

Utah's Data Storage and Management Challenge

Presented by:

Jim Harris

Utah Division of Water Quality

What we collect and why:

- Water quality
 - Biological (Macroinvertebrates, Fish, Algae)
 - Habitat (Stream morphology, substrate, etc.)
 - Lakes
 - Groundwater
 - Continuous Data
-
- ✓ Beneficial Use Assessment
 - ✓ TMDL Development
 - ✓ Permitting and Compliance

Partners

- **Statewide cooperative monitoring program**
 - USFS
 - BLM
 - Other Partners
- **Expand collection network**
 - E. coli Assessments
- **Challenge – Information management and dissemination**

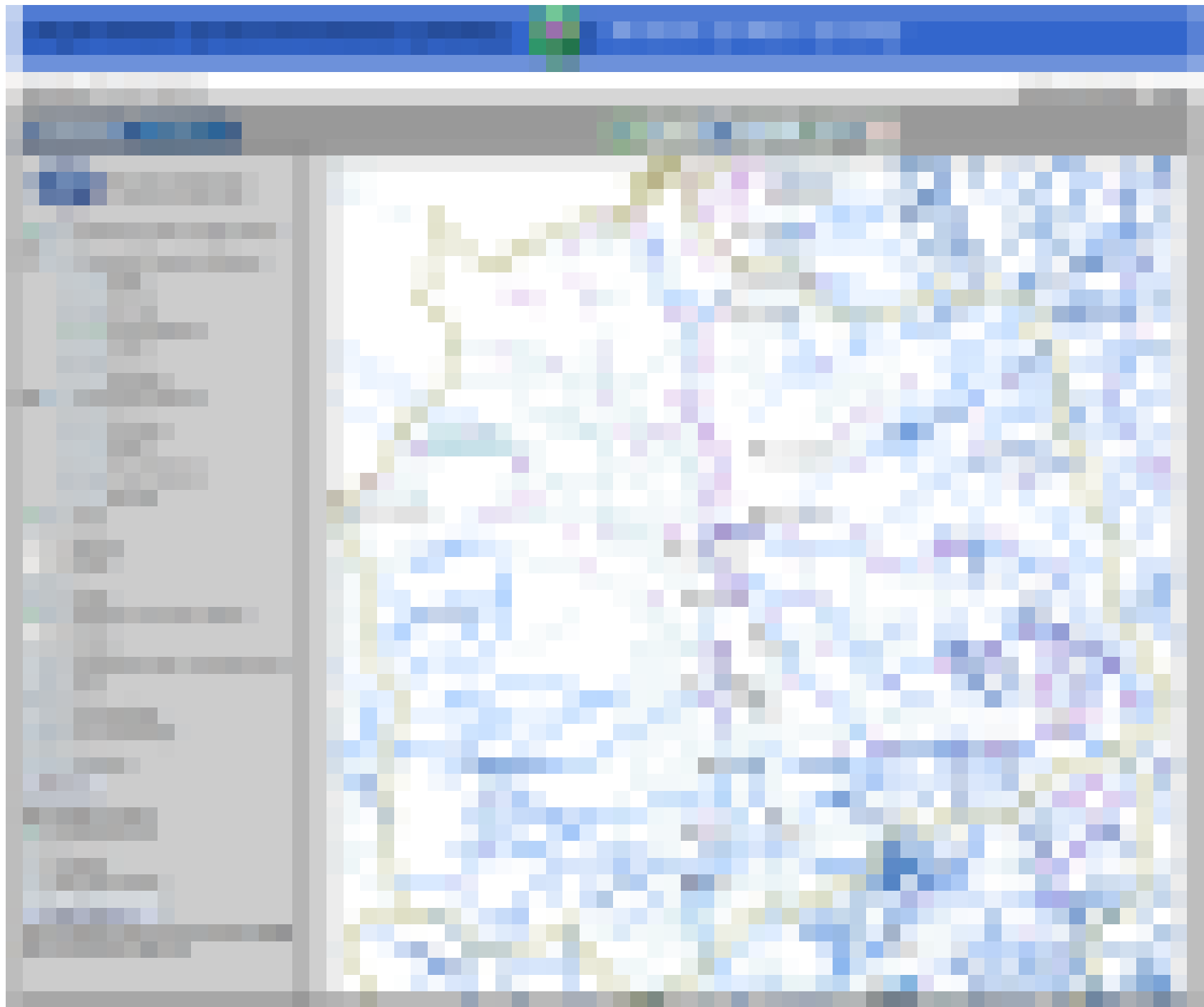
Where we store it:

STOrage and RETrieval (STORET)

- Local Data Warehouse
 - Populate National STORET
 - Tools for field collection
 - Basic reporting functions
 - Data retrieval (local network)

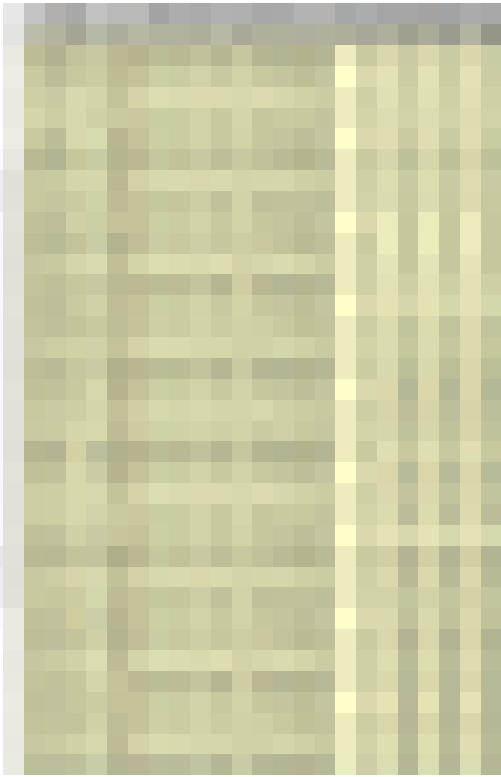
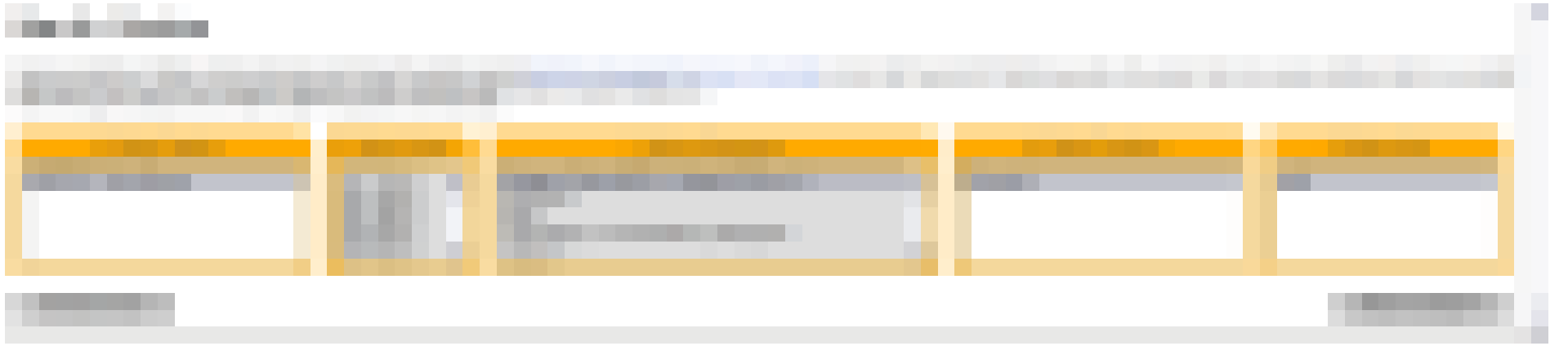
Vertical sidebar containing several menu items, some with blue icons, and a search bar.







[Blurred content]	[Blurred content]	[Blurred content]
-------------------	-------------------	-------------------



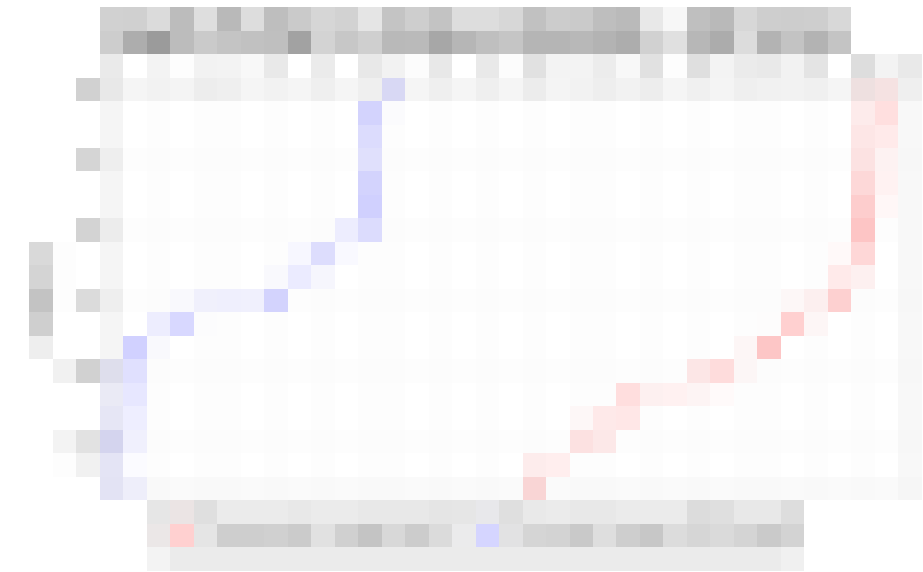


Placeholder text for the top header.

Placeholder text for the main header.

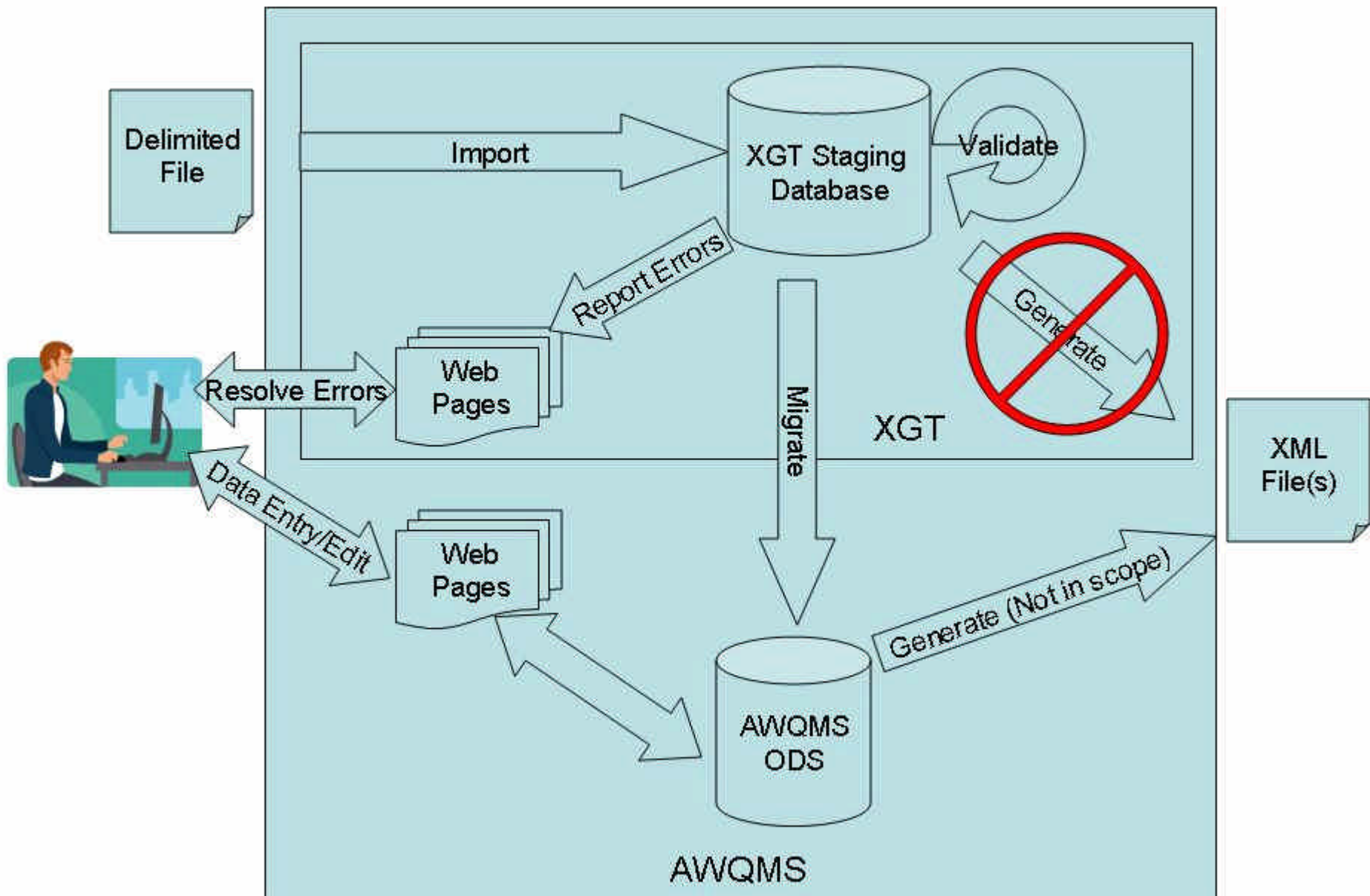
Three panels with orange borders, each containing different content. The left panel is mostly white, the middle panel has a grey background, and the right panel has a grid-like pattern.

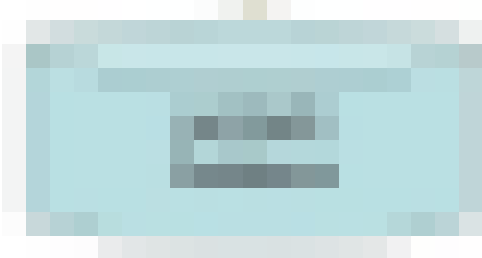
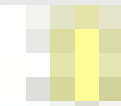
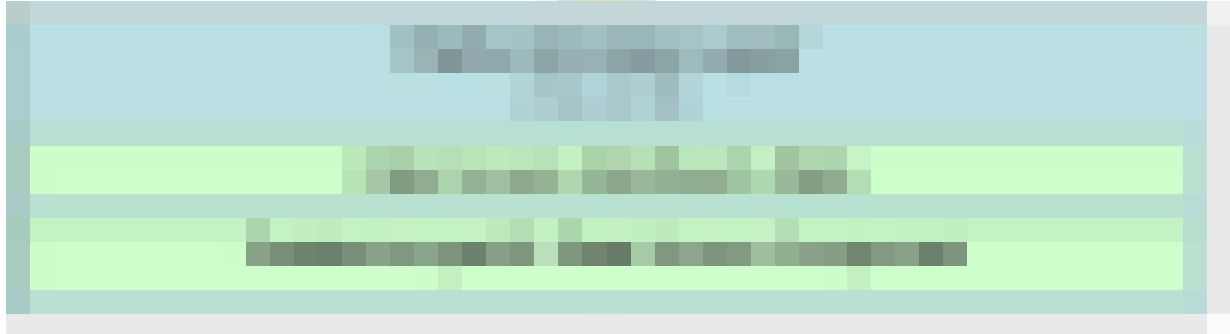
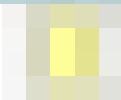
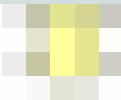
Placeholder text for the sub-header.



WQX Transition

- **STORET (not supported after Fall 2009)**
- **Ambient Water Quality Monitoring System**
 - EPA Region 8
 - Illinois
 - Minnesota
 - National Park Service
 - Other States





WQX Benefits

- Adaptable to different databases
- Standardized / Transferable
- Potential to develop custom interfaces and tools

Next Steps...

- **XML file generation for national WQX**
 - Achieved through collaboration with Iowa
- **Assessment Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS)**
 - 305(b) and 303(d) Integrated Reporting database

WQX/ATTAINS Integration

- Migrate STORET to WQX
- Develop QA/QC screening tools
- Web client for partners to submit data to DWQ

- **Link sampling locations to NHD**

WQX/ATTAINS Integration

- Link Assessment Units, Beneficial Uses and Associated Criteria to dataset
- Basis for WQ and Biological Assessment
- Reporting tools and IR development
- Integrate into Map Service

Summary

- Continue...
 - Funding
 - Collaboration
 - Development
 - Provide data to staff and partners