**Table S2. Statistics from genome assembly and binning**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Lake Mendota | Trout Bog Epilimnion | Trout Bog Hypolimnion |
| Number of metagenomes | 94 | 45 | 45 |
| Collection time span | Jun. 2008 – Nov. 2012 | Jun. 2007 – Aug. 2009 | May 2007 – Aug. 2009 |
| Total base pairs in metagenomes | 1.26x1011 | 6.72x1010 | 7.18x1010 |
| Total base pairs in pooled assembly | 3.37x109 | 2.60x108 | 5.47x108 |
| Number of contigs in pooled assembly | 9,912,431 | 79,862 | 153,912 |
| Number of curated bins | 99 | 31 | 63 |
| Number of base pairs in curated bins | 2.31x108 | 5.82x107 | 1.60x108 |
| Number of contigs in curated bins | 18,675 | 5,098 | 11,656 |