



Department of
**Environment &
Conservation**

TN 2018 ATTAINS Experience

Why am I here?

Richard Cochran
Environmental Scientist, GISP
TN Dept. of Environment and Conservation
Division of Water Resources

- Water Quality Assessment team (20 years)
- GIS coordinator for Division
- Assessment Database/ATTAINS administrator
- Special field studies
- Occasional Biologist
- Amy Feingold's TN Wiki and historian
- Not and IT guy but do play one occasionally

Background/History

- **TN was an EPA Assessment Database (ADB) state from the beginning (1997-98)**
 - Beta tester for early versions
 - Desperate need for a system to manage assessment info
- **Never produced or reported a true “Integrated Report”**
 - Separate 303(d) and 305(b) reports, GIS data, and a submission letter to EPA
 - Never met the April 1st submission date
- **TN “303(d)” is actually a TN Impaired Streams List**
- **No Consolidated and Listing Methodology document (CALM)**
 - Pieces stored in various SOPs and other documents
- **New ATTAINS system provided an opportunity to modernize the program and institute a culture change**

ATTAINS Transition

- **Communication**

- It is critical that the state communicate often and early with EPA and contractors during the transition
- **Dwane Young, Wendy Reid, Marion Hopkins (R4), Robyn Polinski (R4) and Amy Wesley (RTI) were all extremely helpful and patient during the data transition and updates!!!**

- **Partnership**

- Critical that the state be committed to the transition and stay engaged during the process.
 - EPA and contractors are assisting but ultimately this is the state's data and should reflect things appropriately

Transition Data Prep

- **Previous ADB work significantly helped moving to ATTAINS**
 - Data schemas are very similar
 - Staff familiarity with the data made communication and review relatively easy
- **ADB allowed TN to volunteer early to have EPA contractors migrate existing 2016 data into ATTAINS**
- **ADB didn't solve all problems**
 - Some data elements required by ATTAINS were missing
 - TMDL priorities in old ADB were outdated or missing
 - Some data elements didn't transfer
 - TMDL linkages were a mixed bag

2018 Data Uploads

- **TN uses a watershed approach for monitoring and assessment**
- **TN assessed one group of watersheds after the 2016 submittal (12 HUC 8 level watersheds) using ADB**
 - 2016 data were already submitted to EPA contractors for ATTAINS upload
 - Hoped to use Web ATTAINS to start the new assessments but the system wasn't ready for daily use yet
- **Decided to limit 2018 submittal to this one watershed group to make the work load manageable for migration**

2018 Data Upload Process

1. Download Oracle ADB tables to MS Access (limit IT involvement with project)
2. Create MS Access queries to pull data for Batch Upload Template (used the All-In-One tab)
 - TN worked one HUC 8 at a time rather than all at once
3. Verify that all new Assessment Units are in ATTAINS (new segmenting during 2018 assessments)
4. Paste data into Batch Upload Template and export
5. **USE TEST ATTAINS to verify batch upload!!!! (state specific Test ATTAINS)**
6. Identify and track down errors reported and fix in template
 - Early versions of ATTAINS were very cryptic on errors
 - Updated version are much better describing errors

2018 Data Upload Process

- 7. USE TEST ATTAINS to verify updated batch upload!!! (continue until no errors or errors are understood to only be a test environment issue)**
- 8. Batch Upload to Production ATTAINS**
 - Make sure you have no errors before proceeding
- 9. Check Assessments and verify the Validation field to see if there are issues with upload.**
- 10. Update TMDL priorities and validate TMDL (Actions) are linked**

Promoting Data and EPA Review

- **TN did not use the promote for public review step**
 - To meet April 1st submission date, TN did all public comment and review without the ATTAINS promotion
 - Missed out on a possible EPA “unofficial” review opportunity
- **Link documents and GIS data**
 - Responses to Public Comments, Delisting Rationale, CALM and zipped file geodatabase of unique Assessment Units
- **Promote to EPA**
- **EPA coordinator did not have ATTAINS access at time of promotion**
 - Shared Excel tables of ATTAINS data, delisting rationales, and other older ADB reports with coordinator to start preliminary review
- **How best to update a few mistakes in Final Draft submission?**

Web ATTAINS (the future is now)

- TN is now using Web ATTAINS as our daily assessment database
- Staff are picking up nuances of system
- A few bugs/tedious issues
- TN is less cavalier with Assessment Unit management
- Working in Web ATTAINS should make the 2020 easy
 - Time spent during initial upload well spent to get data correct moving forward
- Reports are still not quite where we would like them
- How to share updated assessment info with staff?
 - Data services, Excel extracts, WQX accounts as read only?
- TN looking for ways to better inform and engage public
 - Excel based impaired streams list, 305(b)ish Story Map, Updated GIS based data viewers

Contact Information

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