**Tabel 1.** Die gemete Cd konsentrasies in die water, sediment en liggame van die seester *P. exigua* in Valsbaai gedurende verskillende seisoene. (Lokaliteit 1 – Strand, Lok. 2 – Gordonsbaai, Lok. 3 – Glencairn, Lok. 4 – Muizenberg, Lok. 7 – Miller’s Point) (NM = nie meetbaar; SA = standaardafwyking)

Lokaliteit Winter (Jul.) Lente (Sept.) Somer (Des.) Herfs (Apr.) Jaar

Nr. 2000 2000 2000 2001 gemid.(±SA)

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1 0.15 0.20 1.05 2.0 0.88±0.7

Water 2 0.65 0.04 1.0 1.94 1.1±0.8

(µg/L) 3 0.05 0.15 3.24 6.60 2.5±2.6

4 0.75 0.55 1.37 2.01 1.2±1.3

7 NM NM 0.15 1.49 0.41 -

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Seisoen gemid. 0.32±0.4 0.19±0.2 1.36±1.1 2.8±2.1

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1 7.36 1.54 3.0 3.09 3.75

Sediment 2 3.03 1.01 5.25 6.17 3.86

( µg/g) 3 0.21 0.10 NM 0.21 0.13

4 12.36 2.77 10.75 10.46 9.1

7 0.20 0.30 1.30 1.59 0.85

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Seisoen gemid. 4.6 1.14 4.06 4.30

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1 5.25 2.15 6.52 5.25 4.79±2.3

Liggaam 2 3.33 0.34 1.52 4.33 2.37±1.6

( µg/g) 3 4.75 3.0 2.28 3.04 3.27±0.9

4 7.25 5.07 2.0 3.97 4.57±1.9

7 9.0 0.05 3.26 3.8 4.03±3.4

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Seisoen gemid. 5.92±2.2 2.12±2.0 3.12±1.9 4.09±1.3

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**Tabel 2**. Die Cu konsentrasies wat in die water, sediment en liggame van die seester *P. exigua* in Valsbaai gemeet is gedurende verskillende seisoene. ( Lokaliteit 1 – Strand, Lok. 2 – Gordonsbaai, Lok. 3 – Glencairn, Lok. 4 – Muizenberg, Lok. 7 – Miller’s Point). (NM = nie meetbaar )

Lokaliteit Winter (Jul.) Lente (Sept.) Somer (Des.) Herfs (Apr.) Jaar

Nr. 2000 2000 2000 2001 gemid.

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1 NM NM 0.67 1.10 0.44

Water 2 1.55 NM 0.67 0.95 0.79

(µg/L) 3 2.20 NM 0.12 1.84 1.04

4 0.60 0.6 0.4 1.22 0.71

7 NM NM NM 2.30 0.58

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Seisoen gemid. 0.87 0.12 0.37 1.48

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1 15.10 NM NM 1.24 4.09

Sediment 2 3.18 NM NM 0.98 1.04

( µg/g) 3 1.16 NM NM 6.05 1.80

4 5.27 1.41 NM 7.46 3.54

7 11.0 2.71 1.94 11.50 6.79

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Seisoen gemid. 7.14 0.82 0.39 5.48

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1 26.25 12.36 6.65 11.70 14.24

Liggaam 2 16.50 12.36 3.27 3.50 8.91

( µg/g) 3 30.25 - 5.0 5.25 13.50

4 41.75 23.0 4.55 6.14 18.86

7 3.48 2.05 3.92 4.17 3.41

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Seisoen gemid. 23.65 9.95 4.68 6.15

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**Tabel 3**. Die Ni konsentrasies wat in die water, sediment en liggame van die seester *P. exigua* in Valsbaai gemeet is gedurende verskillende seisoene. (Lokaliteit 1 – Strand, Lok. 2 – Gordonsbaai, Lok. 3 – Glencairn, Lok. 4 – Muizenberg, Lok. 7 – Miller’s Point) (NM = nie meetbaar)

Lokaliteit Winter (Jul.) Lente (Sept.) Somer (Des.) Herfs (Apr.) Jaar

Nr. 2000 2000 2000 2001 gemid.

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1 NM NM NM 1.50 0.38

Water 2 NM NM 2.2 0.50 1.80

(µg/L) 3 1.52 NM 5.2 1.77 2.12

4 0.15 0.5 5.08 1.44 5.50

7 NM NM NM 0.97 0.24

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Seisoen gemid. 0.33 0.1 2.10 1.24

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1 12.21 17.5 22.5 30.92 20.78

Sediment 2 24.24 16.9 30.25 37.27 27.17

( µg/g) 3 6.42 0.52 13.04 16.71 9.17

4 18.18 9.4 50.0 30.86 27.11

7 29.5 15.79 9.63 11.59 16.63

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Seisoen gemid. 15.91 12.02 25.08 25.47

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1 2.25 1.0 NM 1.50 1.19

Liggaam 2 0.05 NM NM 0.50 0.14

( µg/g) 3 0.51 NM NM 1.77 0.57

4 0.01 NM NM 1.44 0.36

7 0.02 NM NM 0.97 0.74

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Seisoen gemid. 0.57 0.2 NM 1.24

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**Tabel 4.** Die Pb konsentrasies wat in die water, sediment en liggame van die seester *P. exigua* in Valsbaai gemeet is gedurende verskillende seisoene. ( Lokaliteit 1 – Strand, Lok. 2 – Gordonsbaai, Lok. 3 – Glencairn, Lok. 4 – Muizenberg, Lok. 7 – Miller’s Point) (NM = nie meetbaar))

Lokaliteit Winter (Jul.) Lente (Sept.) Somer (Des.) Herfs (Apr.) Jaar

Nr. 2000 2000 2000 2001 gemid.

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1 0.14 0.15 1.70 2.20 1.26

Water 2 0.5 0.35 1.05 2.84 1.06

(µg/L) 3 1.15 0.35 4.80 6.30 1.35

4 0.3 10.17 5.20 4.30 5.0

7 0.67 0.04 0.35 3.40 1.11

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Seisoen gemid. 0.55 2.21 2.26 3.81

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1 15.15 2.0 10.08 16.80 10.99

Sediment 2 60.76 38.46 35.08 36.06 42.59

( µg/g) 3 10.84 3.68 30.08 34.65 19.80

4 28.41 47.82 28.64 37.73 35.65

7 41.0 22.90 23.33 30.70 29.48

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Seisoen gemid. 31.23 22.97 25.44 31.19

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1 2.35 2.0 0.24 1.50 1.52

Liggaam 2 5.0 2.33 0.23 1.33 2.22

( µg/g) 3 11.75 0.13 2.0 2.79 4.16

4 15.75 4.0 2.73 3.19 2.92

7 1.0 0.80 1.09 2.78 1.42

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Seisoen gemid. 7.17 1.85 1.26 2.32

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**Tabel 5.** Die Zn konsentrasies wat in die water, sediment en liggame van die seester *P. exigua* in Valsbaai gemeet is gedurende verskillende seisoene . (Lokaliteit 1 – Strand, Lok. 2 – Gordonsbaai, Lok. 3 – Glencairn, Lok. 4 – Muizenberg, Lok. 7 – Miller’s Point)

Lokaliteit Winter (Jul.) Lente (Sept.) Somer (Des.) Herfs (Apr.) Jaar

Nr. 2000 2000 2000 2001 gemid.

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1 3.35 4.3 9.95 10.12 6.93

Water 2 16.95 12.3 8.0 10.95 12.05

(µg/L) 3 24.6 8.1 16.3 17.8 16.70

4 30.15 9.3 16.65 17.0 18.28

7 4.5 1.9 3.55 6.3 4.06

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Seisoen gemid. 15.91 7.18 10.89 12.43

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1 38.24 21.6 81.25 85.91 56.75

Sediment 2 72.71 30.77 56.2 67.37 56.76

( µg/g) 3 14.1 40.0 65.0 20.98 35.02

4 26.73 21.54 100.0 110.46 64.68

7 67.5 39.36 46.57 61.50 53.73

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Seisoen gemid. 43.86 30.65 69.80 69.24

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1 224.75 117.33 55.96 61.5 114.88

Liggaam 2 76.0 40.25 90.73 101.0 76.99

( µg/g) 3 151.75 100.25 108.18 109.77 117.48

4 149.25 100.0 53.0 60.17 90.61

7 35.0 20.01 105.22 109.9 67.53

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Seisoen gemid. 127.35 75.57 82.62 88.47

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**Tabel 6**. ‘n Vergelyking tussen die hoogste gemiddelde en hoogste individuele gemete metaalkonsentrasies (µg/L) per lokaliteit in die tussengety kuswater van Valsbaai en Suid-Afrika en ander lande se teiken- of riglynwaardes.

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Metaal Suid-Afrika1 ANZECC2  EG3  Hierdie studie4

Individ. Gemid.

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Cd 4 2 2.5 6.6 2.8

Cu 5 5 5 2.3 1.04

Ni 25 - - 5.2 1.8

Pb 12 5 15 10.1 5.0

Zn 25 50 40 30.1 18.28

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1. SA mariene water kwaliteitsriglyne, Department of Water Affairs and Forestry, 1996

2. Australia and New Zealand Environmental and Conservation Council Guidelines (1992)

3. Vroeëre Europese Gemeenskapsriglyne volgens Fatoki en Mathabatha (2001) en Auris (1994) maar intussen verlaag vir prioriteitstowwe soos Pb en Cd (Directive 2008/105/EC).

4. Hoogste individuele en gemiddelde metings per lokaliteit in Valsbaai