

MEMORANDUM

Date: March 9, 2004

To: Permit File 31-7338

From: Jeff Peppersack

Re: Review of Effects to Snake River Reaches

I ran the Effects Spreadsheet to determine the effects to reaches of the Snake River based on diversion from ground water for 33 irrigated acres under the permit. The consumptive irrigation requirement is 2.5 afa per acre (Allen and Brockway, 1983) or a total of 82.5 afa for the 33 acres. This is different than the plan submitted by the permit holder. The permit holder used a total of 100 afa (about 3 afa per acre for 33 acres). The results are shown on the attached sheets by reach and total effects per trimester and per year.

Based on the modeling for effects to the Snake River, the results show that the effects to the river could be mitigated by providing water to the river in the amounts shown. However, the plan may not mitigate any effects to springs and other ground water pumpers.

	NET TRANSFER EFFECT (AF/TRIMESTER)				Total Effect	Total Effect	Year
	Ashton to Lewisville	Near Shell to Neeley	Neeley to Minidoka	Milner to King Hill	All Reaches (per trimester)	All Reaches (annual)	
Spring 2004	0.0	0.0	0.0	0.0	0.0		
Summer 2004	0.0	0.0	0.0	0.0	0.0		
Winter 2004	0.0	0.0	0.0	0.0	0.0	0.0	2004.0
Spring 2005	0.0	0.0	0.0	0.0	0.0		
Summer 2005	0.0	0.1	0.0	0.0	0.1		
Winter 2005	0.0	0.1	0.0	0.0	0.1	0.2	2005.0
Spring 2006	0.0	0.2	0.0	0.0	0.2		
Summer 2006	0.0	0.2	0.0	0.0	0.2		
Winter 2006	0.1	0.3	0.0	0.0	0.3	0.8	2006.0
Spring 2007	0.1	0.3	0.0	0.0	0.4		
Summer 2007	0.1	0.4	0.0	0.0	0.5		
Winter 2007	0.1	0.5	0.0	0.0	0.6	1.5	2007.0
Spring 2008	0.2	0.5	0.0	0.0	0.7		
Summer 2008	0.2	0.6	0.0	0.0	0.8		
Winter 2008	0.3	0.7	0.0	0.0	1.0	2.5	2008.0
Spring 2009	0.3	0.8	0.0	0.0	1.1		
Summer 2009	0.4	0.9	0.0	0.0	1.2		
Winter 2009	0.4	1.0	0.0	0.0	1.4	3.7	2009.0
Spring 2010	0.5	1.1	0.0	0.0	1.5		
Summer 2010	0.5	1.2	0.0	0.0	1.7		
Winter 2010	0.6	1.3	0.0	0.0	1.8	5.1	2010.0
Spring 2011	0.6	1.4	0.0	0.0	2.0		
Summer 2011	0.7	1.5	0.0	0.0	2.2		
Winter 2011	0.8	1.6	0.0	0.0	2.3	6.5	2011.0
Spring 2012	0.8	1.7	0.0	0.0	2.5		
Summer 2012	0.9	1.8	0.0	0.0	2.7		
Winter 2012	1.0	1.9	0.0	0.0	2.9	8.0	2012.0
Spring 2013	1.0	2.0	0.0	0.0	3.0		
Summer 2013	1.1	2.1	0.0	0.0	3.2		
Winter 2013	1.2	2.2	0.0	0.0	3.4	9.6	2013.0
Spring 2014	1.3	2.3	0.0	0.0	3.6		
Summer 2014	1.3	2.4	0.0	0.0	3.7		
Winter 2014	1.4	2.5	0.0	0.0	3.9	11.2	2014.0
Spring 2015	1.5	2.6	0.0	0.0	4.1		
Summer 2015	1.6	2.6	0.0	0.0	4.3		
Winter 2015	1.7	2.7	0.0	0.0	4.5	12.8	2015.0
Spring 2016	1.7	2.8	0.0	0.0	4.6		
Summer 2016	1.8	2.9	0.0	0.0	4.8		
Winter 2016	1.9	3.0	0.0	0.0	5.0	14.4	2016.0
Spring 2017	2.0	3.1	0.0	0.0	5.2		
Summer 2017	2.1	3.2	0.0	0.0	5.3		
Winter 2017	2.1	3.3	0.0	0.0	5.5	16.0	2017.0
Spring 2018	2.2	3.4	0.0	0.0	5.7		
Summer 2018	2.3	3.5	0.0	0.0	5.9		
Winter 2018	2.4	3.6	0.0	0.0	6.1	17.6	2018.0
Spring 2019	2.5	3.7	0.0	0.0	6.2		

Summer 2019	2.5	3.8	0.0	0.0	6.4		
Winter 2019	2.6	3.9	0.0	0.0	6.6	19.2	2019.0
Spring 2020	2.7	4.0	0.0	0.0	6.8		
Summer 2020	2.8	4.1	0.1	0.1	6.9		
Winter 2020	2.8	4.1	0.1	0.1	7.1	20.8	2020.0
Spring 2021	2.9	4.2	0.1	0.1	7.3		
Summer 2021	3.0	4.3	0.1	0.1	7.4		
Winter 2021	3.1	4.4	0.1	0.1	7.6	22.3	2021.0
Spring 2022	3.2	4.5	0.1	0.1	7.8		
Summer 2022	3.2	4.6	0.1	0.1	7.9		
Winter 2022	3.3	4.7	0.1	0.1	8.1	23.8	2022.0
Spring 2023	3.4	4.7	0.1	0.1	8.3		
Summer 2023	3.5	4.8	0.1	0.1	8.4		
Winter 2023	3.5	4.9	0.1	0.1	8.6	25.3	2023.0
Spring 2024	3.6	5.0	0.1	0.1	8.7		
Summer 2024	3.7	5.1	0.1	0.1	8.9		
Winter 2024	3.7	5.1	0.1	0.1	9.1	26.7	2024.0
Spring 2025	3.8	5.2	0.1	0.1	9.2		
Summer 2025	3.9	5.3	0.1	0.1	9.4		
Winter 2025	4.0	5.4	0.1	0.1	9.5	28.1	2025.0
Spring 2026	4.0	5.4	0.1	0.1	9.7		
Summer 2026	4.1	5.5	0.1	0.1	9.8		
Winter 2026	4.2	5.6	0.1	0.1	10.0	29.4	2026.0
Spring 2027	4.2	5.7	0.1	0.1	10.1		
Summer 2027	4.3	5.7	0.1	0.1	10.3		
Winter 2027	4.4	5.8	0.1	0.1	10.4	30.8	2027.0
Spring 2028	4.4	5.9	0.1	0.1	10.5		
Summer 2028	4.5	5.9	0.1	0.1	10.7		
Winter 2028	4.6	6.0	0.1	0.1	10.8	32.0	2028.0
Spring 2029	4.6	6.1	0.1	0.1	11.0		
Summer 2029	4.7	6.1	0.1	0.1	11.1		
Winter 2029	4.7	6.2	0.1	0.1	11.2	33.3	2029.0
Spring 2030	4.8	6.3	0.1	0.2	11.4		
Summer 2030	4.9	6.3	0.1	0.2	11.5		
Winter 2030	4.9	6.4	0.1	0.2	11.6	34.5	2030.0
Spring 2031	5.0	6.5	0.1	0.2	11.8		
Summer 2031	5.1	6.5	0.1	0.2	11.9		
Winter 2031	5.1	6.6	0.1	0.2	12.0	35.7	2031.0
Spring 2032	5.2	6.7	0.1	0.2	12.2		
Summer 2032	5.2	6.7	0.1	0.2	12.3		
Winter 2032	5.3	6.8	0.2	0.2	12.4	36.8	2032.0
Spring 2033	5.3	6.8	0.2	0.2	12.5		
Summer 2033	5.4	6.9	0.2	0.2	12.7		
Winter 2033	5.5	7.0	0.2	0.2	12.8	38.0	2033.0
Spring 2034	5.5	7.0	0.2	0.2	12.9		
Summer 2034	5.6	7.1	0.2	0.2	13.0		
Winter 2034	5.6	7.1	0.2	0.2	13.1	39.0	2034.0
Spring 2035	5.7	7.2	0.2	0.2	13.2		
Summer 2035	5.7	7.2	0.2	0.2	13.4		
Winter 2035	5.8	7.3	0.2	0.2	13.5	40.1	2035.0
Spring 2036	5.8	7.4	0.2	0.2	13.6		
Summer 2036	5.9	7.4	0.2	0.2	13.7		

Winter 2036	5.9	7.5	0.2	0.2	13.8	41.1	2036.0
Spring 2037	6.0	7.5	0.2	0.2	13.9		
Summer 2037	6.0	7.6	0.2	0.2	14.0		
Winter 2037	6.1	7.6	0.2	0.2	14.1	42.1	2037.0
Spring 2038	6.1	7.7	0.2	0.3	14.3		
Summer 2038	6.2	7.7	0.2	0.3	14.4		
Winter 2038	6.2	7.8	0.2	0.3	14.5	43.1	2038.0
Spring 2039	6.3	7.8	0.2	0.3	14.6		
Summer 2039	6.3	7.9	0.2	0.3	14.7		
Winter 2039	6.4	7.9	0.2	0.3	14.8	44.0	2039.0
Spring 2040	6.4	8.0	0.2	0.3	14.9		
Summer 2040	6.5	8.0	0.2	0.3	15.0		
Winter 2040	6.5	8.1	0.2	0.3	15.1	44.9	2040.0
Spring 2041	6.6	8.1	0.2	0.3	15.2		
Summer 2041	6.6	8.1	0.2	0.3	15.3		
Winter 2041	6.7	8.2	0.2	0.3	15.4	45.8	2041.0
Spring 2042	6.7	8.2	0.2	0.3	15.5		
Summer 2042	6.7	8.3	0.2	0.3	15.6		
Winter 2042	6.8	8.3	0.2	0.3	15.6	46.7	2042.0
Spring 2043	6.8	8.4	0.2	0.3	15.7		
Summer 2043	6.9	8.4	0.2	0.3	15.8		
Winter 2043	6.9	8.5	0.2	0.3	15.9	47.5	2043.0
Spring 2044	7.0	8.5	0.2	0.3	16.0		
Summer 2044	7.0	8.5	0.2	0.3	16.1		
Winter 2044	7.0	8.6	0.2	0.3	16.2	48.3	2044.0
Spring 2045	7.1	8.6	0.2	0.3	16.3		
Summer 2045	7.1	8.7	0.3	0.3	16.4		
Winter 2045	7.2	8.7	0.3	0.3	16.4	49.1	2045.0
Spring 2046	7.2	8.7	0.3	0.3	16.5		
Summer 2046	7.2	8.8	0.3	0.3	16.6		
Winter 2046	7.3	8.8	0.3	0.4	16.7	49.9	2046.0
Spring 2047	7.3	8.9	0.3	0.4	16.8		
Summer 2047	7.3	8.9	0.3	0.4	16.9		
Winter 2047	7.4	8.9	0.3	0.4	16.9	50.6	2047.0
Spring 2048	7.4	9.0	0.3	0.4	17.0		
Summer 2048	7.5	9.0	0.3	0.4	17.1		
Winter 2048	7.5	9.0	0.3	0.4	17.2	51.3	2048.0
Spring 2049	7.5	9.1	0.3	0.4	17.3		
Summer 2049	7.6	9.1	0.3	0.4	17.3		
Winter 2049	7.6	9.2	0.3	0.4	17.4	52.0	2049.0
Spring 2050	7.6	9.2	0.3	0.4	17.5		
Summer 2050	7.7	9.2	0.3	0.4	17.6		
Winter 2050	7.7	9.3	0.3	0.4	17.6	52.7	2050.0
Spring 2051	7.7	9.3	0.3	0.4	17.7		
Summer 2051	7.8	9.3	0.3	0.4	17.8		
Winter 2051	7.8	9.4	0.3	0.4	17.9	53.4	2051.0
Spring 2052	7.8	9.4	0.3	0.4	17.9		
Summer 2052	7.9	9.4	0.3	0.4	18.0		
Winter 2052	7.9	9.5	0.3	0.4	18.1	54.0	2052.0
Spring 2053	7.9	9.5	0.3	0.4	18.1		
Summer 2053	8.0	9.5	0.3	0.4	18.2		
Winter 2053	8.0	9.6	0.3	0.4	18.3	54.6	2053.0

Spring 2054	8.0	9.6	0.3	0.4	18.4		
Summer 2054	8.1	9.6	0.3	0.4	18.4		
Winter 2054	8.1	9.6	0.3	0.4	18.5	55.3	2054.0
Spring 2055	8.1	9.7	0.3	0.4	18.6		
Summer 2055	8.1	9.7	0.3	0.4	18.6		
Winter 2055	8.2	9.7	0.3	0.4	18.7	55.9	2055.0
Spring 2056	8.2	9.8	0.3	0.5	18.7		
Summer 2056	8.2	9.8	0.3	0.5	18.8		
Winter 2056	8.3	9.8	0.3	0.5	18.9	56.4	2056.0
Spring 2057	8.3	9.9	0.3	0.5	18.9		
Summer 2057	8.3	9.9	0.3	0.5	19.0		
Winter 2057	8.4	9.9	0.3	0.5	19.1	57.0	2057.0
Spring 2058	8.4	9.9	0.3	0.5	19.1		
Summer 2058	8.4	10.0	0.3	0.5	19.2		
Winter 2058	8.4	10.0	0.3	0.5	19.2	57.5	2058.0
Spring 2059	8.5	10.0	0.3	0.5	19.3		
Summer 2059	8.5	10.0	0.3	0.5	19.4		
Winter 2059	8.5	10.1	0.3	0.5	19.4	58.1	2059.0
Spring 2060	8.5	10.1	0.3	0.5	19.5		
Summer 2060	8.6	10.1	0.3	0.5	19.5		
Winter 2060	8.6	10.1	0.3	0.5	19.6	58.6	2060.0
Spring 2061	8.6	10.2	0.3	0.5	19.6		
Summer 2061	8.6	10.2	0.4	0.5	19.7		
Winter 2061	8.7	10.2	0.4	0.5	19.8	59.1	2061.0
Spring 2062	8.7	10.2	0.4	0.5	19.8		
Summer 2062	8.7	10.3	0.4	0.5	19.9		
Winter 2062	8.7	10.3	0.4	0.5	19.9	59.6	2062.0
Spring 2063	8.8	10.3	0.4	0.5	20.0		
Summer 2063	8.8	10.3	0.4	0.5	20.0		
Winter 2063	8.8	10.4	0.4	0.5	20.1	60.1	2063.0
Spring 2064	8.8	10.4	0.4	0.5	20.1		
Summer 2064	8.9	10.4	0.4	0.5	20.2		
Winter 2064	8.9	10.4	0.4	0.5	20.2	60.5	2064.0
Spring 2065	8.9	10.5	0.4	0.5	20.3		
Summer 2065	8.9	10.5	0.4	0.5	20.3		
Winter 2065	9.0	10.5	0.4	0.5	20.4	61.0	2065.0
Spring 2066	9.0	10.5	0.4	0.5	20.4		
Summer 2066	9.0	10.5	0.4	0.5	20.5		
Winter 2066	9.0	10.6	0.4	0.5	20.5	61.4	2066.0
Spring 2067	9.1	10.6	0.4	0.6	20.6		
Summer 2067	9.1	10.6	0.4	0.6	20.6		
Winter 2067	9.1	10.6	0.4	0.6	20.7	61.9	2067.0
Spring 2068	9.1	10.7	0.4	0.6	20.7		
Summer 2068	9.1	10.7	0.4	0.6	20.8		
Winter 2068	9.2	10.7	0.4	0.6	20.8	62.3	2068.0
Spring 2069	9.2	10.7	0.4	0.6	20.9		
Summer 2069	9.2	10.7	0.4	0.6	20.9		
Winter 2069	9.2	10.8	0.4	0.6	20.9	62.7	2069.0
Spring 2070	9.2	10.8	0.4	0.6	21.0		
Summer 2070	9.3	10.8	0.4	0.6	21.0		
Winter 2070	9.3	10.8	0.4	0.6	21.1	63.1	2070.0
Spring 2071	9.3	10.8	0.4	0.6	21.1		

Summer 2071	9.3	10.9	0.4	0.6	21.2		
Winter 2071	9.3	10.9	0.4	0.6	21.2	63.5	2071.0
Spring 2072	9.4	10.9	0.4	0.6	21.3		
Summer 2072	9.4	10.9	0.4	0.6	21.3		
Winter 2072	9.4	10.9	0.4	0.6	21.3	63.9	2072.0
Spring 2073	9.4	10.9	0.4	0.6	21.4		
Summer 2073	9.4	11.0	0.4	0.6	21.4		
Winter 2073	9.5	11.0	0.4	0.6	21.5	64.3	2073.0
Spring 2074	9.5	11.0	0.4	0.6	21.5		
Summer 2074	9.5	11.0	0.4	0.6	21.5		
Winter 2074	9.5	11.0	0.4	0.6	21.6	64.6	2074.0
Spring 2075	9.5	11.1	0.4	0.6	21.6		
Summer 2075	9.6	11.1	0.4	0.6	21.7		
Winter 2075	9.6	11.1	0.4	0.6	21.7	65.0	2075.0
Spring 2076	9.6	11.1	0.4	0.6	21.7		
Summer 2076	9.6	11.1	0.4	0.6	21.8		
Winter 2076	9.6	11.1	0.4	0.6	21.8	65.3	2076.0
Spring 2077	9.6	11.2	0.4	0.6	21.9		
Summer 2077	9.7	11.2	0.4	0.6	21.9		
Winter 2077	9.7	11.2	0.4	0.6	21.9	65.7	2077.0
Spring 2078	9.7	11.2	0.4	0.6	22.0		
Summer 2078	9.7	11.2	0.4	0.6	22.0		
Winter 2078	9.7	11.2	0.4	0.6	22.0	66.0	2078.0
Spring 2079	9.8	11.3	0.4	0.6	22.1		
Summer 2079	9.8	11.3	0.4	0.6	22.1		
Winter 2079	9.8	11.3	0.4	0.6	22.1	66.3	2079.0
Spring 2080	9.8	11.3	0.4	0.6	22.2		
Summer 2080	9.8	11.3	0.4	0.6	22.2		
Winter 2080	9.8	11.3	0.4	0.6	22.2	66.6	2080.0
Spring 2081	9.9	11.3	0.4	0.6	22.3		
Summer 2081	9.9	11.4	0.4	0.7	22.3		
Winter 2081	9.9	11.4	0.4	0.7	22.3	66.9	2081.0
Spring 2082	9.9	11.4	0.4	0.7	22.4		
Summer 2082	9.9	11.4	0.4	0.7	22.4		
Winter 2082	9.9	11.4	0.4	0.7	22.4	67.2	2082.0
Spring 2083	9.9	11.4	0.4	0.7	22.5		
Summer 2083	10.0	11.4	0.4	0.7	22.5		
Winter 2083	10.0	11.5	0.4	0.7	22.5	67.5	2084.0
Spring 2084	10.0	11.5	0.4	0.7	22.6		
Summer 2084	10.0	11.5	0.4	0.7	22.6		
Winter 2084	10.0	11.5	0.5	0.7	22.6	67.8	2084.0
Spring 2085	10.0	11.5	0.5	0.7	22.7		
Summer 2085	10.0	11.5	0.5	0.7	22.7		
Winter 2085	10.1	11.5	0.5	0.7	22.7	68.1	2085.0
Spring 2086	10.1	11.6	0.5	0.7	22.8		
Summer 2086	10.1	11.6	0.5	0.7	22.8		
Winter 2086	10.1	11.6	0.5	0.7	22.8	68.4	2086.0
Spring 2087	10.1	11.6	0.5	0.7	22.9		
Summer 2087	10.1	11.6	0.5	0.7	22.9		
Winter 2087	10.1	11.6	0.5	0.7	22.9	68.6	2087.0
Spring 2088	10.2	11.6	0.5	0.7	22.9		
Summer 2088	10.2	11.6	0.5	0.7	23.0		

Winter 2088	10.2	11.7	0.5	0.7	23.0	68.9	2088.0
Spring 2089	10.2	11.7	0.5	0.7	23.0		
Summer 2089	10.2	11.7	0.5	0.7	23.1		
Winter 2089	10.2	11.7	0.5	0.7	23.1	69.2	2089.0
Spring 2090	10.2	11.7	0.5	0.7	23.1		
Summer 2090	10.3	11.7	0.5	0.7	23.1		
Winter 2090	10.3	11.7	0.5	0.7	23.2	69.4	2090.0
Spring 2091	10.3	11.7	0.5	0.7	23.2		
Summer 2091	10.3	11.7	0.5	0.7	23.2		
Winter 2091	10.3	11.8	0.5	0.7	23.2	69.7	2091.0
Spring 2092	10.3	11.8	0.5	0.7	23.3		
Summer 2092	10.3	11.8	0.5	0.7	23.3		
Winter 2092	10.3	11.8	0.5	0.7	23.3	69.9	2092.0
Spring 2093	10.4	11.8	0.5	0.7	23.3		
Summer 2093	10.4	11.8	0.5	0.7	23.4		
Winter 2093	10.4	11.8	0.5	0.7	23.4	70.1	2093.0
Spring 2094	10.4	11.8	0.5	0.7	23.4		
Summer 2094	10.4	11.8	0.5	0.7	23.5		
Winter 2094	10.4	11.9	0.5	0.7	23.5	70.4	2094.0
Spring 2095	10.4	11.9	0.5	0.7	23.5		
Summer 2095	10.4	11.9	0.5	0.7	23.5		
Winter 2095	10.5	11.9	0.5	0.7	23.6	70.6	2095.0
Spring 2096	10.5	11.9	0.5	0.7	23.6		
Summer 2096	10.5	11.9	0.5	0.7	23.6		
Winter 2096	10.5	11.9	0.5	0.7	23.6	70.8	2096.0
Spring 2097	10.5	11.9	0.5	0.7	23.6		
Summer 2097	10.5	11.9	0.5	0.7	23.7		
Winter 2097	10.5	11.9	0.5	0.7	23.7	71.0	2097.0
Spring 2098	10.5	12.0	0.5	0.7	23.7		
Summer 2098	10.5	12.0	0.5	0.7	23.7		
Winter 2098	10.6	12.0	0.5	0.7	23.8	71.2	2098.0
Spring 2099	10.6	12.0	0.5	0.7	23.8		
Summer 2099	10.6	12.0	0.5	0.7	23.8		
Winter 2099	10.6	12.0	0.5	0.7	23.8	71.4	2099.0
Spring 2100	10.6	12.0	0.5	0.7	23.9		
Summer 2100	10.6	12.0	0.5	0.7	23.9		
Winter 2100	10.6	12.0	0.5	0.7	23.9	71.6	2100.0
Spring 2101	10.6	12.0	0.5	0.7	23.9		
Summer 2101	10.6	12.1	0.5	0.7	23.9		
Winter 2101	10.7	12.1	0.5	0.8	24.0	71.8	2101.0
Spring 2102	10.7	12.1	0.5	0.8	24.0		
Summer 2102	10.7	12.1	0.5	0.8	24.0		
Winter 2102	10.7	12.1	0.5	0.8	24.0	72.0	2102.0
Spring 2103	10.7	12.1	0.5	0.8	24.0		
Summer 2103	10.7	12.1	0.5	0.8	24.1		
Winter 2103	10.7	12.1	0.5	0.8	24.1	72.2	2103.0
Spring 2104	10.7	12.1	0.5	0.8	24.1		
Summer 2104	10.7	12.1	0.5	0.8	24.1		
Winter 2104	10.7	12.1	0.5	0.8	24.1	72.4	2104.0
Spring 2105	10.8	12.1	0.5	0.8	24.2		
Summer 2105	10.8	12.2	0.5	0.8	24.2		
Winter 2105	10.8	12.2	0.5	0.8	24.2	72.6	2105.0

Spring 2106	10.8	12.2	0.5	0.8	24.2		
Summer 2106	10.8	12.2	0.5	0.8	24.2		
Winter 2106	10.8	12.2	0.5	0.8	24.3	72.7	2106.0
Spring 2107	10.8	12.2	0.5	0.8	24.3		
Summer 2107	10.8	12.2	0.5	0.8	24.3		
Winter 2107	10.8	12.2	0.5	0.8	24.3	72.9	2107.0
Spring 2108	10.8	12.2	0.5	0.8	24.3		
Summer 2108	10.8	12.2	0.5	0.8	24.4		
Winter 2108	10.9	12.2	0.5	0.8	24.4	73.1	2108.0
Spring 2109	10.9	12.2	0.5	0.8	24.4		
Summer 2109	10.9	12.2	0.5	0.8	24.4		
Winter 2109	10.9	12.3	0.5	0.8	24.4	73.2	2109.0
Spring 2110	10.9	12.3	0.5	0.8	24.5		
Summer 2110	10.9	12.3	0.5	0.8	24.5		
Winter 2110	10.9	12.3	0.5	0.8	24.5	73.4	2110.0
Spring 2111	10.9	12.3	0.5	0.8	24.5		
Summer 2111	10.9	12.3	0.5	0.8	24.5		
Winter 2111	10.9	12.3	0.5	0.8	24.5	73.6	2111.0
Spring 2112	10.9	12.3	0.5	0.8	24.6		
Summer 2112	11.0	12.3	0.5	0.8	24.6		
Winter 2112	11.0	12.3	0.5	0.8	24.6	73.7	2112.0
Spring 2113	11.0	12.3	0.5	0.8	24.6		
Summer 2113	11.0	12.3	0.5	0.8	24.6		
Winter 2113	11.0	12.3	0.5	0.8	24.6	73.9	2113.0
Spring 2114	11.0	12.3	0.5	0.8	24.7		
Summer 2114	11.0	12.4	0.5	0.8	24.7		
Winter 2114	11.0	12.4	0.5	0.8	24.7	74.0	2114.0
Spring 2115	11.0	12.4	0.5	0.8	24.7		
Summer 2115	11.0	12.4	0.5	0.8	24.7		
Winter 2115	11.0	12.4	0.5	0.8	24.7	74.2	2115.0
Spring 2116	11.0	12.4	0.5	0.8	24.8		
Summer 2116	11.1	12.4	0.5	0.8	24.8		
Winter 2116	11.1	12.4	0.5	0.8	24.8	74.3	2116.0
Spring 2117	11.1	12.4	0.5	0.8	24.8		
Summer 2117	11.1	12.4	0.5	0.8	24.8		
Winter 2117	11.1	12.4	0.5	0.8	24.8	74.5	2117.0
Spring 2118	11.1	12.4	0.5	0.8	24.8		
Summer 2118	11.1	12.4	0.5	0.8	24.9		
Winter 2118	11.1	12.4	0.5	0.8	24.9	74.6	2118.0
Spring 2119	11.1	12.4	0.5	0.8	24.9		
Summer 2119	11.1	12.5	0.5	0.8	24.9		
Winter 2119	11.1	12.5	0.5	0.8	24.9	74.7	2119.0
Spring 2120	11.1	12.5	0.5	0.8	24.9		
Summer 2120	11.1	12.5	0.5	0.8	25.0		
Winter 2120	11.1	12.5	0.5	0.8	25.0	74.9	2120.0
Spring 2121	11.2	12.5	0.5	0.8	25.0		
Summer 2121	11.2	12.5	0.5	0.8	25.0		
Winter 2121	11.2	12.5	0.5	0.8	25.0	75.0	2121.0
Spring 2122	11.2	12.5	0.5	0.8	25.0		
Summer 2122	11.2	12.5	0.5	0.8	25.0		
Winter 2122	11.2	12.5	0.5	0.8	25.1	75.1	2122.0
Spring 2123	11.2	12.5	0.5	0.8	25.1		

Summer 2123	11.2	12.5	0.5	0.8	25.1		
Winter 2123	11.2	12.5	0.5	0.8	25.1	75.2	2123.0
Spring 2124	11.2	12.5	0.5	0.8	25.1		
Summer 2124	11.2	12.5	0.5	0.8	25.1		
Winter 2124	11.2	12.5	0.5	0.8	25.1	75.4	2124.0
Spring 2125	11.2	12.5	0.5	0.8	25.1		
Summer 2125	11.2	12.6	0.5	0.8	25.2		
Winter 2125	11.3	12.6	0.5	0.8	25.2	75.5	2125.0
Spring 2126	11.3	12.6	0.5	0.8	25.2		
Summer 2126	11.3	12.6	0.5	0.8	25.2		
Winter 2126	11.3	12.6	0.5	0.8	25.2	75.6	2126.0
Spring 2127	11.3	12.6	0.5	0.8	25.2		
Summer 2127	11.3	12.6	0.5	0.8	25.2		
Winter 2127	11.3	12.6	0.5	0.8	25.3	75.7	2127.0
Spring 2128	11.3	12.6	0.5	0.8	25.3		
Summer 2128	11.3	12.6	0.5	0.8	25.3		
Winter 2128	11.3	12.6	0.5	0.8	25.3	75.8	2128.0
Spring 2129	11.3	12.6	0.5	0.8	25.3		
Summer 2129	11.3	12.6	0.5	0.8	25.3		
Winter 2129	11.3	12.6	0.5	0.8	25.3	75.9	2129.0
Spring 2130	11.3	12.6	0.5	0.8	25.3		
Summer 2130	11.3	12.6	0.5	0.8	25.4		
Winter 2130	11.3	12.6	0.5	0.8	25.4	76.1	2130.0
Spring 2131	11.4	12.6	0.5	0.8	25.4		
Summer 2131	11.4	12.6	0.5	0.8	25.4		
Winter 2131	11.4	12.7	0.5	0.8	25.4	76.2	2131.0
Spring 2132	11.4	12.7	0.5	0.8	25.4		
Summer 2132	11.4	12.7	0.5	0.8	25.4		
Winter 2132	11.4	12.7	0.5	0.8	25.4	76.3	2132.0
Spring 2133	11.4	12.7	0.5	0.8	25.4		
Summer 2133	11.4	12.7	0.5	0.8	25.5		
Winter 2133	11.4	12.7	0.5	0.8	25.5	76.4	2133.0
Spring 2134	11.4	12.7	0.5	0.8	25.5		
Summer 2134	11.4	12.7	0.5	0.8	25.5		
Winter 2134	11.4	12.7	0.5	0.8	25.5	76.5	2134.0
Spring 2135	11.4	12.7	0.5	0.8	25.5		
Summer 2135	11.4	12.7	0.5	0.8	25.5		
Winter 2135	11.4	12.7	0.5	0.8	25.5	76.6	2135.0
Spring 2136	11.4	12.7	0.5	0.8	25.5		
Summer 2136	11.4	12.7	0.6	0.8	25.6		
Winter 2136	11.5	12.7	0.6	0.8	25.6	76.7	2136.0
Spring 2137	11.5	12.7	0.6	0.8	25.6		
Summer 2137	11.5	12.7	0.6	0.8	25.6		
Winter 2137	11.5	12.7	0.6	0.8	25.6	76.8	2137.0
Spring 2138	11.5	12.7	0.6	0.8	25.6		
Summer 2138	11.5	12.7	0.6	0.9	25.6		
Winter 2138	11.5	12.7	0.6	0.9	25.6	76.9	2138.0
Spring 2139	11.5	12.7	0.6	0.9	25.6		
Summer 2139	11.5	12.8	0.6	0.9	25.6		
Winter 2139	11.5	12.8	0.6	0.9	25.7	76.9	2139.0
Spring 2140	11.5	12.8	0.6	0.9	25.7		
Summer 2140	11.5	12.8	0.6	0.9	25.7		

Winter 2140	11.5	12.8	0.6	0.9	25.7	77.0	2140.0
Spring 2141	11.5	12.8	0.6	0.9	25.7		
Summer 2141	11.5	12.8	0.6	0.9	25.7		
Winter 2141	11.5	12.8	0.6	0.9	25.7	77.1	2141.0
Spring 2142	11.5	12.8	0.6	0.9	25.7		
Summer 2142	11.5	12.8	0.6	0.9	25.7		
Winter 2142	11.5	12.8	0.6	0.9	25.7	77.2	2142.0
Spring 2143	11.5	12.8	0.6	0.9	25.8		
Summer 2143	11.6	12.8	0.6	0.9	25.8		
Winter 2143	11.6	12.8	0.6	0.9	25.8	77.3	2143.0
Spring 2144	11.6	12.8	0.6	0.9	25.8		
Summer 2144	11.6	12.8	0.6	0.9	25.8		
Winter 2144	11.6	12.8	0.6	0.9	25.8	77.4	2144.0
Spring 2145	11.6	12.8	0.6	0.9	25.8		
Summer 2145	11.6	12.8	0.6	0.9	25.8		
Winter 2145	11.6	12.8	0.6	0.9	25.8	77.5	2145.0
Spring 2146	11.6	12.8	0.6	0.9	25.8		
Summer 2146	11.6	12.8	0.6	0.9	25.8		
Winter 2146	11.6	12.8	0.6	0.9	25.9	77.5	2146.0
Spring 2147	11.6	12.8	0.6	0.9	25.9		
Summer 2147	11.6	12.8	0.6	0.9	25.9		
Winter 2147	11.6	12.8	0.6	0.9	25.9	77.6	2147.0
Spring 2148	11.6	12.8	0.6	0.9	25.9		
Summer 2148	11.6	12.8	0.6	0.9	25.9		
Winter 2148	11.6	12.9	0.6	0.9	25.9	77.7	2148.0
Spring 2149	11.6	12.9	0.6	0.9	25.9		
Summer 2149	11.6	12.9	0.6	0.9	25.9		
Winter 2149	11.6	12.9	0.6	0.9	25.9	77.8	2149.0
Spring 2150	11.6	12.9	0.6	0.9	25.9		
Summer 2150	11.6	12.9	0.6	0.9	25.9		
Winter 2150	11.7	12.9	0.6	0.9	26.0	77.8	2150.0
Spring 2151	11.7	12.9	0.6	0.9	26.0		
Summer 2151	11.7	12.9	0.6	0.9	26.0		
Winter 2151	11.7	12.9	0.6	0.9	26.0	77.9	2151.0
Spring 2152	11.7	12.9	0.6	0.9	26.0		
Summer 2152	11.7	12.9	0.6	0.9	26.0		
Winter 2152	11.7	12.9	0.6	0.9	26.0	78.0	2152.0
Spring 2153	11.7	12.9	0.6	0.9	26.0		
Summer 2153	11.7	12.9	0.6	0.9	26.0		
Winter 2153	11.7	12.9	0.6	0.9	26.0	78.1	2153.0