Final
Cedar River Watershed
Habitat Conservation Plan

For the Issuance of a Permit to Allow Incidental Take of Threatened and Endangered Species

City of Seattle

April 2000
CEDAR RIVER WATERSHED
HABITAT CONSERVATION PLAN

FOR THE ISSUANCE OF A PERMIT TO ALLOW INCIDENTAL
TAKE OF THREATENED AND ENDANGERED SPECIES

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List of Publications

**Issued April 2000**


**Issued May 27, 1999**


**Issued December 10, 1998**


List of Resource Maps

All of the maps for the Cedar River Watershed Habitat Conservation Plan are contained in a separate document entitled “Resource Maps for the Final Cedar River Watershed Habitat Conservation Plan.” The numbering scheme/order is arranged by map category and does not necessarily reflect the order in which they are discussed in the particular documents.

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<td>2</td>
<td>Cedar River Watershed and its Environs</td>
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<td>Regional Context</td>
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<td>5</td>
<td>Existing Forest Age</td>
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<td>6</td>
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<td>10</td>
<td>Mass Wasting/Landslide Potential</td>
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<td>Surface Erosion Potential</td>
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<td>12</td>
<td>Road Surface Erosion Potential</td>
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<td>13</td>
<td>Transportation System: Current and Future</td>
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<tr>
<td>14</td>
<td>Projected Forest Seral Stages by Major Subbasin at Years 2020 and 2050</td>
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<td>15</td>
<td>Projected Distribution of Forest Seral Stages at Year 2050</td>
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## Acronyms and Abbreviations

### Acronyms and Abbreviations used in the Text

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<tr>
<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>ACOE</td>
<td>United States Army Corps of Engineers</td>
</tr>
<tr>
<td>AFM</td>
<td>Anadromous Fish Mitigation</td>
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<td>BIBI</td>
<td>Benthic Index of Biological Integrity</td>
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<td>BLM</td>
<td>Bureau of Land Management</td>
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<td>BMPs</td>
<td>Best Management Practices</td>
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<td>Code of Federal Regulations</td>
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<tr>
<td>cfs</td>
<td>cubic feet per second</td>
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<td>CHU</td>
<td>Critical Habitat Unit; used in reference to the spotted owl</td>
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<td>CMAI</td>
<td>Culmination of Mean Annual Increment</td>
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<td>Chester Morse Lake</td>
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<td>CPUE</td>
<td>Catch Per Unit Effort</td>
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<td>dbh</td>
<td>diameter at breast height</td>
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<td>LWD</td>
<td>Large Woody Debris</td>
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<tr>
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<td>Million Gallons per Day</td>
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<td>PPI</td>
<td>Parr Production Index</td>
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<td>River Mile</td>
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<td>Safe Water Drinking Act</td>
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<td>State Environmental Policy Act</td>
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<td>Weighted Usable Area</td>
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<td>WWIRPP</td>
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**Acronyms and Abbreviations used in the Watershed Assessment Prescriptions**

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<td>Inner Gorges</td>
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<td>SORZ&amp;W</td>
<td>Streams, Riparian Zones, Wetlands and Open Water Bodies</td>
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List of Technical Appendices

Bound with HCP

Appendix 1. Implementation Agreement for the City of Seattle’s Cedar River Watershed Habitat Conservation Plan. April 21, 2000.

Bound separately

Original Appendices Issued December 1998:

Appendix 2. Cooperation Agreements between the City of Seattle and the State of Washington for the Cedar River Interim Sockeye Salmon Restoration Project.


Appendix 8. Estimated Accretion Flows in the Cedar River.


Appendix 11. City of Seattle Water Claim for the Cedar River.

(appendix deleted)

Appendix 14. Dates and Lists of Participants for Workshops Conducted by the City of Seattle to Develop the Cedar River Habitat Conservation Plan.

Appendix 15. Summary of the Cedar River Watershed Assessment.


Appendix 17. Cedar River Watershed Transportation Plan Summary.


Appendix 28. Landsburg Mitigation Agreement for the Fish Migration Barrier at the Landsburg Diversion Dam.  April 21, 2000.


Appendix 30. HCP Activities Compliance Reports.
Appendices Issued April 2000 with Final HCP:


Appendix 33. City Ordinance # 115204.

Appendix 34. Notes from February 11, 1999, Sockeye Technical Committee.

Appendix 35. Statements received in response to requests regarding applicability of IFIM and extent of present use.

Appendix 36. Expected flows under the HCP.

Appendix 37. Habitat Duration Analyses Based on Collaborative PHABSIM Results Applied to Expected Flows under the HCP, IRPP, and Unregulated Conditions.

List of Supporting Documents

(1) The Cedar River Watershed Assessment
   - Basin Condition Reports, Prescriptions, and Restoration Opportunities (Seattle Water Department 1995)
   - Stream Channel and Fish Habitat Assessment for the Cedar River Watershed (Cupp and Metzler 1995)
   - Mass Wasting and Surface Erosion Assessment (Foster Wheeler Environmental Corp. 1995c)

(2) Workshops
   - Cedar River Watershed Bull Trout Workshop Meeting Minutes, November 18, 1994 (Foster Wheeler Environmental Corp. 1995d)
   - Cedar River Watershed Conservation Biology Workshops: Meeting Minutes – August 24, 1995, and October 16, 1995 (Foster Wheeler Environmental Corp. 1995a)

(3) Scoping Report for the Cedar River Watershed Habitat Conservation Plan Environmental Assessment/Environmental Impact Statement (Seattle Public Utilities 1997)


(5) City of Seattle City Council Resolution 29977, July 12, 1999, with Exhibit A (“Adopted Changes to the Cedar River Watershed Habitat Conservation Plan”).


NOTE ON LYNX

On March 24, 2000, the Canada lynx (*Lynx canadensis*) was listed as threatened under the Endangered Species Act (Fed. Reg. Vol. 65, No. 56, pp. 16052-16086. The listing occurred after the Habitat Conservation Plan (HCP) documents had been finalized, and the status of the lynx has not been updated in this HCP. The lynx is a species covered by the HCP and the incidental take permit, and mitigation is provided as described in Chapter 4 of the HCP. The U. S. Fish and Wildlife Service completed a biological opinion for the lynx in its process to approve the HCP and incidental take permit.