

**Integrated Resource Plan**

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**Appendix 3A-28**

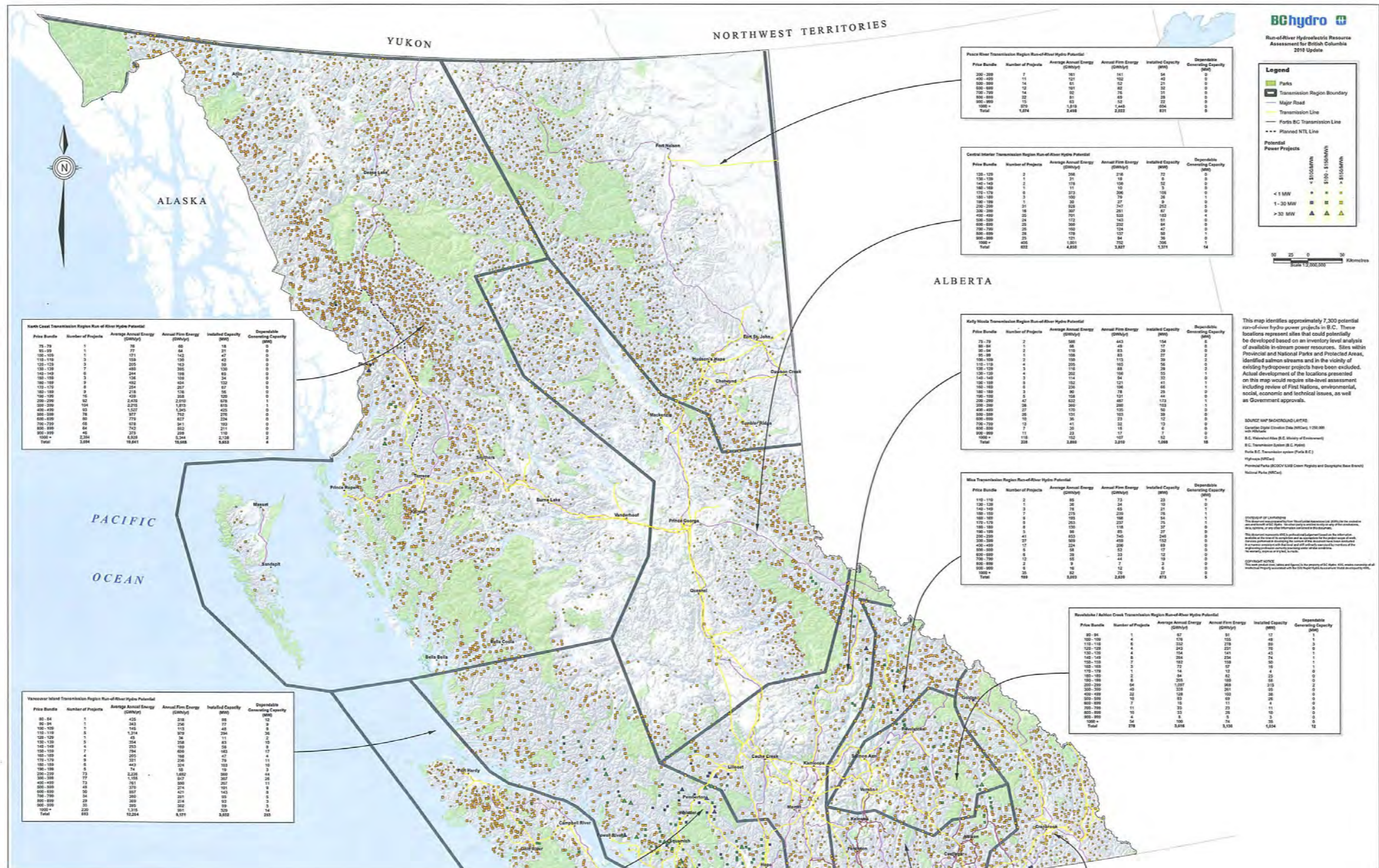
**2013 Resource Options Report Update**

**Run-of-River Report**

**Report Attachment: Map E-1**

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**BC Hydro**  
Run-of-River Hydroelectric Resource Assessment for British Columbia 2013 Update

**Legend**

- Parks
- Transmission Region Boundary
- Major Road
- Transmission Line
- Fortis BC Transmission Line
- Planned NTL Line

**Potential Power Projects**

- < 1 MW
- 1-30 MW
- > 30 MW
- < \$100M/W
- \$100 - \$150M/W
- > \$150M/W

Scale 1:2,000,000  
Kilometres

**Peace River Transmission Region Run-of-River Hydro Potential**

Price Bundle	Number of Projects	Average Annual Energy (GWh/yr)	Annual Firm Energy (GWh/yr)	Installed Capacity (MW)	Dependable Generating Capacity (MW)
200-299	7	361	161	54	0
400-499	11	621	102	21	0
600-699	14	61	62	21	0
800-899	12	701	82	22	0
100-199	14	82	78	21	0
300-399	12	81	65	25	0
500-599	15	63	52	22	0
900-999	15	1,819	1,448	604	0
1000+	0	0	0	0	0
<b>Total</b>	<b>1,014</b>	<b>2,608</b>	<b>2,222</b>	<b>821</b>	<b>0</b>

**Central Interior Transmission Region Run-of-River Hydro Potential**

Price Bundle	Number of Projects	Average Annual Energy (GWh/yr)	Annual Firm Energy (GWh/yr)	Installed Capacity (MW)	Dependable Generating Capacity (MW)
120-129	2	206	216	72	0
130-139	1	21	18	17	0
140-149	2	179	150	62	0
150-159	1	11	10	5	0
170-179	6	312	306	109	0
180-189	3	100	79	26	1
190-199	1	30	27	9	0
200-299	31	828	747	252	0
300-399	16	267	251	87	0
400-499	25	403	323	103	4
500-599	25	300	232	84	0
600-699	25	192	123	40	0
800-899	28	179	127	50	1
900-999	25	1,001	752	265	1
1000+	0	0	0	0	0
<b>Total</b>	<b>622</b>	<b>4,802</b>	<b>3,827</b>	<b>1,371</b>	<b>14</b>

**Early Works Transmission Region Run-of-River Hydro Potential**

Price Bundle	Number of Projects	Average Annual Energy (GWh/yr)	Annual Firm Energy (GWh/yr)	Installed Capacity (MW)	Dependable Generating Capacity (MW)
70-79	2	588	443	154	5
80-89	1	68	45	17	0
90-99	1	110	83	29	0
100-109	2	110	82	29	0
110-119	2	130	113	39	2
120-129	3	205	161	56	0
130-139	4	202	156	55	1
140-149	3	114	84	31	0
150-159	5	121	91	31	1
160-169	5	236	196	68	0
180-189	3	90	78	26	0
190-199	5	324	121	40	1
200-299	47	612	487	173	1
300-399	26	260	200	103	0
400-499	27	170	125	50	0
500-599	26	101	103	39	0
600-699	10	36	23	12	0
700-799	12	41	32	13	0
800-899	7	30	15	7	0
900-999	11	23	17	7	0
1000+	0	0	0	0	0
<b>Total</b>	<b>228</b>	<b>2,888</b>	<b>2,219</b>	<b>1,068</b>	<b>18</b>

**Mesa Transmission Region Run-of-River Hydro Potential**

Price Bundle	Number of Projects	Average Annual Energy (GWh/yr)	Annual Firm Energy (GWh/yr)	Installed Capacity (MW)	Dependable Generating Capacity (MW)
110-119	2	85	73	23	0
120-129	1	28	24	10	0
140-149	3	78	65	21	1
150-159	7	275	229	76	1
160-169	6	193	169	54	1
170-179	6	263	227	75	0
180-189	3	130	110	37	0
190-199	5	85	65	25	0
200-299	41	633	740	245	0
300-399	8	402	402	132	0
400-499	17	224	206	69	0
500-599	6	58	53	17	0
600-699	6	28	23	12	0
700-799	12	65	44	19	0
800-899	2	9	8	3	0
900-999	5	18	12	6	0
1000+	0	0	0	0	0
<b>Total</b>	<b>189</b>	<b>3,022</b>	<b>2,639</b>	<b>873</b>	<b>5</b>

**Revelstoke / Bulkley Creek Transmission Region Run-of-River Hydro Potential**

Price Bundle	Number of Projects	Average Annual Energy (GWh/yr)	Annual Firm Energy (GWh/yr)	Installed Capacity (MW)	Dependable Generating Capacity (MW)
80-89	1	67	61	17	1
90-99	4	179	155	48	3
110-119	4	232	278	89	3
120-129	6	243	221	75	1
130-139	4	154	141	43	1
140-149	6	264	234	74	1
150-159	7	182	159	50	1
160-169	2	72	57	16	0
170-179	1	14	12	4	0
180-189	6	265	215	62	0
190-199	10	1,037	869	273	2
200-299	11	328	241	80	0
300-399	22	129	102	38	0
400-499	18	63	60	20	0
500-599	11	15	11	4	0
600-699	11	23	23	11	0
800-899	10	33	28	10	0
900-999	3	9	8	3	0
1000+	0	0	0	0	0
<b>Total</b>	<b>278</b>	<b>3,616</b>	<b>3,024</b>	<b>1,024</b>	<b>12</b>

**North Coast Transmission Region Run-of-River Hydro Potential**

Price Bundle	Number of Projects	Average Annual Energy (GWh/yr)	Annual Firm Energy (GWh/yr)	Installed Capacity (MW)	Dependable Generating Capacity (MW)
70-79	1	32	18	18	0
80-89	1	77	31	31	0
90-99	1	141	141	45	0
100-109	3	109	100	43	0
120-129	3	205	163	56	0
130-139	3	485	395	130	0
140-149	6	244	198	65	0
150-159	3	158	158	54	0
160-169	3	492	424	132	0
170-179	8	254	207	67	0
180-189	3	218	176	56	0
190-199	16	438	358	120	0
200-299	92	2,416	2,010	678	1
300-399	104	2,216	1,819	615	0
400-499	63	1,527	1,243	425	0
500-599	78	927	762	256	0
600-699	80	779	627	224	0
700-799	66	678	541	183	0
800-899	64	742	602	211	0
900-999	48	273	229	110	0
1000+	2,256	6,328	5,244	2,228	8
<b>Total</b>	<b>3,894</b>	<b>18,841</b>	<b>15,688</b>	<b>5,853</b>	<b>8</b>

**Vancouver Island Transmission Region Run-of-River Hydro Potential**

Price Bundle	Number of Projects	Average Annual Energy (GWh/yr)	Annual Firm Energy (GWh/yr)	Installed Capacity (MW)	Dependable Generating Capacity (MW)
80-89	1	425	298	86	12
90-99	1	243	206	77	9
100-109	1	145	113	43	5
110-119	5	1,214	794	236	36
120-129	1	43	36	11	2
130-139	1	264	218	63	9
140-149	7	253	189	58	9
150-159	4	354	305	93	13
160-169	4	295	188	47	4
170-179	4	261	214	62	8
180-189	6	443	324	103	10
190-199	6	55	46	16	3
200-299	73	2,226	1,882	609	44
300-399	77	1,158	907	307	26
400-499	72	761	597	207	11
500-599	48	379	274	101	9
600-699	56	657	421	143	9
700-799	34	360	281	93	5
800-899	28	369	238	83	5
900-999	35	293	202	70	3
1000+	229	1,316	991	320	24
<b>Total</b>	<b>683</b>	<b>12,264</b>	<b>8,121</b>	<b>3,022</b>	<b>203</b>

This map identifies approximately 7,300 potential run-of-river hydro power projects in B.C. These locations represent sites that could potentially be developed based on an inventory level analysis of available in-stream power resources. Sites within Provincial and National Parks and Protected Areas, identified salmon streams and in the vicinity of existing hydropower projects have been excluded. Actual development of the locations presented on this map would require site-level assessment, including review of First Nations, environmental, social, economic and technical issues, as well as Government approvals.

**SOURCE MAP BACKGROUND LAYERS:**  
Canadian Digital Elevation Data (CNDS) 1:250,000 scale  
B.C. Hydroelectric Atlas (B.C. Ministry of Environment)  
B.C. Transmission System (B.C. Hydro)  
Fortis B.C. Transmission System (Fortis B.C.)  
Highways (BC Govt)  
Provincial Parks (BCOV) / Wilderness Green Regions and Designated Best Ecosystems (BC Govt)  
National Parks (PAC)

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