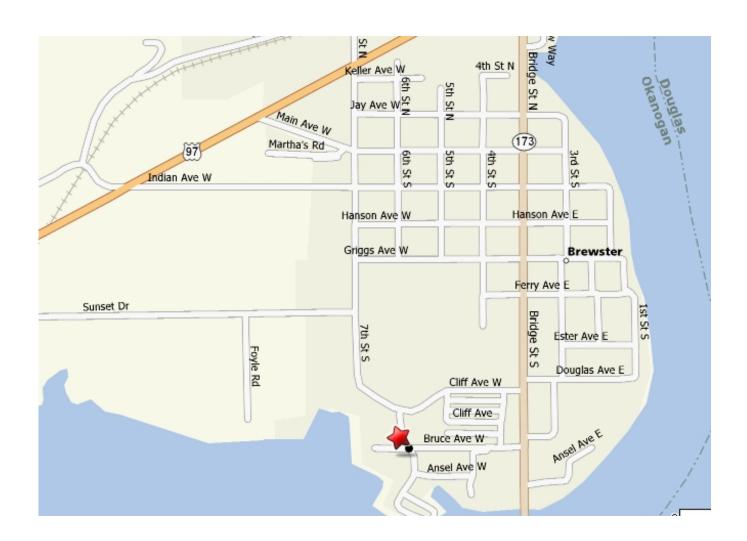
Continue on US 97 to Brewster.

Turn left on Bridge St.

Follow Bridge St. through Brewster.

Turn right on Cliff Ave.





Agenda

Cultural Resource Work Group

Wells Hydroelectric Project Relicensing Douglas County PUD October 9, 2008 9:00 am – 3:00 pm

Meeting Location: Wells Reservoir – Meet at Columbia Cove Boat Launch in

Brewster, WA

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