

Supplementary Table S1. Primary productivity ($\text{gC m}^{-2} \text{ month}^{-1}$) estimated in the vicinity of Station 18 off Concepción during 2008 and 2009 using SeaWiFS-MODIS data and average primary productivity estimated in situ between 1987 and 1998 (Daneri et al., 2000).

Month \ Years	SeaWiFS-MODIS		Average (Daneri et al., 2000)
	2008	2009	1987-1988
January	5.9	3.2	5.7
February	5.1	4.3	1.0
March	3.9	5.15	2.3
April	4.6	3.6	1.9
May	2.1	1.3	1.8
June	1.4	1.2	0.9
July	0.9	1.1	0.5
August	1.4	1.3	0.6
September	2.4	3.3	4.9
October	6.9	6.9	3.0
November	6.7	6.8	6.1
December	7.9	8.4	2.0

Table S2. Monthly fish landings (tons) in the BioBio Region (Chile) between 2008 and 2009.

Month \ Year	2008	2009
January	26 594	84 431
February	199 703	174 884
March	312 661	454 170
April	240 062	313 713
May	179 699	130 609
June	76 895	57 713
July	19 275	126 648
August	10 435	38 550
September	19 029	3 965
October	131 996	133 704
November	52 374	89 210
December	61 973	81 255

Table S3. Bottom water (90 m) oxygen (μM), solid phase P contents (mg P kg^{-1} dry sediment), biogenic P deposition rates ($P_{\text{fish dep.}}$ in $\text{mg P m}^{-2} \text{ month}^{-1}$) and P_{fish} preservation potential (%) estimated for sediments collected from Station 18 off Concepción during 2009.

Month	Oxygen	Biogenic P (P_{fish})	Organic P (P_{org})	Iron bound P (P-Fe)	$P_{\text{fish. dep.}}$	Pres%
February	5.2	190	505	460	15.0	13.9
March	1.6	234	405	416	18.5	17.1
April	5.1	175	528	513	13.9	12.8
May	6.4	295	513	398	23.4	21.5
June	11.8	91	211	584	7.2	6.6
July	2.9	379	474	403	30.0	27.6
August	15.0	-	-	-	-	-
September	16.7	182	486	445	14.4	13.3