

UT Knoxville's Water Quality Laboratory Accreditation: Episode II – The Phantom Menace



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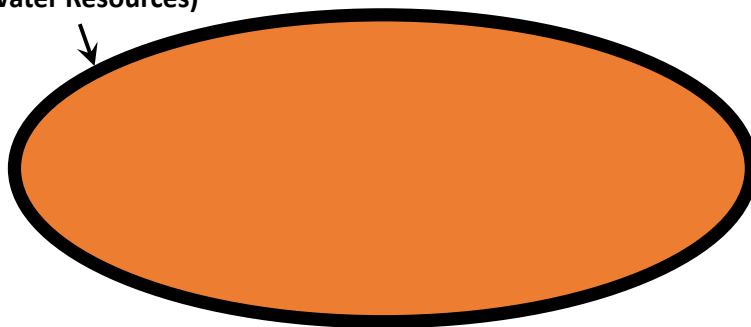
Water Quality Core Facility

(dys-) **Functional Diagram**

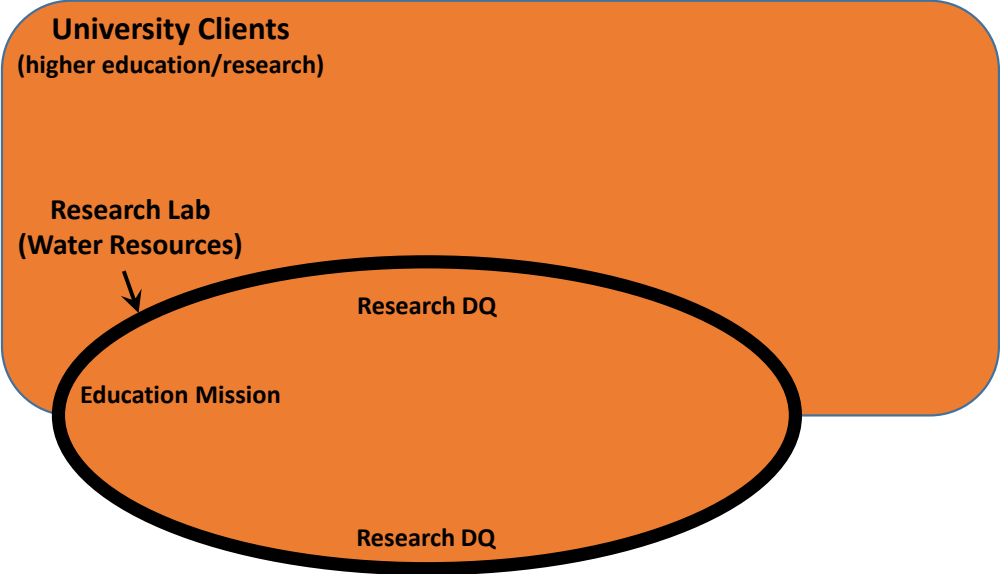
Evolution of the multi-mission conundrum

Pre-NELAP...

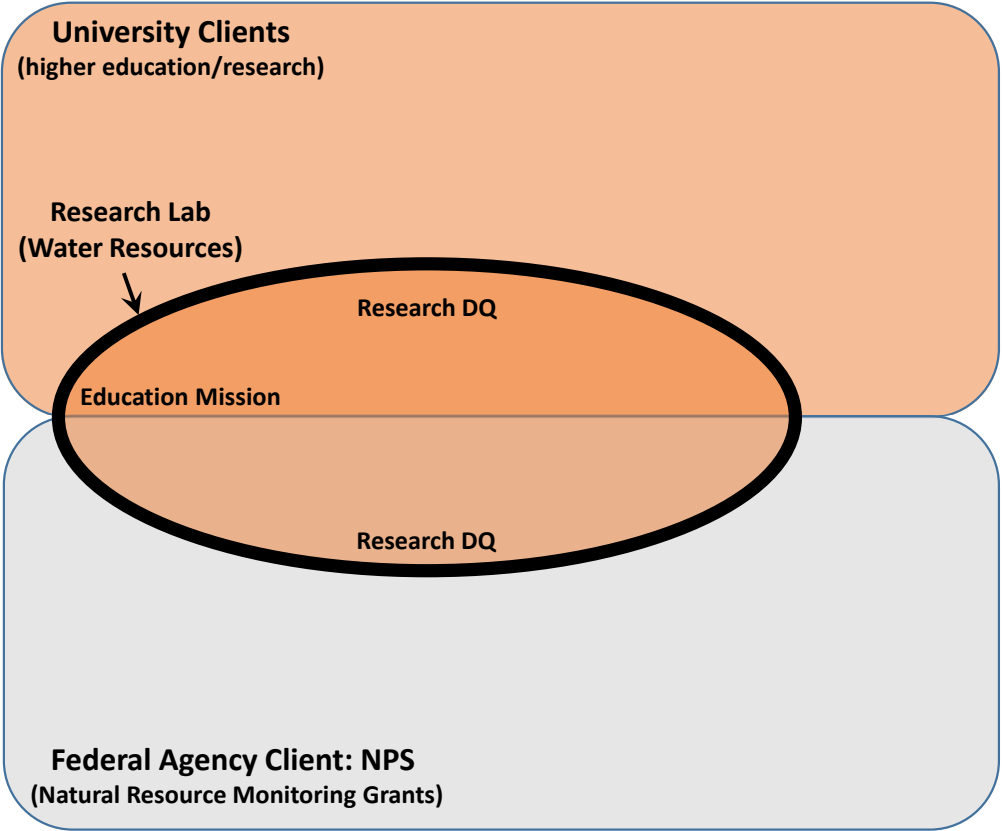
Research Lab
(Water Resources)



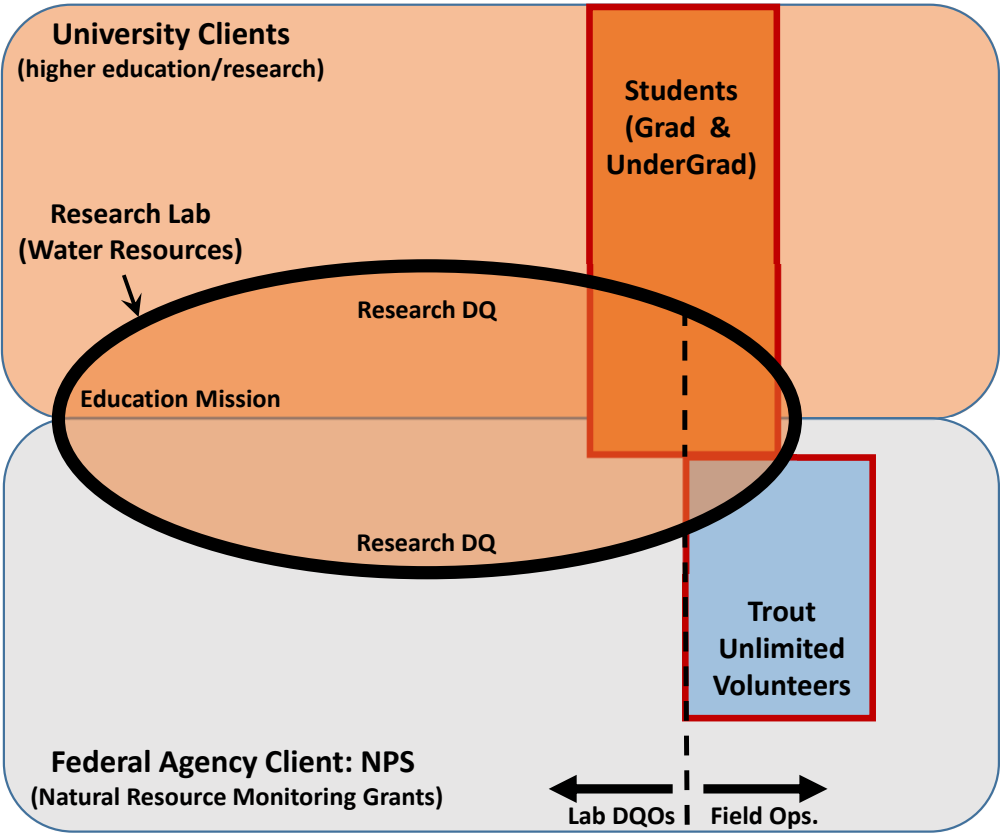
Pre-NELAP...



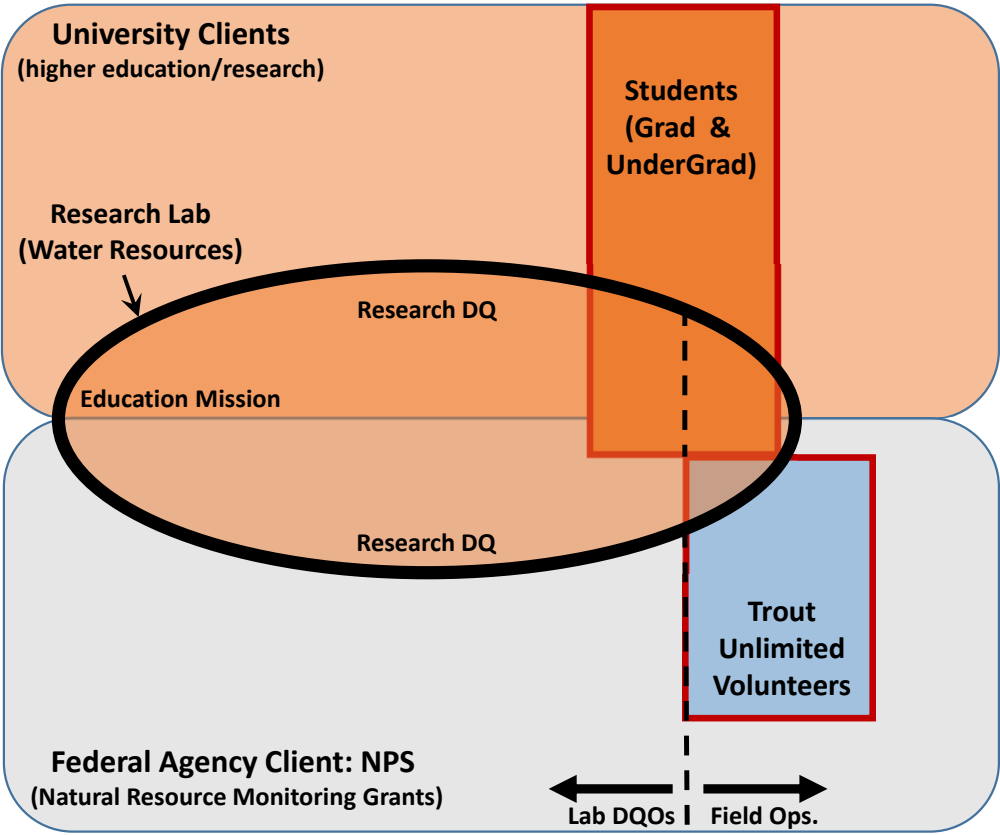
Pre-NELAP...



Pre-NELAP...

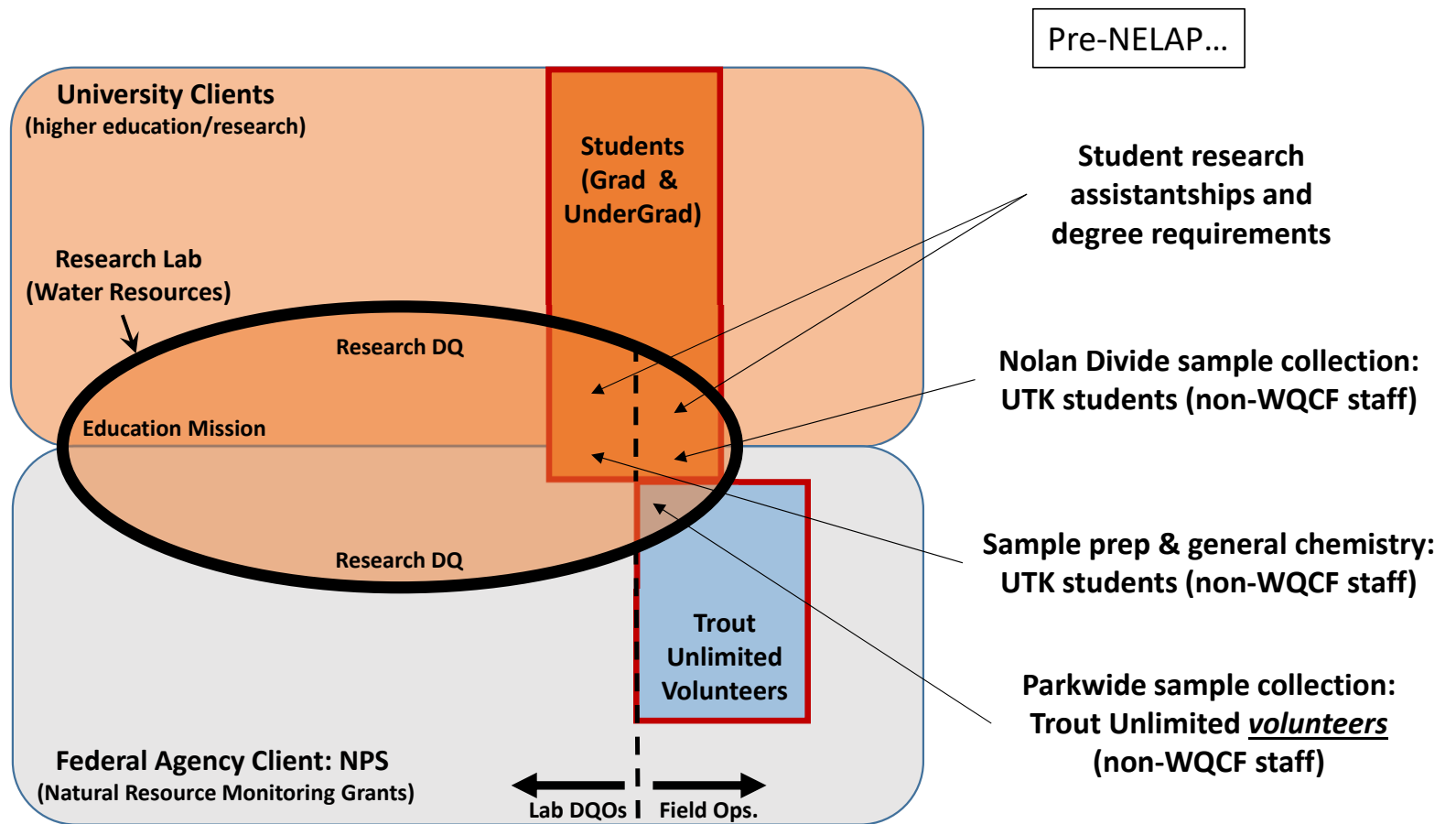


Pre-NELAP...



Costs: Consumables
& Instrument Repairs

Revenue: Research
Grant Accounts

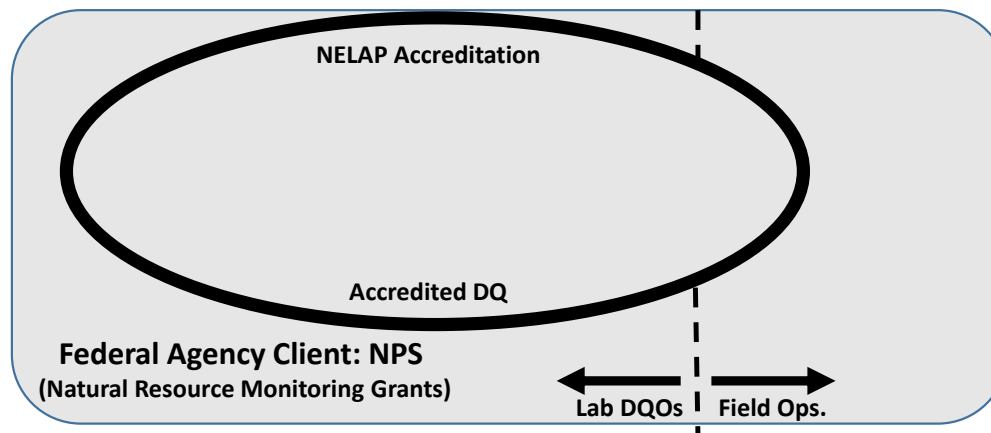


Water Quality Core Facility

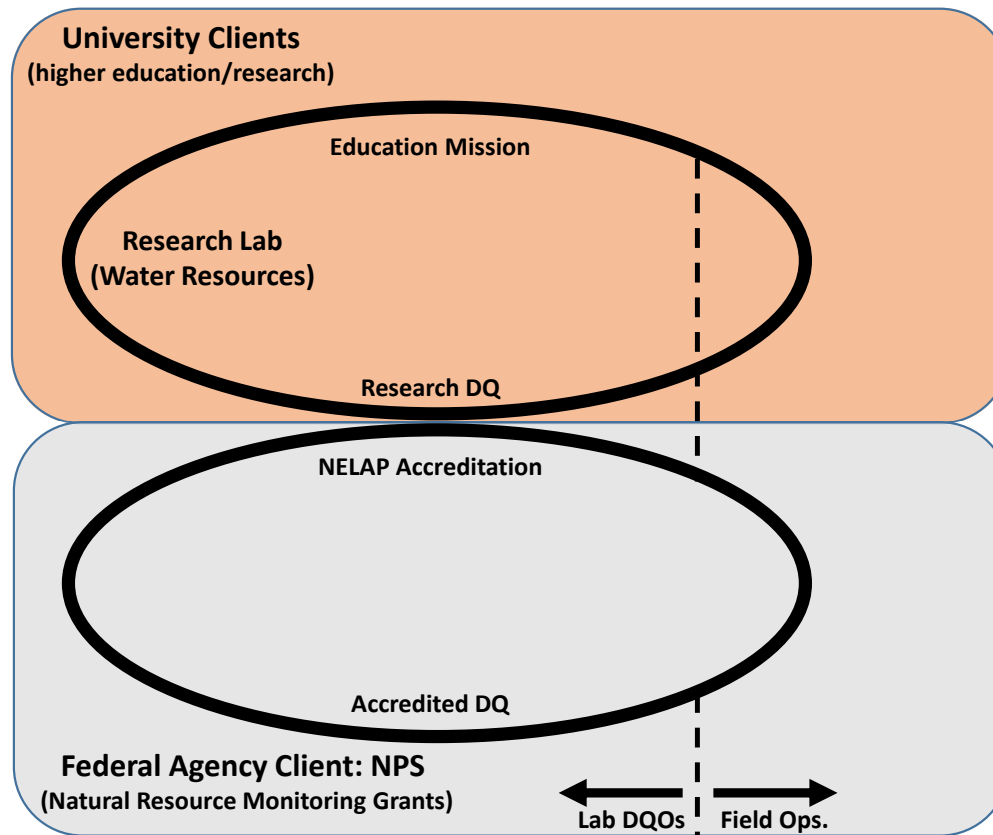
New Paradigm: Accreditation...

Evolution of the multi-mission conundrum

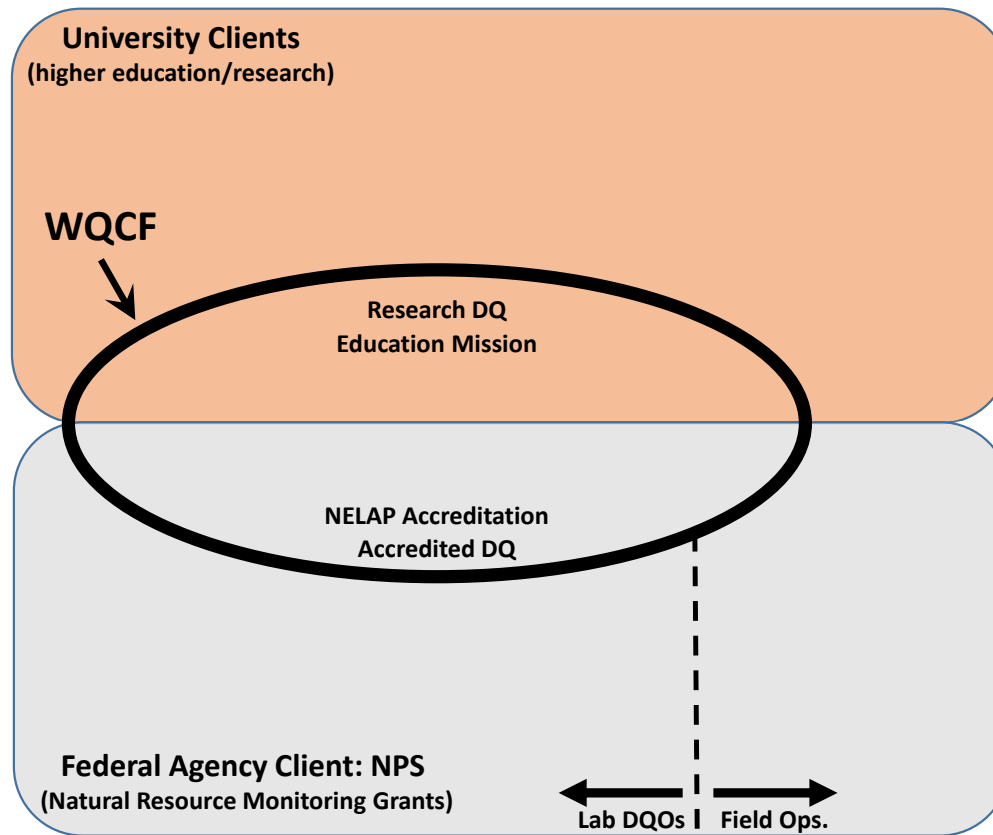
January 2018 Department of Interior Directive:
Publicly-Funded Data Must be Generated through
accredited laboratories...



Ideal: Two distinct University labs...

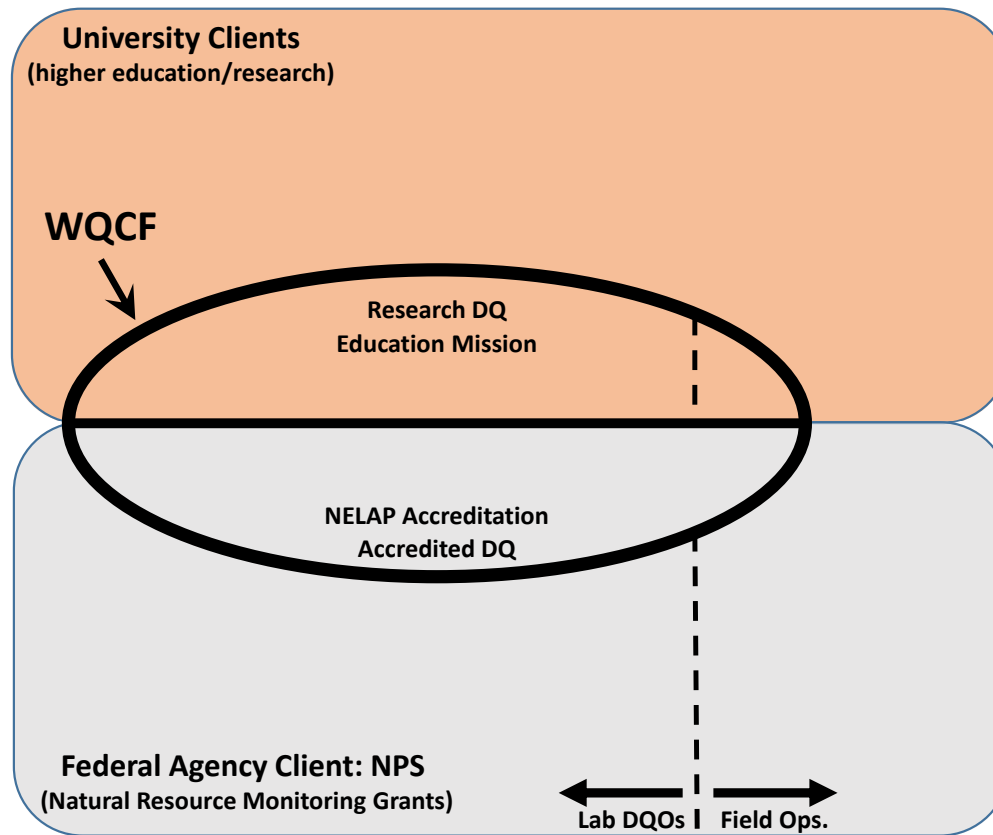


Here's what was done: a One-Lab Solution



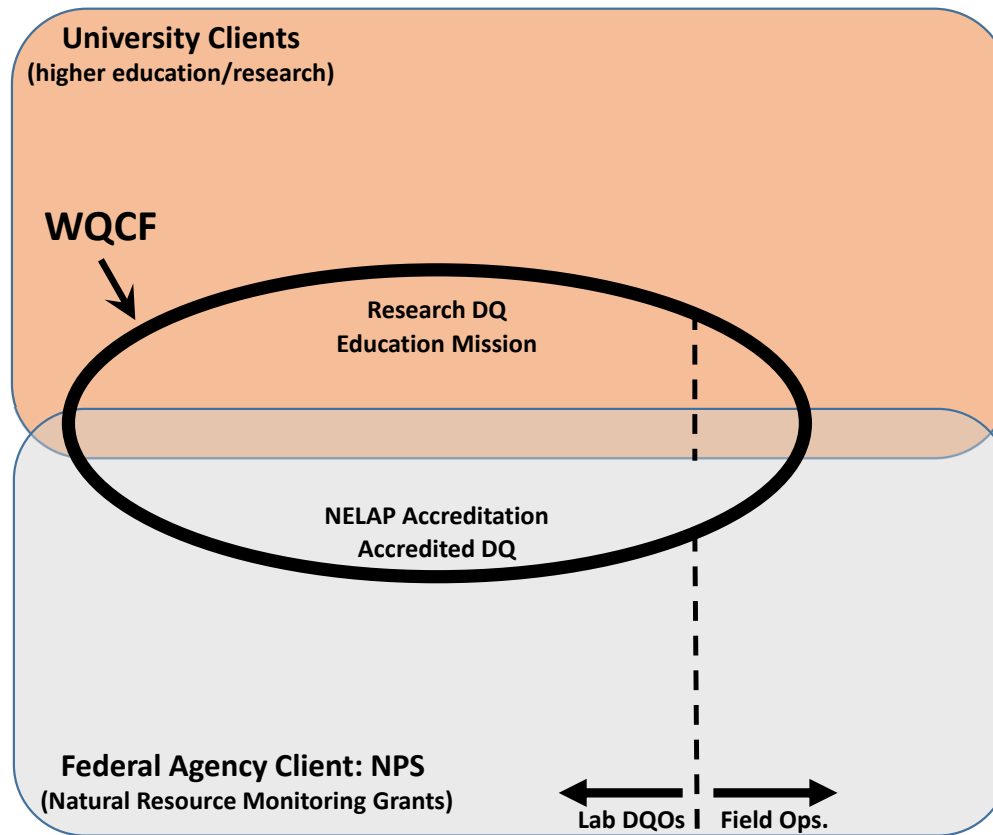
WQCF = Water Quality Core Facility Laboratory

Less Ideal: One Lab / Clear Separation of Functions...



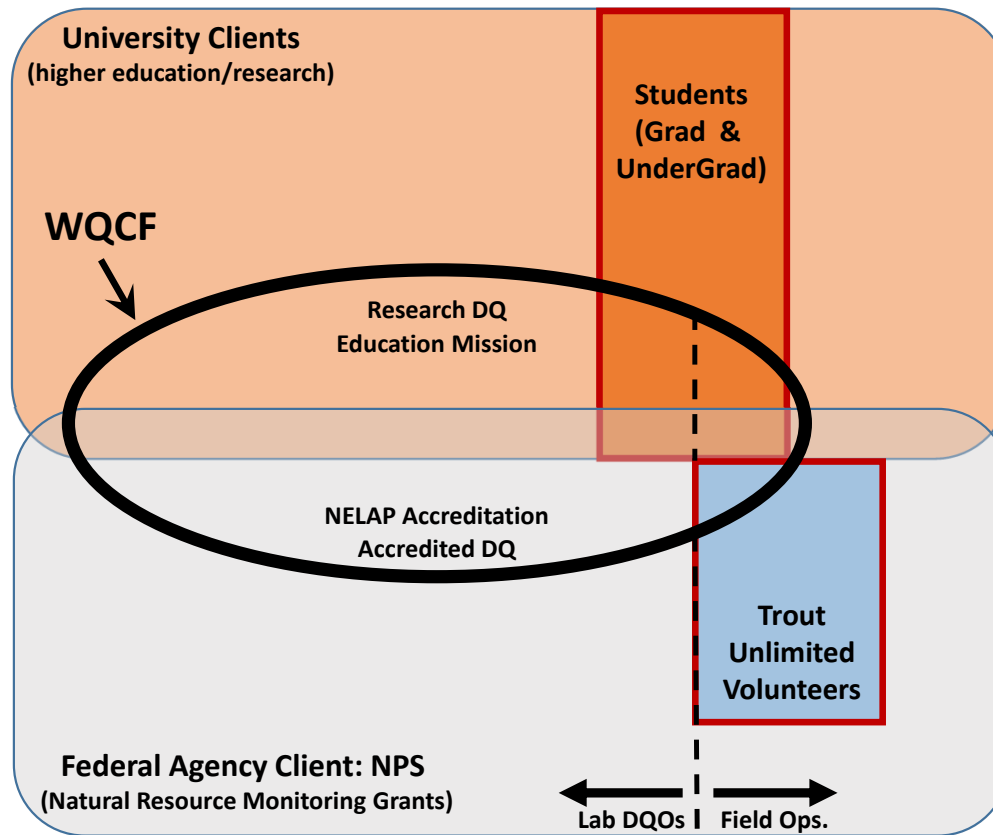
WQCF = Water Quality Core Facility Laboratory

Reality: Multi-Mission Laboratory



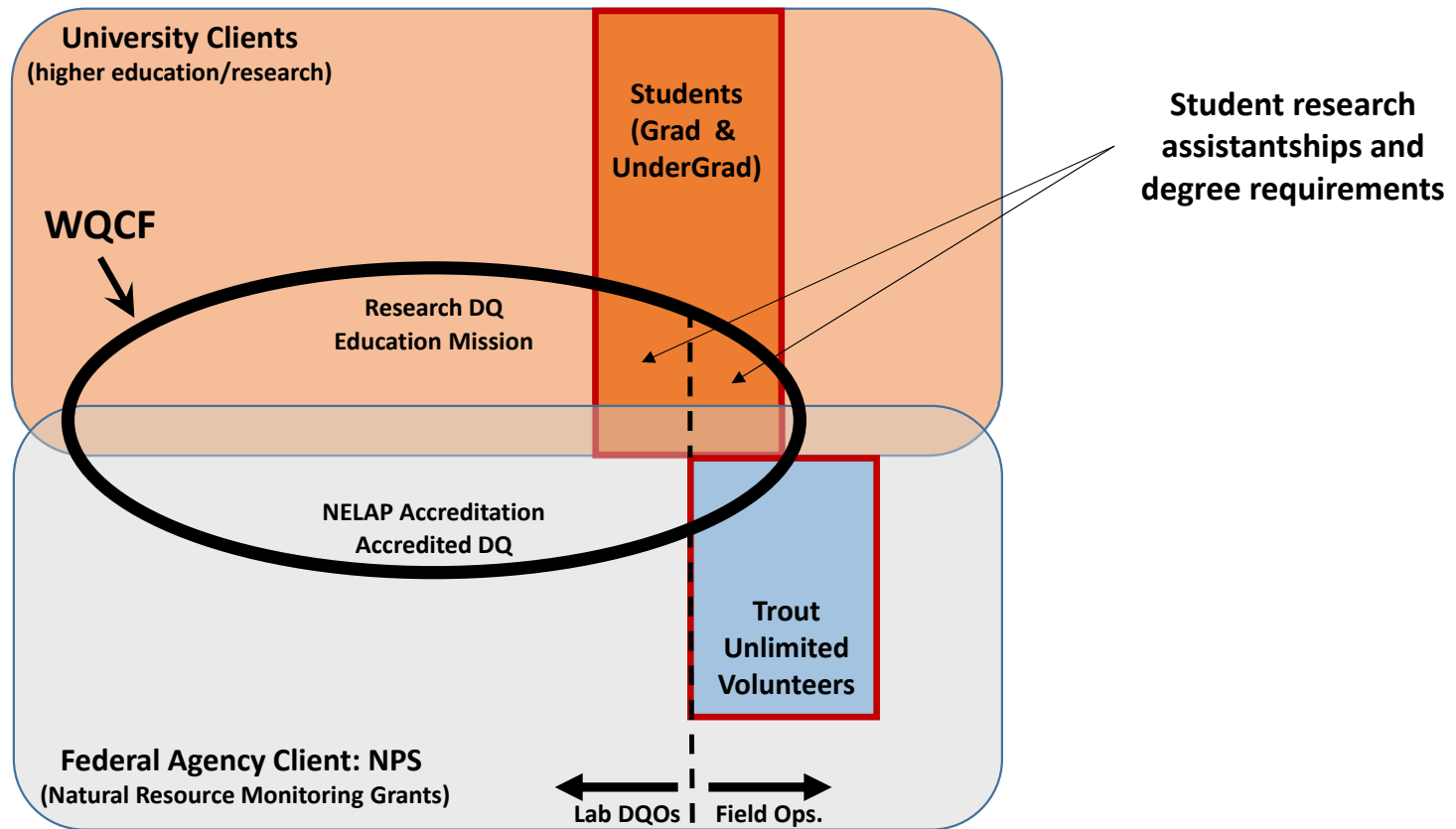
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Post-Accreditation / Post-Core Facility



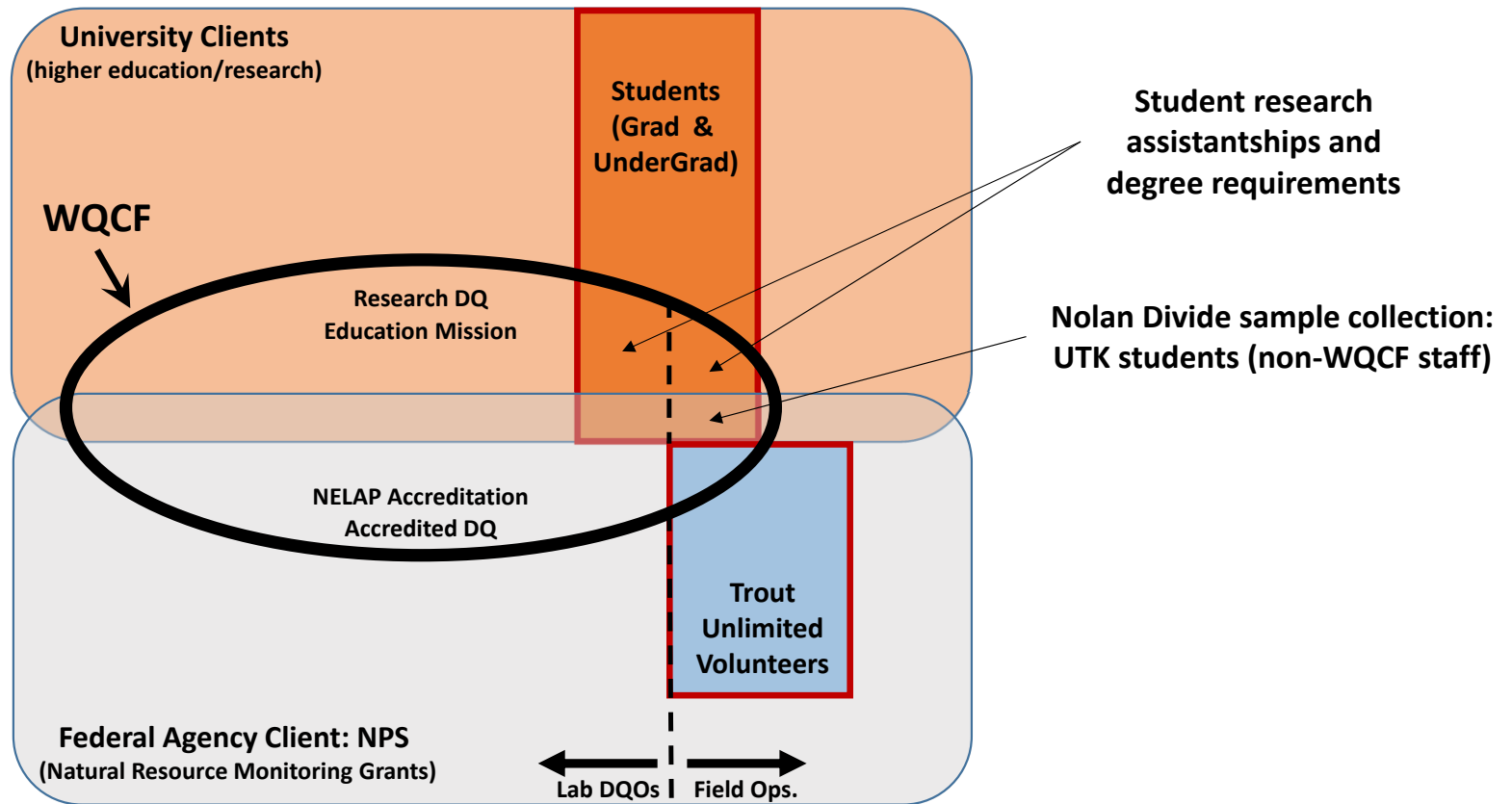
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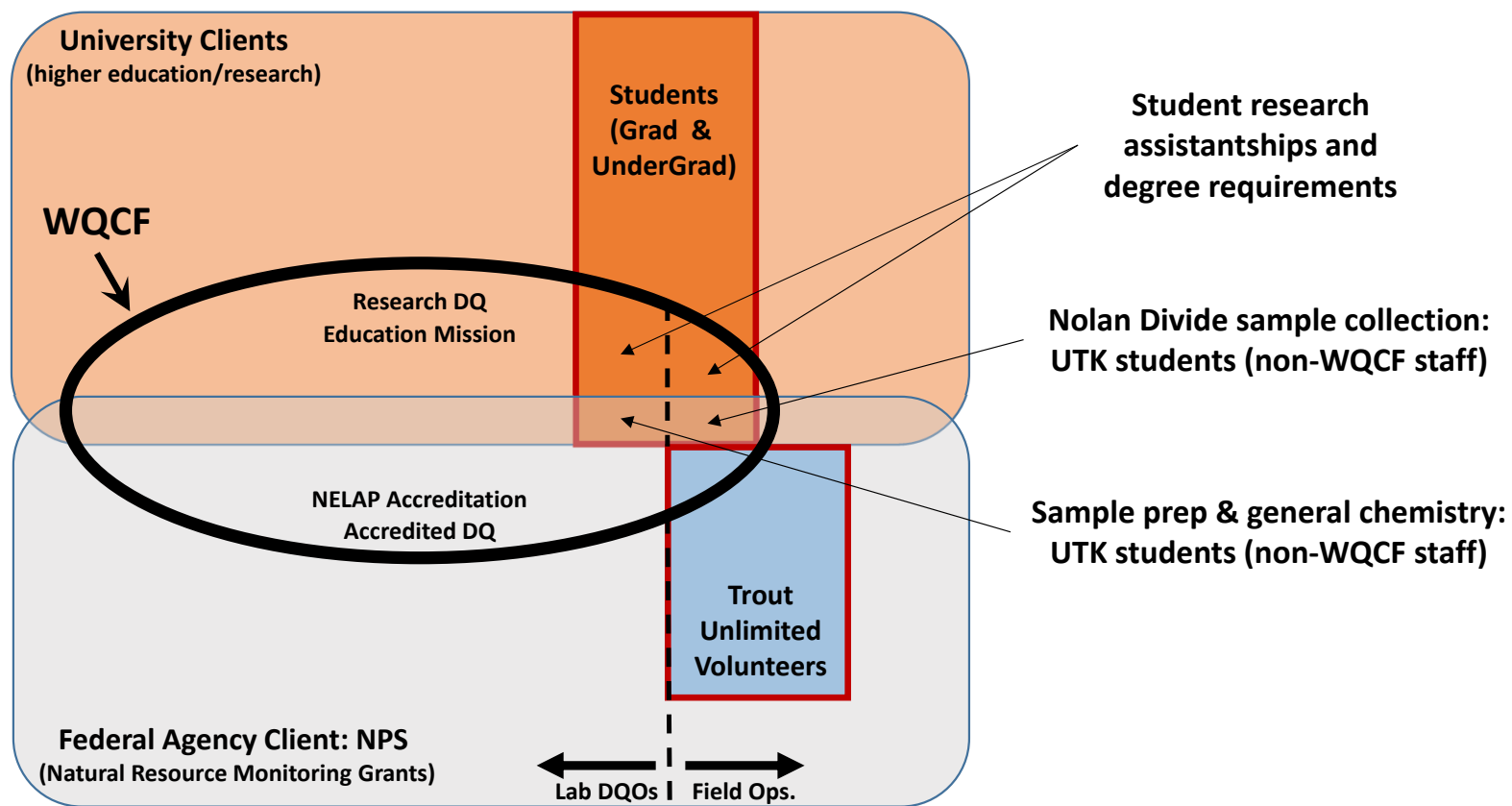
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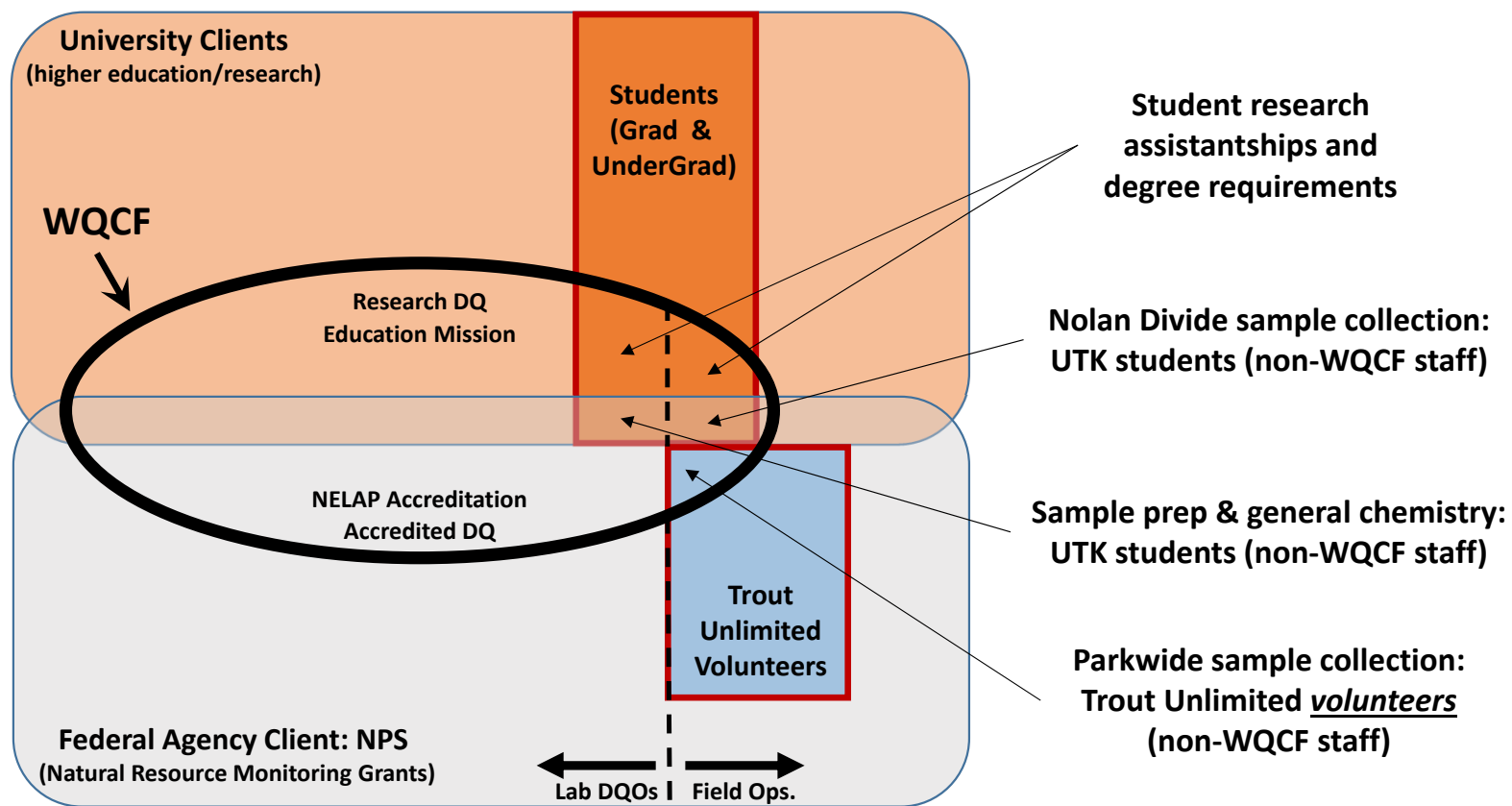
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WQCF = Water Quality Core Facility Laboratory

Here's what I'm working with...

- First-time/start-up accredited laboratory
- Technical support from the kindness of professional colleagues or instrument vendors
- Staff size: 1
- No Quality Manager (TM+QM combined)
- Hands-off, too-busy Lab Director (holds multiple roles): college department head, active professor, small research program, administrative committees, administrative supervisor to faculty and staff
- Continual student turnover (graduation = continual training/retraining)
- Fee per sample... QC samples added-on!
- Cost: Salary, benefits, instrument service contracts, consumables, etc.

Water Quality Core Facility

Vigilance and Persistence

Evolution of the multi-mission conundrum

Happily Ever After...

