

SOUTH AFRICA'S NATIONAL WATER QUALITY MONITORING DATA

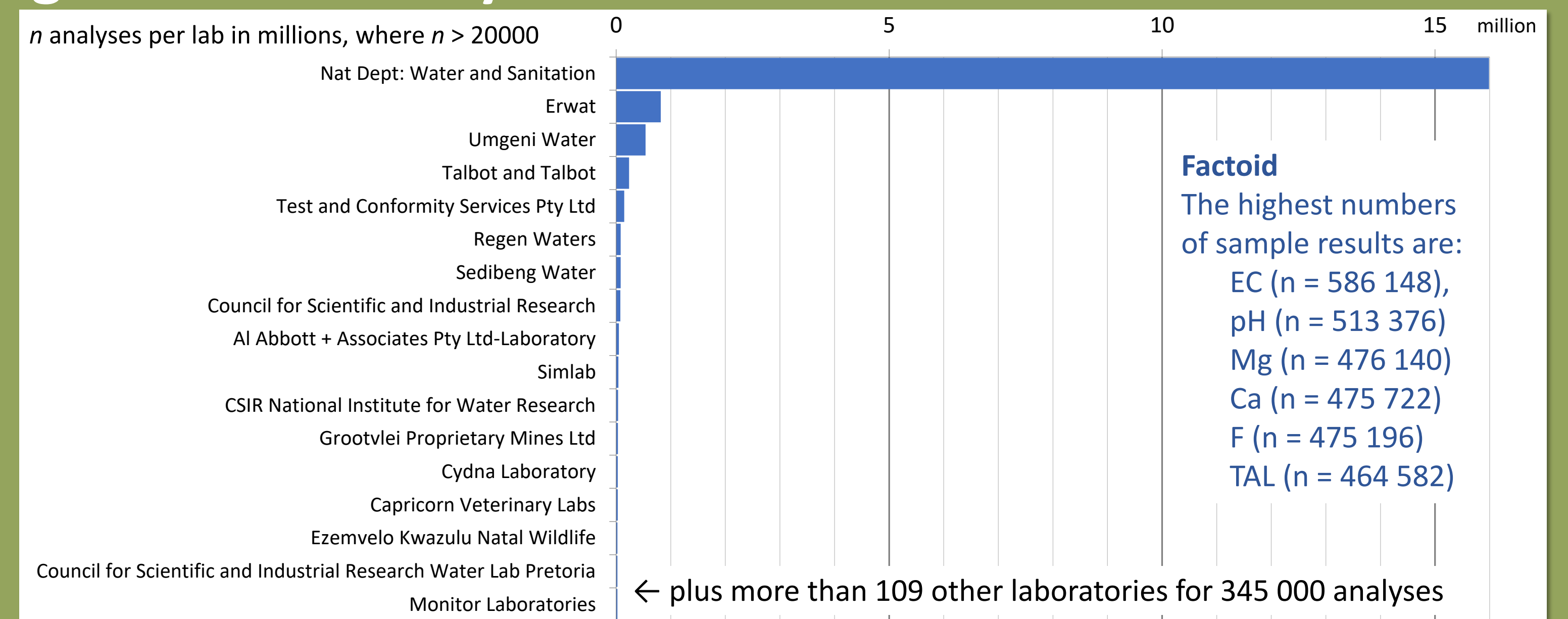
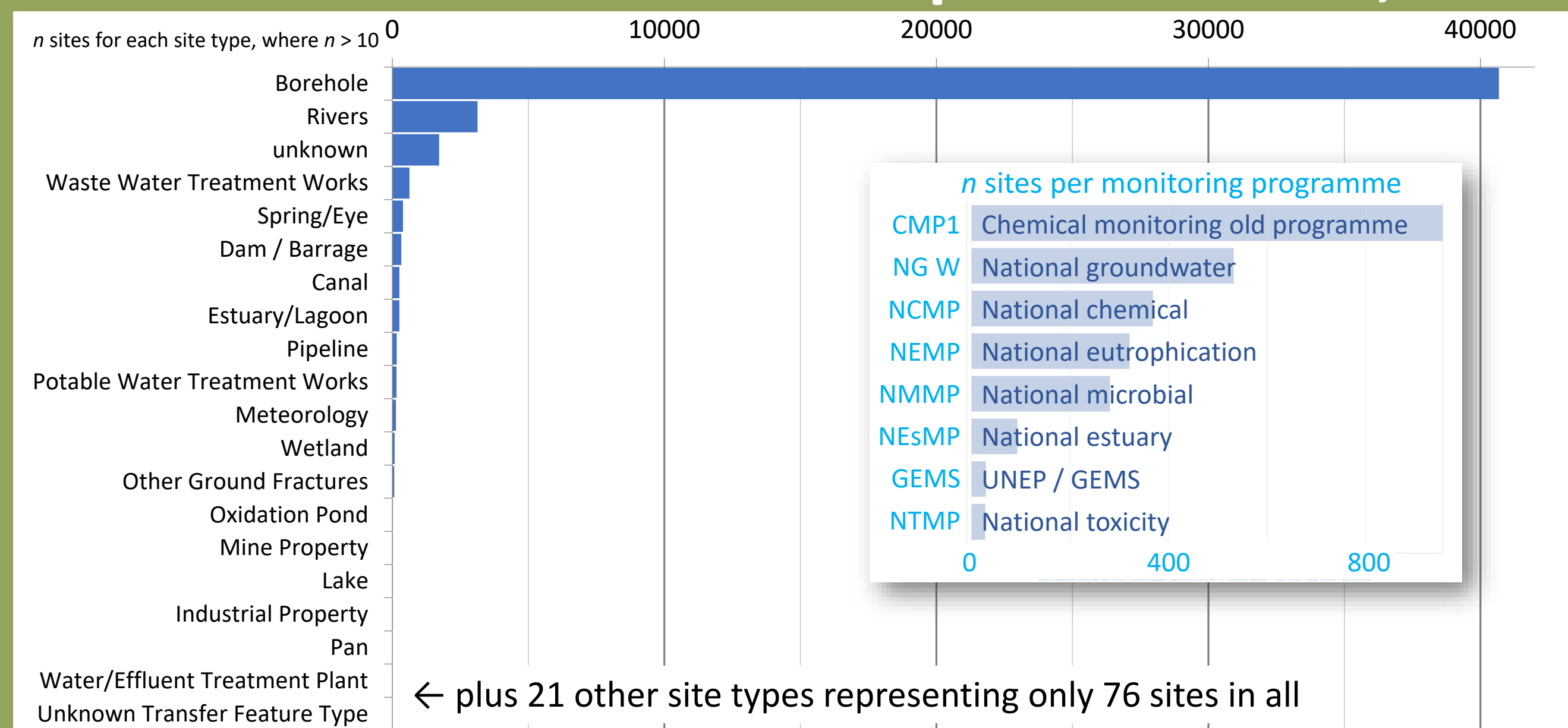
A guide to the effective use of the national inland water quality database for monitoring change

Scientists have made extensive use of the national database, e.g. Ramjukadh (in prep.), Griffin (2017, 2014), Slaughter (2017), van Niekerk (2014, 2009), Lemley (2014), Dabrowski (2014), Barnard (2013), Huizenga (2013, 2011), Bird (2012), Ashton (2011), Kempster (2007, 1994), de Villiers (2007, 2006), Ncube (2005), Day (1995), Swart (1991), Bosman (1985) and many others.

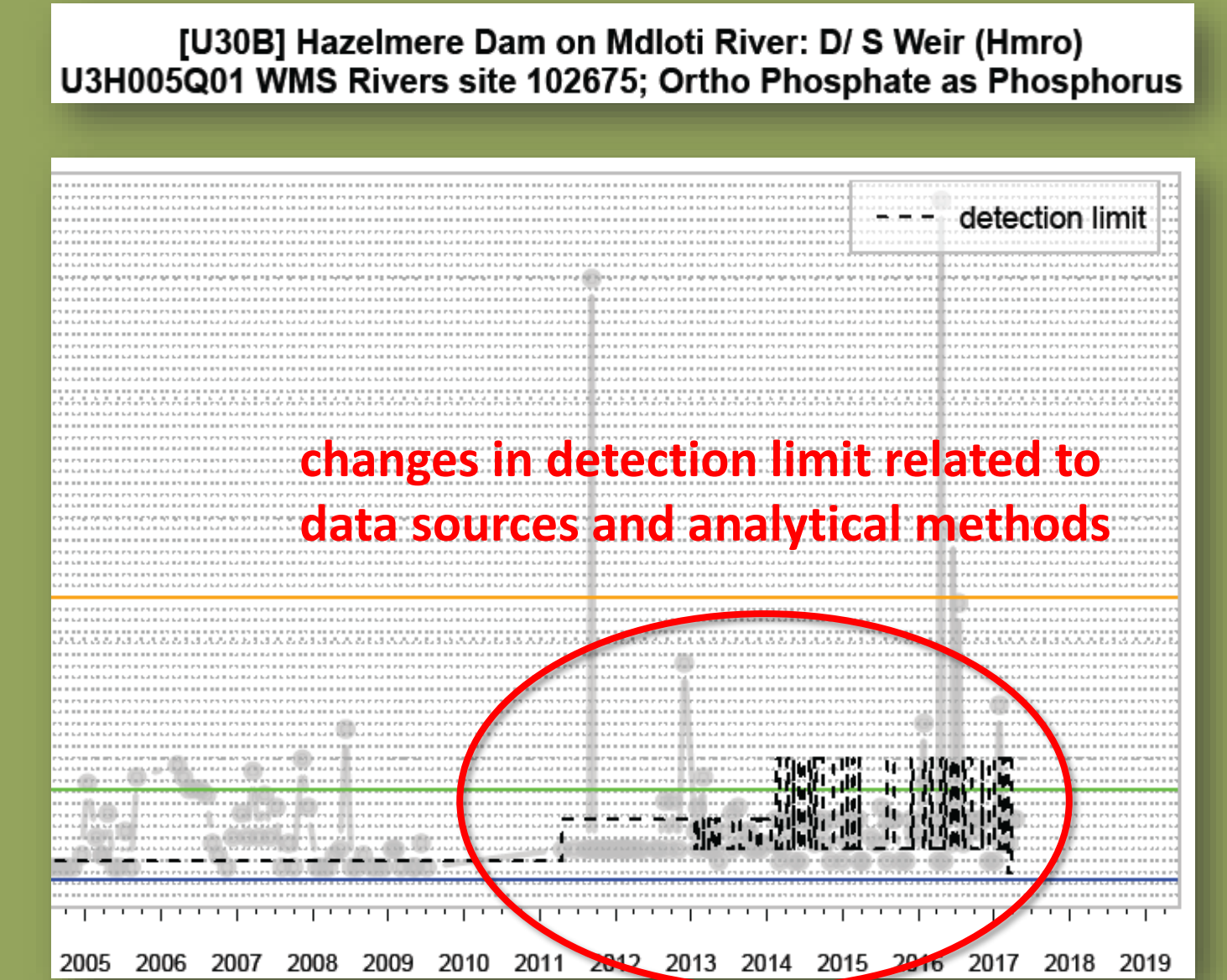
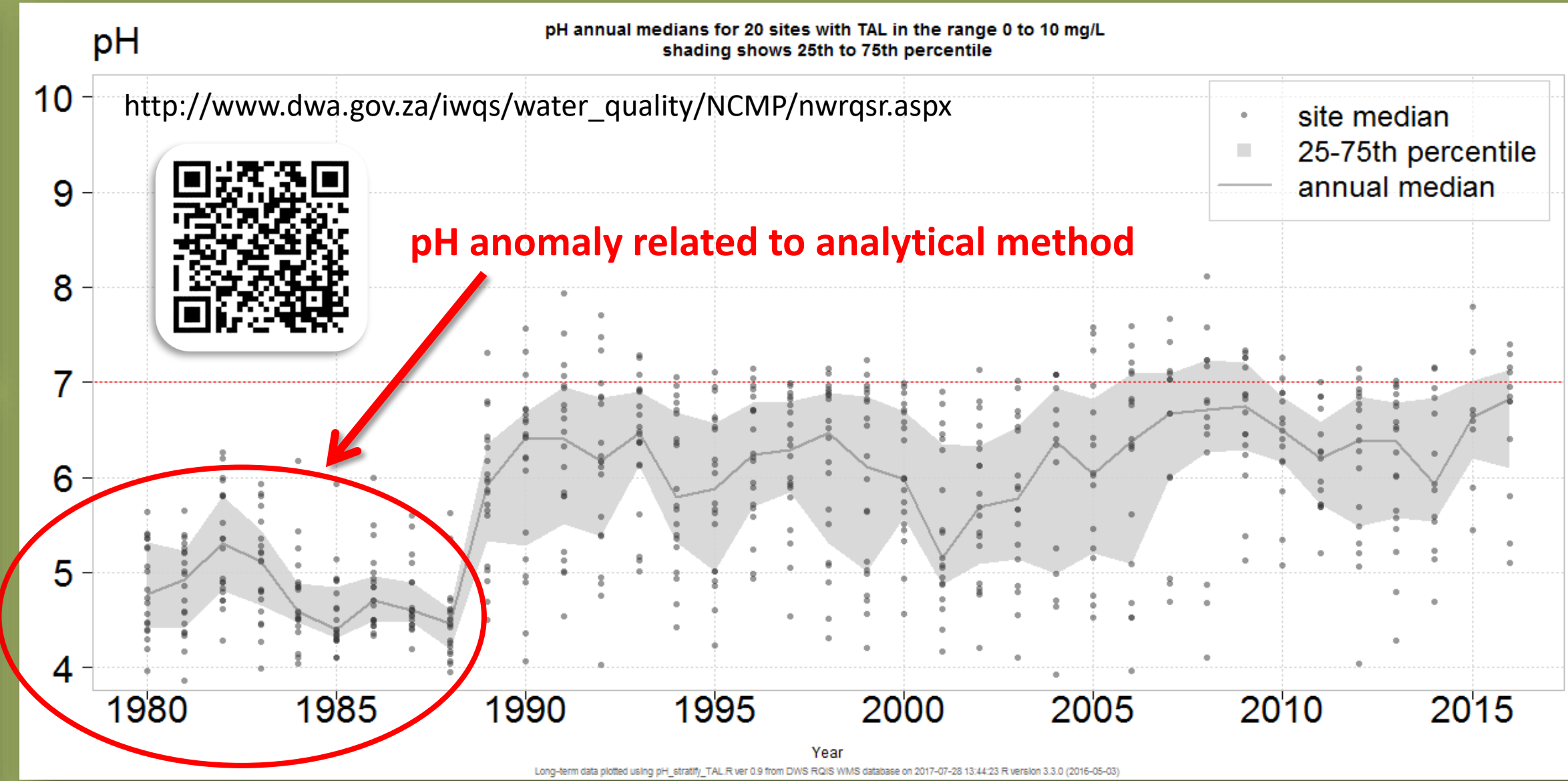
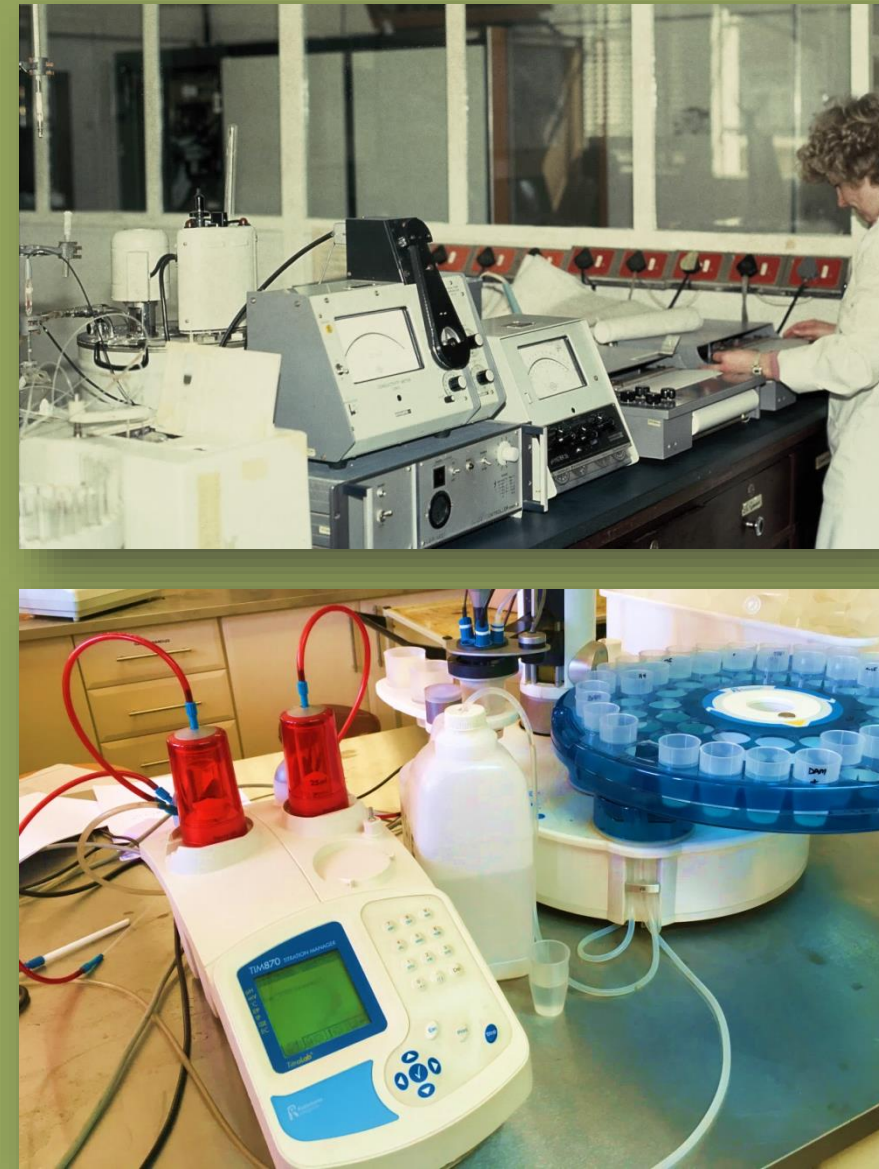
www.dwa.gov.za/iwqs/water_quality/NCMP/publication.aspx



More than 10 million results span 5 decades, including records of analytical methods since the 1980s

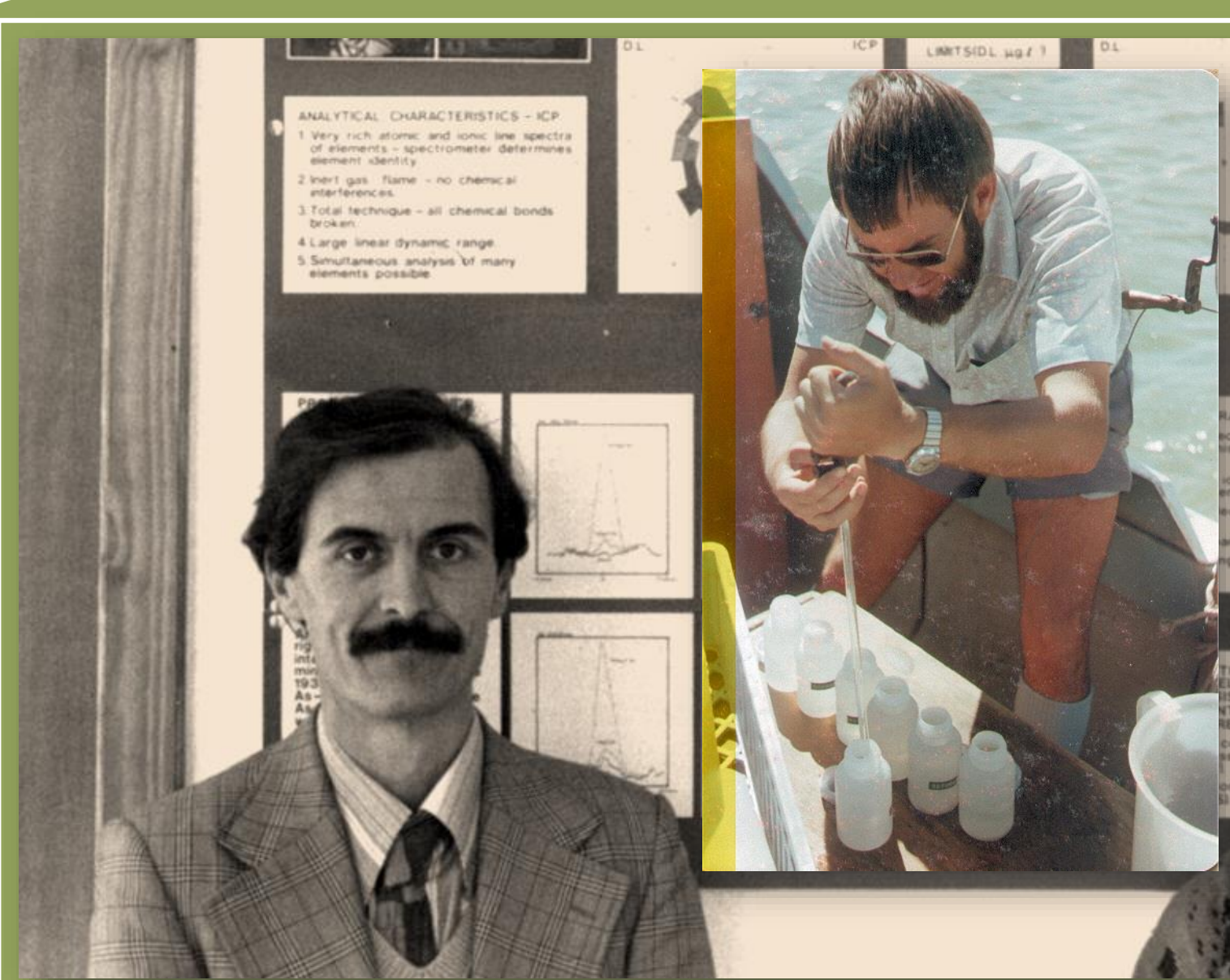
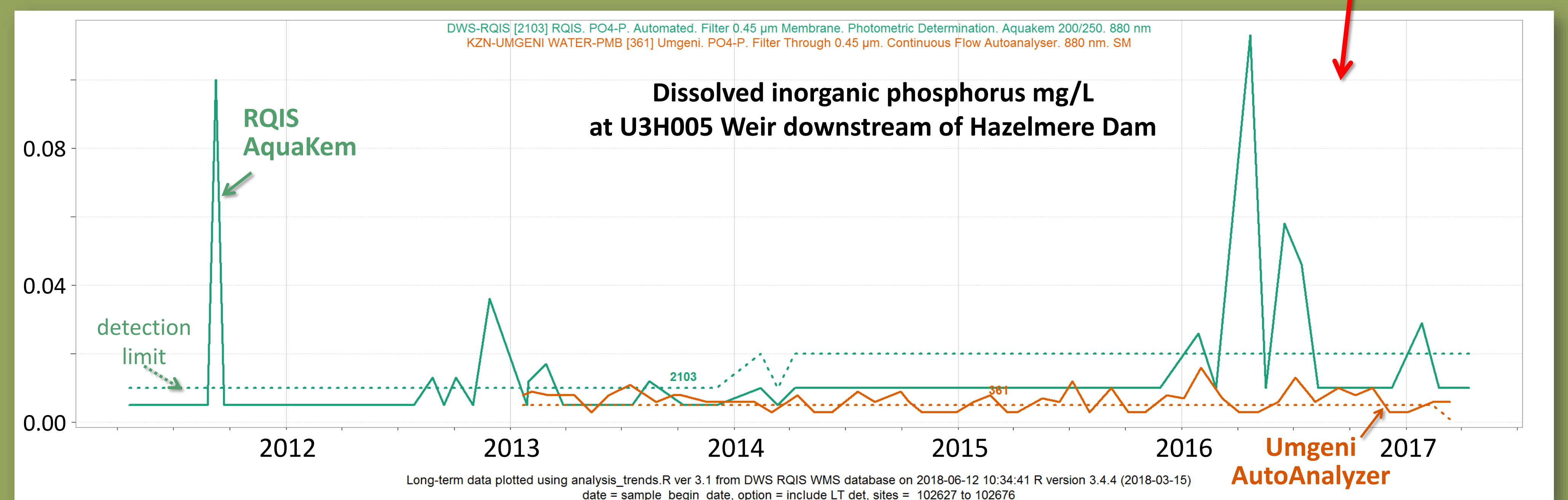


Methods and detection limits have changed with advances and regressions in technology.

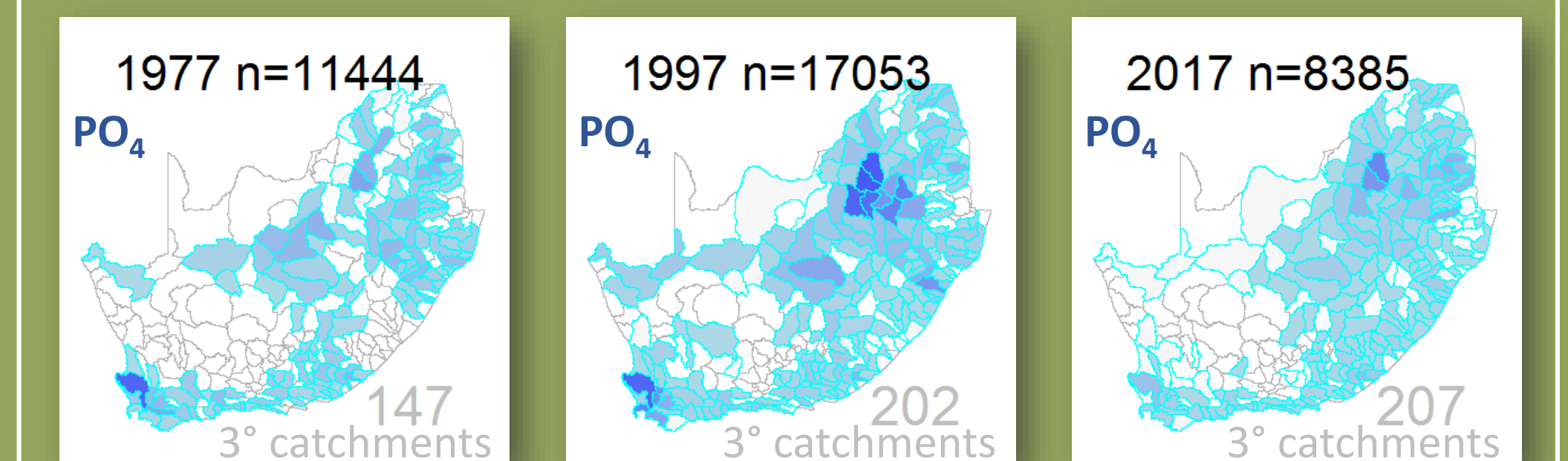
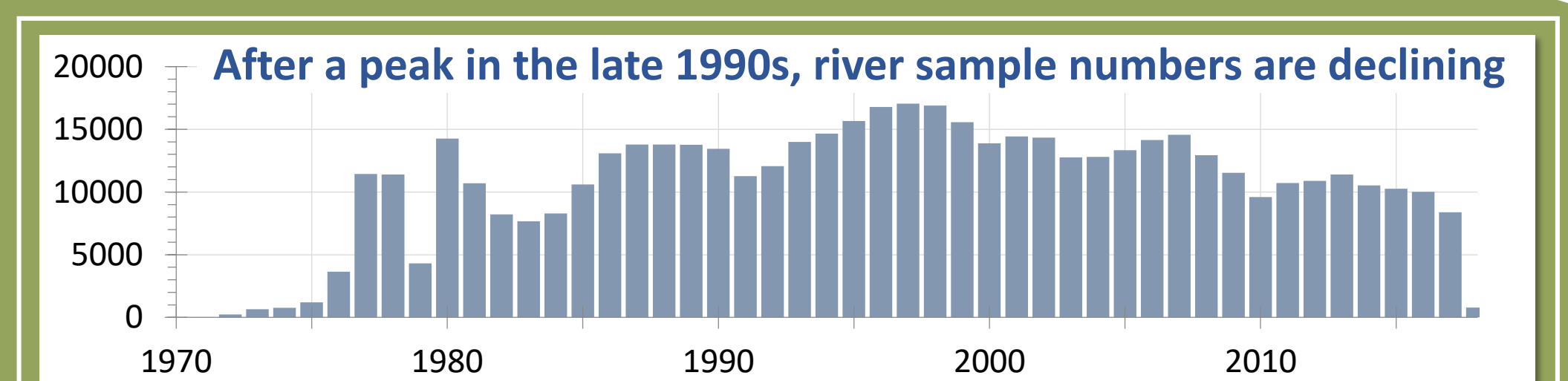
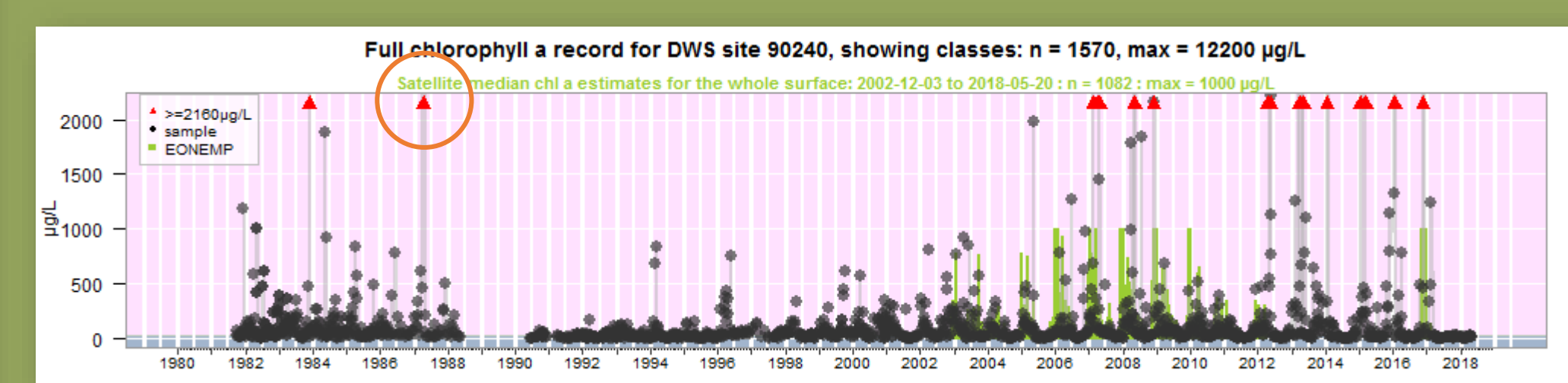


Results are primarily from Resource Quality Information Services (RQIS) laboratories, with contributions from 100 other institutions.

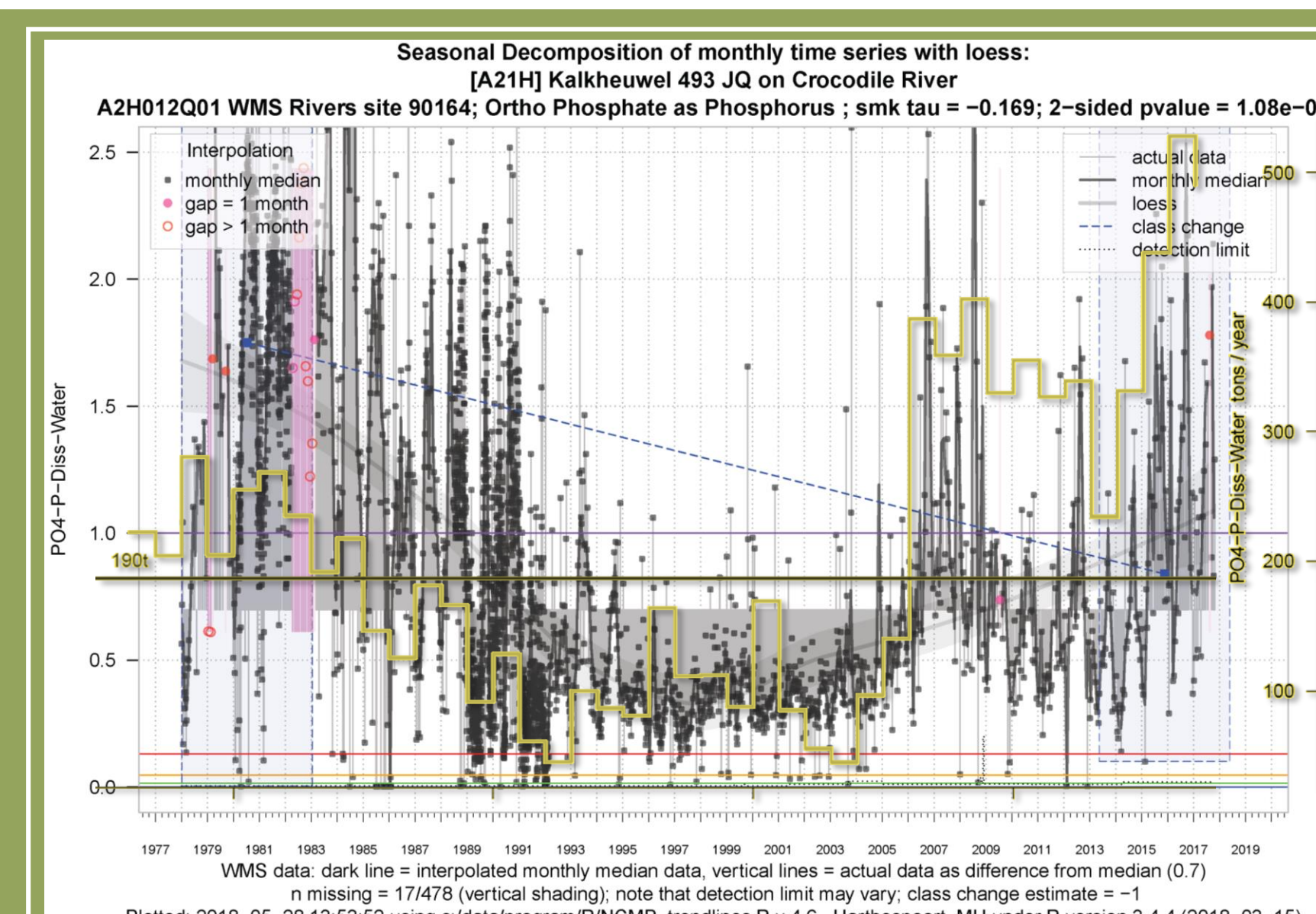
Overlapping records provide insightful comparisons.



Oral sources are disappearing, and with them, confirmation of unusual results: e.g. could chlorophyll *a* in Hartbeespoort Dam really have been 6530 µg/L, on 14 April 1987?



RQIS greatly values the contributions of all aquatic scientists to understanding the complex national water quality dataset. Studies have viewed the data in different ways, have added value by integrating data into models and have detected anomalies along the way. Users are encouraged to request datasets or download them from the website – if you have any doubts or queries about the data sources, please ask. www.dwa.gov.za/iwqs/



Combining data sources: Using flow and concentration to estimate annual load of PO₄-P to Hartbeespoort Dam.