9 References


Andonaegui, C. 2001. Salmon, steelhead, and bull trout habitat limiting factors for the Wenatchee subbasin (Water Resource Inventory Area 45) and Portions of WRIA 40 within Chelan County (Squilchuck, Stemilt and Colockum drainages). Final draft report. WSCC.


Beamesderfer and A.A. Nigro, eds.1995. Status and habitat requirements of the white sturgeon populations in the Columbia River downstream from McNary Dam. Vol 1. Final Report to Bonneville Power Administration, Portland, OR.


Bell, M. 1990. Fisheries handbook of engineering requirements and biological criteria. Fish Passage Development and Evaluation Program, Corp of Engineers, North Pacific Division, Portland, OR.


Power Administration. Center for Salmonid and Freshwater Species at Risk, Univ. of ID, Moscow, ID. 178 p.


———. 1984. Lake Chelan fisheries. (WDG) Washington Department of Game


———. 1965. Ecology of spring chinook salmon. Fish Comm. of OR. Annual progress report. 11/1/63-12/31/64. Portland, OR.


Craig, J. A. and A. J. Suomela. 1941. Time of appearance of the runs of salmon and steelhead trout native to the Wenatchee, Entiat, Methow, and Okanogan rivers. Unpub. MS. USFWS.


Economic and Engineering Services, Inc. and Golder Associate, Inc. 1998. PUD No. 1 of Chelan County Lake Wenatchee ground water assessment: Wenatchee, Washington.


Kelly-Ringel, B., and J. DeLa Vergne. 2003 DRAFT. Multiple-year seasonal movements of migratory bull trout in the Wenatchee River drainage and in the Columbia River, Washington. USFWS, Leavenworth, WA


Leman, B.D. 1968. Annual PUD report. Biological Section, Engineering Dept., Public Utility District 1, Chelan County, Wenatchee, WA.


Mallatt, J. 1983. Laboratory growth of larval lampreys (Lampetra (Entosphenus) tridentata Richardson) at different food concentrations and animal densities. Journal of Fish Biology 22:293-301.


McCabe, Jr., and Charles A. Tracy 1993. Spawning characteristics and early life history of white sturgeon Acipenser transmontanus in the Lower Columbia River. In: R. C. Beamesderfer and A. A. Nigro (editors), Status and habitat requirements of the white sturgeon populations in the Columbia River downstream from McNary Dam, Volume I, p. 19-46, Bonneville Power Administration, Contract DE-AI79-86BP63584


———. Overview of artificial and natural propagation of coho salmon (Oncorhynchus kisutch) on the mid-Columbia River. Rept. No. FRI/FAO-84-4. USFWS Leavenworth, WA


Oregon Department of Fish and Wildlife et al. 1989. Grande Ronde River subbasin salmon and steelhead production plan, Columbia Basin System Planning, funds provided by NPPC and the Columbia Basin Fish and Wildlife Authority.


———. 1984. Habitat use and species interactions of juvenile cutthroat trout (Salmo clarki lewisi) and bull trout (Salvelinus confluentes) in the upper Flathead River basin. Master's thesis. University of Idaho, Moscow.


Regional Technical Team (RTT) 2004. A biologic strategy to protect and restore salmonid habitat in the upper Columbia region. (Authored by Bob Bugert).


Ringel, K. 1998. Analysis of habitat and fish populations in Icicle Creek from the upper barriers of Leavenworth NFH to upstream Snow Creek at boulder Falls. MCRFRO. Leavenworth, Washington.


Shapovalov, L., and A. C. Taft. 1954. The life histories of the steelhead rainbow trout (Salmo gairdneri gairdneri) and silver salmon (Oncorhynchus kisutch) with special reference to Waddell Creek, California, and recommendations regarding their management. California Dept. of Fish and Game, Fish. Bull. No. 98. 375 p.


## 10 Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACOE</td>
<td>US Army Corps of Engineers</td>
</tr>
<tr>
<td>AF</td>
<td>Acre feet</td>
</tr>
<tr>
<td>AFWP</td>
<td>Agriculture Fish and Wildlife Program</td>
</tr>
<tr>
<td>BLM</td>
<td>Bureau of Land Management</td>
</tr>
<tr>
<td>BPA</td>
<td>Bonneville Power Administration</td>
</tr>
<tr>
<td>BOR</td>
<td>Bureau of Reclamation</td>
</tr>
<tr>
<td>BiOP</td>
<td>Biological opinion</td>
</tr>
<tr>
<td>BRT</td>
<td>Biological review team</td>
</tr>
<tr>
<td>CAA</td>
<td>Clean Air Act</td>
</tr>
<tr>
<td>CBFWA</td>
<td>Columbia Basin Fish and Wildlife Authority</td>
</tr>
<tr>
<td>CCCD</td>
<td>Chelan County Conservation District</td>
</tr>
<tr>
<td>CCD</td>
<td>County Conservation District</td>
</tr>
<tr>
<td>CCP</td>
<td>Columbia Cascade Province</td>
</tr>
<tr>
<td>CCRP</td>
<td>Continuous Conservation Reserve Program</td>
</tr>
<tr>
<td>cfs</td>
<td>Cubic feet per second</td>
</tr>
<tr>
<td>Colville Tribes</td>
<td>Confederated Tribes of the Colville Reservation</td>
</tr>
<tr>
<td>CP</td>
<td>Cover practices</td>
</tr>
<tr>
<td>CREP</td>
<td>Conservation Reserve Enhancement Program</td>
</tr>
<tr>
<td>CRITFC</td>
<td>Columbia River Inter-Tribal Fish Commission</td>
</tr>
<tr>
<td>CRMP</td>
<td>Columbia River Management Plan</td>
</tr>
<tr>
<td>CRP</td>
<td>Conservation Reserve Program</td>
</tr>
<tr>
<td>CWA</td>
<td>Clean Water Act</td>
</tr>
<tr>
<td>CZMA</td>
<td>Coastal Zone Management Act</td>
</tr>
<tr>
<td>DBH</td>
<td>Diameter at breast height</td>
</tr>
<tr>
<td>DPS</td>
<td>Distinct population segment</td>
</tr>
<tr>
<td>EA</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>EDT</td>
<td>Ecosystem Diagnostic &amp; Treatment</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>EPA</td>
<td>US Environmental Protection Agency</td>
</tr>
<tr>
<td>EQUIP</td>
<td>Environmental Quality Incentives Program</td>
</tr>
<tr>
<td>ESA</td>
<td>Endangered Species Act</td>
</tr>
<tr>
<td>ESU</td>
<td>Ecologically Significant Unit</td>
</tr>
<tr>
<td>FCRPS</td>
<td>Federal Columbia River Operating System</td>
</tr>
<tr>
<td>FEIS</td>
<td>Final Environmental Impact Statement</td>
</tr>
<tr>
<td>FERC</td>
<td>Federal Energy Regulatory Commission</td>
</tr>
<tr>
<td>FIP</td>
<td>Forest Incentive Program</td>
</tr>
<tr>
<td>FLIR</td>
<td>Forward looking infrared</td>
</tr>
<tr>
<td>FLPMA</td>
<td>Federal Land Policy and Management Act</td>
</tr>
<tr>
<td>FSA</td>
<td>Farm Services Administration</td>
</tr>
<tr>
<td>GAP</td>
<td>Gap Analysis Program</td>
</tr>
<tr>
<td>GCFMP</td>
<td>Grand Coulee Fish Management Plan</td>
</tr>
<tr>
<td>GCDFMP</td>
<td>Grand Coulee Dan Fish Maintenance Project</td>
</tr>
<tr>
<td>gpm</td>
<td>Gallons per minute</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information System</td>
</tr>
<tr>
<td>GMA</td>
<td>Growth Management Act</td>
</tr>
<tr>
<td>HEP</td>
<td>Habitat Evaluation Procedure</td>
</tr>
<tr>
<td>HGMP</td>
<td>Hatchery Genetic Management Plan</td>
</tr>
<tr>
<td>HSI</td>
<td>Habitat Suitability Indices</td>
</tr>
<tr>
<td>IFIM</td>
<td>instream flow incremental methodology</td>
</tr>
<tr>
<td>ISAB</td>
<td>Independent Scientific Advisory Board</td>
</tr>
<tr>
<td>IBIS</td>
<td>Interactive Biological Information System</td>
</tr>
<tr>
<td>ICBEMP</td>
<td>Interior Columbia Basin Ecosystem Mgmt. Project</td>
</tr>
<tr>
<td>ICBTRT</td>
<td>Interior Columbia Basin Technical Recovery Team</td>
</tr>
<tr>
<td>ISG</td>
<td>Independent Scientific Group</td>
</tr>
<tr>
<td>ISRP</td>
<td>Independent Scientific Review Panel</td>
</tr>
<tr>
<td>LFA</td>
<td>Limiting factors analysis</td>
</tr>
<tr>
<td>LWD</td>
<td>Large woody debris</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>MCMCP</td>
<td>Mid-Columbia Mainstem Conservation Plan</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and evaluation</td>
</tr>
<tr>
<td>MPRSA</td>
<td>Marine Protection, Research, and Sanctuaries Act</td>
</tr>
<tr>
<td>MYS</td>
<td>Maximum sustained yield</td>
</tr>
<tr>
<td>NEPA</td>
<td>National Environmental Policy Act</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
</tr>
<tr>
<td>NF</td>
<td>National Forest</td>
</tr>
<tr>
<td>NFMA</td>
<td>National Forest Management Act</td>
</tr>
<tr>
<td>NFN</td>
<td>National Fish Hatchery</td>
</tr>
<tr>
<td>NHPA</td>
<td>National Historic Preservation Act</td>
</tr>
<tr>
<td>NMFS</td>
<td>National Marine Fisheries Service</td>
</tr>
<tr>
<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
</tr>
<tr>
<td>NPCC</td>
<td>Northwest Power and Conservation Council</td>
</tr>
<tr>
<td>NPPC</td>
<td>Northwest Power Planning Council</td>
</tr>
<tr>
<td>NRC</td>
<td>National Research Council</td>
</tr>
<tr>
<td>NRCS</td>
<td>Natural Resources Conservation Service</td>
</tr>
<tr>
<td>ORVs</td>
<td>Off-road recreational vehicles</td>
</tr>
<tr>
<td>PPA</td>
<td>Pollution Prevention Act</td>
</tr>
<tr>
<td>PHS</td>
<td>Priority habitats and species</td>
</tr>
<tr>
<td>PMU</td>
<td>Population management unit</td>
</tr>
<tr>
<td>PUD</td>
<td>Public Utility District</td>
</tr>
<tr>
<td>QHA</td>
<td>Qualitative Habitat Assessment</td>
</tr>
<tr>
<td>RM</td>
<td>River mile</td>
</tr>
<tr>
<td>RME</td>
<td>Research, Monitoring, and Evaluation</td>
</tr>
<tr>
<td>RMP</td>
<td>Resource Management Plan</td>
</tr>
<tr>
<td>ROD</td>
<td>Record of Decision</td>
</tr>
<tr>
<td>RPA</td>
<td>Reasonable and Prudent Alternatives</td>
</tr>
<tr>
<td>RTT</td>
<td>Regional Technical Team</td>
</tr>
<tr>
<td>SASSI</td>
<td>Washington State Salmon and Steelhead Stock Inventory</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SOR</td>
<td>Systems operation review</td>
</tr>
<tr>
<td>TAC</td>
<td>Technical Advisory Committee</td>
</tr>
<tr>
<td>TMDL</td>
<td>Total maximum daily load</td>
</tr>
<tr>
<td>TRT</td>
<td>Technical Recovery Team</td>
</tr>
<tr>
<td>Upper Columbia RUT</td>
<td>Upper Columbia Recovery Unit Team</td>
</tr>
<tr>
<td>USDA</td>
<td>United States Department of Agriculture</td>
</tr>
<tr>
<td>USDOE</td>
<td>United States Department of Energy</td>
</tr>
<tr>
<td>USDOI</td>
<td>United States Department of Interior</td>
</tr>
<tr>
<td>USFS</td>
<td>United States Forest Service</td>
</tr>
<tr>
<td>USFWS</td>
<td>United States Fish and Wildlife Service</td>
</tr>
<tr>
<td>USGS</td>
<td>United States Geological Survey</td>
</tr>
<tr>
<td>UTM</td>
<td>Universal Transverse Mercator</td>
</tr>
<tr>
<td>VOR</td>
<td>Visual obstruction readings</td>
</tr>
<tr>
<td>WAC</td>
<td>Washington Administrative Code</td>
</tr>
<tr>
<td>WDNR</td>
<td>Washington Department of Natural Resources</td>
</tr>
<tr>
<td>WCC</td>
<td>Washington Conservation Commission</td>
</tr>
<tr>
<td>WDOE</td>
<td>Washington Department of Ecology</td>
</tr>
<tr>
<td>WDF</td>
<td>Washington Department of Fisheries</td>
</tr>
<tr>
<td>WDFW</td>
<td>Washington Department of Fish and Wildlife</td>
</tr>
<tr>
<td>WDNR</td>
<td>Washington Department of Natural Resources</td>
</tr>
<tr>
<td>WDOE</td>
<td>Washington Department of Ecology</td>
</tr>
<tr>
<td>WDW</td>
<td>Washington Department of Wildlife</td>
</tr>
<tr>
<td>WHIP</td>
<td>Wildlife Habitat Improvement Program</td>
</tr>
<tr>
<td>WPA</td>
<td>Watershed Planning Act</td>
</tr>
<tr>
<td>WPU</td>
<td>Wenatchee Planning Unit</td>
</tr>
<tr>
<td>WQI</td>
<td>Water quality index</td>
</tr>
<tr>
<td>WRIA</td>
<td>Water Resource Inventory Area</td>
</tr>
<tr>
<td>WRP</td>
<td>Wetlands Reserve Program</td>
</tr>
<tr>
<td>Yakama Nation</td>
<td>Confederated Tribes and Bands of the Yakama Nation</td>
</tr>
</tbody>
</table>
11 Appendices


Appendix D. Summary of Artificial Production In the Wenatchee Subbasin

Appendix E. Pevan et al. 2004 Hatchery Information for Subbasin Planning