

ITAC

September 18, 2014

Roll Call:

Michael Lewis
Terri Moore
Nate Booth
Gary Krammes
Gary Cottrell

Scott Gain
John Bumgarner
David Boldt
Kris Lund
Kate Flynn

Bob Avery
Daniel Pearson
Kim Martz

AGENDA

1. November meeting details
 - Who is attending
 - Logistics (transportation, etc...)
 - sAgenda development--what do we want to get out of the meeting
2. Overview of potential ITAC initiatives to date
 - Does anything jump out for our attention?
 - Which initiative ideas do we want to better develop?
3. Anything on ITAC Sharepoint site to review/discuss?

Notes:

San Diego, Face-to-Face Meeting

Michael referenced the letter he sent to Eric Reichard regarding ITAC's visit in November and asked if there were any comments. Terri noted Nate's addition to the agenda – Nate can describe the FY15 priorities within OWI which include our modernization activities for NWIS during the 8:30-11:00 am session (20-30 min). Nate commented that time should be limited for discussion of CA activities to allow sufficient working time for ITAC. Michael asked if Bob Avery was on the call and if so, does he have feedback regarding speakers and/or projects to discuss. Terri responded that Bob is not on the call, but she has talked to him. Bob is working on this.

REMINDER – Terri reminded everyone to finalize their hotel reservations. Sheri will send email to ITAC with confirmation numbers.

Overview of potential initiatives to date

ITAC reviewed the list of potential initiatives that Michael pulled together from constituent feedback.

Data Chief feedback --

1. **KEEP** -- How/whether to interact with/utilize/support the growing number of field computing platforms (PCs, handhelds, SmartPhones, etc.)

- Michael commented that this refers back to Field Computing issues. Kate commented that technology is moving fast... where do we throw the arrow? Nate recommended keeping this on the list and noted that Burl is ready to pass the field computing torch to someone else. Nate has not selected a person yet.
2. **KEEP --** Develop the ability to serve real-time imagery from field sites without having to resort to outside contracts with service providers.
 - Nate commented that getting a good understanding of what techniques folks are using is a good first step. Scott asked what this refers to. Nate responded that in Georgia, Brian McCallum uses a subscription service through which they get their camera feed. Scott commented that this brings up the issue of network speed.
 3. **KEEP --** Improve network communication speed to and from field offices.
 - Nate commented that Paul Exter has been doing a lot of work in this area. It would be good for ITAC to have an update. Terri took the **ACTION** to update ITAC in San Diego. She will talk to Paul and get an update and ask someone from the Telecommunications group call in to the meeting. Michael commented that there are a lot of recent examples related to this issue. Terri added that most WSCs do not have enough bandwidth to tie into the Cloud when it becomes available. This is something that Bill Werkheiser is working on. Scott commented that slow network speeds are a problem as WSCs are merged into Commonwealths. The ability to communicate effectively as combined Centers is important.
 4. **KEEP --** Have more modern/dynamic data visualizations of our data (continuous or discrete) for the public and internally (note: suggested by John Clune, who has done some research on the topic and provided a link to this movie: http://md.water.usgs.gov/clune/data_visualization.html)
 - Nate commented that this is a neat idea. Michael added that it is needed, but this may be better suited for the NWIS Users Group. Kate commented that ITAC can talk about it and look at what is there, but technology moves fast. Our timeline may be too slow. Gary Krammes suggested that ITAC look at this and maybe put forth a forward vision. Scott noted that it would good to have an idea of what is being used and then promote something we feel strongly about.
 5. **KEEP --** Develop a formalized pathway for technicians to be able to send data, inspections, measurements, etc. directly into the database from mobile devices in the field in near real-time. This needs to be functional without the need for VPN since many field devices can't use it. (note: this was suggested twice)
 - Scott commented that this is different from number one. Michael responded that they are interrelated items. There is a pressing question in terms of efficiency. There are different solutions in different places. Michael added that some of these topics may be good for ITAC to take on. In other cases, ITAC may play a role in providing research on a topic for people. Kris commented that AQUARIUS will streamline the process, but it is still 1-1 ½ years away. It would be good to have a tool to use. Terri added that there are probably security issues. She will check with NWIS. A comment was made that numbers 1, 5, and 6 touch on the same things. Michael recommended that ITAC do some research and find out how it's being addressed by others. This is critical. Kris responded that it is a critical issue, and she does not see the VPN situation going away. She added that Centers are used to a certain level of processing speed. When SMART goes away, Centers will start requesting this.
 - Nate recommended combining #1 and #6.

6. **KEEP --** Streamline the process to automatically upload discharge measurements, inspections, etc. directly from the field to the database. (note: this was suggested twice)
 - Combine with #1.
7. **KEEP –** Start looking at getting non-GOES data formats on RT.
 - Nate commented that this is an issue with supergages. Kris referenced an on-going survey being done. Information from that survey would allow ITAC to get an idea of what is needed in the future.
 - **Per Nate’s recommendation, combine this with the supergage network suggestion.**
8. **KEEP –** Enhance the SMART program to automatically process streamflow information.
 - Kris commented that SMART will not be part of the initial AQUARIUS rollout. She recommended talking to Joe Nielsen about this in more depth as a first step.

Study Chief/Reston Discipline Office feedback --

1. An intuitive user-friendly version of the Personal Computer Field Form (PCFF) for documenting water-quality field work.
 - Michael recommended interacting with Office of Water Quality to see what their future plans are for PCFF as a first step. Nate agrees this is a good idea.
2. **KEEP (Champion – Nate and John Bumgarner)** Some form of a searchable database for code/scripts: Many staff routinely use python, R, SQL for Access,SQL, VBA, etc. Staff spend time searching google, perhaps there is some way to title scripts and make that searchable. Tools like this exist (Github is something like that), but there are data processes that are specific to the USGS. We are aware of interesting tools (like queries/forms in Access for interfacing with QWDATA) that some DBA's have developed at other WSC. Is there a way to share these kinds of ideas among all USGS WSC? (From Reston: Assume ITAC is already aware of Gitorious, an internal GIT server. There would probably need to be some training on how to use it effectively as there are log in instructions but no real instructions on how to use it.)

<http://butst.usgs.gov/open-source/gitorious/> and <https://gitorious.org/>

 - John Bumgarner expressed interest in this item. Nate commented that he is moving OWI towards GITHUB. Kris noted that Mike Canova (TX) has done several presentations on this. He is a good contact.
3. **KEEP (Champion – Nate)** Incorporation of climatic data retrieval tools into USGS data retrieval tools. It would be great to see, along with flow data, or GW level data, the nearest climate station, and the data available. Or be able to retrieve all data within X distance of this well. Something along those lines. Can we build an intuitive front end to access NOAA climate data with our USGS water data?
4. **KEEP (Champion – Nate)** Someone should publish a standard .csl template for formatting citations in USGS reports. This will be available through Mendeley, Zotero, and most (if not all) citation management software.
5. **KEEP (Champion – Nate)** In terms of ITAC’s brainstorm list item#1, we need a definition of a super gage first. OWI should weigh in as well. (email further shared with the Continuous Water Quality committee.)

- Michael asked for Nate's thoughts on this. Nate commented that a lot of folks do not like the term. It is a goal for having more sophisticated gages – continue to add innovation to existing platforms. It's important to get a feel for what is happening in WSCs. Nate added that he can line up a speaker for this topic
6. I would rank all of the suggestions from the Data Chiefs way above any other suggestions presented. If I had to pick one, it would be: (a) Streamline the process to automatically upload discharge measurements, inspections, etc. directly from the field to the database. (Note: this was suggested twice); or (b) Enhance the SMART program to automatically process streamflow information.

DBA feedback:

1. **KEEP (Champion – Kris)** Additional guidance on replacement ADR process. (I know this topic is already being worked on by Brad Garner and Kirk Miller, but there are still questions relating to the ADR process and what enhancements might be necessary to achieve our publication goals, both to SIMS and NWISWeb.)
 - Michael asked for Kris' thoughts. Kris responded that there was a discussion on this at the data conference. Kris noted that this is the time of year when a list of revisions and manuscripts are being pub together. This may not be an ITAC issue, but it's an important issue that encompasses all WSCs. The Centers are looking for feedback... what timelines exist?
 - Nate noted that Brad Garner and Kirk Miller are a good starting point for discussion.
2. **REMOVE** ~~Integrated field tool (i.e., SVMobile) for electronic data collection and archiving. ("Been hearing about it for years...")~~
 - Was just released
3. **REMOVE** ~~Development of an updated, user friendly, and integrated water data portal (also on Data Chief list).~~

ITAC SharePoint –

Bob Avery gave a brief overview of the updates that have been made to the ITAC SP site since ITAC's last call. Any additional feedback can be sent to Bob.