



Pre-Permitting Environmental / Socio-Economic Data Report Series

Report Series H- Macroinvertebrates and Periphyton

Report H-9 Metrics for Data Collected, Periphyton 2004-2007

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The Pebble Partnership is providing environmental and socio-economic baseline data collected to inform the development of the Pebble Project to state and federal agencies, project stakeholders and the general public prior to project permitting as part of its commitment to full and open disclosure.

A comprehensive Environmental Baseline Document (EBD) will subsequently be prepared and appended to future project permit applications. The EBD will also be made publicly available when complete.

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REPORT H-9.1

Periphyton Metrics for Data Collected Using Modified EPA RBP Method in June and August 2004 and Chlorophyll-*a* Sampling in June 2005 and 2007, Mine Study Area

Site ID	Taxa Richness June 2004	Taxa Richness Aug 2004	Percent Dominant Taxon June 2004	Percent Dominant Taxon Aug 2004	Chlorophyll- <i>a</i> (mg/m ² ±1 Standard Deviation) June 2005 ^(a)	Chlorophyll- <i>a</i> (mg/m ² ±1 Standard Deviation) June 2007 ^(a)
CR119A	19	—	49	—	—	—
KC100A	19	18	31	64	—	—
NK100A	14	17	35	53	8.9 (± 3.99)	6.0 (± 4.81)
NK100B04	12	—	41	—	—	—
NK100C	18	19	41	37	4.7 (± 1.83)	4.0 (± 1.91)
NK119A	14	14	24	24	—	3.7 (± 2.02)
SK100A	19	17	27	45	—	6.4 (± 8.51)
SK100B	19	12	28	57	17.0 (± 8.45)	6.7 (± 1.69)
SK100C	19	—	61	—	—	—
SK100D	—	—	—	—	—	2.5 (± 1.43)
SK100F	13	17	72	72	—	—
SK100G	19	15	47	38	—	—
SK119A	17	14	43	22	—	—
UT100B	15	13	26	61	8.1 (± 6.56)	6.4 (± 4.14)
UT100C	17	15	38	47	—	13.2 (± 8.20)
UT100D	14	17	49	31	2.1 (± 0.82)	30.2 (± 12.24)
UT100E	17	13	32	51	—	—
UT119A	17	16	32	21	—	2.3 (± 0.84)
UT138A	—	19	—	22	15.6 (± 12.07)	—
Big Wiggly Lake	—	14	—	65	—	—
Frying Pan	—	13	—	41	—	—

Note:

(a) Mean values are averages for ten samples per site

-- = Samples not collected



REPORT H-9.2

Periphyton Metrics for Data Collected Using Modified EPA RBP Method in August 2004 and Chlorophyll-a Sampling in August 2005, Transportation Corridor

Site ID	Taxa Richness Aug 2004	Percent Dominant Taxon Aug 2004	Chlorophyll-a (mg/m ² ±1 Standard Deviation) Aug 2005 ^(a)
Bear Den	22	52	9.6 (±4.86)
Red Creek	14	57	9.0 (±4.27)
Ursa 100B	13	68	4.4 (±1.94)

Note:

(a) Mean values are averages for ten samples per site

REPORT H-9.3

Periphyton Metrics for Data Collected Using RBP Method (Diatom Identification) in 2004 and Chlorophyll-a Sampling in 2005, Cook Inlet Drainages

Site	Taxa Richness August 2004	Percent Dominant Taxon August 2004	Chlorophyll-a (mg/m ² ±1 Standard Deviation) June 2005
Unnamed creek	8	79	NS
Y Valley Creek	17	35	2.4 ±0.83 ^a

Notes:

a. Result is average ±1 standard deviation derived from 10 samples.

NS = not sampled in 2005.