

COMPOUND INTEREST AND ANNUITY TABLES -

SNAKE RIVER DAM COSTS

Beginning in 2015

All costs in Thousands of Dollars

Discount Rate: 6.880%

Total Annual Costs	Present Value	Cap. Recovery Factor	Annual Average
\$147,658,332	\$4,297,144	6.889%	\$296,030
Decommission (breach)			
Total Annual Average			\$296,030

Year	Total Annual Costs**	Present Value \$1	Total Annual Cost: Present Value	Annual Cost Categories					
				1. System Improvements	2. O&M	3. Turbine Rehab	4. Comp Plan	5. Power Services	6. Dredging
2015	\$133,691	0.93563	\$125,085		\$39,400	\$16,200	\$31,670	\$34,711	\$11,710
2016	\$136,858	0.87540	\$119,806		\$40,600	\$16,200	\$32,303	\$35,752	\$12,003
2017	\$140,177	0.81905	\$114,812		\$41,900	\$16,200	\$32,949	\$36,825	\$12,303
2018	\$170,937	0.76633	\$130,994		\$43,100	\$42,700	\$34,596	\$37,930	\$12,611
2019	\$159,220	0.71700	\$114,160		\$44,400	\$26,500	\$36,326	\$39,068	\$12,926
2020	\$163,831	0.67084	\$109,905		\$45,700	\$26,500	\$38,143	\$40,240	\$13,249
2021	\$197,177	0.62766	\$123,760		\$47,100	\$55,000	\$40,050	\$41,447	\$13,580
2022	\$176,162	0.58726	\$103,453		\$48,500	\$29,000	\$42,052	\$42,690	\$13,920
2023	\$181,394	0.54945	\$99,668		\$50,000	\$29,000	\$44,155	\$43,971	\$14,268
2024	\$218,377	0.51409	\$112,265		\$51,500	\$60,600	\$46,363	\$45,290	\$14,625
2025	\$194,920	0.48099	\$93,755		\$53,000	\$31,600	\$48,681	\$46,649	\$14,990
2026	\$248,471	0.45003	\$111,820	\$47,743	\$54,600	\$31,600	\$51,115	\$48,048	\$15,365
2027	\$290,584	0.42106	\$122,354	\$49,175	\$56,300	\$66,200	\$53,670	\$49,490	\$15,749
2028	\$266,621	0.39396	\$105,037	\$50,650	\$57,900	\$34,600	\$56,354	\$50,974	\$16,143
2029	\$274,692	0.36860	\$101,251	\$52,170	\$59,700	\$34,600	\$59,172	\$52,504	\$16,546
2030	\$320,804	0.34487	\$110,636	\$53,735	\$61,500	\$72,400	\$62,130	\$54,079	\$16,960
2031	\$294,769	0.32267	\$95,113	\$55,347	\$63,300	\$37,800	\$65,237	\$55,701	\$17,384
2032	\$303,697	0.30190	\$91,686	\$57,008	\$65,200	\$37,800	\$68,499	\$57,372	\$17,819
2033	\$354,199	0.28247	\$100,049	\$58,718	\$67,200	\$79,000	\$71,924	\$59,093	\$18,264
2034	\$325,985	0.26428	\$86,153	\$60,479	\$69,200	\$41,200	\$75,520	\$60,866	\$18,721
2035	\$335,869	0.24727	\$83,051	\$62,293	\$71,200	\$41,200	\$79,296	\$62,692	\$19,189
2036	\$327,202	0.23135	\$75,700		\$73,400	\$86,300	\$83,260	\$64,573	\$19,669
2037	\$294,794	0.21646	\$63,812		\$75,600	\$45,100	\$87,424	\$66,510	\$20,160
2038	\$301,964	0.20253	\$61,156		\$75,900	\$45,100	\$91,795	\$68,505	\$20,664
2039	\$313,426	0.18949	\$59,391		\$80,200	\$45,100	\$96,384	\$70,560	\$21,181
2040	\$278,191	0.17729	\$49,321		\$82,600		\$101,204	\$72,677	\$21,710
2041	\$288,474	0.16588	\$47,852		\$85,100		\$106,264	\$74,857	\$22,253
2042	\$299,090	0.15520	\$46,420		\$87,600		\$111,577	\$77,103	\$22,809
2043	\$310,152	0.14521	\$45,038		\$90,200		\$117,156	\$79,416	\$23,380
2044	\$321,777	0.13586	\$43,718		\$93,000		\$123,014	\$81,799	\$23,964
2045	\$333,780	0.12712	\$42,430		\$95,800		\$129,164	\$84,253	\$24,563
2046	\$346,180	0.11894	\$41,173		\$98,600		\$135,623	\$86,780	\$25,177
2047	\$359,194	0.11128	\$39,971		\$101,600		\$142,404	\$89,384	\$25,807
2048	\$372,641	0.10412	\$38,798		\$104,600		\$149,524	\$92,065	\$26,452
2049	\$386,741	0.09741	\$37,674		\$107,800		\$157,000	\$94,827	\$27,113

2050	\$401,313	0.09114	\$36,577		\$111,000		\$164,850	\$97,672	\$27,791
2051	\$516,533	0.08528	\$44,048	\$99,952	\$114,400		\$173,093	\$100,602	\$28,486
2052	\$535,320	0.07979	\$42,712	\$102,955	\$117,800		\$181,747	\$103,620	\$29,198
2053	\$554,830	0.07465	\$41,419	\$106,039	\$121,300		\$190,835	\$106,729	\$29,928
2054	\$575,203	0.06985	\$40,176	\$109,220	\$125,000		\$200,376	\$109,931	\$30,676
2055	\$672,963	0.06535	\$43,978	\$112,496	\$128,700	\$76,700	\$210,395	\$113,229	\$31,443
2056	\$694,941	0.06114	\$42,491	\$115,872	\$132,600	\$76,700	\$220,915	\$116,625	\$32,229
2057	\$717,668	0.05721	\$41,056	\$119,348	\$136,500	\$76,700	\$231,961	\$120,124	\$33,035
2058	\$825,305	0.05352	\$44,174	\$122,958	\$140,600	\$160,600	\$243,559	\$123,728	\$33,861
2059	\$773,300	0.05008	\$38,726	\$126,616	\$144,900	\$83,900	\$255,737	\$127,440	\$34,707
2060	\$798,876	0.04686	\$37,432	\$130,415	\$149,200	\$83,900	\$268,523	\$131,263	\$35,575
2061	\$917,142	0.04384	\$40,207	\$134,327	\$153,700	\$175,500	\$281,950	\$135,201	\$36,464
2062	\$722,680	0.04102	\$29,643		\$158,300	\$91,700	\$296,047	\$139,257	\$37,376
2063	\$747,294	0.03838	\$28,679		\$163,000	\$91,700	\$310,849	\$143,435	\$38,310
2064	\$873,098	0.03591	\$31,350		\$167,900	\$191,800	\$326,392	\$147,738	\$39,268
2065	\$808,131	0.03360	\$27,150		\$172,900	\$100,100	\$342,711	\$152,170	\$40,250
2066	\$836,038	0.03143	\$26,279		\$178,100	\$100,100	\$359,847	\$156,735	\$41,256
2067	\$974,564	0.02941	\$28,661		\$183,500	\$209,500	\$377,839	\$161,437	\$42,287
2068	\$904,756	0.02752	\$24,896		\$189,000	\$109,400	\$396,731	\$166,280	\$43,345
2069	\$936,265	0.02575	\$24,104		\$194,600	\$109,400	\$416,568	\$171,268	\$44,428
2070	\$1,088,842	0.02409	\$26,228		\$200,500	\$229,000	\$437,396	\$176,406	\$45,539
2071	\$1,013,742	0.02254	\$22,847		\$206,500	\$119,600	\$459,266	\$181,699	\$46,677
2072	\$1,049,523	0.02109	\$22,131		\$212,700	\$119,600	\$482,229	\$187,150	\$47,844
2073	\$1,217,545	0.01973	\$24,021		\$219,100	\$250,300	\$506,341	\$192,764	\$49,041
2074	\$1,136,771	0.01846	\$20,984		\$225,600	\$130,700	\$531,658	\$198,547	\$50,267
2075	\$1,386,648	0.01727	\$23,949	\$209,281	\$232,400	\$130,700	\$558,241	\$204,503	\$51,523
2076	\$1,578,062	0.01616	\$25,500	\$215,559	\$239,400	\$273,500	\$586,153	\$210,639	\$52,811
2077	\$1,497,876	0.01512	\$22,646	\$222,026	\$246,600	\$142,700	\$615,460	\$216,958	\$54,132
2078	\$1,549,952	0.01415	\$21,925	\$228,687	\$253,380	\$142,700	\$646,234	\$223,466	\$55,485
2079	\$1,604,836	0.01324	\$21,240	\$235,548	\$261,000	\$142,700	\$678,545	\$230,170	\$56,872
2080	\$1,519,256	0.01238	\$18,813	\$242,614	\$268,800		\$712,472	\$237,076	\$58,294
2081	\$1,578,827	0.01159	\$18,292	\$249,892	\$276,900		\$748,096	\$244,188	\$59,751
2082	\$1,640,848	0.01084	\$17,787	\$257,389	\$285,200		\$785,501	\$251,513	\$61,245
2083	\$1,705,422	0.01014	\$17,297	\$265,111	\$293,700		\$824,776	\$259,059	\$62,776
2084	\$1,772,755	0.00949	\$16,823	\$273,064	\$302,500		\$866,015	\$266,831	\$64,345
2085	\$1,561,705	0.00888	\$13,866		\$311,600		\$909,315	\$274,836	\$65,954
2086	\$1,626,465	0.00831	\$13,511		\$321,000		\$954,781	\$283,081	\$67,603
2087	\$1,693,986	0.00777	\$13,166		\$330,600		\$1,002,520	\$291,573	\$69,293
2088	\$1,764,492	0.00727	\$12,832		\$340,500		\$1,052,646	\$300,320	\$71,025
2089	\$1,838,109	0.00680	\$12,507		\$350,700		\$1,105,279	\$309,330	\$72,801
2090	\$1,914,973	0.00637	\$12,191		\$361,200		\$1,160,543	\$318,610	\$74,621
2091	\$1,995,324	0.00596	\$11,885		\$372,100		\$1,218,570	\$328,168	\$76,486
2092	\$2,079,210	0.00557	\$11,587		\$383,300		\$1,279,498	\$338,013	\$78,399
2093	\$2,178,585	0.00521	\$11,359		\$406,600		\$1,343,473	\$348,153	\$80,359
2094	\$2,270,412	0.00488	\$11,076		\$418,800		\$1,410,647	\$358,598	\$82,368

2095	\$2,366,362	0.00456	\$10,801		\$431,400		\$1,481,179	\$369,356	\$84,427
2096	\$2,466,512	0.00427	\$10,534		\$444,300		\$1,555,238	\$380,437	\$86,537
2097	\$2,571,150	0.00400	\$10,274		\$457,600		\$1,633,000	\$391,850	\$88,701
2098	\$2,680,501	0.00374	\$10,021		\$471,328		\$1,714,650	\$403,605	\$90,918
2099	\$2,794,755	0.00350	\$9,776		\$485,468		\$1,800,382	\$415,713	\$93,191
2100	\$3,352,323	0.00327	\$10,971	\$438,184.08	\$500,032		\$1,890,402	\$428,185	\$95,521
2101	\$3,490,224	0.00306	\$10,687	\$451,329.60	\$515,033		\$1,984,922	\$441,030	\$97,909
2102	\$3,634,139	0.00286	\$10,412	\$464,869.49	\$530,484		\$2,084,168	\$454,261	\$100,357
2103	\$3,784,345	0.00268	\$10,144	\$478,815.58	\$546,398		\$2,188,376	\$467,889	\$102,866
2104	\$3,941,129	0.00251	\$9,884	\$493,180.04	\$562,790		\$2,297,795	\$481,926	\$105,437
2105	\$4,104,791	0.00235	\$9,632	\$507,975.44	\$579,674		\$2,412,685	\$496,384	\$108,073
2106	\$4,275,648	0.00220	\$9,387	\$523,214.71	\$597,064		\$2,533,319	\$511,275	\$110,775
2107	\$4,454,030	0.00205	\$9,149	\$538,911.15	\$614,976		\$2,659,985	\$526,613	\$113,545
2108	\$4,640,283	0.00192	\$8,918	\$555,078.48	\$633,426		\$2,792,984	\$542,412	\$116,383
2109	\$4,834,769	0.00180	\$8,694	\$571,730.84	\$652,428		\$2,932,633	\$558,684	\$119,293
2110	\$4,448,986	0.00168	\$7,485		\$672,001		\$3,079,265	\$575,445	\$122,275
2111	\$4,643,429	0.00157	\$7,309		\$692,161		\$3,233,228	\$592,708	\$125,332
2112	\$4,846,770	0.00147	\$7,138		\$712,926		\$3,394,890	\$610,489	\$128,465
2113	\$5,059,429	0.00138	\$6,972		\$734,314		\$3,564,634	\$628,804	\$131,677
2114	\$5,281,846	0.00129	\$6,810		\$756,343		\$3,742,866	\$647,668	\$134,969
2115	\$5,514,484	0.00121	\$6,652		\$779,034		\$3,930,009	\$667,098	\$138,343
100 Yr Totals:	\$ 147,658,332		\$4,297,144	\$9,249,976	\$25,056,162	\$4,466,700	\$81,935,182	\$21,746,662	\$5,203,649
Avg Annual*:	\$ 10,172,183		\$296,030	\$20,971	\$68,398	\$28,127	\$91,442	\$60,158	\$18,149

* Average Annual Costs calculated on each category's spreadsheet (not shown here). See individual spreadsheets.

**Total sum of costs from all categories

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Revised by Chandra Johnson 13 October 2014

Revised by Jim Waddell 4 Nov 2014