

**Bonneville Power Administration  
2000 Pacific Northwest Loads and Resources Study  
Technical Appendix**

**Section 9  
Loads & Resources Federal Tables  
Medium Loads  
Monthly OY 2002, 2006 & 2011  
Capacity in Megawatts**

**Power Business Line**

Reports Powered by:



Loads and Resources Information System

**Loads and Resources - Federal System  
PNW Loads and Resources Study  
2001 - 2002 Operating Year  
1937 Water Year  
2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
<b>Non-Utility Obligations</b>														
Federal Agencies 1981 PSC Sale	198	198	188	0	0	0	0	0	0	0	0	0	0	0
USBR 1981 PSC Sale	32	32	20	0	0	0	0	0	0	0	0	0	0	0
DSI 1981 PSC Sale	2467	2467	2467	0	0	0	0	0	0	0	0	0	0	0
Federal Agencies 2002 PSC Sale	0	0	0	179	186	206	205	242	213	195	195	203	195	205
USBR 2002 PSC Sale	0	0	0	96	24	15	15	12	54	222	222	252	240	267
DSI 2002 PSC Sale	0	0	0	330	330	330	326	326	326	662	662	662	662	842
<b>Total Firm Non-Utility Obligations</b>	<b>2697</b>	<b>2697</b>	<b>2675</b>	<b>605</b>	<b>541</b>	<b>551</b>	<b>546</b>	<b>580</b>	<b>592</b>	<b>1080</b>	<b>1080</b>	<b>1117</b>	<b>1097</b>	<b>1314</b>
<b>Transfers Out</b>														
NGP 1981 PSC Sale	3447	3448	3426	0	0	0	0	0	0	0	0	0	0	0
GPU 1981 PSC Sale	1567	1515	1689	0	0	0	0	0	0	0	0	0	0	0
IOU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NGP 2002 PSC Sale	0	0	0	3659	4007	4396	4623	4448	4099	3862	3861	3733	3486	3536
GPU 2002 PSC Sale	0	0	0	2177	2396	2814	2854	2831	2683	2328	2328	2116	1607	1666
NGP Slice Sale	0	0	0	1209	1148	1325	1008	1136	1050	1066	957	1303	1105	1258
GPU Slice Sale	0	0	0	2014	1912	2207	1678	1891	1748	1775	1593	2171	1840	2095
IOU 2002 PSC Sale	0	0	0	350	350	350	350	350	350	350	350	350	350	350
Exports	2157	2157	1983	1975	1896	1904	1933	1935	1923	2038	2038	2131	2184	2116
Intra-Regional Transfers (Out)	1733	1733	1780	2031	2336	2391	1885	1841	1731	1724	1724	1552	1657	1670
Supp & Entitlement Capacity (Out)	84	84	84	84	84	84	84	84	84	74	74	74	74	74
CSPE To West Group Utilities	187	187	187	187	187	187	187	187	187	167	167	167	167	167
Federal Diversity	-682	-675	-692	-732	-660	-519	-538	-526	-703	-659	-659	-755	-717	-736
<b>Total Transfers Out</b>	<b>8494</b>	<b>8449</b>	<b>8456</b>	<b>12954</b>	<b>13656</b>	<b>15140</b>	<b>14065</b>	<b>14177</b>	<b>13151</b>	<b>12724</b>	<b>12433</b>	<b>12843</b>	<b>11753</b>	<b>12196</b>
<b>Total Firm Obligations</b>	<b>11191</b>	<b>11146</b>	<b>11132</b>	<b>13559</b>	<b>14197</b>	<b>15691</b>	<b>14610</b>	<b>14757</b>	<b>13744</b>	<b>13804</b>	<b>13513</b>	<b>13961</b>	<b>12850</b>	<b>13510</b>
<b>Hydro Resources</b>														
Regulated Hydro	16253	16247	16286	16279	16594	18093	18140	17974	17484	17349	17336	17450	17702	16304
Independent Hydro	757	769	751	774	737	703	674	790	850	875	875	914	916	792
Sustained Peaking Adjustment	-100	-1388	-2284	-1238	-2278	-1439	-5404	-3768	-4440	-4152	-5497	-1310	-4029	-700
Non-Fed CER (CSPE)	43	43	43	43	43	43	43	43	43	38	38	38	38	38
Non-Fed CER (Canada)	138	136	149	137	143	148	142	139	142	136	136	141	142	141
Restoration	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Hydro Resources</b>	<b>17091</b>	<b>15807</b>	<b>14944</b>	<b>15995</b>	<b>15239</b>	<b>17548</b>	<b>13595</b>	<b>15177</b>	<b>14078</b>	<b>14245</b>	<b>12889</b>	<b>17232</b>	<b>14768</b>	<b>16574</b>
<b>Other Resources</b>														
Small Thermal & Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combustion Turbines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Renewables	27	27	27	28	29	31	32	31	31	30	30	27	27	27
Cogeneration	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imports	160	160	189	456	514	570	523	299	257	240	240	100	118	184
Intra-Regional Transfers (In)	1164	1164	1188	2046	2111	2138	1826	1826	1827	1526	1126	976	978	1877
Supp & Entitlement Capacity (In)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Thermal	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162
Non-Utility Generation	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>2517</b>	<b>2517</b>	<b>2570</b>	<b>3697</b>	<b>3820</b>	<b>3905</b>	<b>3547</b>	<b>3322</b>	<b>3281</b>	<b>2962</b>	<b>2562</b>	<b>2269</b>	<b>2289</b>	<b>3254</b>
<b>Total Resources</b>	<b>19608</b>	<b>18324</b>	<b>17514</b>	<b>19691</b>	<b>19059</b>	<b>21453</b>	<b>17142</b>	<b>18499</b>	<b>17360</b>	<b>17207</b>	<b>15450</b>	<b>19501</b>	<b>17057</b>	<b>19828</b>
<b>Reserves &amp; Maintenance</b>														
Hydro Reserves	-851	-851	-852	-853	-867	-940	-941	-938	-917	-911	-911	-918	-931	-855
Small Thermal & Misc. Reserves	-1.6	-1.6	-1.6	-1.6	-1.7	-1.8	-1.8	-1.8	-1.8	-1.7	-1.7	-1.6	-1.6	-1.6
Large Thermal Reserves	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174
Federal Hydro Maintenance	-3263	-2761	-2770	-2752	-2705	-1866	-1408	-1883	-1915	-2061	-1805	-1756	-1635	-2785
Spinning Reserves	-359	-341	-320	-346	-329	-403	-320	-347	-320	-321	-294	-399	-343	-359
Federal Transmission Losses	-501	-476	-449	-521	-502	-605	-479	-508	-470	-460	-411	-544	-468	-524
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-5150</b>	<b>-4604</b>	<b>-4566</b>	<b>-4647</b>	<b>-4578</b>	<b>-3991</b>	<b>-3324</b>	<b>-3852</b>	<b>-3798</b>	<b>-3929</b>	<b>-3597</b>	<b>-3794</b>	<b>-3553</b>	<b>-4698</b>
<b>Total Net Resources</b>	<b>14458</b>	<b>13720</b>	<b>12948</b>	<b>15044</b>	<b>14481</b>	<b>17462</b>	<b>13818</b>	<b>14647</b>	<b>13562</b>	<b>13278</b>	<b>11854</b>	<b>15708</b>	<b>13504</b>	<b>15130</b>
<b>Total Firm Surplus/Deficit</b>	<b>3266</b>	<b>2574</b>	<b>1816</b>	<b>1485</b>	<b>284</b>	<b>1771</b>	<b>-792</b>	<b>-110</b>	<b>-182</b>	<b>-526</b>	<b>-1659</b>	<b>1747</b>	<b>655</b>	<b>1620</b>

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10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
<b>Non-Utility Obligations</b>														
Federal Agencies 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
USBR 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DSI 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Agencies 2002 PSC Sale	207	207	180	192	202	221	220	258	227	210	210	218	210	219
USBR 2002 PSC Sale	227	227	161	96	24	15	15	12	54	222	222	252	240	267
DSI 2002 PSC Sale	1435	1435	1435	1442	1442	1442	1442	1442	1442	1442	1442	1442	1442	1442
<b>Total Firm Non-Utility Obligations</b>	<b>1869</b>	<b>1869</b>	<b>1776</b>	<b>1731</b>	<b>1668</b>	<b>1678</b>	<b>1677</b>	<b>1712</b>	<b>1723</b>	<b>1875</b>	<b>1875</b>	<b>1912</b>	<b>1891</b>	<b>1928</b>
<b>Transfers Out</b>														
NGP 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GPU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IOU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NGP 2002 PSC Sale	3850	3848	3803	4153	4539	4949	5203	5002	4621	4362	4362	4224	3960	4006
GPU 2002 PSC Sale	2006	2006	2206	2528	2699	3094	3137	3098	2936	2636	2636	2510	2074	2048
NGP Slice Sale	1299	1201	1132	1215	1155	1331	1008	1140	1048	1063	955	1304	1106	1256
GPU Slice Sale	2163	2000	1885	2023	1924	2217	1678	1898	1745	1770	1591	2171	1841	2091
IOU 2002 PSC Sale	382	382	382	382	382	382	382	382	382	382	382	382	382	382
Exports	2058	2058	2049	1839	1765	1774	1777	1781	1766	1876	1876	1989	2016	1928
Intra-Regional Transfers (Out)	793	793	822	888	1105	1159	1028	984	874	747	747	575	680	743
Supp & Entitlement Capacity (Out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSPE To West Group Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Diversity	-818	-817	-825	-836	-746	-580	-600	-586	-784	-743	-743	-864	-843	-850
<b>Total Transfers Out</b>	<b>11733</b>	<b>11470</b>	<b>11455</b>	<b>12192</b>	<b>12822</b>	<b>14326</b>	<b>13613</b>	<b>13699</b>	<b>12588</b>	<b>12092</b>	<b>11805</b>	<b>12290</b>	<b>11216</b>	<b>11604</b>
<b>Total Firm Obligations</b>	<b>13602</b>	<b>13339</b>	<b>13230</b>	<b>13922</b>	<b>14490</b>	<b>16004</b>	<b>15290</b>	<b>15410</b>	<b>14312</b>	<b>13967</b>	<b>13680</b>	<b>14202</b>	<b>13107</b>	<b>13532</b>
<b>Hydro Resources</b>														
Regulated Hydro	16253	16247	16286	16279	16594	18093	18140	17974	17484	17349	17336	17450	17702	16304
Independent Hydro	775	787	769	774	737	703	674	790	850	875	875	914	916	792
Sustained Peaking Adjustment	-100	-1313	-2200	-1166	-2178	-1354	-5404	-3702	-4440	-4152	-5497	-1270	-3973	-700
Non-Fed CER (CSPE)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Fed CER (Canada)	243	241	253	251	253	251	261	246	242	240	261	249	241	259
Restoration	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Hydro Resources</b>	<b>17172</b>	<b>15962</b>	<b>15107</b>	<b>16138</b>	<b>15406</b>	<b>17692</b>	<b>13671</b>	<b>15307</b>	<b>14135</b>	<b>14312</b>	<b>12976</b>	<b>17342</b>	<b>14885</b>	<b>16655</b>
<b>Other Resources</b>														
Small Thermal & Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combustion Turbines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Renewables	27	27	27	28	29	31	32	31	31	30	30	27	27	27
Cogeneration	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imports	138	138	167	203	256	310	284	240	212	215	215	75	93	159
Intra-Regional Transfers (In)	1481	1481	1539	1536	1539	1480	1080	1079	1080	780	780	630	631	1082
Supp & Entitlement Capacity (In)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Thermal	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162
Non-Utility Generation	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>2862</b>	<b>2862</b>	<b>2949</b>	<b>2983</b>	<b>3040</b>	<b>3037</b>	<b>2612</b>	<b>2566</b>	<b>2539</b>	<b>2241</b>	<b>2241</b>	<b>1948</b>	<b>1967</b>	<b>2484</b>
<b>Total Resources</b>	<b>20034</b>	<b>18824</b>	<b>18056</b>	<b>19121</b>	<b>18445</b>	<b>20730</b>	<b>16283</b>	<b>17873</b>	<b>16674</b>	<b>16553</b>	<b>15216</b>	<b>19290</b>	<b>16852</b>	<b>19138</b>
<b>Reserves &amp; Maintenance</b>														
Hydro Reserves	-851	-852	-853	-853	-867	-940	-941	-938	-917	-911	-911	-918	-931	-855
Small Thermal & Misc. Reserves	-4	-4	-4	-4.1	-4.1	-4.2	-4.3	-4.2	-4.2	-4.2	-4.2	-4	-4	-4
Large Thermal Reserves	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174
Federal Hydro Maintenance	-3263	-2761	-2770	-2752	-2705	-1866	-1408	-1883	-1915	-2061	-1805	-1756	-1635	-2785
Spinning Reserves	-361	-344	-324	-348	-332	-406	-322	-350	-321	-322	-296	-401	-345	-360
Federal Transmission Losses	-515	-492	-467	-502	-481	-581	-450	-487	-447	-438	-403	-537	-461	-501
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-5169</b>	<b>-4627</b>	<b>-4591</b>	<b>-4633</b>	<b>-4564</b>	<b>-3972</b>	<b>-3299</b>	<b>-3836</b>	<b>-3778</b>	<b>-3911</b>	<b>-3592</b>	<b>-3791</b>	<b>-3551</b>	<b>-4679</b>
<b>Total Net Resources</b>	<b>14864</b>	<b>14197</b>	<b>13465</b>	<b>14488</b>	<b>13882</b>	<b>16758</b>	<b>12984</b>	<b>14037</b>	<b>12896</b>	<b>12642</b>	<b>11624</b>	<b>15499</b>	<b>13302</b>	<b>14460</b>
<b>Total Firm Surplus/Deficit</b>	<b>1262</b>	<b>858</b>	<b>235</b>	<b>566</b>	<b>-609</b>	<b>753</b>	<b>-2306</b>	<b>-1373</b>	<b>-1416</b>	<b>-1325</b>	<b>-2057</b>	<b>1297</b>	<b>194</b>	<b>928</b>

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10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
<b>Non-Utility Obligations</b>														
Federal Agencies 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
USBR 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DSI 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Agencies 2002 PSC Sale	138	138	118	128	133	149	148	187	158	142	142	155	147	153
USBR 2002 PSC Sale	27	27	16	22	0	0	0	0	30	47	47	53	30	40
DSI 2002 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Firm Non-Utility Obligations</b>	<b>165</b>	<b>165</b>	<b>134</b>	<b>150</b>	<b>133</b>	<b>149</b>	<b>148</b>	<b>187</b>	<b>188</b>	<b>189</b>	<b>189</b>	<b>208</b>	<b>177</b>	<b>193</b>
<b>Transfers Out</b>														
NGP 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GPU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IOU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NGP 2002 PSC Sale	4168	4166	4114	4457	4896	5347	5580	5370	4941	4690	4690	4508	4251	4292
GPU 2002 PSC Sale	2426	2426	2639	3015	3254	3714	3739	3684	3470	3160	3160	2882	2348	2383
NGP Slice Sale	1300	1204	1135	1217	1159	1334	1007	1142	1047	1062	956	1309	1027	1255
GPU Slice Sale	2164	2005	1891	2027	1930	2222	1677	1902	1744	1769	1592	2179	1710	2090
IOU 2002 PSC Sale	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Exports	1521	1521	1511	1453	1428	1439	1441	1447	1427	1430	1430	1500	1533	1541
Intra-Regional Transfers (Out)	588	588	617	683	900	954	928	884	774	747	747	575	680	693
Supp & Entitlement Capacity (Out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSPE To West Group Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Diversity	-879	-878	-895	-915	-828	-645	-663	-647	-860	-804	-804	-912	-881	-893
<b>Total Transfers Out</b>	<b>13488</b>	<b>13230</b>	<b>13212</b>	<b>14138</b>	<b>14938</b>	<b>16566</b>	<b>15910</b>	<b>15983</b>	<b>14744</b>	<b>14254</b>	<b>13970</b>	<b>14242</b>	<b>12868</b>	<b>13562</b>
<b>Total Firm Obligations</b>	<b>13654</b>	<b>13396</b>	<b>13346</b>	<b>14288</b>	<b>15071</b>	<b>16715</b>	<b>16058</b>	<b>16170</b>	<b>14932</b>	<b>14443</b>	<b>14159</b>	<b>14450</b>	<b>13045</b>	<b>13755</b>
<b>Hydro Resources</b>														
Regulated Hydro	16253	16247	16286	16279	16594	18093	18140	17974	17484	17349	17336	17450	17702	16304
Independent Hydro	775	787	769	774	737	703	674	790	850	875	875	914	916	792
Sustained Peaking Adjustment	-100	-1268	-2153	-1125	-2122	-1306	-5404	-3665	-4440	-4152	-5497	-1247	-3941	-700
Non-Fed CER (CSPE)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Fed CER (Canada)	255	233	244	243	244	243	253	238	234	233	234	251	234	251
Restoration	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Hydro Resources</b>	<b>17183</b>	<b>15999</b>	<b>15146</b>	<b>16171</b>	<b>15454</b>	<b>17732</b>	<b>13663</b>	<b>15337</b>	<b>14127</b>	<b>14305</b>	<b>12949</b>	<b>17368</b>	<b>14911</b>	<b>16647</b>
<b>Other Resources</b>														
Small Thermal & Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combustion Turbines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Renewables	27	27	27	28	29	31	32	31	31	30	30	27	27	27
Cogeneration	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imports	88	88	117	153	206	260	234	190	162	165	165	75	93	109
Intra-Regional Transfers (In)	0	0	58	56	58	0	0	0	0	0	0	0	0	0
Supp & Entitlement Capacity (In)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Thermal	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	0	1162
Non-Utility Generation	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>1331</b>	<b>1331</b>	<b>1418</b>	<b>1453</b>	<b>1509</b>	<b>1507</b>	<b>1482</b>	<b>1437</b>	<b>1409</b>	<b>1411</b>	<b>1411</b>	<b>1318</b>	<b>174</b>	<b>1352</b>
<b>Total Resources</b>	<b>18514</b>	<b>17330</b>	<b>16564</b>	<b>17624</b>	<b>16962</b>	<b>19239</b>	<b>15144</b>	<b>16773</b>	<b>15536</b>	<b>15716</b>	<b>14359</b>	<b>18686</b>	<b>15085</b>	<b>17999</b>
<b>Reserves &amp; Maintenance</b>														
Hydro Reserves	-851	-852	-853	-853	-867	-940	-941	-938	-917	-911	-911	-918	-931	-855
Small Thermal & Misc. Reserves	-4	-4	-4	-4.1	-4.1	-4.2	-4.3	-4.2	-4.2	-4.2	-4.2	-4	-4	-4
Large Thermal Reserves	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	0	-174
Federal Hydro Maintenance	-3263	-2761	-2770	-2752	-2705	-1866	-1408	-1883	-1915	-2061	-1805	-1756	-1635	-2785
Spinning Reserves	-361	-345	-325	-349	-334	-408	-322	-350	-321	-322	-261	-367	-346	-360
Federal Transmission Losses	-464	-442	-417	-452	-431	-531	-412	-450	-409	-410	-375	-518	-408	-463
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-5118</b>	<b>-4578</b>	<b>-4542</b>	<b>-4584</b>	<b>-4515</b>	<b>-3923</b>	<b>-3260</b>	<b>-3800</b>	<b>-3740</b>	<b>-3883</b>	<b>-3530</b>	<b>-3738</b>	<b>-3324</b>	<b>-4641</b>
<b>Total Net Resources</b>	<b>13396</b>	<b>12752</b>	<b>12022</b>	<b>13040</b>	<b>12447</b>	<b>15316</b>	<b>11884</b>	<b>12973</b>	<b>11796</b>	<b>11833</b>	<b>10829</b>	<b>14949</b>	<b>11761</b>	<b>13358</b>
<b>Total Firm Surplus/Deficit</b>	<b>-258</b>	<b>-644</b>	<b>-1324</b>	<b>-1248</b>	<b>-2624</b>	<b>-1399</b>	<b>-4174</b>	<b>-3197</b>	<b>-3136</b>	<b>-2610</b>	<b>-3330</b>	<b>499</b>	<b>-1284</b>	<b>-396</b>

**Bonneville Power Administration  
2000 Pacific Northwest Loads and Resources Study  
Technical Appendix**

**Section 10  
Loads & Resources Regional Tables  
Medium Loads  
Monthly OY 2002, 2006 & 2011  
Capacity in Megawatts**

**Power Business Line**

Reports Powered by:



Loads and Resources Information System

**Loads and Resources - Pacific Northwest Region**  
**PNW Loads and Resources Study**  
**2001 - 2002 Operating Year**  
**1937 Water Year**  
**2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
<b>Firm Regional Loads</b>														
Regional Firm Loads	29025	29025	27968	28504	31264	33846	34621	33483	30779	29383	29383	27942	27209	27845
Exports	3478	3478	3253	2794	2693	2712	2747	2697	2675	2809	2809	2920	3423	3445
Federal Diversity	-682	-675	-692	-732	-660	-519	-538	-526	-703	-659	-659	-755	-717	-736
<b>Total Firm Regional Loads</b>	<b>31821</b>	<b>31827</b>	<b>30530</b>	<b>30566</b>	<b>33297</b>	<b>36039</b>	<b>36830</b>	<b>35654</b>	<b>32750</b>	<b>31532</b>	<b>31532</b>	<b>30107</b>	<b>29915</b>	<b>30554</b>
<b>Non-Firm Regional Loads</b>														
Regional Non-Firm Loads	150	150	143	117	170	101	195	140	193	160	160	130	186	159
<b>Total Non-Firm Regional Loads</b>	<b>150</b>	<b>150</b>	<b>143</b>	<b>117</b>	<b>170</b>	<b>101</b>	<b>195</b>	<b>140</b>	<b>193</b>	<b>160</b>	<b>160</b>	<b>130</b>	<b>186</b>	<b>159</b>
<b>Total Loads</b>	<b>31970</b>	<b>31977</b>	<b>30672</b>	<b>30684</b>	<b>33467</b>	<b>36140</b>	<b>37025</b>	<b>35793</b>	<b>32943</b>	<b>31693</b>	<b>31692</b>	<b>30236</b>	<b>30101</b>	<b>30713</b>
<b>Hydro Resources</b>														
Regulated Hydro	26986	26953	26391	26721	27017	28342	28216	28119	27490	27631	27597	27185	28269	26981
Independent Hydro	1960	1942	1918	1890	1843	1828	1780	1883	1980	2023	2048	2151	2163	2024
Sustained Peaking Adjustment	-100	-1388	-2284	-1238	-2278	-1439	-5404	-3768	-4440	-4152	-5497	-1310	-4029	-700
<b>Total Hydro Resources</b>	<b>28846</b>	<b>27507</b>	<b>26025</b>	<b>27374</b>	<b>26583</b>	<b>28731</b>	<b>24592</b>	<b>26233</b>	<b>25030</b>	<b>25502</b>	<b>24148</b>	<b>28026</b>	<b>26402</b>	<b>28306</b>
<b>Other Resources</b>														
Small Thermal & Misc.	53	53	45	47	43	40	41	38	36	32	32	48	1	55
Combustion Turbines	1054	1054	1055	1080	1538	1540	1538	1537	1082	580	1080	834	1076	1070
Renewables	81	81	81	82	83	85	87	86	86	85	85	34	82	82
Cogeneration	775	775	775	775	775	755	775	775	775	775	775	306	775	755
Imports	2102	2102	1560	2362	2445	2991	3038	2855	2315	1698	1698	1597	2116	2050
Large Thermal	5745	5745	5716	5724	5699	5689	5691	5681	5562	5495	5495	4132	5734	5751
Non-Utility Generation	1481	1481	1389	1290	1237	1219	1142	1169	1204	1356	1356	769	1345	1473
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>11293</b>	<b>11293</b>	<b>10620</b>	<b>11361</b>	<b>11819</b>	<b>12319</b>	<b>12313</b>	<b>12140</b>	<b>11059</b>	<b>10020</b>	<b>10520</b>	<b>7720</b>	<b>11128</b>	<b>11236</b>
<b>Total Resources</b>	<b>40139</b>	<b>38799</b>	<b>36645</b>	<b>38735</b>	<b>38402</b>	<b>41050</b>	<b>36905</b>	<b>38374</b>	<b>36089</b>	<b>35523</b>	<b>34669</b>	<b>35746</b>	<b>37530</b>	<b>39542</b>
<b>Reserves &amp; Maintenance</b>														
Hydro Reserves	-1447	-1445	-1415	-1431	-1443	-1508	-1500	-1500	-1473	-1483	-1482	-1467	-1522	-1450
Small Thermal & Misc. Reserves	-172	-172	-167	-164	-184	-182	-179	-180	-159	-141	-166	-100	-164	-172
Contract Reserves	-443	-443	-294	-348	-309	-383	-389	-406	-353	-311	-311	-421	-503	-428
Large Thermal Reserves	-862	-862	-857	-859	-855	-853	-854	-852	-834	-824	-824	-620	-860	-863
Regional Hydro Maintenance	-4607	-4044	-3787	-3208	-2935	-2037	-1561	-2288	-2631	-2751	-2483	-2360	-2202	-3721
Spinning Reserves	-820	-801	-755	-807	-794	-879	-791	-814	-757	-765	-739	-790	-818	-827
Regional Transmission Losses	-1065	-1040	-984	-1069	-1068	-1179	-1060	-1083	-1001	-980	-960	-1005	-1054	-1075
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-9416</b>	<b>-8807</b>	<b>-8260</b>	<b>-7886</b>	<b>-7587</b>	<b>-7022</b>	<b>-6333</b>	<b>-7124</b>	<b>-7209</b>	<b>-7255</b>	<b>-6966</b>	<b>-6762</b>	<b>-7123</b>	<b>-8535</b>
<b>Total Net Resources</b>	<b>30723</b>	<b>29993</b>	<b>28385</b>	<b>30849</b>	<b>30814</b>	<b>34028</b>	<b>30571</b>	<b>31250</b>	<b>28880</b>	<b>28267</b>	<b>27703</b>	<b>28984</b>	<b>30407</b>	<b>31007</b>
<b>Surplus/Deficits</b>														
Firm Surplus/Deficit	-1097	-1835	-2145	283	-2483	-2011	-6258	-4403	-3870	-3265	-3829	-1123	492	453
<b>Total Surplus/Deficit</b>	<b>-1247</b>	<b>-1984</b>	<b>-2287</b>	<b>166</b>	<b>-2653</b>	<b>-2112</b>	<b>-6454</b>	<b>-4543</b>	<b>-4063</b>	<b>-3425</b>	<b>-3990</b>	<b>-1252</b>	<b>306</b>	<b>293</b>

**Loads and Resources - Pacific Northwest Region**  
**PNW Loads and Resources Study**  
**2005 - 2006 Operating Year**  
**1937 Water Year**  
**2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
<b>Firm Regional Loads</b>														
Regional Firm Loads	29287	29284	28308	30564	33320	36301	37242	35952	33186	31545	31545	30002	29183	29764
Exports	2685	2685	2591	2322	2232	2264	2272	2248	2230	2337	2337	2459	2613	2575
Federal Diversity	-818	-817	-825	-836	-746	-580	-600	-586	-784	-743	-743	-864	-843	-850
<b>Total Firm Regional Loads</b>	<b>31154</b>	<b>31152</b>	<b>30073</b>	<b>32050</b>	<b>34805</b>	<b>37985</b>	<b>38914</b>	<b>37614</b>	<b>34632</b>	<b>33139</b>	<b>33139</b>	<b>31597</b>	<b>30953</b>	<b>31488</b>
<b>Non-Firm Regional Loads</b>														
Regional Non-Firm Loads	148	148	144	144	169	85	151	154	188	160	160	130	176	162
<b>Total Non-Firm Regional Loads</b>	<b>148</b>	<b>148</b>	<b>144</b>	<b>144</b>	<b>169</b>	<b>85</b>	<b>151</b>	<b>154</b>	<b>188</b>	<b>160</b>	<b>160</b>	<b>130</b>	<b>176</b>	<b>162</b>
<b>Total Loads</b>	<b>31302</b>	<b>31300</b>	<b>30217</b>	<b>32194</b>	<b>34974</b>	<b>38070</b>	<b>39065</b>	<b>37768</b>	<b>34820</b>	<b>33299</b>	<b>33299</b>	<b>31726</b>	<b>31129</b>	<b>31650</b>
<b>Hydro Resources</b>														
Regulated Hydro	26971	26937	26391	26721	27016	28352	28225	28128	27490	27632	27597	27185	28268	26966
Independent Hydro	1944	1926	1918	1890	1843	1838	1789	1892	1980	2023	2048	2151	2162	2008
Sustained Peaking Adjustment	-100	-1313	-2200	-1166	-2178	-1354	-5404	-3702	-4440	-4152	-5497	-1270	-3973	-700
<b>Total Hydro Resources</b>	<b>28815</b>	<b>27550</b>	<b>26109</b>	<b>27444</b>	<b>26681</b>	<b>28835</b>	<b>24611</b>	<b>26318</b>	<b>25030</b>	<b>25502</b>	<b>24148</b>	<b>28065</b>	<b>26458</b>	<b>28275</b>
<b>Other Resources</b>														
Small Thermal & Misc.	45	45	45	47	43	46	46	43	35	32	32	48	1	47
Combustion Turbines	1072	1072	1074	1080	1538	1540	1538	1537	1082	580	1080	834	1076	1070
Renewables	82	82	82	83	84	86	87	86	86	85	85	34	82	82
Cogeneration	775	775	775	775	775	755	775	775	775	775	775	306	775	755
Imports	1724	1724	1496	1395	1708	1982	2051	2046	1463	1398	1398	1312	1832	1774
Large Thermal	5715	5715	5715	5723	5697	5709	5710	5700	5682	5495	5495	4132	4994	5721
Non-Utility Generation	1469	1469	1383	1280	1227	1214	1188	1215	1246	1399	1399	812	1387	1509
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>10882</b>	<b>10882</b>	<b>10569</b>	<b>10384</b>	<b>11072</b>	<b>11331</b>	<b>11395</b>	<b>11402</b>	<b>10370</b>	<b>9764</b>	<b>10264</b>	<b>7478</b>	<b>10146</b>	<b>10958</b>
<b>Total Resources</b>	<b>39696</b>	<b>38432</b>	<b>36678</b>	<b>37828</b>	<b>37752</b>	<b>40167</b>	<b>36006</b>	<b>37721</b>	<b>35400</b>	<b>35266</b>	<b>34412</b>	<b>35543</b>	<b>36604</b>	<b>39233</b>
<b>Reserves &amp; Maintenance</b>														
Hydro Reserves	-1446	-1443	-1415	-1431	-1443	-1509	-1501	-1501	-1473	-1483	-1482	-1467	-1522	-1449
Small Thermal & Misc. Reserves	-172	-172	-168	-163	-183	-182	-182	-183	-161	-144	-169	-102	-166	-173
Contract Reserves	-443	-443	-294	-348	-309	-383	-389	-406	-353	-311	-311	-421	-503	-428
Large Thermal Reserves	-857	-857	-857	-858	-855	-856	-857	-855	-852	-824	-824	-620	-749	-858
Regional Hydro Maintenance	-4605	-4042	-3787	-3208	-2935	-2037	-1561	-2288	-2631	-2751	-2483	-2360	-2202	-3721
Spinning Reserves	-814	-798	-763	-805	-800	-878	-790	-814	-755	-763	-737	-789	-795	-822
Regional Transmission Losses	-1051	-1028	-985	-1039	-1046	-1150	-1029	-1061	-977	-971	-952	-998	-1027	-1065
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-9388</b>	<b>-8783</b>	<b>-8270</b>	<b>-7853</b>	<b>-7571</b>	<b>-6996</b>	<b>-6308</b>	<b>-7109</b>	<b>-7204</b>	<b>-7246</b>	<b>-6957</b>	<b>-6756</b>	<b>-6965</b>	<b>-8516</b>
<b>Total Net Resources</b>	<b>30309</b>	<b>29649</b>	<b>28408</b>	<b>29975</b>	<b>30181</b>	<b>33171</b>	<b>29698</b>	<b>30612</b>	<b>28196</b>	<b>28020</b>	<b>27455</b>	<b>28787</b>	<b>29639</b>	<b>30717</b>
<b>Surplus/Deficits</b>														
Firm Surplus/Deficit	-845	-1502	-1665	-2075	-4624	-4814	-9216	-7002	-6435	-5119	-5684	-2810	-1314	-772
<b>Total Surplus/Deficit</b>	<b>-993</b>	<b>-1651</b>	<b>-1809</b>	<b>-2219</b>	<b>-4793</b>	<b>-4899</b>	<b>-9367</b>	<b>-7156</b>	<b>-6624</b>	<b>-5280</b>	<b>-5844</b>	<b>-2939</b>	<b>-1490</b>	<b>-933</b>

**Loads and Resources - Pacific Northwest Region**  
**PNW Loads and Resources Study**  
**2010 - 2011 Operating Year**  
**1937 Water Year**  
**2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
<b>Firm Regional Loads</b>														
Regional Firm Loads	31691	31688	30603	33047	35916	39148	40259	39016	36077	34401	34400	32630	31682	32225
Exports	2014	2014	1918	1816	1771	1805	1813	1791	1766	1768	1768	1845	1999	2056
Federal Diversity	-879	-878	-895	-915	-828	-645	-663	-647	-860	-804	-804	-912	-881	-893
<b>Total Firm Regional Loads</b>	<b>32826</b>	<b>32824</b>	<b>31625</b>	<b>33948</b>	<b>36859</b>	<b>40308</b>	<b>41409</b>	<b>40161</b>	<b>36984</b>	<b>35365</b>	<b>35364</b>	<b>33564</b>	<b>32800</b>	<b>33388</b>
<b>Non-Firm Regional Loads</b>														
Regional Non-Firm Loads	162	162	143	112	170	88	191	141	188	161	161	134	174	159
<b>Total Non-Firm Regional Loads</b>	<b>162</b>	<b>162</b>	<b>143</b>	<b>112</b>	<b>170</b>	<b>88</b>	<b>191</b>	<b>141</b>	<b>188</b>	<b>161</b>	<b>161</b>	<b>134</b>	<b>174</b>	<b>159</b>
<b>Total Loads</b>	<b>32988</b>	<b>32986</b>	<b>31768</b>	<b>34060</b>	<b>37029</b>	<b>40396</b>	<b>41600</b>	<b>40301</b>	<b>37172</b>	<b>35526</b>	<b>35526</b>	<b>33697</b>	<b>32974</b>	<b>33547</b>
<b>Hydro Resources</b>														
Regulated Hydro	26974	26940	26393	26723	27038	28374	28248	28151	27512	27653	27619	27201	28272	26970
Independent Hydro	1946	1929	1921	1892	1864	1861	1813	1914	2003	2047	2071	2167	2166	2012
Sustained Peaking Adjustment	-100	-1268	-2153	-1125	-2122	-1306	-5404	-3665	-4440	-4152	-5497	-1247	-3941	-700
<b>Total Hydro Resources</b>	<b>28820</b>	<b>27600</b>	<b>26161</b>	<b>27489</b>	<b>26781</b>	<b>28928</b>	<b>24657</b>	<b>26400</b>	<b>25075</b>	<b>25547</b>	<b>24193</b>	<b>28121</b>	<b>26497</b>	<b>28281</b>
<b>Other Resources</b>														
Small Thermal & Misc.	46	46	46	48	55	59	59	57	49	46	46	57	1	48
Combustion Turbines	1074	1074	1076	1082	1540	1542	1540	1539	1084	582	1082	834	1078	1072
Renewables	82	82	82	83	84	86	87	86	86	85	85	34	82	82
Cogeneration	775	775	775	775	775	755	775	775	775	775	775	306	775	755
Imports	1109	1109	776	972	1254	1196	1213	1242	1274	905	905	1284	1253	1089
Large Thermal	5720	5720	5720	5727	5743	5755	5756	5748	5729	5048	4694	4792	4579	5728
Non-Utility Generation	1462	1462	1376	1273	1228	1215	1197	1224	1255	1407	1407	818	1388	1510
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Other Resources</b>	<b>10269</b>	<b>10269</b>	<b>9850</b>	<b>9961</b>	<b>10679</b>	<b>10607</b>	<b>10628</b>	<b>10670</b>	<b>10252</b>	<b>8847</b>	<b>8993</b>	<b>8124</b>	<b>9155</b>	<b>10284</b>
<b>Total Resources</b>	<b>39089</b>	<b>37869</b>	<b>36012</b>	<b>37450</b>	<b>37460</b>	<b>39535</b>	<b>35285</b>	<b>37070</b>	<b>35326</b>	<b>34394</b>	<b>33187</b>	<b>36245</b>	<b>35652</b>	<b>38566</b>
<b>Reserves &amp; Maintenance</b>														
Hydro Reserves	-1446	-1443	-1416	-1431	-1445	-1512	-1503	-1503	-1476	-1485	-1484	-1468	-1522	-1449
Small Thermal & Misc. Reserves	-172	-172	-168	-163	-184	-183	-183	-184	-162	-145	-170	-102	-166	-173
Contract Reserves	-443	-443	-294	-348	-309	-383	-389	-406	-353	-311	-311	-421	-503	-428
Large Thermal Reserves	-858	-858	-858	-859	-861	-863	-863	-862	-859	-757	-704	-719	-687	-859
Regional Hydro Maintenance	-4605	-4042	-3787	-3208	-2935	-2037	-1561	-2289	-2632	-2751	-2483	-2360	-2202	-3721
Spinning Reserves	-812	-796	-755	-803	-812	-879	-790	-815	-764	-768	-697	-763	-815	-819
Regional Transmission Losses	-1030	-1009	-963	-1026	-1036	-1128	-1005	-1039	-974	-944	-916	-1019	-997	-1042
<b>Total Reserves, Maintenance &amp; Losses</b>	<b>-9366</b>	<b>-8763</b>	<b>-8240</b>	<b>-7839</b>	<b>-7582</b>	<b>-6985</b>	<b>-6294</b>	<b>-7098</b>	<b>-7222</b>	<b>-7160</b>	<b>-6765</b>	<b>-6852</b>	<b>-6893</b>	<b>-8492</b>
<b>Total Net Resources</b>	<b>29723</b>	<b>29106</b>	<b>27771</b>	<b>29611</b>	<b>29879</b>	<b>32550</b>	<b>28991</b>	<b>29972</b>	<b>28104</b>	<b>27234</b>	<b>26422</b>	<b>29393</b>	<b>28759</b>	<b>30073</b>
<b>Surplus/Deficits</b>														
Firm Surplus/Deficit	-3103	-3718	-3854	-4337	-6981	-7759	-12418	-10189	-8879	-8131	-8942	-4171	-4040	-3314
<b>Total Surplus/Deficit</b>	<b>-3265</b>	<b>-3880</b>	<b>-3997</b>	<b>-4448</b>	<b>-7151</b>	<b>-7846</b>	<b>-12609</b>	<b>-10330</b>	<b>-9067</b>	<b>-8293</b>	<b>-9104</b>	<b>-4304</b>	<b>-4215</b>	<b>-3473</b>



**Bonneville Power Administration  
2000 Pacific Northwest Loads and Resources Study  
Technical Appendix**

**Section 11  
50 Water Year Surplus/Deficit  
Federal Tables  
Medium Loads  
Monthly OY 2002, 2006 & 2011  
Capacity in Megawatts**

**Power Business Line**

Reports Powered by:



Loads and Resources Information System

**Federal 50 Water Year Surplus/Deficit  
PNW Loads and Resources Study  
2001 - 2002 Operating Year  
2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
1929 Federal Surplus/Deficit	3299	3637	1771	2311	5	1707	-791	1050	-182	-526	334	24	2525	1616
1930 Federal Surplus/Deficit	3269	2395	1771	1414	849	2031	-792	82	-182	823	1769	-1049	-332	1601
1931 Federal Surplus/Deficit	3237	3644	1771	1171	1008	2344	-793	-922	-182	2429	-749	2034	625	1568
1932 Federal Surplus/Deficit	3164	1598	1771	1355	829	1039	-792	448	2774	1890	672	1165	2325	1393
1933 Federal Surplus/Deficit	3287	3784	2601	2386	512	2099	2920	2155	1073	1595	525	998	2325	1682
1934 Federal Surplus/Deficit	3356	3836	3996	2213	1983	2868	2969	2229	2712	1768	862	1173	1959	1211
1935 Federal Surplus/Deficit	1554	1598	1771	673	3.5	1355	2891	2174	2627	1664	493	935	2119	1431
1936 Federal Surplus/Deficit	3238	1598	1771	1999	47	1886	270	1428	440	443	1346	1744	2384	1615
1937 Federal Surplus/Deficit	3266	2574	1816	1485	284	1771	-792	-110	-182	-526	-1659	1747	655	1620
1938 Federal Surplus/Deficit	3230	2923	2416	1699	1159	2668	2911	2149	2598	1686	685	1150	2191	1389
1939 Federal Surplus/Deficit	3285	1598	1771	2408	5	1482	-791	2575	2897	2203	1248	1656	-588	1613
1940 Federal Surplus/Deficit	3253	2075	1771	2390	452	1686	1256	2574	3043	2311	1455	1572	-1114	1614
1941 Federal Surplus/Deficit	3231	1598	2780	2324	192	1737	873	193	1688	-499	1035	1280	2254	1226
1942 Federal Surplus/Deficit	3200	1833	1771	2134	1189	2841	2908	2219	-182	2413	1611	1987	2594	1634
1943 Federal Surplus/Deficit	3289	3782	3248	2360	5.2	1650	2931	2219	2736	1879	930	1067	2243	1631
1944 Federal Surplus/Deficit	3338	3817	1771	2441	5.9	1729	-791	1595	-182	-526	-279	804	1391	1126
1945 Federal Surplus/Deficit	3266	1598	1771	1616	961	1000	-791	-922	-182	-142	587	1745	2529	1627
1946 Federal Surplus/Deficit	3289	3794	2170	1347	6.0	2874	2961	2251	2731	1842	782	1256	2310	1413
1947 Federal Surplus/Deficit	3301	1646	3261	2428	293	2884	2945	2219	2657	1782	697	1189	2410	1387
1948 Federal Surplus/Deficit	3283	3027	2714	2250	1827	2876	2959	2277	2733	1766	614	611	2283	1630
1949 Federal Surplus/Deficit	3336	3815	4015	2429	5	1490	2942	2274	2797	1905	734	1518	2568	613
1950 Federal Surplus/Deficit	1554	1598	1771	1768	5.1	2874	2945	2218	2640	1698	529	817	1212	1588
1951 Federal Surplus/Deficit	3332	3818	3220	2267	2043	2909	2956	2252	2651	1670	496	-30	2115	1398
1952 Federal Surplus/Deficit	3348	3826	3122	2261	1247	2880	2924	2229	2711	1813	886	515	2480	1402
1953 Federal Surplus/Deficit	3286	2140	1771	1974	5.1	1976	1505	2597	2772	2000	1019	1300	2383	1674
1954 Federal Surplus/Deficit	3321	3790	3352	2416	622	2254	3201	2558	2688	1684	520	992	2070	1591
1955 Federal Surplus/Deficit	3367	3867	4051	2448	1958	2487	3202	2710	-181	2385	1403	1594	2527	1685
1956 Federal Surplus/Deficit	3363	3846	3618	2253	1830	2897	2941	2175	2473	1378	384	668	1576	1554
1957 Federal Surplus/Deficit	3322	3794	2898	2444	5.2	2886	3198	2589	2830	1848	709	891	2618	1626
1958 Federal Surplus/Deficit	3293	2547	1875	2397	4.6	1666	3211	2620	2871	2114	1042	1627	2607	1619
1959 Federal Surplus/Deficit	3286	3017	1843	2370	1627	2884	2958	2195	2591	1608	476	888	2032	1591
1960 Federal Surplus/Deficit	3324	3812	3735	2463	2027	2888	2922	2386	3071	2120	910	1247	2264	1494
1961 Federal Surplus/Deficit	3309	2229	2561	2382	914	744	2932	2240	2743	1866	634	1281	1541	1623
1962 Federal Surplus/Deficit	3247	3217	1771	2319	4.7	1200	2937	1993	1694	1993	848	1297	2406	1635
1963 Federal Surplus/Deficit	3286	3787	1771	2441	1931	2880	3011	2556	2117	2758	1663	1905	2569	1626
1964 Federal Surplus/Deficit	3294	3790	3995	2426	4.6	974	3206	2543	435	1809	612	978	1408	1661
1965 Federal Surplus/Deficit	3345	3826	3905	2224	1022	2896	2941	2195	2508	1445	683	1136	2277	1408
1966 Federal Surplus/Deficit	3039	3807	3327	2418	1160	2737	3171	2662	2075	2348	1140	1439	1856	1643
1967 Federal Surplus/Deficit	3301	2744	1941	2407	4.6	1951	2945	2208	2616	1588	-1301	800	2225	1440
1968 Federal Surplus/Deficit	3256	3816	3759	2433	700	2608	2995	2349	2884	884	468	667	2274	1479
1969 Federal Surplus/Deficit	3317	3773	3705	2233	2033	2880	2946	2269	2671	1722	835	555	2574	1419
1970 Federal Surplus/Deficit	3276	1598	1801	2409	3.2	1223	3210	2618	2991	2057	1269	1450	2417	1635
1971 Federal Surplus/Deficit	3302	2697	1771	2280	5	2868	2972	2282	2710	1696	420	394	1542	1689
1972 Federal Surplus/Deficit	3379	3849	4018	2440	689	2621	2952	2228	2562	1494	423	183	1599	1443
1973 Federal Surplus/Deficit	3364	3849	4029	2438	5.2	2884	3211	2781	2004	-527	-1107	443	1104	1631
1974 Federal Surplus/Deficit	3277	1598	1771	1911	1034	2877	2958	2240	2520	1428	342	-309	1636	1647
1975 Federal Surplus/Deficit	3364	3839	3790	2358	5.2	1712	3196	2514	2647	1701	525	826	2177	1652
1976 Federal Surplus/Deficit	3316	3781	2581	2447	1824	2896	2965	2235	2746	1810	544	215	2239	1422
1977 Federal Surplus/Deficit	3078	3595	4009	2439	5.9	1852	8.7	2239	-182	-526	309	492	824	1174
1978 Federal Surplus/Deficit	3161	1598	1771	1075	748	2350	2905	2193	2675	1830	735	976	2049	1604
<b>-Ranked Averages-</b>														
Top Ten Percent	3330	3815	3451	2359	1987	2800	3010	2430	2078	2151	1135	1295	2378	1487
Middle Eighty Percent	3191	2913	2647	2176	551	2197	2443	2179	2257	1527	644	952	1937	1518
Bottom Ten Percent	3275	2806	1780	1625	622	1775	-792	-56	-182	411	-66	1056	974	1508

**Federal 50 Water Year Surplus/Deficit  
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2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
1929 Federal Surplus/Deficit	1288	1670	138	1339	-961	685	-2305	-222	-1416	-1325	-5.1	-413	2043	924
1930 Federal Surplus/Deficit	1264	722	142	496	-54	1008	-2306	-1179	-1416	80	1372	-1444	-786	909
1931 Federal Surplus/Deficit	1240	1679	138	253	100	1319	-2306	-2234	-1417	1665	-1057	1554	163	875
1932 Federal Surplus/Deficit	1184	49	138	438	-75	26	-2306	-817	1540	1091	275	686	1824	701
1933 Federal Surplus/Deficit	1279	1740	837	1414	-390	1072	1406	843	-73	796	128	519	1824	989
1934 Federal Surplus/Deficit	1332	1780	1860	1241	1017	1788	1456	918	1477	969	465	694	1491	561
1935 Federal Surplus/Deficit	-64	46	135	-231	-962	339	1377	862	1393	865	96	456	1618	738
1936 Federal Surplus/Deficit	1240	48	137	1074	-851	867	-1173	180	-747	-293	948	1265	1883	923
1937 Federal Surplus/Deficit	1262	858	235	566	-609	753	-2306	-1373	-1416	-1325	-2057	1297	194	928
1938 Federal Surplus/Deficit	1234	1128	693	776	248	1633	1397	837	1364	887	288	671	1690	697
1939 Federal Surplus/Deficit	1277	48	137	1436	-961	461	-2264	1263	1663	1404	851	1177	-1031	921
1940 Federal Surplus/Deficit	1252	480	159	1419	-445	665	-163	1262	1809	1512	1057	1093	-1615	922
1941 Federal Surplus/Deficit	1236	49	970	1353	-706	715	-559	-1073	507	-1223	685	844	1776	566
1942 Federal Surplus/Deficit	1211	296	138	1163	276	1761	1394	908	-1416	1646	1250	1507	2093	942
1943 Federal Surplus/Deficit	1280	1738	1325	1388	-960	621	1417	907	1502	1080	533	588	1742	938
1944 Federal Surplus/Deficit	1318	1766	138	1470	-960	703	-2213	318	-1416	-1325	-606	363	916	466
1945 Federal Surplus/Deficit	1263	48	137	694	54	-9.7	-2305	-2234	-1416	-866	225	1266	2028	935
1946 Federal Surplus/Deficit	1280	1747	506	427	-940	1794	1447	939	1497	1043	385	777	1809	721
1947 Federal Surplus/Deficit	1290	153	1339	1456	-610	1804	1431	907	1423	983	300	709	1909	695
1948 Federal Surplus/Deficit	1276	1200	921	1278	862	1796	1445	965	1498	966	216	132	1782	938
1949 Federal Surplus/Deficit	1316	1763	1874	1457	-961	464	1428	962	1563	1106	336	1039	2067	-26
1950 Federal Surplus/Deficit	-62	48	137	840	-960	1794	1431	906	1406	899	131	338	711	896
1951 Federal Surplus/Deficit	1313	1766	1312	1296	1077	1829	1442	940	1416	871	98	-509	1614	706
1952 Federal Surplus/Deficit	1325	1771	1242	1290	333	1800	1410	917	1477	1014	488	36	1979	710
1953 Federal Surplus/Deficit	1278	517	137	1048	-961	953	48	1285	1537	1201	622	821	1882	982
1954 Federal Surplus/Deficit	1305	1745	1407	1444	-281	1223	1687	1247	1453	885	123	513	1569	899
1955 Federal Surplus/Deficit	1341	1804	1902	1476	1039	1457	1688	1398	-1416	1586	1006	1115	2026	993
1956 Federal Surplus/Deficit	1338	1788	1616	1281	864	1818	1428	863	1238	579	-14	189	1075	862
1957 Federal Surplus/Deficit	1305	1747	1063	1473	-960	1807	1684	1277	1596	1049	311	412	2117	934
1958 Federal Surplus/Deficit	1283	833	279	1444	-961	638	1697	1308	1637	1315	645	1148	2106	927
1959 Federal Surplus/Deficit	1278	1195	255	1398	707	1805	1444	884	1357	809	79	409	1531	899
1960 Federal Surplus/Deficit	1307	1761	1657	1491	1061	1808	1408	1074	1836	1321	513	768	1763	802
1961 Federal Surplus/Deficit	1295	589	802	1410	6.4	-273	1418	928	1508	1067	272	802	1040	931
1962 Federal Surplus/Deficit	1247	1353	138	1348	-961	180	1423	751	523	1194	450	818	1905	943
1963 Federal Surplus/Deficit	1278	1742	185	1469	996	1800	1497	1244	950	1959	1265	1426	2068	934
1964 Federal Surplus/Deficit	1284	1744	1858	1455	-961	-45	1692	1231	-720	1010	215	499	907	969
1965 Federal Surplus/Deficit	1324	1772	1789	1252	112	1817	1427	883	1273	646	286	657	1776	716
1966 Federal Surplus/Deficit	1087	1758	1389	1446	247	1699	1657	1351	905	1549	742	960	1398	951
1967 Federal Surplus/Deficit	1290	988	333	1435	-961	926	1432	896	1381	789	-1645	321	1724	748
1968 Federal Surplus/Deficit	1254	1765	1725	1461	-206	1572	1481	1037	1650	158	118	231	1773	787
1969 Federal Surplus/Deficit	1302	1731	1634	1261	1068	1800	1432	957	1436	923	438	76	2073	727
1970 Federal Surplus/Deficit	1268	46	221	1437	-962	200	1697	1306	1757	1311	871	971	1916	943
1971 Federal Surplus/Deficit	1290	946	138	1351	-961	1788	1458	971	1476	896	22	-85	1041	997
1972 Federal Surplus/Deficit	1350	1790	1876	1469	-220	1583	1438	916	1327	695	25	-297	1098	751
1973 Federal Surplus/Deficit	1338	1790	1885	1467	-960	1804	1697	1469	824	-1326	-1422	9.8	642	939
1974 Federal Surplus/Deficit	1271	48	138	983	117	1797	1444	928	1285	629	-55	-788	1135	955
1975 Federal Surplus/Deficit	1338	1782	1755	1429	-960	684	1682	1202	1412	902	128	347	1676	960
1976 Federal Surplus/Deficit	1301	1737	818	1476	858	1817	1451	923	1511	1010	146	-264	1738	730
1977 Federal Surplus/Deficit	1117	1593	1870	1467	-960	825	-1409	958	-1416	-1325	-22	63	359	517
1978 Federal Surplus/Deficit	1181	96	138	160	-159	1314	1391	882	1441	1031	337	496	1548	912
<b>-Ranked Averages-</b>														
Top Ten Percent	1261	1755	1345	1382	878	1779	1490	1109	1321	1344	685	785	1758	795
Middle Eighty Percent	1211	1085	857	1219	-368	1145	941	876	976	736	264	483	1457	830
Bottom Ten Percent	1269	1015	158	696	-294	755	-2287	-1341	-1416	-354	-424	607	503	823

**Federal 50 Water Year Surplus/Deficit  
PNW Loads and Resources Study  
2010 - 2011 Operating Year  
2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
1929 Federal Surplus/Deficit	-231	162	-1455	-504	-3016	-1469	-4173	-2050	-3136	-2609	-1244	-1203	553	-400
1930 Federal Surplus/Deficit	-255	-779	-1414	-1317	-2074	-1146	-4139	-3001	-3135	-1172	99	-2210	-2260	-415
1931 Federal Surplus/Deficit	-280	173	-1455	-1561	-1923	-837	-4174	-4084	-3136	400	-2277	740	-1316	-448
1932 Federal Surplus/Deficit	-336	-1486	-1455	-1374	-2095	-2122	-4173	-2640	-179	-193	-998	-129	323	-623
1933 Federal Surplus/Deficit	-241	206	-724	-429	-2410	-1085	-461	-1007	-1743	-487	-1145	-296	322	-334
1934 Federal Surplus/Deficit	-187	246	268	-602	-1038	-398	-412	-932	-242	-314	-808	-121	9.1	-739
1935 Federal Surplus/Deficit	-1584	-1488	-1457	-2037	-3018	-1811	-490	-988	-326	-419	-1177	-359	117	-585
1936 Federal Surplus/Deficit	-279	-1486	-1456	-744	-2867	-1285	-3001	-1634	-2440	-1542	-325	450	382	-400
1937 Federal Surplus/Deficit	-257	-643	-1323	-1248	-2623	-1398	-4173	-3196	-3135	-2609	-3329	499	-1283	-396
1938 Federal Surplus/Deficit	-285	-374	-868	-1040	-1777	-528	-471	-1013	-355	-397	-985	-144	189	-626
1939 Federal Surplus/Deficit	-243	-1486	-1455	-407	-3016	-1693	-4079	-587	-56	120	-422	362	-2499	-403
1940 Federal Surplus/Deficit	-267	-1017	-1398	-425	-2461	-1489	-1978	-588	90	228	-215	278	-3117	-402
1941 Federal Surplus/Deficit	-284	-1486	-593	-490	-2724	-1439	-2381	-2897	-1183	-2466	-560	54	287	-739
1942 Federal Surplus/Deficit	-308	-1199	-1455	-680	-1750	-425	-473	-942	-3136	380	-1.9	692	591	-382
1943 Federal Surplus/Deficit	-239	204	-243	-455	-3016	-1537	-451	-943	-218	-203	-740	-227	241	-385
1944 Federal Surplus/Deficit	-202	231	-1455	-374	-3015	-1453	-4026	-1513	-3135	-2609	-1838	-429	-570	-840
1945 Federal Surplus/Deficit	-257	-1486	-1456	-1122	-1969	-2156	-4173	-4084	-3135	-2109	-1028	451	527	-389
1946 Federal Surplus/Deficit	-239	213	-1054	-1388	-2955	-392	-420	-911	-222	-241	-888	-38	307	-603
1947 Federal Surplus/Deficit	-230	-1341	-226	-387	-2630	-382	-436	-943	-297	-301	-973	-105	407	-628
1948 Federal Surplus/Deficit	-244	-307	-641	-565	-1194	-390	-422	-885	-221	-317	-1057	-683	281	-385
1949 Federal Surplus/Deficit	-204	229	282	-386	-3016	-1692	-440	-888	-157	-178	-937	224	566	-1319
1950 Federal Surplus/Deficit	-1582	-1486	-1456	-979	-3016	-392	-436	-944	-313	-385	-1141	-477	-791	-428
1951 Federal Surplus/Deficit	-206	232	-252	-548	-978	-357	-425	-910	-303	-413	-1175	-1324	112	-618
1952 Federal Surplus/Deficit	-194	237	-317	-554	-1694	-386	-458	-933	-242	-270	-785	-779	477	-613
1953 Federal Surplus/Deficit	-242	-988	-1455	-769	-3016	-1202	-1788	-565	-182	-83	-651	5.6	381	-342
1954 Federal Surplus/Deficit	-214	211	-160	-399	-2301	-936	-181	-603	-266	-398	-1150	-302	68	-425
1955 Federal Surplus/Deficit	-179	270	309	-367	-1001	-701	-179	-452	-3135	302	-267	300	524	-330
1956 Federal Surplus/Deficit	-182	254	52	-562	-1191	-369	-440	-987	-481	-704	-1286	-626	-427	-462
1957 Federal Surplus/Deficit	-214	213	-500	-370	-3016	-380	-184	-573	-123	-235	-962	-403	615	-390
1958 Federal Surplus/Deficit	-236	-671	-1280	-400	-3017	-1520	-170	-542	-82	31	-628	333	605	-397
1959 Federal Surplus/Deficit	-242	-310	-1303	-445	-1323	-382	-424	-966	-362	-475	-1194	-406	29	-425
1960 Federal Surplus/Deficit	-212	227	64	-352	-994	-378	-459	-776	117	37	-760	-47	261	-522
1961 Federal Surplus/Deficit	-224	-914	-761	-433	-2017	-2423	-450	-922	-211	-217	-980	-13	-461	-392
1962 Federal Surplus/Deficit	-272	-150	-1455	-496	-3016	-1973	-445	-1060	-1161	-90	-822	3.3	403	-381
1963 Federal Surplus/Deficit	-242	208	-1373	-374	-1060	-386	-370	-606	-732	675	-7.4	611	566	-390
1964 Federal Surplus/Deficit	-236	210	266	-389	-3017	-2197	-175	-619	-2395	-274	-1058	-316	-595	-355
1965 Federal Surplus/Deficit	-196	238	196	-591	-1911	-370	-440	-967	-446	-638	-987	-158	275	-607
1966 Federal Surplus/Deficit	-433	224	-177	-397	-1778	-463	-211	-499	-778	265	-530	145	-79	-372
1967 Federal Surplus/Deficit	-230	-516	-1224	-408	-3017	-1230	-436	-954	-338	-495	-2887	-494	222	-576
1968 Federal Surplus/Deficit	-265	230	159	-382	-2228	-590	-387	-813	-69	-1085	-1128	-559	272	-537
1969 Federal Surplus/Deficit	-218	197	42	-582	-988	-386	-435	-893	-283	-361	-835	-739	571	-597
1970 Federal Surplus/Deficit	-252	-1488	-1337	-406	-3018	-1954	-171	-544	37	56	-401	156	414	-381
1971 Federal Surplus/Deficit	-229	-560	-1455	-469	-3016	-398	-409	-879	-243	-387	-1251	-900	-461	-327
1972 Federal Surplus/Deficit	-170	256	284	-374	-2244	-580	-429	-934	-392	-589	-1248	-1111	-404	-573
1973 Federal Surplus/Deficit	-181	256	292	-376	-3016	-382	-170	-381	-864	-2610	-2647	-778	-837	-385
1974 Federal Surplus/Deficit	-248	-1486	-1455	-836	-1911	-389	-423	-922	-434	-655	-1328	-1603	-367	-368
1975 Federal Surplus/Deficit	-181	248	193	-391	-3016	-1473	-185	-648	-307	-381	-1145	-468	174	-363
1976 Federal Surplus/Deficit	-219	203	-746	-368	-1197	-370	-416	-927	-208	-273	-1127	-1079	236	-594
1977 Federal Surplus/Deficit	-403	59	278	-376	-3015	-1332	-3221	-874	-3135	-2609	-1256	-722	-1121	-786
1978 Federal Surplus/Deficit	-338	-1395	-1455	-1652	-2181	-849	-477	-968	-279	-252	-936	-318	46	-412
<b>-Ranked Averages-</b>														
Top Ten Percent	-258	220	-235	-461	-1172	-402	-377	-741	-384	61	-588	-30	266	-524
Middle Eighty Percent	-309	-437	-720	-616	-2408	-1022	-919	-970	-738	-544	-1003	-329	-42	-492
Bottom Ten Percent	-250	-501	-1421	-1124	-2321	-1398	-4137	-3176	-3135	-1620	-1675	-190	-981	-497

**Bonneville Power Administration  
2000 Pacific Northwest Loads and Resources Study  
Technical Appendix**

**Section 12  
50 Water Year Surplus/Deficit  
Regional Tables  
Medium Loads  
Monthly OY 2002, 2006 & 2011  
Capacity in Megawatts**

**Power Business Line**

Reports Powered by:



Loads and Resources Information System

**Regional 50 Water Year Surplus/Deficit  
PNW Loads and Resources Study  
2001 - 2002 Operating Year  
2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
1929 Regional Surplus/Deficit	-892	-659	-1848	1787	-2643	-1672	-5960	-2781	-3597	-3079	-1352	-3083	3244	419
1930 Regional Surplus/Deficit	-1214	-2051	-2065	180	-1832	-1602	-6168	-3901	-3585	-1670	384	-4169	-1259	111
1931 Regional Surplus/Deficit	-1309	-1103	-1846	-332	-1784	-1369	-6042	-5504	-3728	458	-2950	-325	111	245
1932 Regional Surplus/Deficit	-1408	-3051	-1911	-232	-2009	-2893	-6232	-3830	136	-21	-686	-1147	3009	363
1933 Regional Surplus/Deficit	-1032	-557	-1003	1776	-1907	-1172	-921	-1367	-1874	-429	-833	-1435	2995	918
1934 Regional Surplus/Deficit	-886	-456	566	1790	-26	-7.5	-644	-907	509	-17	-588	-1747	1827	-708
1935 Regional Surplus/Deficit	-3394	-3431	-1992	-765	-2592	-2190	-965	-1238	39	-386	-861	-1594	2684	106
1936 Regional Surplus/Deficit	-1285	-2883	-1865	1122	-2721	-1787	-4619	-2307	-2782	-2002	313	-358	3163	597
1937 Regional Surplus/Deficit	-977	-1715	-2092	376	-2428	-1882	-6219	-4298	-3845	-3240	-3805	-979	615	552
1938 Regional Surplus/Deficit	-1159	-1454	-1329	844	-1095	-268	-900	-1139	94	-447	-565	-1180	2863	375
1939 Regional Surplus/Deficit	-1030	-2600	-1848	1824	-2708	-1939	-5916	-687	498	292	93	-630	-924	446
1940 Regional Surplus/Deficit	-1144	-2301	-2026	1676	-2254	-1842	-3138	-485	759	509	114	-652	-2269	-174
1941 Regional Surplus/Deficit	-1186	-2939	-1483	1239	-2551	-1779	-3767	-3713	-1194	-3797	-732	-1659	1790	-922
1942 Regional Surplus/Deficit	-2119	-3400	-1973	1142	-1281	-144	-1103	-1062	-3576	314	228	-235	3176	501
1943 Regional Surplus/Deficit	-1252	-599	-522	1623	-2624	-1530	-1032	-949	349	309	-154	-1292	2938	800
1944 Regional Surplus/Deficit	-958	-468	-1775	1990	-2644	-1596	-5875	-1944	-3507	-3156	-2307	-2320	647	-625
1945 Regional Surplus/Deficit	-1704	-3354	-1882	133	-1778	-2901	-6140	-5383	-3688	-2849	-967	-387	3258	479
1946 Regional Surplus/Deficit	-1079	-578	-1422	461	-2659	-67	-745	-888	363	-18	-517	-1174	3061	471
1947 Regional Surplus/Deficit	-917	-2613	-235	2036	-2098	133	-881	-808	302	-63	-632	-1362	2609	308
1948 Regional Surplus/Deficit	-1061	-1306	-731	1946	-139	-3	-767	-870	326	-60	-644	-1796	2606	769
1949 Regional Surplus/Deficit	-962	-466	567	2044	-2523	-1863	-1140	-993	488	-32	-564	-527	3265	-647
1950 Regional Surplus/Deficit	-2600	-2656	-1995	991	-2508	-4.9	-830	-786	410	-101	-855	-1689	1537	880
1951 Regional Surplus/Deficit	-759	-356	-112	1969	331	296	-638	-455	434	-153	-916	-2862	2819	477
1952 Regional Surplus/Deficit	-947	-462	-340	1945	-886	-40	-1007	-792	320	-22	-281	-1971	3370	401
1953 Regional Surplus/Deficit	-962	-2059	-1802	1101	-2660	-1421	-2683	-333	378	139	-199	-929	3133	923
1954 Regional Surplus/Deficit	-916	-468	-162	1946	-1761	-806	-470	-330	300	-55	-718	-1502	2394	841
1955 Regional Surplus/Deficit	-845	-343	628	2078	-36	-661	-567	-463	-3515	801	267	-592	3232	722
1956 Regional Surplus/Deficit	-971	-497	137	1898	-104	260	-703	-1016	60	-607	-1114	-1894	2090	816
1957 Regional Surplus/Deficit	-843	-402	-491	2075	-2498	55	-622	-337	529	-23	-566	-1312	3453	601
1958 Regional Surplus/Deficit	-956	-1757	-1756	1876	-2674	-1663	-495	-331	475	118	-42	-482	3413	584
1959 Regional Surplus/Deficit	-936	-1320	-1784	1828	-440	42	-787	-1084	87	-95	-969	-1516	2603	736
1960 Regional Surplus/Deficit	-1016	-555	429	2194	115	22	-1019	-731	902	617	-310	-1003	3050	531
1961 Regional Surplus/Deficit	-1028	-1981	-1048	1845	-1368	-2924	-1043	-889	407	18	-803	-1145	1725	650
1962 Regional Surplus/Deficit	-1152	-1182	-1914	1773	-2603	-2375	-1055	-1393	-1093	414	-251	-956	3224	390
1963 Regional Surplus/Deficit	-1105	-582	-1908	2008	-38	84	-792	-362	-543	1361	492	-190	3440	390
1964 Regional Surplus/Deficit	-1119	-581	248	1809	-2533	-2558	-557	-622	-2632	117	-768	-1411	1982	916
1965 Regional Surplus/Deficit	-837	-419	545	1692	-1216	98	-802	-768	117	-723	-451	-1271	3045	475
1966 Regional Surplus/Deficit	-1246	-492	-301	2075	-1069	-301	-536	-536	-464	825	-5.3	-828	2331	480
1967 Regional Surplus/Deficit	-1094	-1632	-1832	1760	-2584	-1264	-816	-979	-40	-547	-3341	-2052	2925	421
1968 Regional Surplus/Deficit	-1083	-503	147	2058	-1619	-368	-670	-536	713	-1299	-1127	-1778	2909	376
1969 Regional Surplus/Deficit	-1122	-566	287	1823	148	60	-738	-833	251	-144	-450	-2089	3374	481
1970 Regional Surplus/Deficit	-974	-2534	-1591	1997	-2594	-2151	-472	-246	750	292	-130	-719	2837	692
1971 Regional Surplus/Deficit	-1052	-1602	-1839	1720	-2496	-23	-712	-611	505	-316	-1121	-2418	2096	1037
1972 Regional Surplus/Deficit	-713	-280	747	2089	-1387	-294	-769	-827	287	-457	-1055	-2741	1985	434
1973 Regional Surplus/Deficit	-881	-405	728	1997	-2412	98	-398	-255	-567	-3401	-2842	-2625	293	-556
1974 Regional Surplus/Deficit	-1870	-3189	-1665	532	-1292	113	-580	-506	253	-560	-1182	-3912	1913	832
1975 Regional Surplus/Deficit	-747	-322	412	1785	-2484	-1466	-385	-425	371	-434	-1095	-1569	2957	934
1976 Regional Surplus/Deficit	-914	-358	-858	2175	43	303	-539	-779	481	49	-922	-2451	2990	562
1977 Regional Surplus/Deficit	-1140	-640	545	1915	-2661	-1567	-4842	-1150	-3583	-3460	-1914	-2802	-220	-867
1978 Regional Surplus/Deficit	-2079	-3374	-1925	-303	-2082	-893	-933	-1066	236	-82	-674	-1392	2694	454
<b>-Ranked Averages-</b>														
Top Ten Percent	-983	-483	-432	2034	120	153	-745	-632	305	346	-421	-1719	3135	488
Middle Eighty Percent	-1195	-1460	-884	1520	-1895	-978	-1537	-1008	-371	-460	-715	-1484	2349	420
Bottom Ten Percent	-1232	-1738	-1932	470	-2093	-1870	-6089	-4206	-3671	-2091	-1929	-1636	674	152

**Regional 50 Water Year Surplus/Deficit  
PNW Loads and Resources Study  
2005 - 2006 Operating Year  
2000 White Book**

10/1/2001

<i>Capacity in Megawatts</i>	<i>Aug1</i>	<i>Aug16</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr1</i>	<i>Apr16</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>
1929 Regional Surplus/Deficit	-623	-324	-1481	-651	-4898	-4448	-8857	-5389	-6127	-4918	-3115	-4738	1436	-791
1930 Regional Surplus/Deficit	-944	-1700	-1691	-2188	-4007	-4378	-9065	-6495	-6115	-3436	-1455	-5771	-3032	-1098
1931 Regional Surplus/Deficit	-1039	-763	-1478	-2700	-3965	-4148	-8939	-8163	-6258	-1336	-4673	-2035	-1672	-965
1932 Regional Surplus/Deficit	-1139	-2773	-1544	-2598	-4184	-5656	-9130	-6428	-2394	-1860	-2525	-2857	1176	-847
1933 Regional Surplus/Deficit	-762	-279	-563	-661	-4079	-3953	-3818	-4026	-4291	-2268	-2672	-3145	1162	-291
1934 Regional Surplus/Deficit	-616	-177	934	-648	-2282	-2857	-3541	-3565	-2021	-1856	-2427	-3457	37	-1864
1935 Regional Surplus/Deficit	-3124	-3153	-1624	-3116	-4848	-4957	-3862	-3897	-2491	-2225	-2700	-3304	852	-1104
1936 Regional Surplus/Deficit	-1015	-2604	-1498	-1256	-4887	-4558	-7425	-4883	-5250	-3759	-1526	-2068	1330	-612
1937 Regional Surplus/Deficit	-708	-1365	-1645	-1994	-4589	-4652	-9116	-6894	-6376	-5079	-5644	-2651	-1165	-657
1938 Regional Surplus/Deficit	-890	-1105	-889	-1530	-3280	-3059	-3797	-3798	-2436	-2286	-2404	-2889	1030	-835
1939 Regional Surplus/Deficit	-760	-2322	-1481	-613	-4963	-4713	-8761	-3346	-2033	-1547	-1746	-2339	-2682	-763
1940 Regional Surplus/Deficit	-875	-1941	-1630	-762	-4419	-4616	-5914	-3144	-1771	-1330	-1725	-2362	-4102	-1383
1941 Regional Surplus/Deficit	-916	-2660	-1049	-1199	-4719	-4555	-6559	-6313	-3656	-5539	-2509	-3313	-14	-2089
1942 Regional Surplus/Deficit	-1848	-3035	-1606	-1295	-3468	-2994	-4000	-3721	-6106	-1483	-1563	-1945	1343	-709
1943 Regional Surplus/Deficit	-983	-321	-97	-814	-4879	-4314	-3929	-3608	-2181	-1530	-1993	-3002	1105	-409
1944 Regional Surplus/Deficit	-689	-189	-1407	-447	-4899	-4376	-8654	-4558	-6037	-4995	-4055	-3980	-1153	-1793
1945 Regional Surplus/Deficit	-1435	-3075	-1515	-2240	-3958	-5660	-9037	-8042	-6218	-4591	-2761	-2097	1425	-730
1946 Regional Surplus/Deficit	-810	-299	-978	-1910	-4889	-2917	-3642	-3547	-2167	-1857	-2356	-2884	1228	-738
1947 Regional Surplus/Deficit	-647	-2247	196	-401	-4272	-2716	-3778	-3467	-2228	-1902	-2471	-3071	776	-902
1948 Regional Surplus/Deficit	-791	-968	-294	-491	-2394	-2853	-3664	-3529	-2204	-1899	-2483	-3506	773	-441
1949 Regional Surplus/Deficit	-692	-188	934	-393	-4778	-4643	-4037	-3653	-2042	-1871	-2403	-2237	1432	-1788
1950 Regional Surplus/Deficit	-2330	-2377	-1628	-1390	-4763	-2855	-3727	-3445	-2120	-1940	-2694	-3398	-296	-329
1951 Regional Surplus/Deficit	-489	-77	323	-468	-1925	-2553	-3535	-3114	-2096	-1992	-2755	-4572	986	-732
1952 Regional Surplus/Deficit	-678	-184	104	-492	-3076	-2890	-3905	-3451	-2210	-1861	-2120	-3680	1538	-809
1953 Regional Surplus/Deficit	-692	-1716	-1434	-1277	-4915	-4198	-5506	-2992	-2152	-1700	-2038	-2639	1300	-286
1954 Regional Surplus/Deficit	-647	-189	265	-491	-3934	-3592	-3368	-2989	-2230	-1894	-2558	-3212	561	-368
1955 Regional Surplus/Deficit	-575	-65	996	-359	-2232	-3446	-3464	-3122	-6045	-1038	-1572	-2301	1399	-487
1956 Regional Surplus/Deficit	-702	-219	568	-539	-2359	-2589	-3600	-3675	-2471	-2446	-2953	-3604	257	-393
1957 Regional Surplus/Deficit	-573	-124	-55	-363	-4753	-2794	-3520	-2996	-2002	-1862	-2405	-3022	1620	-609
1958 Regional Surplus/Deficit	-686	-1414	-1310	-538	-4929	-4445	-3392	-2990	-2055	-1721	-1881	-2192	1580	-625
1959 Regional Surplus/Deficit	-667	-978	-1337	-609	-2636	-2808	-3684	-3743	-2444	-1934	-2808	-3226	771	-473
1960 Regional Surplus/Deficit	-747	-276	797	-243	-2140	-2828	-3916	-3390	-1628	-1222	-2149	-2713	1217	-678
1961 Regional Surplus/Deficit	-759	-1634	-612	-593	-3548	-5692	-3940	-3548	-2124	-1821	-2595	-2854	-108	-559
1962 Regional Surplus/Deficit	-883	-836	-1547	-664	-4858	-5148	-3952	-3962	-3541	-1425	-2090	-2666	1392	-820
1963 Regional Surplus/Deficit	-836	-303	-1479	-429	-2255	-2766	-3690	-3021	-2986	-478	-1347	-1900	1607	-819
1964 Regional Surplus/Deficit	-850	-302	615	-628	-4788	-5330	-3454	-3281	-5060	-1722	-2607	-3121	150	-293
1965 Regional Surplus/Deficit	-568	-140	912	-745	-3398	-2752	-3699	-3427	-2414	-2562	-2290	-2981	1212	-734
1966 Regional Surplus/Deficit	-977	-213	126	-362	-3255	-3096	-3433	-3195	-2911	-1014	-1844	-2538	553	-729
1967 Regional Surplus/Deficit	-825	-1286	-1383	-678	-4839	-4044	-3713	-3638	-2570	-2386	-5111	-3762	1092	-788
1968 Regional Surplus/Deficit	-813	-225	577	-380	-3797	-3161	-3567	-3195	-1817	-3044	-2905	-3432	1076	-833
1969 Regional Surplus/Deficit	-852	-288	655	-615	-2108	-2790	-3635	-3492	-2279	-1983	-2290	-3799	1541	-728
1970 Regional Surplus/Deficit	-704	-2255	-1143	-441	-4850	-4927	-3370	-2905	-1780	-1478	-1969	-2428	1004	-518
1971 Regional Surplus/Deficit	-782	-1262	-1472	-662	-4751	-2872	-3609	-3270	-2025	-2155	-2960	-4127	263	-172
1972 Regional Surplus/Deficit	-444	-1.8	1114	-348	-3569	-3090	-3666	-3486	-2243	-2296	-2895	-4450	152	-775
1973 Regional Surplus/Deficit	-611	-126	1095	-440	-4667	-2751	-3295	-2914	-3027	-5240	-4574	-4276	-1490	-1765
1974 Regional Surplus/Deficit	-1600	-2911	-1297	-1848	-3484	-2737	-3477	-3164	-2277	-2399	-3021	-5622	80	-377
1975 Regional Surplus/Deficit	-477	-43	850	-598	-4740	-4248	-3282	-3084	-2160	-2273	-2934	-3278	1124	-275
1976 Regional Surplus/Deficit	-645	-79	-423	-263	-2213	-2547	-3437	-3438	-2049	-1790	-2761	-4161	1157	-647
1977 Regional Surplus/Deficit	-871	-361	912	-523	-4916	-4349	-7615	-3769	-6114	-5299	-3668	-4446	-2006	-2030
1978 Regional Surplus/Deficit	-1809	-3034	-1558	-2668	-4262	-3686	-3830	-3725	-2294	-1921	-2513	-3101	861	-755
<b>-Ranked Averages-</b>														
Top Ten Percent	-714	-205	-26	-404	-2128	-2697	-3642	-3291	-2208	-1493	-2260	-3429	1302	-721
Middle Eighty Percent	-925	-1157	-483	-899	-4114	-3783	-4420	-3657	-2887	-2289	-2541	-3187	524	-784
Bottom Ten Percent	-963	-1418	-1547	-1914	-4284	-4643	-8962	-6830	-6201	-3887	-3717	-3307	-1119	-1049

**Regional 50 Water Year Surplus/Deficit  
PNW Loads and Resources Study  
2010 - 2011 Operating Year  
2000 White Book**

10/1/2001

<b>Capacity in Megawatts</b>	<b>Aug1</b>	<b>Aug16</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr1</b>	<b>Apr16</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>
1929 Regional Surplus/Deficit	-2879	-2546	-3668	-2905	-7344	-7383	-12083	-8554	-8601	-7916	-6316	-6129	-1291	-3315
1930 Regional Surplus/Deficit	-3201	-3913	-3832	-4403	-6407	-7314	-12248	-9652	-8590	-6393	-4699	-7130	-5737	-3622
1931 Regional Surplus/Deficit	-3296	-2983	-3665	-4916	-6369	-7085	-12165	-11356	-8733	-4309	-7850	-3458	-4383	-3489
1932 Regional Surplus/Deficit	-3395	-5029	-3731	-4811	-6585	-8583	-12356	-9588	-4868	-4857	-5769	-4280	-1565	-3371
1933 Regional Surplus/Deficit	-3019	-2535	-2709	-2915	-6479	-6892	-7044	-7220	-6701	-5266	-5916	-4568	-1579	-2815
1934 Regional Surplus/Deficit	-2873	-2434	-1253	-2902	-4728	-5834	-6767	-6758	-4495	-4855	-5672	-4881	-2679	-4357
1935 Regional Surplus/Deficit	-5381	-5409	-3811	-5321	-7294	-7887	-7088	-7090	-4966	-5223	-5944	-4727	-1890	-3628
1936 Regional Surplus/Deficit	-3271	-4861	-3685	-3476	-7284	-7491	-10599	-8030	-7691	-6712	-4771	-3492	-1412	-3137
1937 Regional Surplus/Deficit	-2964	-3579	-3788	-4210	-6982	-7584	-12343	-10053	-8850	-8077	-8888	-4052	-3876	-3181
1938 Regional Surplus/Deficit	-3146	-3320	-3036	-3749	-5687	-6004	-7023	-6992	-4911	-5284	-5648	-4313	-1711	-3359
1939 Regional Surplus/Deficit	-3017	-4578	-3668	-2867	-7410	-7647	-11919	-6539	-4507	-4545	-4990	-3763	-5380	-3288
1940 Regional Surplus/Deficit	-3131	-4149	-3771	-3016	-6815	-7550	-9071	-6337	-4246	-4328	-4969	-3784	-6843	-3908
1941 Regional Surplus/Deficit	-3173	-4917	-3199	-3453	-7116	-7490	-9726	-9473	-6093	-8484	-5718	-4703	-2739	-4589
1942 Regional Surplus/Deficit	-4105	-5242	-3793	-3550	-5877	-5971	-7226	-6915	-8581	-4458	-4780	-3368	-1398	-3233
1943 Regional Surplus/Deficit	-3239	-2577	-2251	-3068	-7325	-7254	-7155	-6802	-4656	-4528	-5238	-4425	-1637	-2934
1944 Regional Surplus/Deficit	-2945	-2446	-3594	-2701	-7346	-7313	-11809	-7726	-8512	-7993	-7246	-5374	-3875	-4293
1945 Regional Surplus/Deficit	-3691	-5332	-3702	-4459	-6363	-8586	-12263	-11235	-8693	-7536	-5979	-3520	-1317	-3255
1946 Regional Surplus/Deficit	-3066	-2556	-3122	-4127	-7283	-5894	-6868	-6740	-4642	-4854	-5600	-4307	-1513	-3263
1947 Regional Surplus/Deficit	-2904	-4452	-1956	-2655	-6673	-5693	-7005	-6661	-4702	-4899	-5716	-4495	-1965	-3426
1948 Regional Surplus/Deficit	-3048	-3189	-2442	-2745	-4841	-5830	-6890	-6723	-4678	-4896	-5728	-4930	-1969	-2965
1949 Regional Surplus/Deficit	-2949	-2444	-1253	-2647	-7224	-7581	-7263	-6846	-4517	-4869	-5648	-3661	-1310	-4272
1950 Regional Surplus/Deficit	-4587	-4633	-3815	-3612	-7209	-5832	-6953	-6639	-4595	-4938	-5938	-4822	-3037	-2853
1951 Regional Surplus/Deficit	-2746	-2334	-1826	-2722	-4371	-5530	-6761	-6307	-4570	-4990	-6000	-5995	-1755	-3256
1952 Regional Surplus/Deficit	-2934	-2440	-2041	-2746	-5485	-5866	-7131	-6644	-4685	-4858	-5365	-5104	-1204	-3333
1953 Regional Surplus/Deficit	-2948	-3935	-3621	-3498	-7361	-7134	-8692	-6186	-4627	-4698	-5283	-4062	-1442	-2810
1954 Regional Surplus/Deficit	-2903	-2446	-1889	-2745	-6335	-6534	-6594	-6183	-4705	-4891	-5802	-4636	-2180	-2892
1955 Regional Surplus/Deficit	-2832	-2321	-1192	-2613	-4658	-6386	-6691	-6316	-8520	-4036	-4817	-3724	-1342	-3012
1956 Regional Surplus/Deficit	-2958	-2475	-1583	-2793	-4805	-5566	-6826	-6868	-4945	-5444	-6198	-5028	-2484	-2918
1957 Regional Surplus/Deficit	-2830	-2380	-2203	-2617	-7199	-5771	-6746	-6189	-4476	-4860	-5649	-4445	-1122	-3133
1958 Regional Surplus/Deficit	-2943	-3632	-3454	-2792	-7375	-7385	-6618	-6184	-4530	-4719	-5125	-3615	-1161	-3150
1959 Regional Surplus/Deficit	-2923	-3197	-3480	-2863	-5049	-5784	-6910	-6936	-4918	-4932	-6053	-4650	-1971	-2997
1960 Regional Surplus/Deficit	-3003	-2533	-1391	-2497	-4586	-5804	-7141	-6582	-4102	-4220	-5393	-4136	-1524	-3202
1961 Regional Surplus/Deficit	-3015	-3850	-2761	-2847	-5953	-8622	-7166	-6741	-4598	-4819	-5813	-4278	-2849	-3083
1962 Regional Surplus/Deficit	-3139	-3052	-3734	-2918	-7305	-8082	-7179	-7105	-5970	-4423	-5335	-4089	-1350	-3344
1963 Regional Surplus/Deficit	-3092	-2560	-3621	-2683	-4701	-5743	-6916	-6215	-5412	-3476	-4591	-3323	-1134	-3344
1964 Regional Surplus/Deficit	-3106	-2559	-1572	-2882	-7235	-8263	-6680	-6475	-7476	-4720	-5852	-4544	-2592	-2817
1965 Regional Surplus/Deficit	-2824	-2397	-1275	-2999	-5804	-5729	-6925	-6620	-4888	-5560	-5535	-4405	-1529	-3258
1966 Regional Surplus/Deficit	-3233	-2470	-2027	-2616	-5663	-6042	-6659	-6388	-5339	-4012	-5089	-3961	-2156	-3253
1967 Regional Surplus/Deficit	-3081	-3502	-3524	-2932	-7285	-6982	-6939	-6832	-5045	-5384	-8316	-5185	-1649	-3312
1968 Regional Surplus/Deficit	-3070	-2481	-1575	-2634	-6200	-6106	-6793	-6388	-4291	-5989	-6114	-4823	-1665	-3358
1969 Regional Surplus/Deficit	-3109	-2544	-1533	-2869	-4554	-5767	-6861	-6685	-4753	-4981	-5534	-5222	-1201	-3252
1970 Regional Surplus/Deficit	-2961	-4512	-3285	-2695	-7296	-7862	-6596	-6099	-4255	-4438	-5213	-3852	-1737	-3042
1971 Regional Surplus/Deficit	-3039	-3482	-3659	-2886	-7197	-5849	-6835	-6464	-4500	-5153	-6205	-5551	-2479	-2696
1972 Regional Surplus/Deficit	-2700	-2258	-1073	-2602	-5975	-6038	-6893	-6680	-4718	-5294	-6139	-5874	-2590	-3299
1973 Regional Surplus/Deficit	-2868	-2383	-1092	-2694	-7113	-5728	-6521	-6108	-5462	-8238	-7757	-5664	-4202	-4289
1974 Regional Surplus/Deficit	-3857	-5167	-3485	-4071	-5895	-5714	-6703	-6358	-4751	-5397	-6265	-7046	-2662	-2901
1975 Regional Surplus/Deficit	-2733	-2300	-1298	-2821	-7186	-7188	-6508	-6277	-4634	-5271	-6179	-4701	-1617	-2799
1976 Regional Surplus/Deficit	-2901	-2336	-2572	-2517	-4659	-5524	-6662	-6631	-4524	-4788	-6006	-5585	-1584	-3172
1977 Regional Surplus/Deficit	-3127	-2618	-1275	-2777	-7363	-7287	-10770	-6940	-8588	-8297	-6862	-5831	-4720	-4528
1978 Regional Surplus/Deficit	-4065	-5235	-3745	-4881	-6666	-6633	-7056	-6918	-4769	-4919	-5758	-4525	-1881	-3279
<b>-Ranked Averages-</b>														
Top Ten Percent	-2970	-2461	-2189	-2658	-4574	-5673	-6868	-6484	-4672	-4491	-5505	-4852	-1440	-3245
Middle Eighty Percent	-3182	-3399	-2650	-3144	-6539	-6734	-7637	-6845	-5353	-5282	-5777	-4606	-2213	-3305
Bottom Ten Percent	-3219	-3651	-3716	-4138	-6693	-7577	-12166	-10005	-8675	-6862	-6933	-4707	-3838	-3568