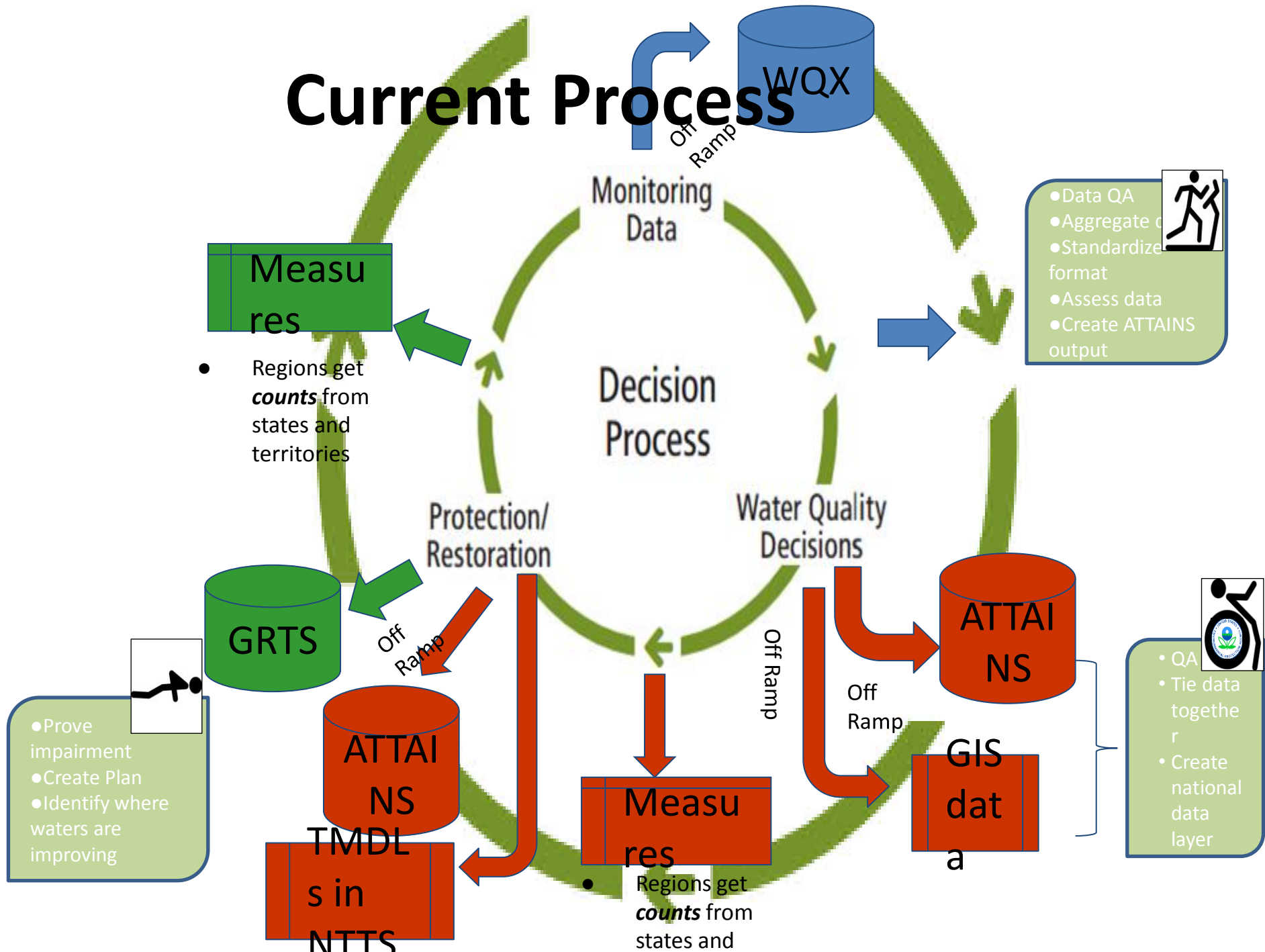


Managing Information: *The NEW Data Process*

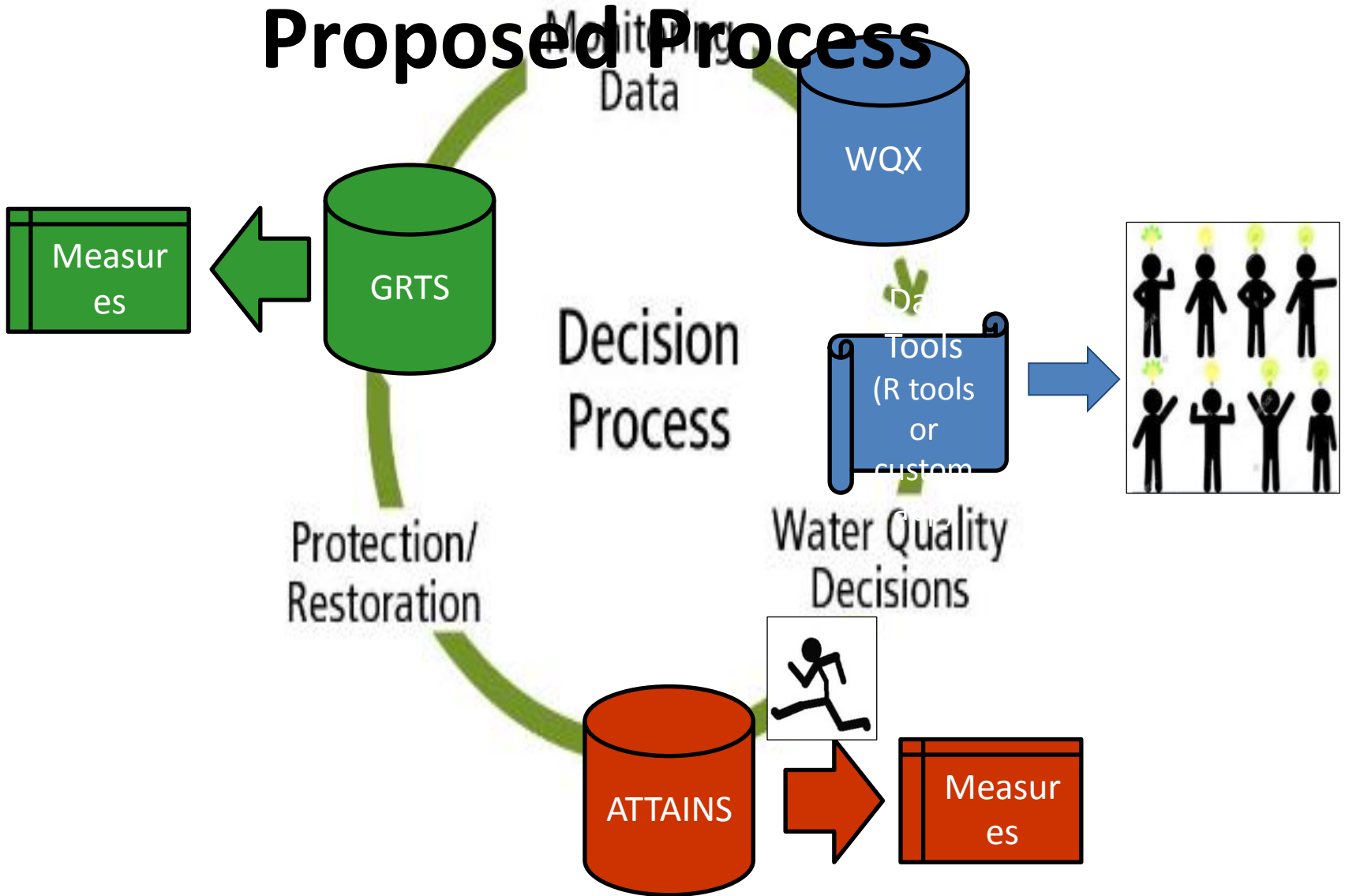
Laura Shumway,

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Current Process



Proposed Process



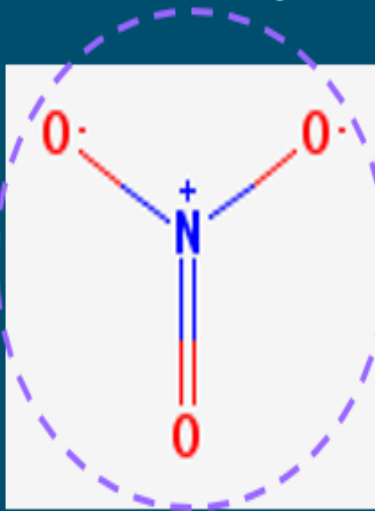
WQX

- WQX 3.0 coming in 2019. Will address quality issues such as:
 - Quality Nutrient Data submissions
 - User backlog requests. Extension of fields, etc.
 - Metals
 - Flow
 - QA reports for both Node and WQX web users
- R Data Tools - v1.0 available
 - Will address data issues such as units reconciliation
 - Base tool will facilitate: larger than and less than, Kendall's seasonal trend, metals including

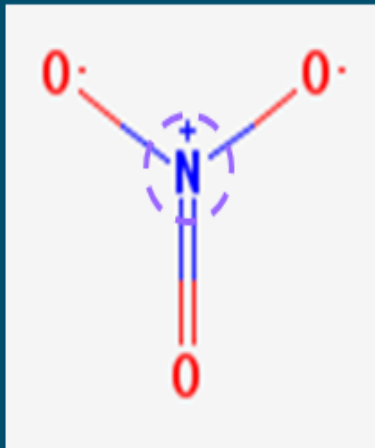
WQX Nutrient Data

- EPA is releasing a WQX nutrient best practices guide describing how to unambiguously describe a nutrient result for data reusers.
- Worked with USGS and state partners to develop guide.
- Identified areas of quality concern:
 - Monitoring Location Management
 - Consistently using the same characteristic names
 - Method speciation
 - Sample Fraction – “Total”
 - Censored Data
 - National Methods

Nitrate as NO₃



Nitrate as N



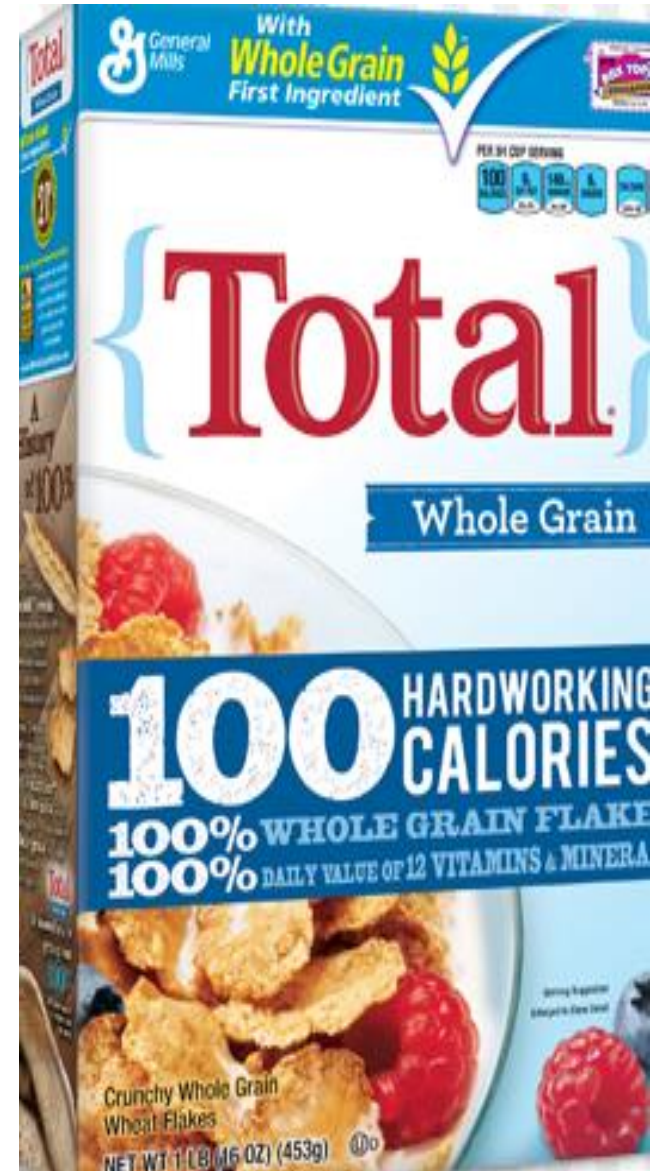
Method Speciation

- The form the sample was analyzed.
- Why is this important?
 - Criteria for Nitrate can be 10 mg/L of Nitrate as N or 45 mg/L of Nitrate as NO₃
 - If you do not provide a speciation the assessment could be showing an exceedance where there isn't one or showing a water meeting criteria when it's not!

Sample Fraction

- “Total”
 - The word total is ambiguous – Total what?
 - “Total” for WQX now = sum of all forms – such as NO_3 , NO_2 , NH_3 , etc

Media	Characteristic	Method Speciation	Result Value	Result Unit	Result Sample Fraction	Analytical Method
Water	Total Nitrogen, mixed forms	as N	2.0	mg/L	Filtered, field	USEPA 351.1



Proposed Process Summary

Pros:

- Aligns EPA processes to build efficiency
- By adopting open source tools, money is saved for the next reuser
- All watershed partners can submit data to the WQP and all readily available data can be more simply incorporated into assessments

Cons:

- Varying documented data qu
- Open source versions

