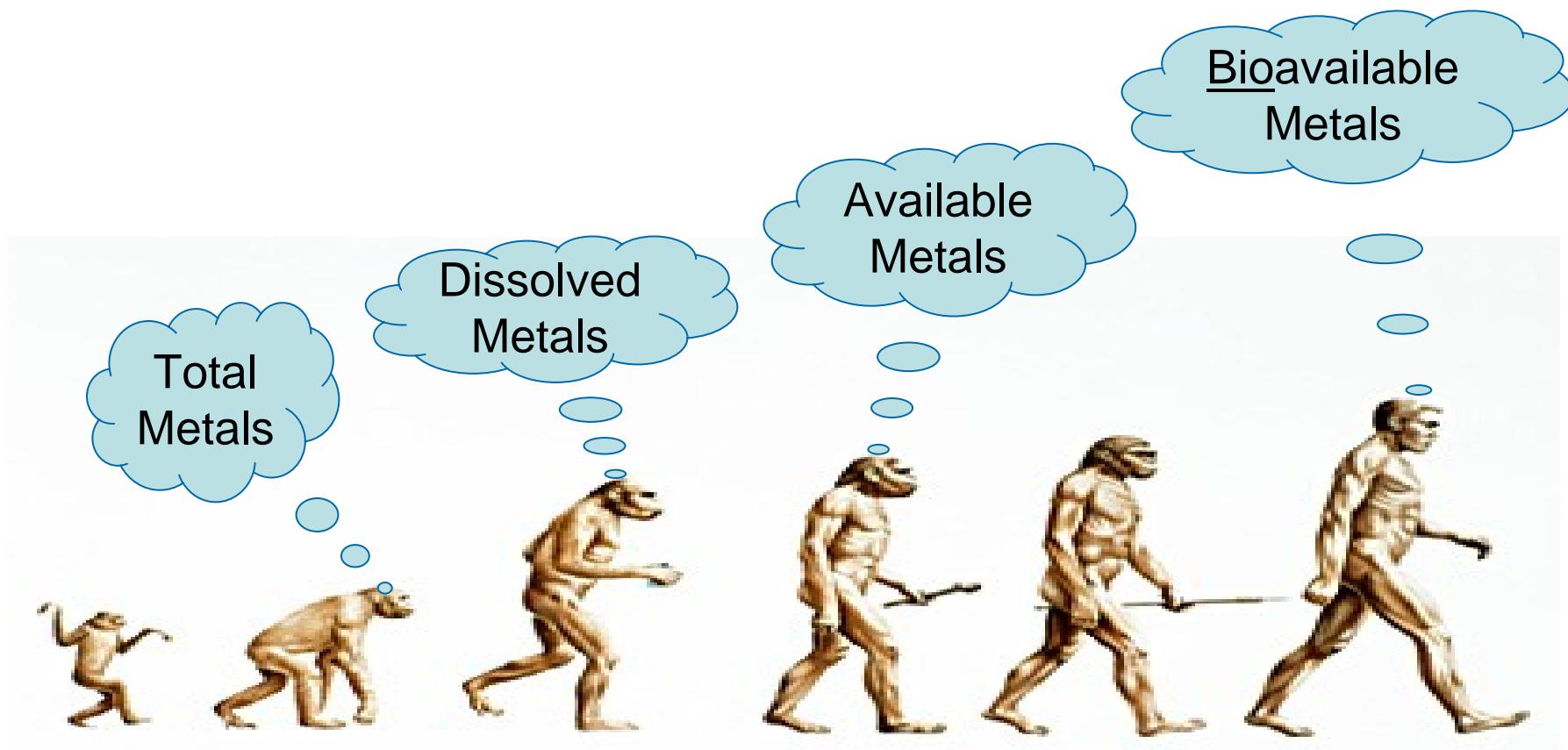




BLMs in the Regulation

Bruce Brown

Evolution of Metals Standards



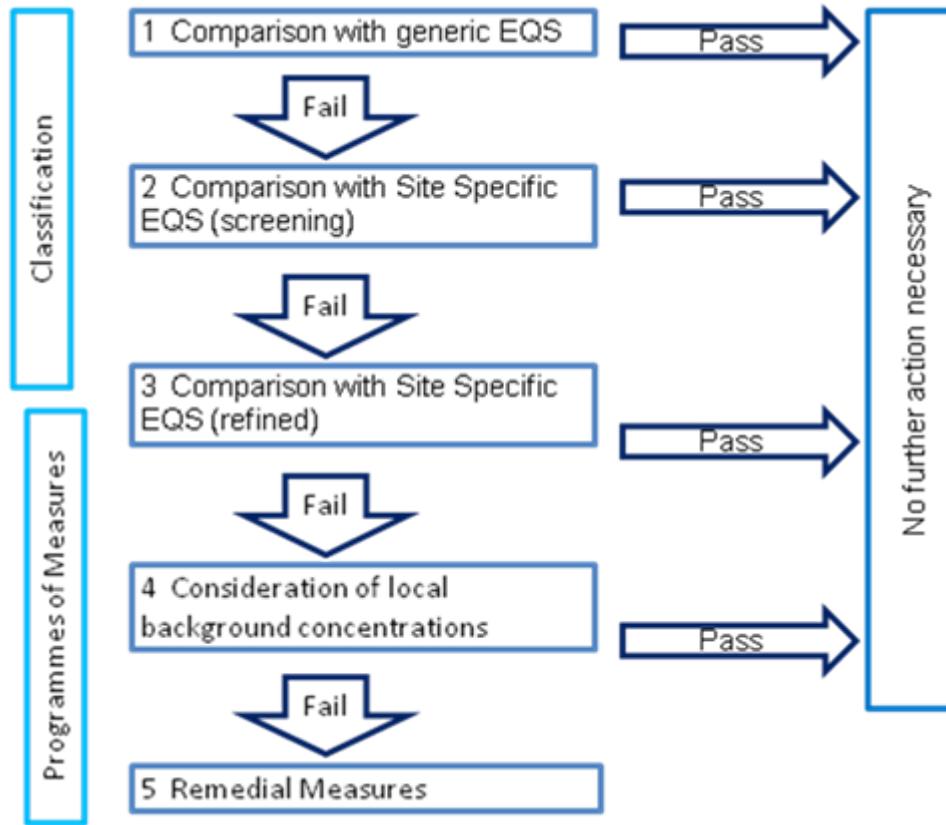
Bruce Brown

UK Environment Agency

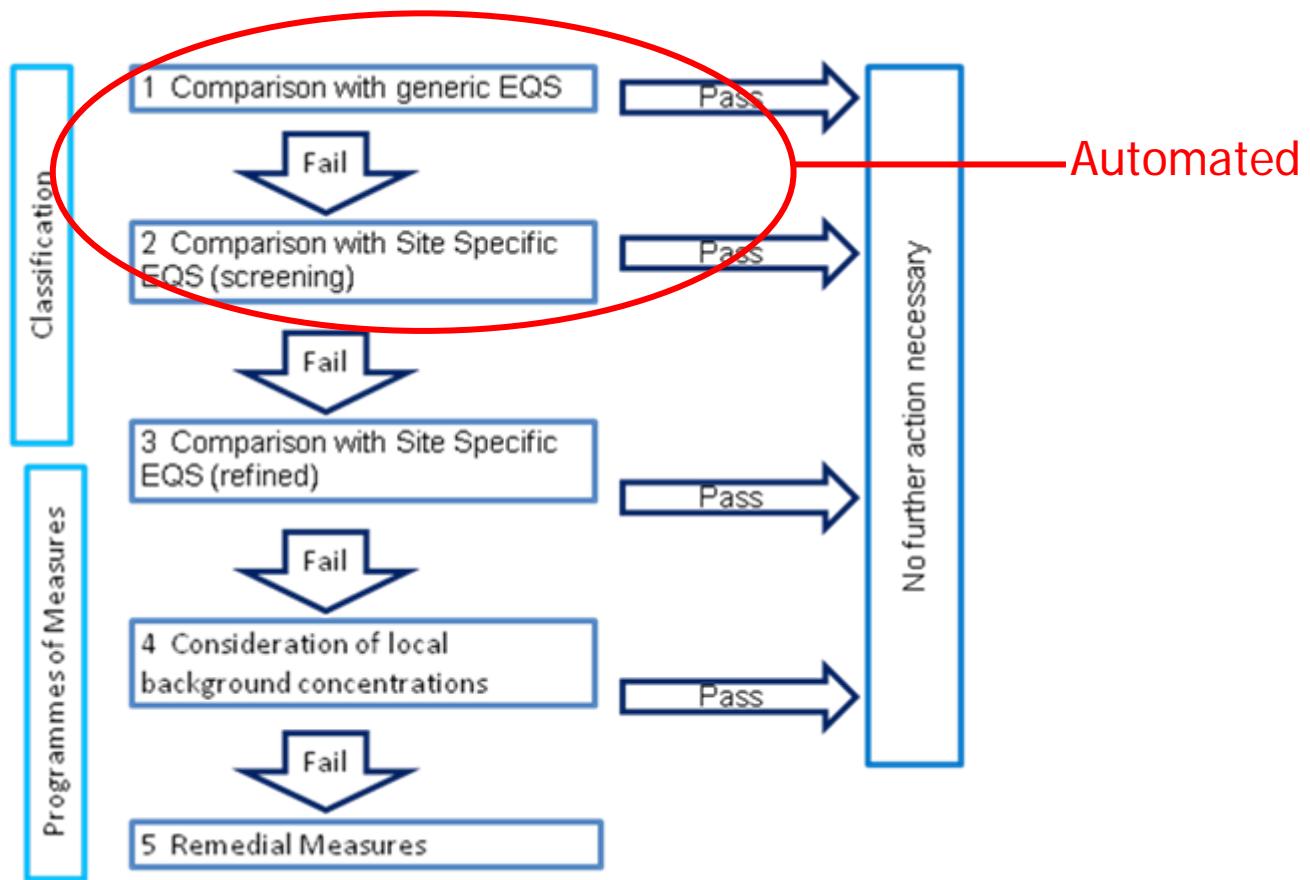
BLMs in Regulation – Why?

- ✓ Strong evidence for them – supported by field data
- ✓ Identifies sites that are really at risk from damage
- ✓ Cost effective way to reduce uncertainty
- ✓ BLMs are ready to use now and we believe are fit for purpose
- ✓ We have deadlines and cannot wait
- ✓ If BLMs not used, we get spurious non-compliance

How would you do this?



How would you do this?



Compliance Assessment

Compliance assessment for Cu in South West Region,
(n = 555 sites)

Without ambient background	Number of sites failing	Percentage of total sites failing
Existing hardness-based EQS	186	34
Tier 1 Generic PNEC of $1\mu\text{g l}^{-1}$	539	97
Tier 2 CuPNEC Estimator	108	19
Tier 3 Full Cu BLM	83	15

Compliance assessment for Cu in Southern Region
(n = 356 sites)

Without ambient background	Number of sites failing	Percentage of total sites failing
Existing hardness-based EQS	8	2
Tier 1 Generic PNEC of $1\mu\text{g l}^{-1}$	348	98
Tier 2 CuPNEC Estimator	94	26
Tier 3 Full Cu BLM	48	13

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Summary

- ➔ Precautionary
- ➔ Reduced uncertainty – compare with derivation and use of backgrounds!
- ➔ Ready to use now!
- ➔ Provides evidence-based, field validated metric to assess potential metal risks.