

Environmental Information



EN2015

Assessment TMDL Tracking and Implementation System (ATTAINS)

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Supporting the Business of Environmental Protection

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<http://www.exchangenetwork.net/en2015>

ABSTRACT

The redesign of the ATTAINS system will streamline state reporting for water quality assessments and integrate that data with other water data flows. The redesign is happening now, with the first release expected in May 2016 and the final release in April 2017.

Outline

- ATTAINS in Context – The Water Quality Framework
- A ‘Rethinking’ of How We Measure Progress
- An Introduction to the ATTAINS Design – IPT Progress
- Implementation Schedule

What is the Water Quality Framework?

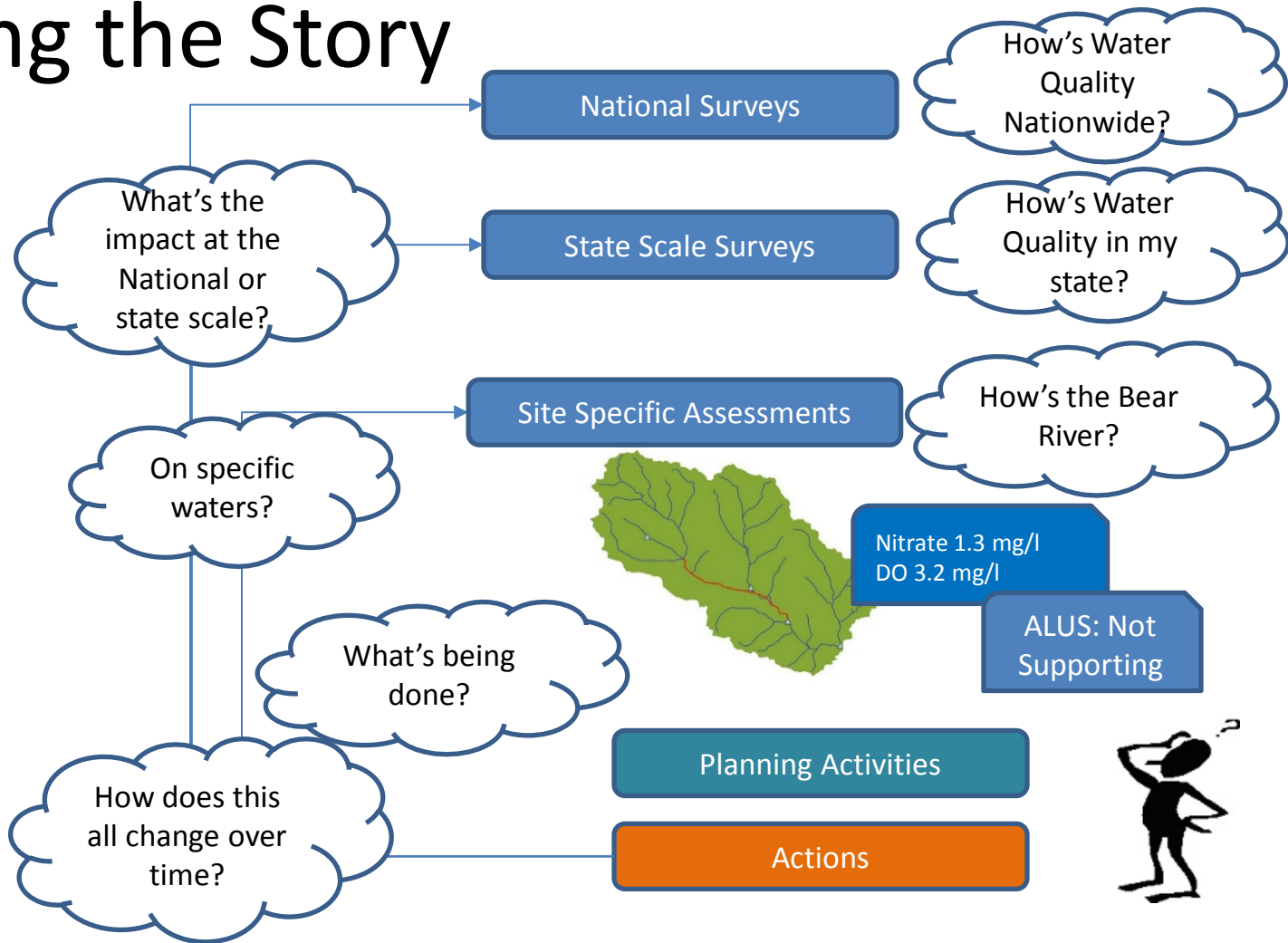
- The **Water Quality Framework Goal**: to streamline water quality assessment and reporting while providing a more complete picture of the nation's water quality.
- The Water Quality Framework is a new way of thinking about how EPA's data and information systems can be better integrated to more effectively support water quality managers.



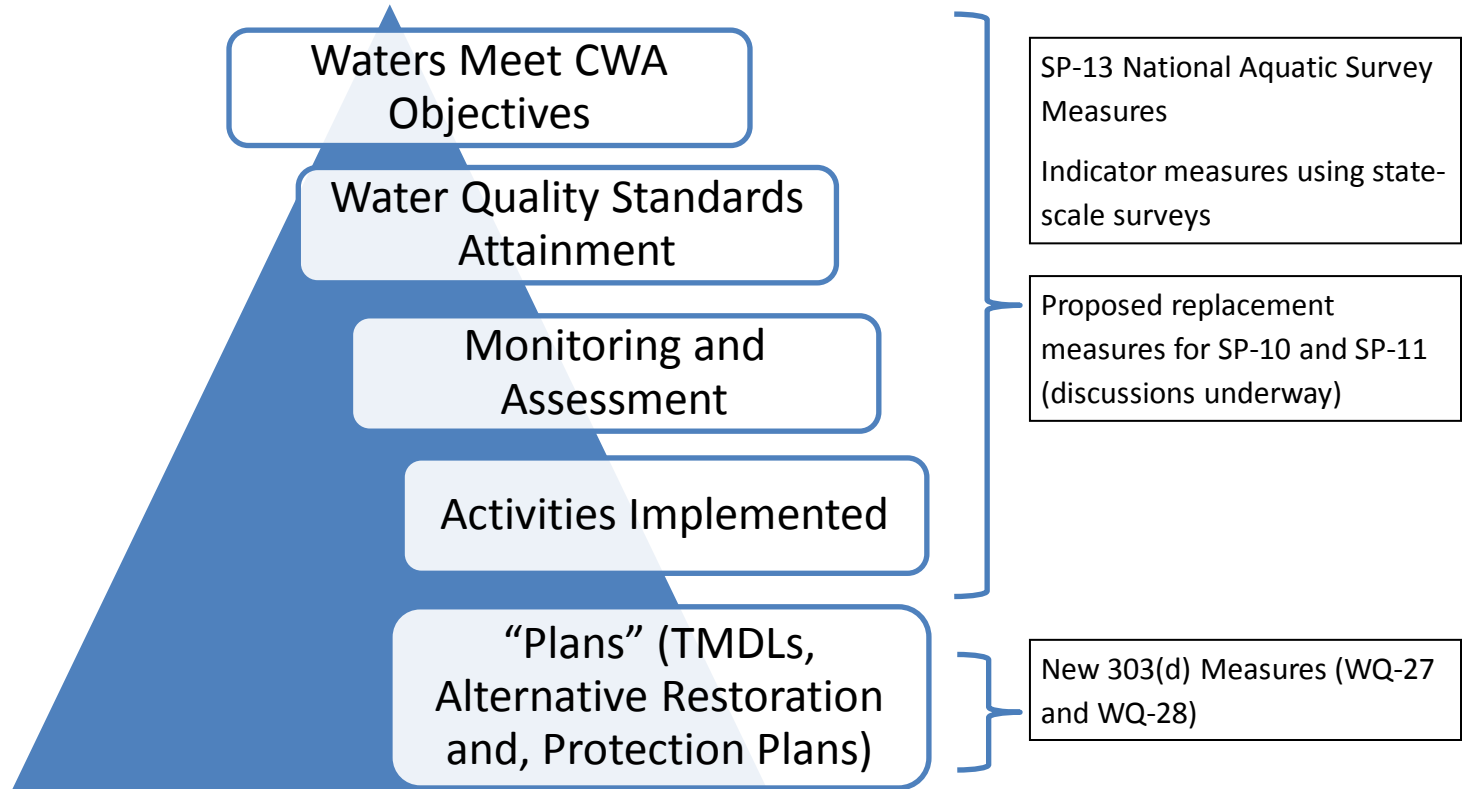
Water Quality Framework Building Blocks

- **The Water Quality Framework is built upon the existing OWOW data systems:**
 - Water Quality Monitoring: STORET/WQX
 - Assessment/TMDL Tracking/Restoration: ATTAINS
 - Actions: 319 Non-Point Source Grants Tracking System (GRTS)
 - Geospatial Fabric: *NHDPlus*
- **The Water Quality Framework will use a services-based approach to provide the mechanisms for linking these systems together**
- **The Water Quality Framework is not a new SYSTEM**
 - We're not talking about merging all these systems together into one

Telling the Story



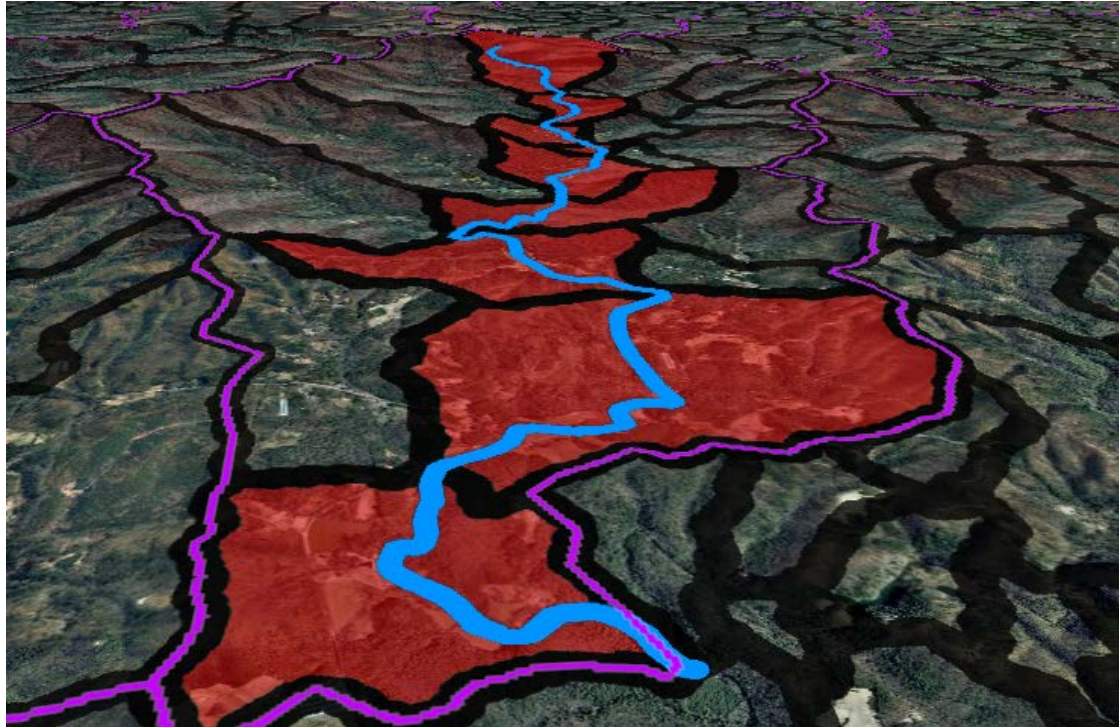
Measuring Progress



EPA is redesigning the ATTAINS system (the system for tracking IR data) to accommodate changes in these measures

Catchment-based Indexing Approach

EPA is implementing a new approach (using the *NHDPlus* catchments) to measure progress under the 303(d) Program Vision, and in the future will use this new approach for tracking water quality restoration, maintenance, and protection



Benefits of Catchment Approach

- Simplifies tracking of site-specific outcomes
- Improves tracking output measures (i.e. TMDL measure, 319 measure)
- Resolves challenges tracking current measures
- More transparent and results can be tracked back to an official 'system-of-record'
- Allows for better cross-program integration
- Faster and cheaper data processing costs for both states and EPA

Automated Calculation of Measures

Assessment Unit Causes

<input type="checkbox"/>	State	Assessment Unit ID	Assessment Unit Name	Cause Name	Plan Type
<input type="checkbox"/>	VA	VA-A02R-02-BEN	NORTH FORK CATOCTIN CREEK	BENTHIC MACROINVERTEBRATES BIOASSESSMENTS	-
<input type="checkbox"/>	VA	VA-A02R-03-BEN	SOUTH FORK CATOCTIN CREEK	BENTHIC MACROINVERTEBRATES BIOASSESSMENTS	-
<input type="checkbox"/>	VA	VA-A03R-02-BAC	CLARKS RUN	ESCHERICHIA COLI (E. COLI)	-
<input type="checkbox"/>	VA	VA-A05R-01-BEN	WANCOPIN CREEK	BENTHIC MACROINVERTEBRATES BIOASSESSMENTS	-
<input type="checkbox"/>	VA	VA-A06R-01-BEN	NORTH FORK GOOSE CREEK	BENTHIC MACROINVERTEBRATES BIOASSESSMENTS	-
<input type="checkbox"/>	VA	VA-A07R-02-BEN	NORTH FORK BEAVERDAM CREEK	BENTHIC MACROINVERTEBRATES BIOASSESSMENTS	-
<input type="checkbox"/>	VA	VA-A08R-01-PCB	BROAD RUN, DIFFICULT RUN, GOOSE CREEK, PIMMIT RUN	PCB(S) IN FISH TISSUE	-
<input type="checkbox"/>	VA	VA-A08R-03-BEN	LITTLE RIVER	BENTHIC MACROINVERTEBRATES BIOASSESSMENTS	-
<input type="checkbox"/>	VA	VA-A09R-01-BAC	UNNAMED TRIBUTARY TO THE POTOMAC RIVER	ESCHERICHIA COLI (E. COLI)	-
<input type="checkbox"/>	VA	VA-A09R-01-BEN	BROAD RUN	BENTHIC MACROINVERTEBRATES BIOASSESSMENTS	-
<input type="checkbox"/>	VA	VA-A09R-01-HG	BROAD RUN	MERCURY IN FISH TISSUE	-
<input type="checkbox"/>	VA	VA-A09R-02-BAC	BROAD RUN	ESCHERICHIA COLI (E. COLI)	-

WQ-28 Universe and Baseline Results

2010 IR Cycle **Catchment Acres**
 Universe area: 5,680,607.62
Baseline area (weighted): **2,113,625.00**
Baseline percent: **37.21%**

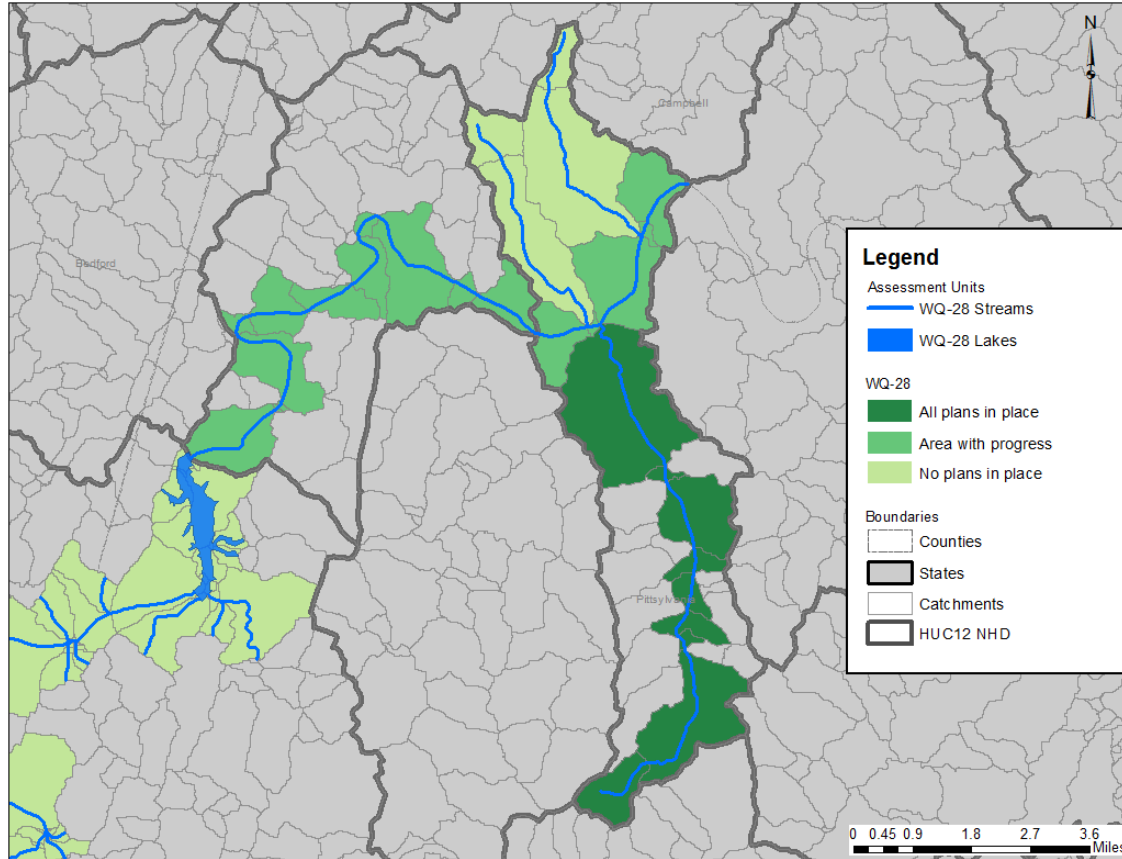
WQ-28 Baseline Plan Breakdown

2010 IR Cycle **Catchment Acres**
 Universe area: 5,680,607.62
 Area with all plans in place: 467,569.46
 Area with progress*: 2,221,888.07
 Area with no plans in place: 2,991,150.08

Category	Catchment Acres
Area with all plans in place	467,569
Area with progress*	2,221,888
Area with no plans in place	2,991,150

* "Area with progress" refers to the area in which some plans are in planning, in development, or in place.

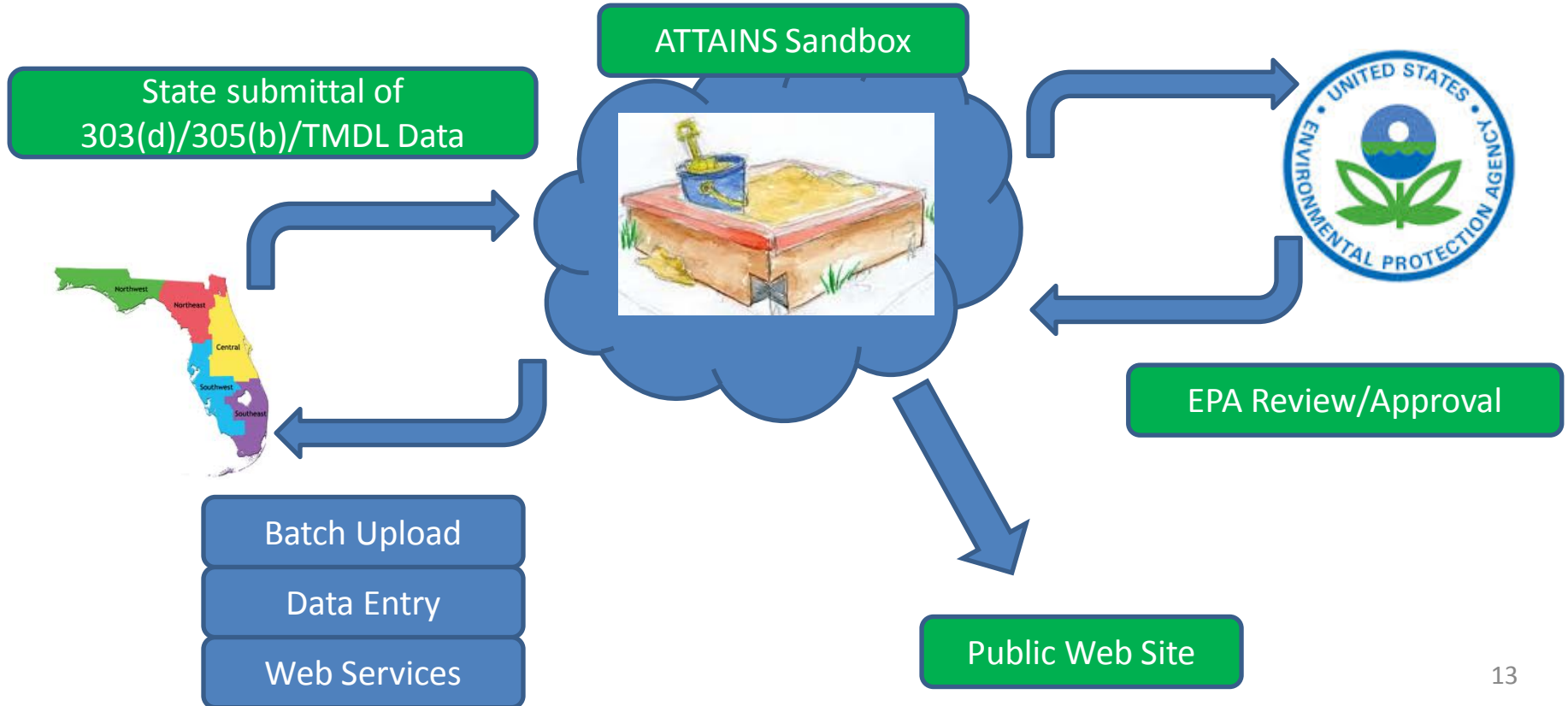
Geographically Presenting Measures



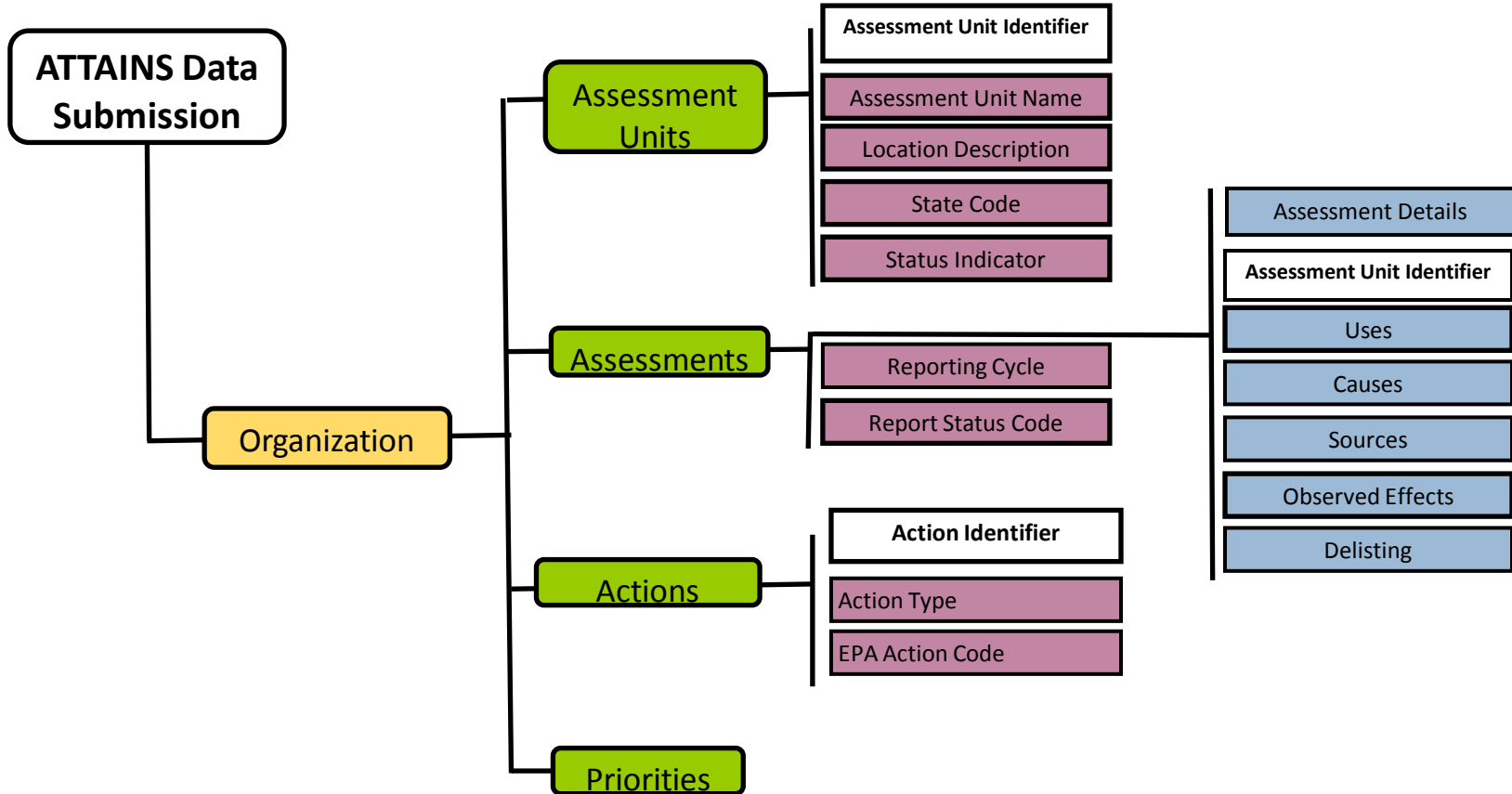
The New ATTAINS: What's changing?

- EPA will no longer support a local application like the ADB, but rather will move towards a cloud-based application, which will be the new ATTAINS system
- The new ATTAINS will incorporate a full integration with the Exchange Network
- The OWIR-ATT schema will no longer be supported (starting in 2018), but rather will be replaced by the new ATTAINS schema
- To provide data to EPA, states would either use the Exchange Network flow, or the ATTAINS cloud-based interface
- Geospatial data will be critical to this new process

ATTAINS Design



ATTAINS Schema Design



ATTAINS Data Flow Considerations

- Portions of the data will need to be maintained as 'Records'
- ATTAINS data flow will manage a 'workflow' for submitting, reviewing, and approving state submittals
- Support inbound and outbound web services

ATTAINS Schedule

2016

- Release of the new ATTAINS System (Release 1)
- Work with State partners to pilot data submission via ATTAINS for 2016 reporting cycle
- Pilot new approach for performance measures SP-10 and SP-11
- Identify improvements to other performances measures (NPS Program, Urban Waters)
- Revise ATTAINS public web site

2017

- Modify ATTAINS per lessons learned in 2016
- ATTAINS Schema and Data Flow ready by April 1, 2017 (1 year prior to 2018 submittal date)
- Work with states on transitioning to the new ATTAINS system
- Finalize new performance measures
- Prepare for full transition to the new ATTAINS in 2018

Questions?



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