

Survey of WSWC Members' Use of Cloud Computing

This survey determines how WSWC member state water agencies utilize the "cloud" and other remote hosting technologies to accomplish their work. It also identifies the benefits, challenges, and any barriers to using such technologies for hosting applications, water models, and data storage. Based on survey results, WSWC will develop a listing of recommendations for states considering moving data or models to the cloud, to leverage some of the "lessons learned" by states who've already tested use of cloud computing.

"About You" Questions

Your Name:

Your Title:

Your State Agency:

Your email (so we can follow-up, if needed):

What does your agency oversee within your state?

- Water Rights Allocation/Administration
- State Water Planning/Conveyance
- Water Quality Monitoring
- Safe-Drinking Water
- Other _____

Section 1 – Centralized IT Services and Your Use of the Cloud

- 1) Does your agency develop and/or host specialized water management applications, water modeling, or data storage "in-house" (i.e., supported within your office, or located on servers within your building, administered by your office)?
- 2) If not, does your agency develop and/or host specialized water management applications, water monitoring and modeling, or data storage with the assistance of an IT services department (e.g., centralized IT) within your state?
- 3) If yes, please provide the name of the IT services agency/department with whom you work.
- 4) If your agency does work with a centralized IT agency, does your agency have a dedicated liaison or IT resource/manager with whom you typically engage or help?
- 5) If you don't have a dedicated liaison, how does your agency procure IT services with your IT services agency?
- 6) Does your agency or department or state have policies regarding the use of cloud vendors or technologies for hosting apps/models/data remotely?
- 7) If yes, could you please describe those policies and add a link to the relevant statute, or provide a written copy to saralarsen@wswc.utah.gov?
- 8) Whether administered by a central IT department or your agency, are any of your water management applications, modeling, or data stored in, processed in, or hosted by a "cloud" vendor (e.g. Amazon Web Services, Google, RedHat, Socrata, etc.)?

If Question 13 is YES, go to Section 2. If not, got to Section 3.

Section 2 – Yes, my Agency Uses the Cloud

- 9) Please provide the name of the cloud vendor and a short description of your applications and their functions.
- 10) Why did your agency opt to go with a cloud vendor, as opposed to supporting the application/model/data locally or on your central IT agency servers?
- 11) How would you rate the performance of the cloud vendor regarding ease of maintenance by you or your staff? In other words, how easy is it for you to maintain, update, interact with your apps/models/data on the cloud? 1 to 5 rating.
- 12) If your applications or data are accessible to outside clients, how would you rate the performance/data retrieval supported by the cloud vendor for your customers? Are they able to get the requested information quickly and reliably, with minimal or no outages or lag time? 1 to 5 rating.
- 13) (Optional) Please feel free to provide any additional comments concerning performance. _____
- 14) Please select any of the benefits listed below that your agency has seen from using a cloud vendor to support your apps/models/data storage.
 - Personnel Time Savings
 - East of Pilot Application Deployment
 - Ease of Backups/Server Updates/etc.
 - Reduced Hardware Procurement
 - Reduced Computing Resource Hosting Costs
 - Central IT/Contractor Saving
 - Improved Security (by hosting some data off-site)
 - Improved Scalability (meeting variable demand)
 - Improved Application Performance
 - Can Support More Robust/Larger Applications (e.g. for remote sensing)
 - Other _____
- 15) What difficulties have resulted or what barriers/costs have you encountered when hosting or storing your application/model/data on cloud vendor servers?
 - Personnel Time (e.g., for training, etc.)
 - Central IT/Contractor Costs
 - Difficulty maintaining/accessing apps/models/data
 - Reduced performance vs. hosting “on-site”
 - Other _____
- 16) Overall, has hosting on the cloud been a cost effective option for your agency when compared to hosting locally or through a central IT agency?
 - Yes
 - No
 - Mixed Results
- 17) Is your cloud vendor's pricing structure predictable, i.e., based on a monthly or annual fee, or based on user access?
 - Monthly or annual fee
 - User-based
 - Other _____
- 18) If it is based on user access, is the unpredictability of billing an issue for your agency?

- Yes
 - No
- 19) In the future, do you think the apps/models/data that your agency is hosting using a cloud vendor will...
- Increase
 - Remain the same
 - Decrease
- 20) Would you be supportive of moving your WaDE application to a cloud setting, if WSWC set up the initial operating capability? Updates would then require uploading or inserting to tables on a cloud database, but fewer interim updates.

Section 3 – No, my Agency Does Not Use the Cloud

9) Has your agency looked at hosting any of your water management applications/models/data with a cloud vendor? Or investigated the possibility with the assistance of your central IT agency?

- Yes
- No
- Other _____

10) If yes, are you still in this review process?

- Yes
- No
- Other _____

11) If yes, how is the review process going? What is your assessment, so far?

12) If you are still reviewing, what issues are you most concerned about?

- Pricing
- Support and Maintenance by the Vendor
- Ease of Data Transfer
- Data Portability (being able to bring data back, and move to a new vendor)
- Performance of Apps/Models/Data Storage
- Scalability
- Ability to Quickly Deploy New Apps
- Support of More Robust Applications (e.g., remote-sensing, “big data”, etc.)
- Other _____

13) If you are NOT in the review process, do you think that you will investigate hosting apps/models/data remotely using a cloud vendor in the coming year?

- Yes
- No
- Other _____

14) Would you be supportive of moving your WaDE application to a cloud setting, if WSWC set up the initial operating capability? Updates would then require uploading or inserting to tables on a cloud database, but fewer interim updates.