

**Table S-2. Gray whale sighting rates derived from ASAMM data for the Hope Basin, Wainwright and Peard Bay analytical areas. Excludes sightings and effort from coastal transect.**

Hope Basin Area	July			August			September			Total		
Year	km	GW	SR	km	GW	SR	km	GW	SR	Km	GW	SR
2009	0	0	NA	0	0	NA	0	0	NA	0	0	NA
2010	81	7	0.0864	85	1	0.0118	0	0	NA	166	8	NA
2011	81	2	0.0247	80	1	0.0125	79	1	0.0127	240	4	0.0167
2012	0	0	NA	0	0	NA	78	0	0.0000	78	0	0.0000
2013	80	2	0.0250	96	2	0.0208	64	0	0.0000	240	4	0.0167
2014	407	7	0.0172	436	77	0.1766	435	44	0.1011	1278	128	0.1002
2015	0	0	NA	406	6	0.0148	48	0	0.0000	454	6	0.0132
2016	299	16	0.0535	590	26	0.0441	484	90	0.1860	1373	132	0.0961
2017	284	67	0.2359	424	69	0.1627	431	18	0.0418	1139	154	0.1352
2018	719	66	0.0918	61	0	0.0000	498	4	0.0080	1278	70	0.0548
2019	284	42	0.1479	411	3	0.0073	441	28	0.0635	1136	73	0.0643
<b>Total</b>	<b>2235</b>	<b>209</b>	<b>0.0935</b>	<b>2589</b>	<b>185</b>	<b>0.0715</b>	<b>2558</b>	<b>185</b>	<b>0.0723</b>	<b>7382</b>	<b>579</b>	<b>0.0784</b>

<b>Wainwright Area</b>	<b>July</b>			<b>August</b>			<b>September</b>			<b>Total</b>		
<b>Year</b>	<b>km</b>	<b>GW</b>	<b>SR</b>	<b>km</b>	<b>GW</b>	<b>SR</b>	<b>km</b>	<b>GW</b>	<b>SR</b>	<b>km</b>	<b>GW</b>	<b>SR</b>
<b>2009</b>	<b>671</b>	<b>23</b>	<b>0.0343</b>	<b>407</b>	<b>12</b>	<b>0.0295</b>	<b>614</b>	<b>7</b>	<b>0.0114</b>	<b>1692</b>	<b>42</b>	<b>0.0248</b>
<b>2010</b>	<b>564</b>	<b>8</b>	<b>0.0142</b>	<b>430</b>	<b>13</b>	<b>0.0302</b>	<b>682</b>	<b>1</b>	<b>0.0015</b>	<b>1676</b>	<b>22</b>	<b>0.0131</b>
<b>2011</b>	<b>346</b>	<b>4</b>	<b>0.0116</b>	<b>766</b>	<b>19</b>	<b>0.0248</b>	<b>721</b>	<b>15</b>	<b>0.0208</b>	<b>1833</b>	<b>38</b>	<b>0.0207</b>
<b>2012</b>	<b>856</b>	<b>27</b>	<b>0.0315</b>	<b>667</b>	<b>19</b>	<b>0.0285</b>	<b>706</b>	<b>9</b>	<b>0.0127</b>	<b>2229</b>	<b>55</b>	<b>0.0247</b>
<b>2013</b>	<b>662</b>	<b>20</b>	<b>0.0302</b>	<b>875</b>	<b>9</b>	<b>0.0103</b>	<b>632</b>	<b>13</b>	<b>0.0206</b>	<b>2169</b>	<b>42</b>	<b>0.0194</b>
<b>2014</b>	<b>531</b>	<b>13</b>	<b>0.0245</b>	<b>471</b>	<b>7</b>	<b>0.0149</b>	<b>356</b>	<b>1</b>	<b>0.0028</b>	<b>1358</b>	<b>21</b>	<b>0.0155</b>
<b>2015</b>	<b>515</b>	<b>45</b>	<b>0.0874</b>	<b>828</b>	<b>26</b>	<b>0.0314</b>	<b>869</b>	<b>8</b>	<b>0.0092</b>	<b>2212</b>	<b>79</b>	<b>0.0357</b>
<b>2016</b>	<b>795</b>	<b>65</b>	<b>0.0818</b>	<b>994</b>	<b>36</b>	<b>0.0362</b>	<b>840</b>	<b>24</b>	<b>0.0286</b>	<b>2629</b>	<b>125</b>	<b>0.0475</b>
<b>2017</b>	<b>874</b>	<b>68</b>	<b>0.0778</b>	<b>614</b>	<b>17</b>	<b>0.0277</b>	<b>936</b>	<b>34</b>	<b>0.0363</b>	<b>2424</b>	<b>119</b>	<b>0.0491</b>
<b>2018</b>	<b>664</b>	<b>85</b>	<b>0.1280</b>	<b>697</b>	<b>34</b>	<b>0.0488</b>	<b>922</b>	<b>101.4</b>	<b>0.1100</b>	<b>2283</b>	<b>220.4</b>	<b>0.0965</b>
<b>2019</b>	<b>417</b>	<b>44</b>	<b>0.1055</b>	<b>46</b>	<b>3</b>	<b>0.0652</b>	<b>909</b>	<b>28</b>	<b>0.0308</b>	<b>1372</b>	<b>75</b>	<b>0.0547</b>
<b>Total</b>	<b>6895</b>	<b>402</b>	<b>0.0583</b>	<b>6795</b>	<b>195</b>	<b>0.0287</b>	<b>8187</b>	<b>241.4</b>	<b>0.0295</b>	<b>21877</b>	<b>838.4</b>	<b>0.0383</b>
<b>Peard Bay Area</b>	<b>July</b>			<b>August</b>			<b>September</b>			<b>Total</b>		
<b>Year</b>	<b>km</b>	<b>GW</b>	<b>SR</b>	<b>km</b>	<b>GW</b>	<b>SR</b>	<b>km</b>	<b>GW</b>	<b>SR</b>	<b>km</b>	<b>GW</b>	<b>SR</b>
<b>2009</b>	<b>418</b>	<b>10</b>	<b>0.0239</b>	<b>510</b>	<b>38</b>	<b>0.0745</b>	<b>442</b>	<b>9</b>	<b>0.0204</b>	<b>1370</b>	<b>57</b>	<b>0.0416</b>

<b>2010</b>	<b>437</b>	<b>28</b>	<b>0.0641</b>	<b>305</b>	<b>8</b>	<b>0.0262</b>	<b>400</b>	<b>2</b>	<b>0.0050</b>	<b>1142</b>	<b>38</b>	<b>0.0333</b>
<b>2011</b>	<b>411</b>	<b>28</b>	<b>0.0681</b>	<b>418</b>	<b>13</b>	<b>0.0311</b>	<b>901</b>	<b>23</b>	<b>0.0255</b>	<b>1730</b>	<b>64</b>	<b>0.0370</b>
<b>2012</b>	<b>763</b>	<b>15</b>	<b>0.0197</b>	<b>593</b>	<b>23</b>	<b>0.0388</b>	<b>628</b>	<b>6</b>	<b>0.0096</b>	<b>1984</b>	<b>44</b>	<b>0.0222</b>
<b>2013</b>	<b>464</b>	<b>3</b>	<b>0.0065</b>	<b>720</b>	<b>24</b>	<b>0.0333</b>	<b>591</b>	<b>5</b>	<b>0.0085</b>	<b>1775</b>	<b>30</b>	<b>0.0169</b>
<b>2014</b>	<b>495</b>	<b>11</b>	<b>0.0222</b>	<b>517</b>	<b>16</b>	<b>0.0309</b>	<b>430</b>	<b>7</b>	<b>0.0163</b>	<b>1442</b>	<b>34</b>	<b>0.0236</b>
<b>2015</b>	<b>472</b>	<b>25</b>	<b>0.0530</b>	<b>758</b>	<b>25</b>	<b>0.0330</b>	<b>1130</b>	<b>6</b>	<b>0.0053</b>	<b>2360</b>	<b>56</b>	<b>0.0237</b>
<b>2016</b>	<b>705</b>	<b>17</b>	<b>0.0241</b>	<b>441</b>	<b>3</b>	<b>0.0068</b>	<b>903</b>	<b>17</b>	<b>0.0188</b>	<b>2049</b>	<b>37</b>	<b>0.0181</b>
<b>2017</b>	<b>796</b>	<b>59</b>	<b>0.0741</b>	<b>744</b>	<b>0</b>	<b>0.0000</b>	<b>1085</b>	<b>6</b>	<b>0.0055</b>	<b>2625</b>	<b>65</b>	<b>0.0248</b>
<b>2018</b>	<b>796</b>	<b>9</b>	<b>0.0113</b>	<b>441</b>	<b>0</b>	<b>0.0000</b>	<b>936</b>	<b>5</b>	<b>0.0053</b>	<b>2173</b>	<b>14</b>	<b>0.0064</b>
<b>2019</b>	<b>591</b>	<b>4</b>	<b>0.0068</b>	<b>289</b>	<b>0</b>	<b>0.0000</b>	<b>1106</b>	<b>0</b>	<b>0.0000</b>	<b>1986</b>	<b>4</b>	<b>0.0020</b>
<b>Total</b>	<b>6348</b>	<b>207</b>	<b>0.0326</b>	<b>5736</b>	<b>150</b>	<b>0.0262</b>	<b>8552</b>	<b>86</b>	<b>0.0101</b>	<b>20636</b>	<b>443</b>	<b>0.0215</b>