

Quality of Rivers: Namahadi & Caledon



Avenant, MF
Watson, M
Vos, AT
Seaman, MT

Centre for Environmental
Management

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T: 051 401 2863 cem@ufs.ac.za www.ufs.ac.za/cem

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CONTENT

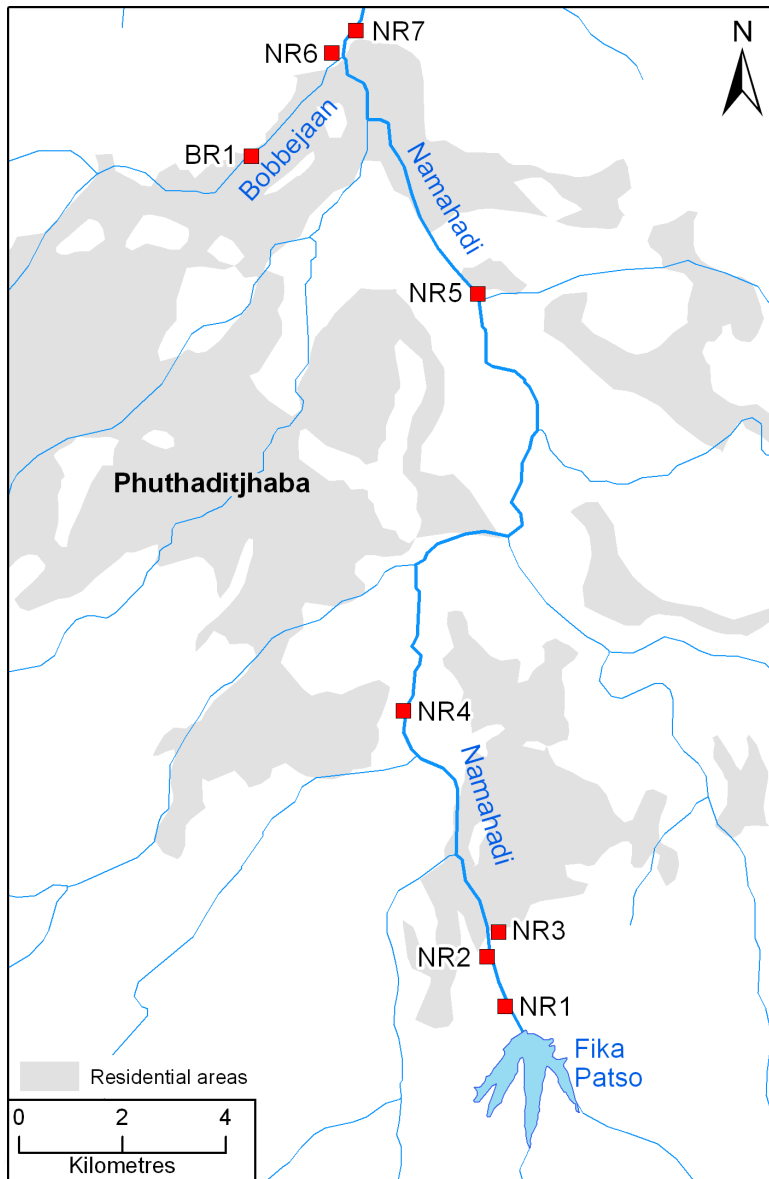
- Namahadi River & Tributaries
- Caledon River & Tributaries



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NAMAHADI & Tributaries



NR5 - Oct 2002



NR3 - Oct 2002

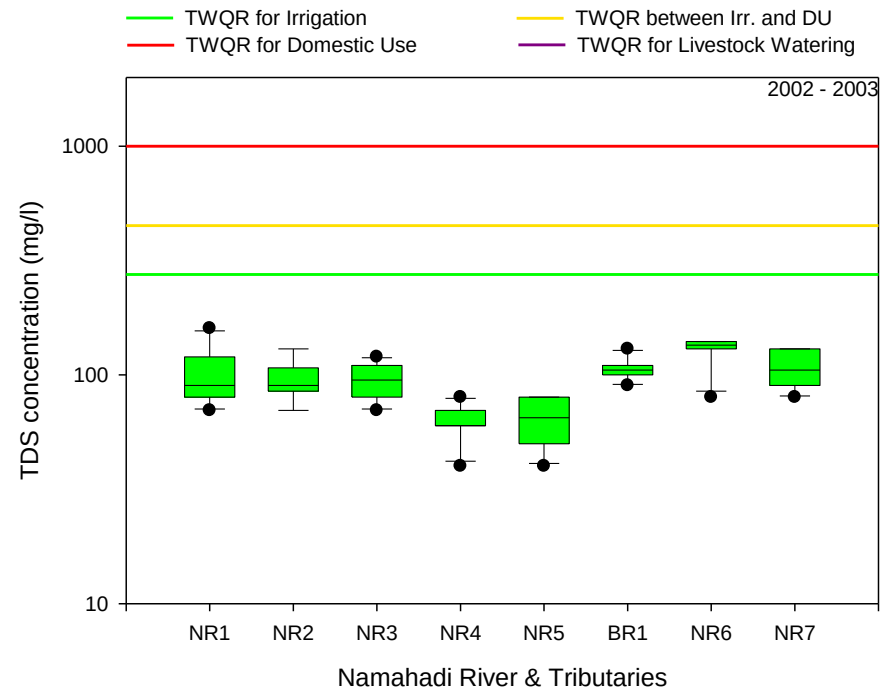
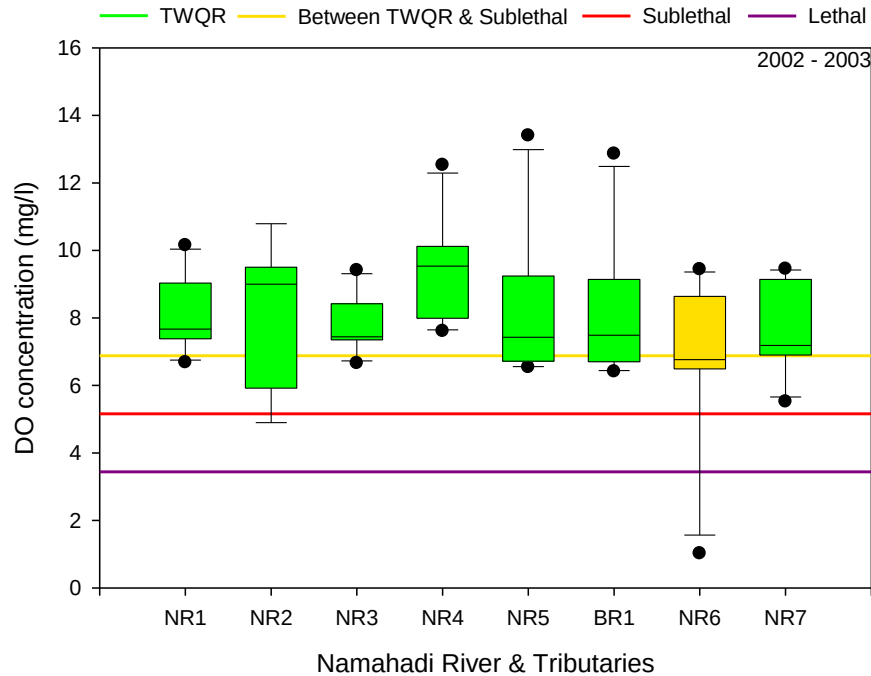


BR1 - Nov 2002

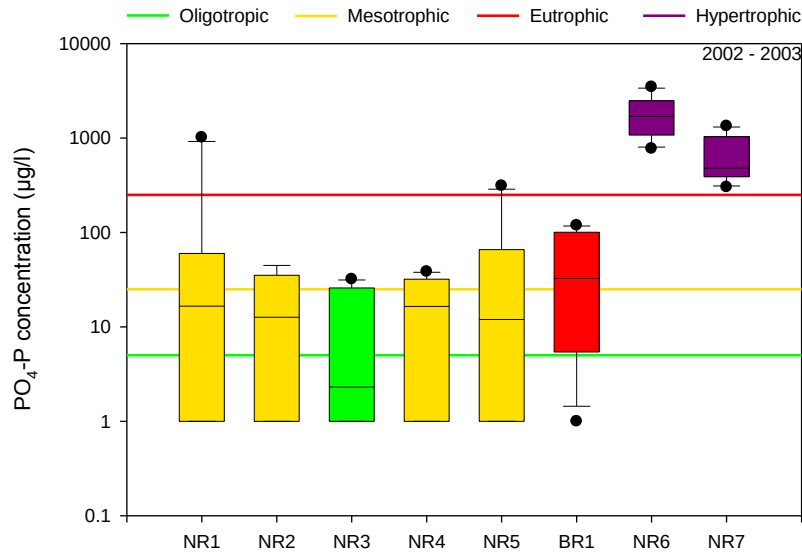


NR4 - Oct 2002

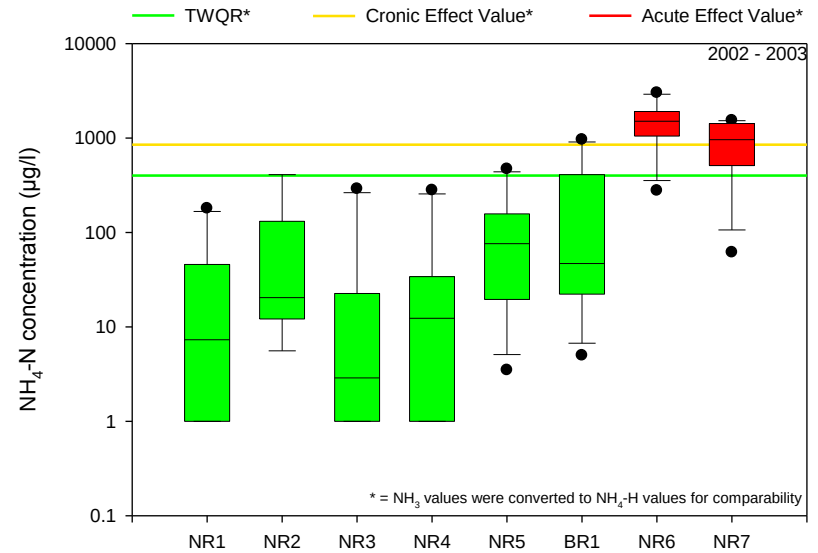
Diss. O₂ & TDS



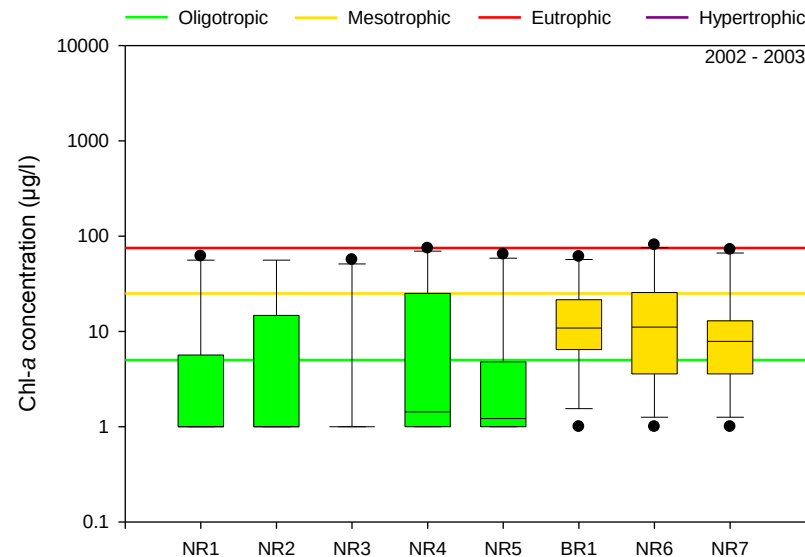
PO₄-P, NH₄-N & Chl-a



Namahadi River & Tributaries



Namahadi River & Tributaries



Namahadi River & Tributaries

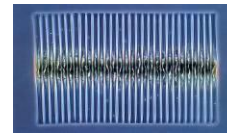
Algae

Ultra - Oligotrophic

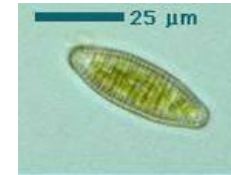
Mesotrophic

Eu - Hypertrophic

Diatoms



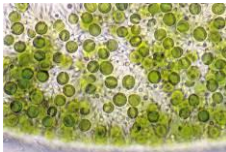
Fragilaria



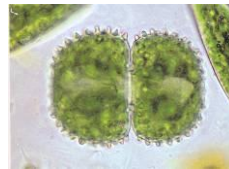
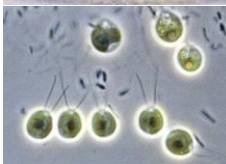
Diatoma

Green algae

Chlorella



Chlamydomonas



Cosmarium



Closterium

Euglenoids

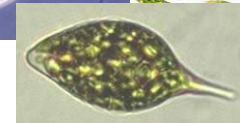
Phacus



Euglena



Lepocinclis



Chrysophytes



Dinobryon

Macro-invertebrates

good

SASS sensitivity

bad



Perlidae (12/15)



Athericidae (10/15)
snipe flies

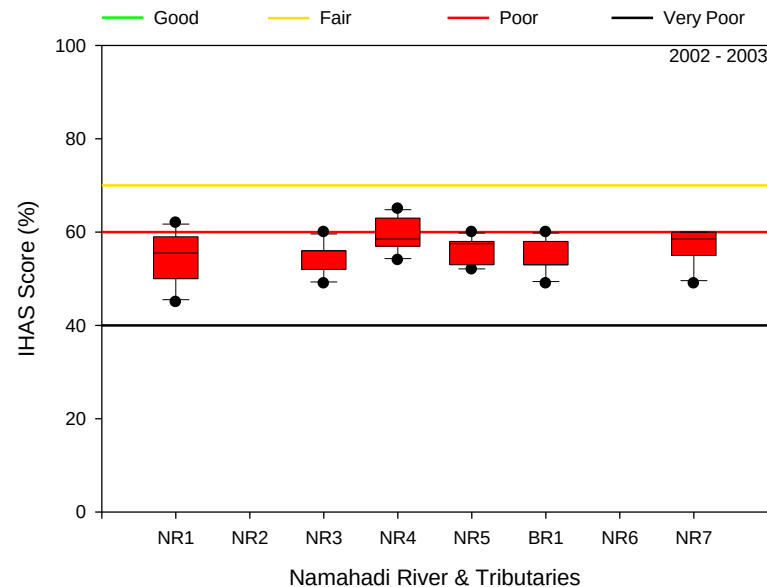
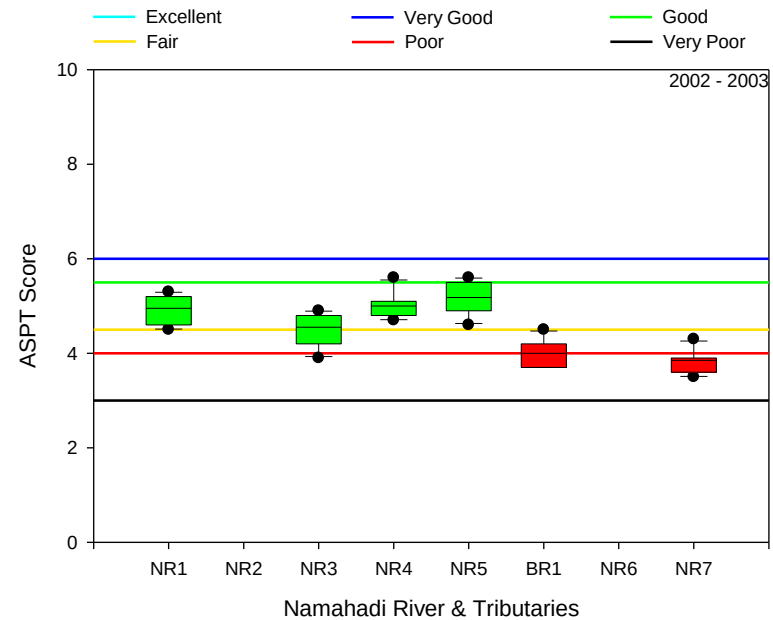
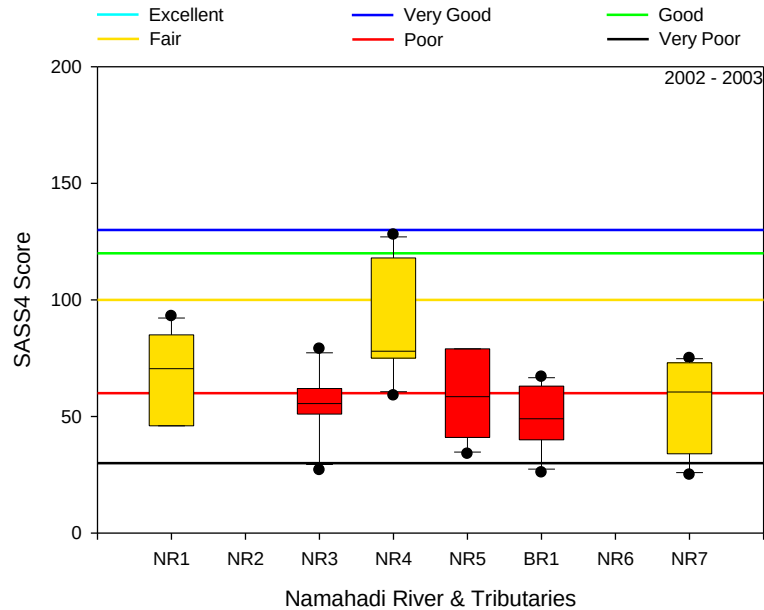


Ceratomyxidae (5/15)
biting midges



Chironomidae (2/15)
midges

Macro-invertebrates



CALEDON & Tributaries (1)



EW R2 - Nov 2004

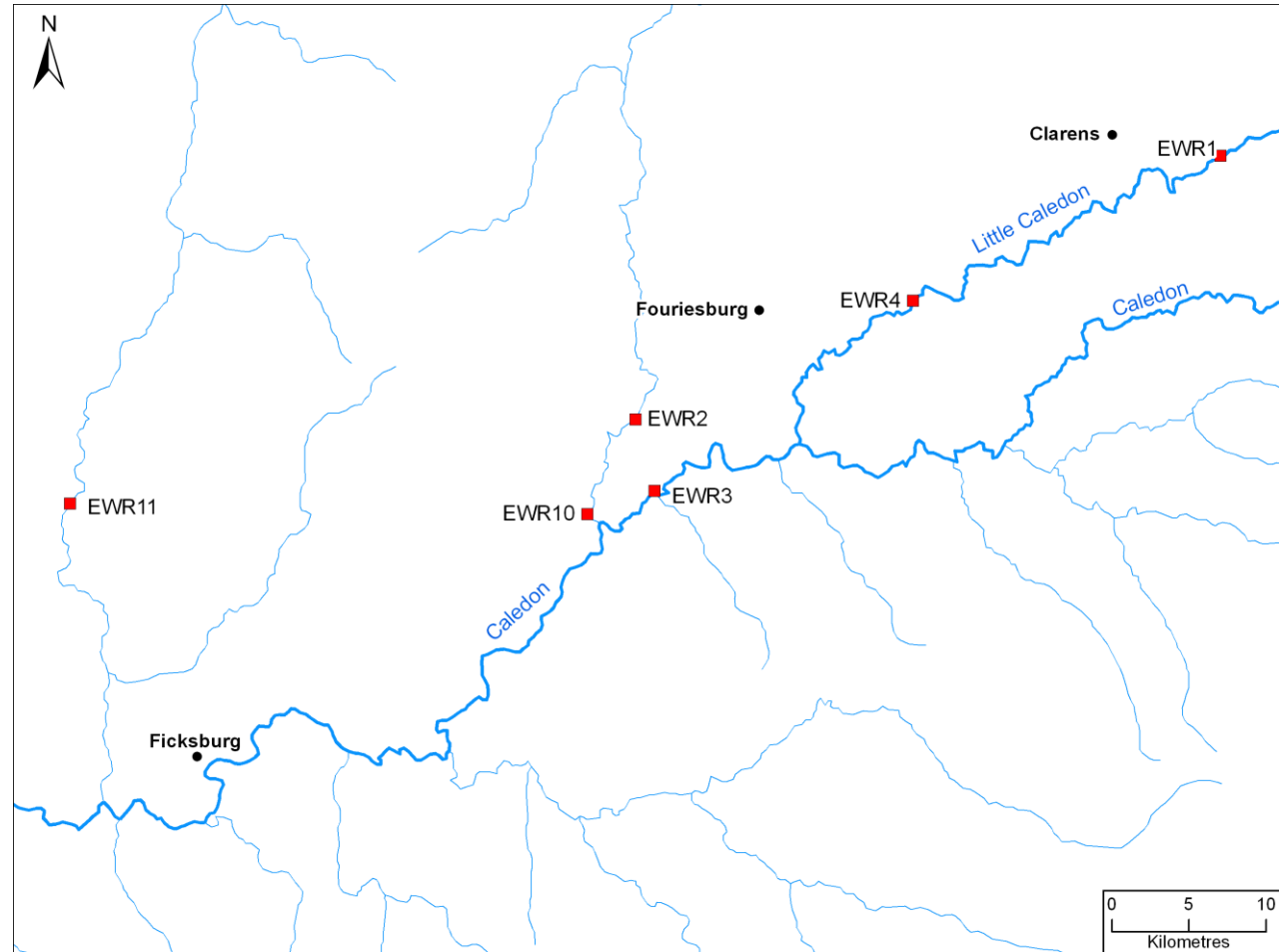


EW R10 - Nov 2004



EW R11 - Nov 2004

g voorbehou



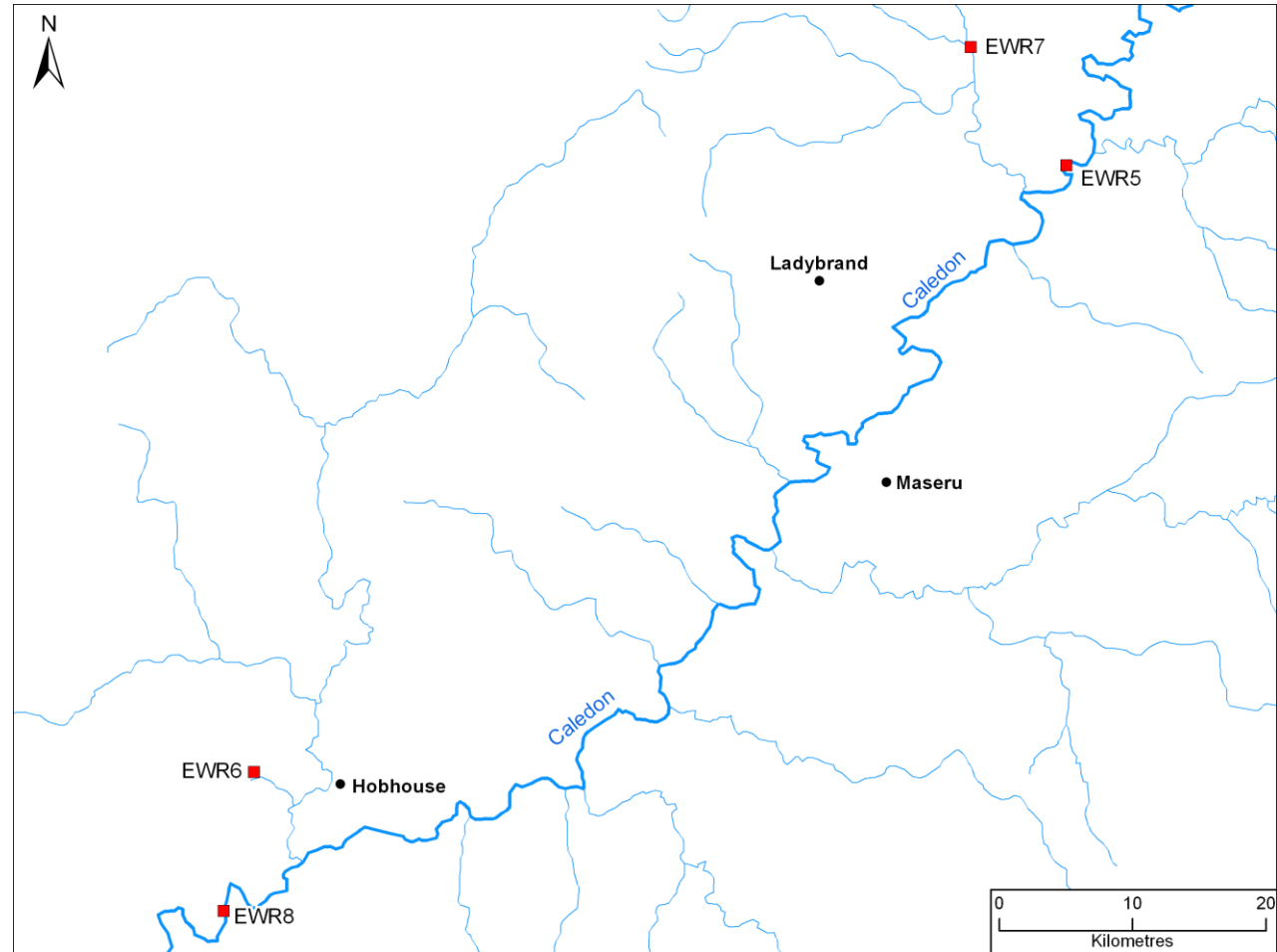
CALEDON & Tributaries (2)



EWR7 - Nov 2004



EWR8 - Nov 2004



Macro-invertebrates

good

SASS sensitivity

bad



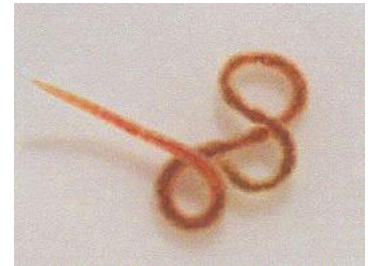
Polymitorcyidae (10/15)
pale borrowers



Dixidae (10/15)
meniscus midges

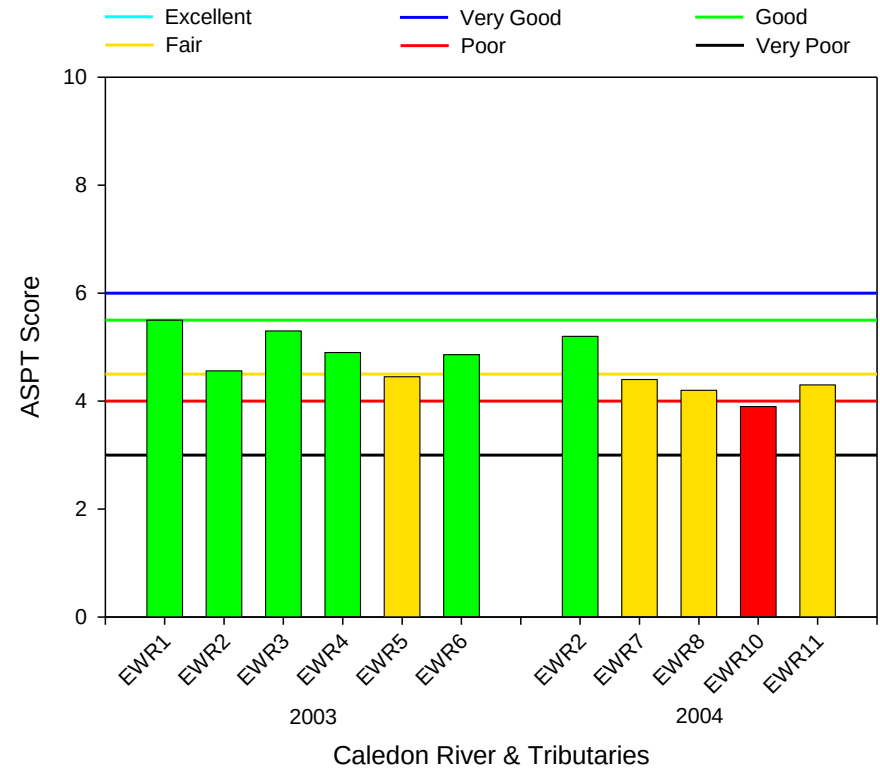
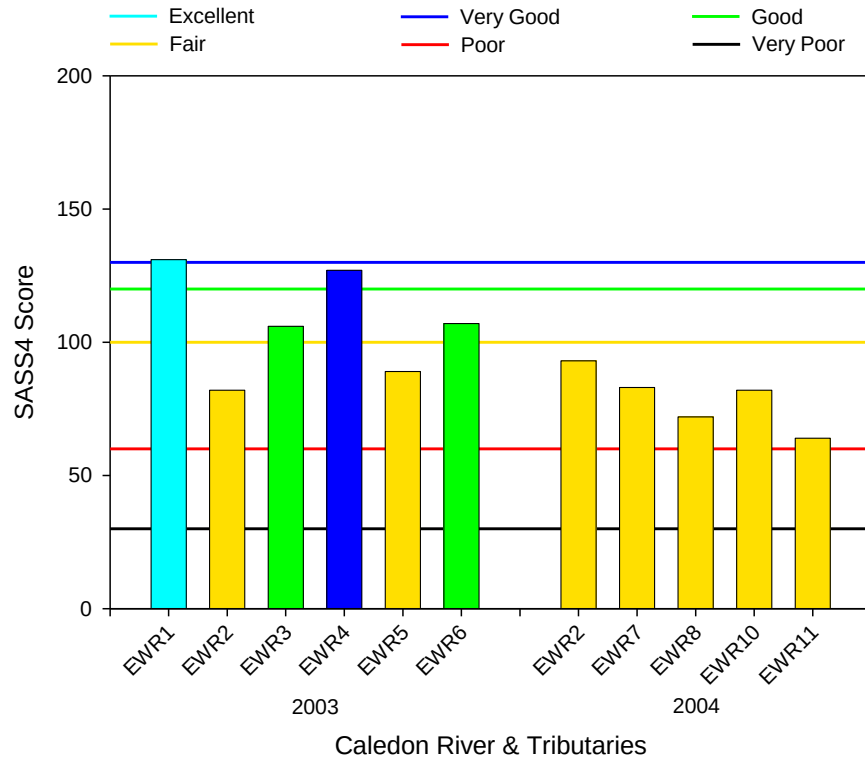


Hirudinae (3/15)
leeches

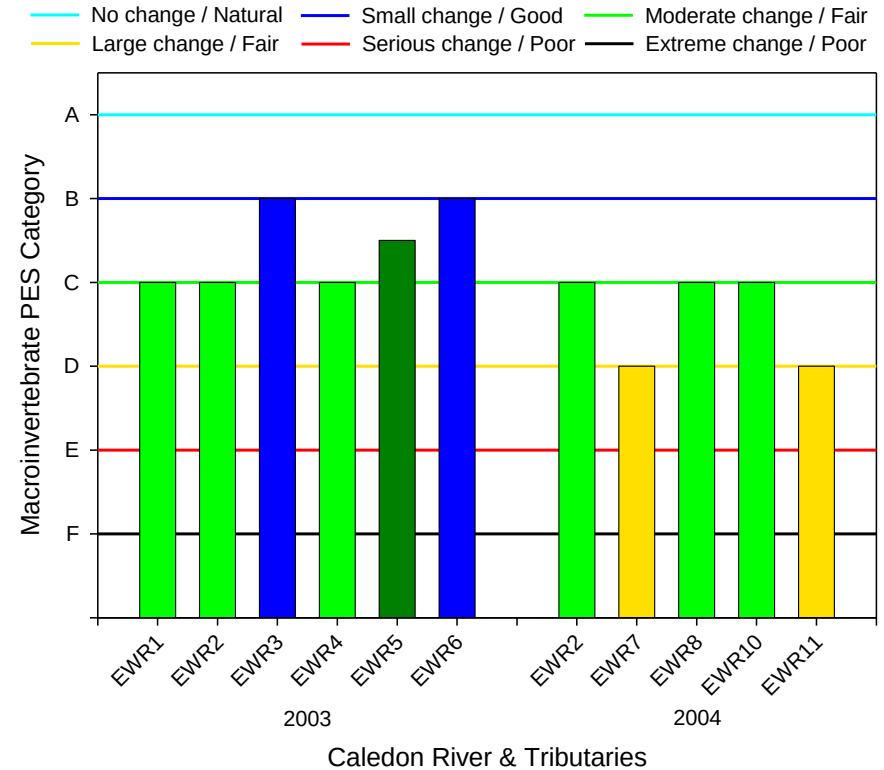
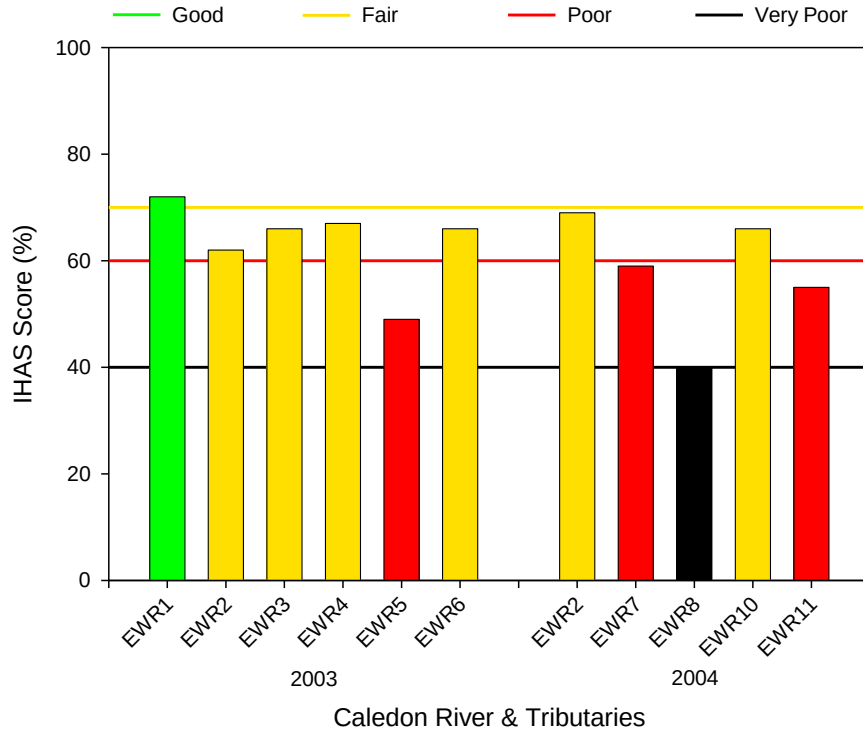


Oligochaeta (1/15)
aquatic earthworms

Macro-invertebrates



Macro-invertebrates

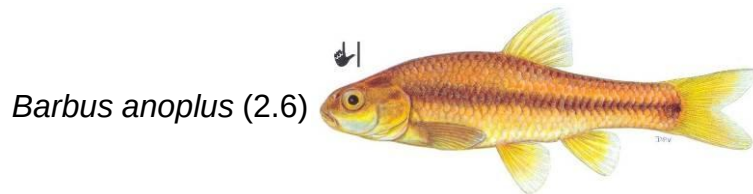
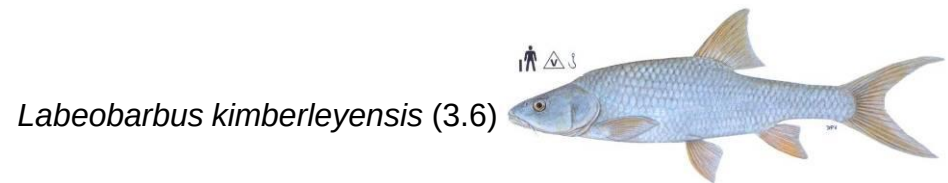
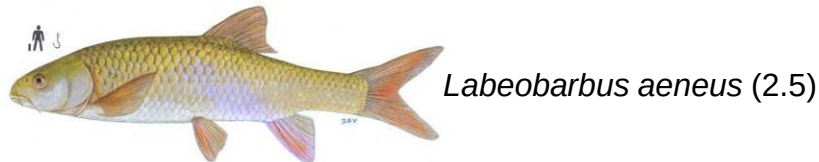
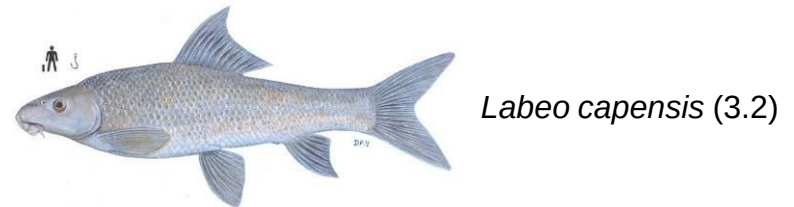
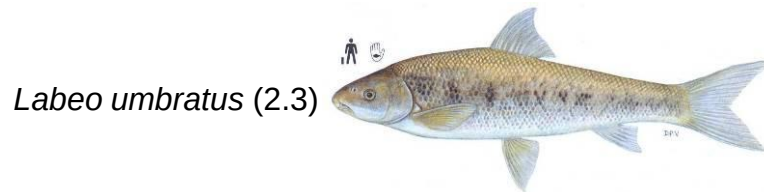
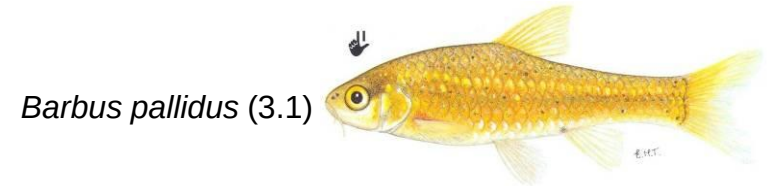


Fish

Relative tolerance of fish species towards change

Tolerant (1-2) - moderate tolerant (2-3)

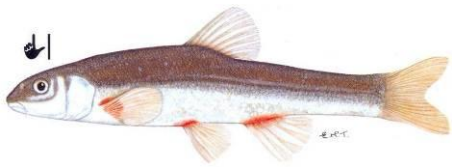
moderate intolerant (3-4) – intolerant (4-5)



Fish

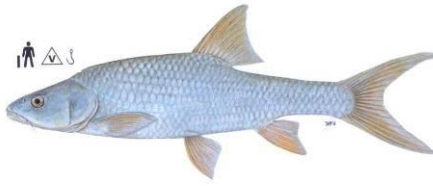
Indigenous

critically endangered



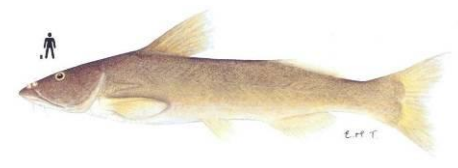
Pseudobarbus quathlambae

vulnerable



Labeobarbus kimberleyensis

least concern



Austroglanis scateri

Exotic



Oncorhynchus mykiss



Salmo trutta

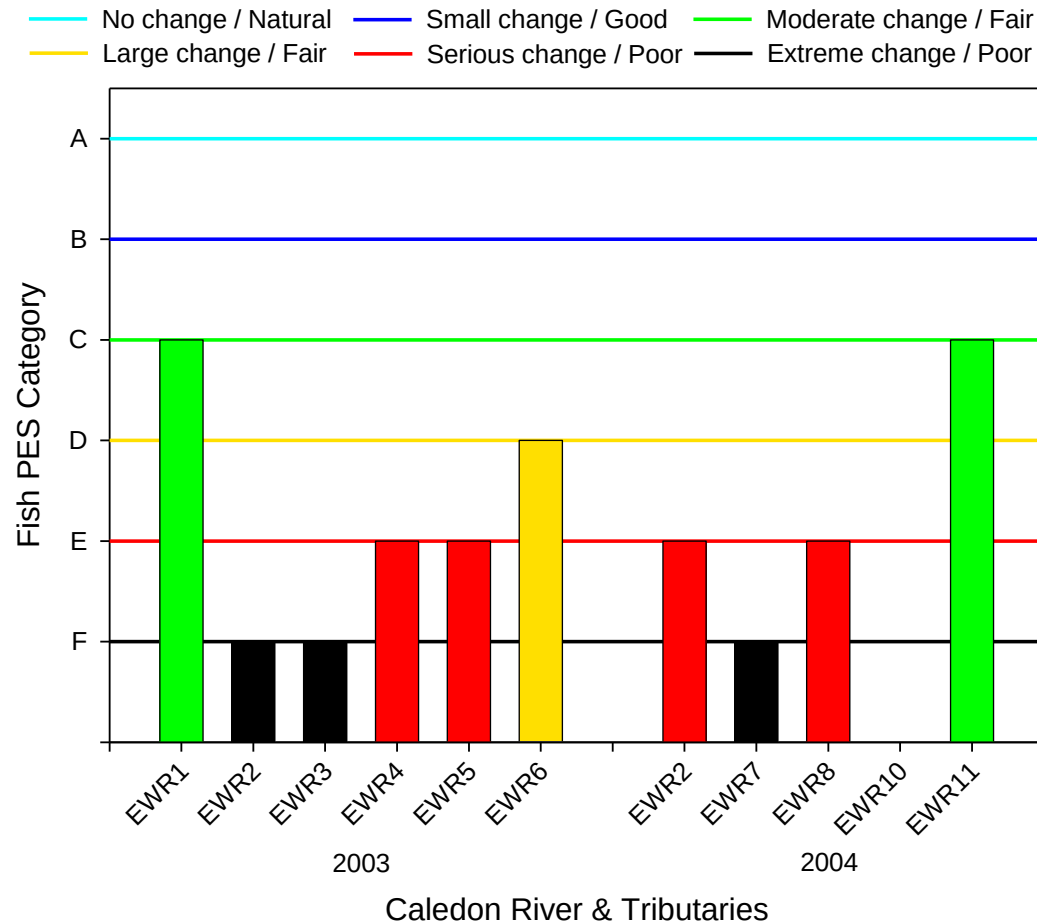
cold, clear streams



Cyprinus carpio

Low land rivers

Fish



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- Watson, M., Vos , T, Roos, J.C. & Seaman, M.T.. 2003. State of the Namahadi and Harts Rivers, Second Quarter 2003 – a biomonitoring report. Report to Sedibeng Water by the Centre for Environmental Management, University of the Free State. Bloemfontein. South Africa.

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Thank You Dankie

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