

**Minutes
ITAC Meeting - Bismarck, ND**

September 27-29, 2011

Day 1 -

North Dakota WSC Overview,– Gregg Wiche, NDWSC Director

Budget

- 2010 – \$4.3 M – up this year due to flooding
- COOP and NSIP contribute funds as well as a small amount from NAWQA.
- Center salary cost as a % of gross funding = 61%
- Work close with Corps of Engineers

Staffing – ND WSC is a small center - @ 35 FTE

Political forces – congressional delegates – Senators Kent Conrad (D), John Hoeven (R), Representative - Rick Berg (R), Governor – Jack Dalrymple (R)

- A Conservative state. Much contact with Jace Dalrymple due to flooding issues.
- 20 years with a delegation that agrees to water projects and money.

Emerging Water-Related Issues:

- Hydrologic forcing
 - Floods – recurring wet period since 1993, especially eastern ND
 - 2011 flood was statewide
 - Droughts – most recent 1987-91
 - Interbasin transfers

At the state-level, the Canadians are opposed to any water projects in US tributaries that drain to Hudson Bay. The new Canadian Premier has moved toward discussing these issues

- Much focus is on maintaining water quality in Lake Winnipeg, 10th largest freshwater lake in the world
- Concern about invasive species

Exacerbation – ice jams and flat topography

- USGS crews made measurements of discharge under extreme field conditions
- USGS technologies used to help with protection of infrastructure – Fargo, ND
- Recurring flooding drives much of the center's work

More recently, problems in the James River Basin – spillway was failing. Two rapid deployment gages were deployed above the dam and 1 below – Demonstration of rapid deployment streamgaging.

The use of rapid deployment gages has become popular. Gages were re-deployed to MT during Missouri River flooding.

Evolution of science support –

- Prior to the late 1980's, streamflow and water quality data were collected for historical purposes
- 1990 – 2000 – focus was on water management and forecasts
- 2009 – 2011 – request for real-time hydrologic information at sites of interest

Gregg gave an overview of USGS involvement with Missouri River at Bismarck flooding in 2011 – collaboration with Corps of Engineers and other agencies

ND WSC Programs –

- Devils Lake –
 - o Devils Lake Flooding – drives studies and monitoring programs -- @ 7500 people
 - Largest expenditures, emergency funds
 - More than 1 billion dollars have been spent to protect this community
 - Peak of record this year – June 2011
 - Water quality degrades from west to east

- A lot of bed sediment work
- Projects:
 - o Climate simulation and flood risk analysis for 2008-40
 - o 2006 – Two dimensional circulation model – developed to simulate movement of water, heat, and specific conductance
 - o On-going outlet monitoring program designed and installed
 - o Two-dimensional hydro-dynamic and water-quality model of Lake Ashtabula to understand dynamics of chemical constitution in the reservoir
 - o Model used as a tool for management and operation of Devils Lake State outlet

Emerging water-related issues

- Hydropolitical forcing
 - o Agricultural production
 - o Biofuels
 - o Increase in irrigation – due to rising crop and commodity prices
 - o Energy development
 - Oil exploration in Bakken Formation
 - New coal-fired power plants

ND WSC International Activities –

- Afghanistan
 - o As part of 2005 multidisciplinary water team, began a study to
 - Assess basic hydrology
 - Provide technical assistance for installation of streamflow gaging station network
 - Build capacity of Afghan scientists and technicians
- Amman - Water resource assessment training

Vision for the future –

- Sole provider of surface-water data
- Develop and expand real-time water-quality monitoring network
- Delivery real-time estimates of load for....
- Data mining – scratching the surface on this.

North Dakota WSC IT Overview – Anthony Koebele

Records section is in Grand Forks – approximately 12 staff

Studies Staff Skills: GIS, SPLUS and R, Fortran and Perl, models, agricultural runoff, SAS, International

Administrative Services - 3 staff

- Windows XP, Windows Server, OS X, NWIS Server, Linux, BlackBerry, iPhone

IT issues related to flooding –

- 1997 – U.S. Mail
- 2001 – Introduction of flood tracking
- 2009 – a week in the life of NDWSC IT
- 2011 - \$509 million in repairs after the flooding; complexity of the enterprise

IT Issues related to flooding

- 1997 – Minimal IT involvement, flood poster created, idea for a flood tracking chart; distributed manually, Xterm platform
 - o 2001 – Announce RT flood tracking (local); Dave Ozman press conferences
 - o Fargo flood tracking 2001 – no one came
 - o Grand Forks flood tracking press conference – held in the basement of the federal building; no Internet, cached links – 4.5 hours later – success; back in Bismarck, 66 simultaneous pages connected; crashed
 - o 2002, moved to Sun Server for first time; 2003 to NWISWeb, 2004 to NatWeb
- Prior to 2009 flooding:

- NWS chat approval (slow) – local
- Firewall configuration (post flood) – local
- Twitter monitored surreptitiously – local (monitored from home)
- Email measurements program – local – folks having trouble finding measurements on web site – NWS chat w/ record of conversation
 - o Started with 3 cooperators that wanted the product
 - o Downstream order
 - o Success
- Network under stress – a week in the life of IT staff – traffic increased dramatically on the web - @40,000 web requests at the end of March 2009
 - 27,687 requests on March 25th; NWIS Web kills programs that generate too many “requests” – email script quit working (** See meeting follow-up note – DOI ESN/Security monitoring killed the North Dakota script, not NWIS)
 - Increased activity on March 26, 2009 – Red River is rising – Nevada State Government (state.nd.us) is blocked from accessing flood data.
 - The issue was resolved, but what is the process for when cooperator cannot get to data.
 - o Buddy site – contingency plan for serving data
 - March 30, 2009 – Bismarck has blizzard – 15 inches of snow; 4/1 – RT activated – server not responding
- Complexity of the Enterprise - decisions made in one area, substantially affect other areas.
- 2011 – Flood tracking requires Andrew File System (AFS) – Tony showed screen captures to demonstrate flood tracking products

Use of web cams – people like these, but they can be difficult to troubleshoot when there are problems.

July 2011 – Complicated network issues – solving issues is difficult; things are noticed quickly during a flood event

- WGET failed – cameras were not updated
- Twitter failed – state agency flood updates
- YouTube failed

Final thoughts –

- Districts need a close relationship with Cooperators – need for this was demonstrated when the State government was unable to get to streamflow data. It is difficult to jump through hoops during a flooding event, time is critical.
- Cooperators want customized information
 - o Rapid deployment maps
 - o NWS Chat
 - o Email measurements
- How can we deliver data more reliably in the future?

Questions:

Q: Terri – Tony, are you responsible for the S&SS and NWIS C&A for ND?

R: Tony – yes, we always get it done.

Q: Susan – wants to know more about issues that appear to be denial of service attack.

R: Tony – the network was slow, script started to fail; clue in that NWIS will kill processes that are bringing down the national server; Susan commented that this is manually monitored; Tony emphasized that time is critical for the WSC during a time of flooding.

Updated: It was determined that the NWISWeb team was not involved with the blocking. This incident was due to the DOI ESN/Network security features that blocked the North Dakota process/script. The NWISWeb Team worked with the local network/security teams to assist in getting the issue resolved.

IT Liaison update – David McCormack

It is a good idea to show what the IT issues are during significant events

David gave a brief introduction noting that he represents the Midwest (MWA), South Central and Rocky Mountain Areas

David's philosophy – Know your customer, Know what they have, know what is needed, and know how to get them there.

Overview of the Midwest Area

- 18 IT CAB members represent the MWA
- 55 +/- FTE in the IT Professional Series (no contractors)
- User support ratio is roughly 1 IT Specialist to 19 users
- 2100 computers supported
- 17 server rooms
- 265 servers
- 5,462 square footage of server room space

Support roles:

- OITS under Dru Burks and Karen Baker
- Support 3 Rex offices, 21 states 37 science centers
- Provides leadership and guidance for IT Security
- Support in operational and management goals of the Area's
 - o Develop and lead IT initiatives
 - o Plan and support bureau and departmental IT and service efforts
 - o It technical review coordinator for the area
- C&A and POA&M support

Highlights:

- Centers are working on mitigating risks identified in C&A (POA&Ms)
- MWA IT CAB formed
- Dave showed a slide of network upgrades this year
- There are a lot of network issues
 - Technology exists, but the infrastructure is behind

2012 Center Goals –

- Program data collection programs to work on Android phones
- High resolution, remote-controlled, web cams for measuring discharge during flash events
- Implement Windows7 upgrades
- Continue to improve Systems Center Configuration Manager
- Continue to upgrade communications (VOIP/Bandwidth) where needed and as funding is available
- Meet 2012 C&A requirements
- Create more efficient and cost effective work processes
- Conduit between other Centers, IT Liaison and AEI with IT business and operational efforts

David commented that the demands of customers are different than the demands from HQ, and that the Center IT specialists will need to work diligently to understand and support both top down and bottom up issues.

IT Liaison Goals for 2011-2012 –

- Continue to support REx and Center Directors
- Continue to utilize IT Customer Advisory Boards for each Area
- Continue to support Areas with C&A, POA&MS and IT Transformation initiatives
- Conduct IT reviews
- Conduit with primary stakeholders
- Raise the bar by
 - o Providing accurate information at the right time
 - o Communicate clearly
 - o Direct and support more efficiencies in IT support methods and processes
 - o Support the centers where the science is

David briefed the group on USGS status with IT Transformation actions – focus on enterprise work

- Deliver uniform, modern, agile, cost effective services
- Support the Department's diverse mission
- Empower our employees to conduct their businesses using IT as a mission enabler, rather than inhibitor
- Does not include mission specific applications

It is important to know what your IT support is doing and how they are supporting our mission.

Initial Quick Wins –

- Telecommunications
 - o Video conferencing best practices (infrastructure analysis is underway)
 - o Audit phone circuits
- Service Desk – prototype service to 5 locations
 - o eRAS support
 - o HSPD-12/DOI access support
 - o Enterprise account management support
 - o Service desk 800 access
 - o Providers to be determined –
 - signed agreement with DOI for HSPD-12/ DOI access support

Other priority focus areas include records and archives, enterprise Web services, IT planning services, and radio services.

David commented that delivery and operation of IT services will change – under IT Transformation, DOI service organizations and/or Centers of Excellence hosted by Bureaus.

What can Centers Do?

- IT needs to know customer needs and goals
- Document and create business processes based on best business practices
- Define what IT's role is to support local mission
- Identify what IT human resources work on common support vs direct science support
- Know your assets and what you have
- Look for opportunities to collaborate with other centers and share IT assets and human resources
- Utilize Area IT Liaison as a resource

Progress with IT CABs is good. Continue to educate. There will be a lot of data calls this year.

Questions:

Q: Reference slide about web cams – can you provide more information?

R: The Center wanted to implement remote web cams. This was a goal at the center level.

Q: Can you tell us more about Android phones?

R: David will check on this and communicate through IT CAB – to Tony, or email Dave.

Town Hall Meeting - ITAC Updates to attendees –

Bob gave a brief overview of ITAC to those in attendance. Bob Swanson commented that officers rotate on and off of the committee, and the ITAC meets for three face-to-face meetings per year at different WSCs. The committee has been meeting for more than twenty years.

Introductions were made around the room.

- **Office of Water Information – David McCulloch for Katherine Lins**
 - o OWI includes – International Water Resources Branch (IWRB) (Verne Schneider), Water Information Coordination Program (WICP) (Wendy Norton) – also encompasses the Advisory Committee on Water Information (ACWI), and the Water Information Computer Applications Support (WICAS) (server support, ADR, NWIS Mapper, Handhelds) (David McCulloch), National Water Information System NWIS (Susan Trapanese); Gary Fisher heads special projects
 - o On-going support role for Watershed Boundary Dataset -- money to integrate w/ NHD
 - o Maintenance of Water Web pages – design and support – encourage common look and feel
 - o Special Projects –
 - Handheld effort – ITAC commissioned a review
 - ADR
 - SIMS
 - o Katherine noted that if there are questions, please submit them to ITAC, and we will try to address them
 - o Backup support for AD Water
 - o Primarily interface with the IT community at HQ and through the field.
 - o Advocate for Water programs – ITAC successful in getting information out and getting feedback on issues
 - o ITAC is respected throughout USGS – confident that ITAC will have a future in Water
 - o The International Program is an entity unto itself

- o GIS component – support NHD and WBD efforts
- **Chief Technology Officer – David McCormack for Paul Exter**
 - There is a big push to go to the cloud environment, however, expectations are greater than the infrastructure can meet the needs for
 - o David commented on the use of iPads, wireless, and getting information
 - o Old infrastructures do not support today's demands
 - o Status of email system
 - o Goal is late 2012/early 2013 to migrate to Microsoft Outlook.
 - o Status of networks (speed, upgrades, connecting to outside)
 - This issue is going to continue to come up.
 - Terri commented that Quality of Service (QOS) is being tested, and the testing is going really well. Terri suggested that the ND WSC may want to consider this option. This is an important issue where we have people working remotely trying to access the NWIS server. Upgrading is only part of the solution.
 - o DIET initiative is closed– this effort is now called IT Transformation.
 - Collecting data on # servers, server rooms, consolidation and will use the data and build teams to look at overhead costs, challenges at bureau level, costs for space, electricity, etc..
 - Looking at major data centers – ex. Denver Federal Center – Denver, Menlo, Reston
 - # computers/person – looking for 1.2, we are now at 1.6; would like to get the ratio to 1.4
 - Working on exclusion lists – science operational computers that are used for carrying out science mission are not included (Science systems such as those collecting data from a scientific monitor/device.)
 - o Conversion to Windows7 – what is ability to maintain XP in the future? Dave responded that there is no deadline right now. No forecast for this. Suggested testing Windows7 64bit against your applications. Be proactive. Historically we have always been required to upgrade operating systems due to old OS's not supported.

Gregg Wiche asked David to comment on network connectivity and speed issues. David noted ND upgraded this year. If the Center can afford to do so, add another T1 line.

- NWIS – Susan Trapanese
 - o NWIS 4.11 rollout
 - o Susan noted the availability of cyber seminars to learn about the 4.11 release
 - o 2012 – capabilities will be the same when NWIS moves to Oracle database
 - o Getting ready to release water use compilations for 2010 – Nov/Dec timeframe
 - o After Oracle (Core NWIS System) – looking to migrate to national database system – 2013
 - o Commercial ADAPS Replacement Plan (CARP) – work with this team to replace ADAPS.
 - o NWISWeb staff are working on getting unit values into seamless interface (Instantaneous Data Archive - IDA) – NWISWeb will house unit values (multi-year project)
 - o Looking to be able to display water use information in NWISWeb
 - o Work on improving and developing web services
 - o Susan noted that NWISWeb traffic keeps increasing.

Town Hall Q&A

Q: Request for more information on new server purchases and Oracle.

R: Susan responded – January to April timeframe – existing servers run INGRES; new servers will have Oracle; bring new software up on new servers; Current servers are reaching end of life – timed switch to Oracle to coincide with this; new servers cost \$22-26 K. Susan noted that M3000 server is recommended – documentation out to WSC. Only about 4 centers will need a more powerful server.

Q: If a computer is used to download data e.g. from a block of ice, this is not a computer to meet user ratio?

R: Yes, this is correct unless it is being used as a workstation. A computer associated with a piece of lab equipment does not count toward this ratio. Can have MS Office, but not use for your mail – then it would count.

Q: What is the definition of a computer that counts in the ratio?

R: If doing T&A, email, etc... you are using for work versus using to support science mission.

Q: Are iPads and smartphones included?

R: Not now, but that will be changing. Right now, they are only counting laptops and desktops. David suggests that Centers document their laptops and workstations so they will be prepared for a data call.

Q: WaterWatch?

R: Katherine noted this is Office of Surface Water (OSW). Groundwater Watch – Office of Groundwater (OGW), Water Quality Watch – Office of Water Quality (OWQ)

Q: Can you summarize the top 2-3 issues you hear at face-to-face meetings?

R: Bob Lent responded with the following– communication issues (email); internet connectivity issues; special issues in larger centers; co-location on University campuses – can Centers use University internet services instead of DOI. Bob commented that issues that are not typical are the most interesting and useful to know about.

Q: What is the plan to increase email quota limits?

R: David McCormack commented that the new email system coming out will have a higher quota.

Q: If no limitations, what could you do better? What are current limitations now? Dave McCormack suggested letting Tony know. Tony can take forward these issues to David. Be upfront and relevant.

Q: Can you talk about how successful Centers deal with cell phones in the field? It seems that we are restricted by policy here? What works that you have seen?

R: We can sometimes negotiate with Verizon. Check with your AO; you need a data plan. Bob Lent noted that some WSCs cannot afford a data plan. Resources are greater in a larger Center. Kate commented that the Orlando office has phones they share through the office.

Q: If it is determined that it costs x dollars / person, this is not a fair policy if using your own phone for business. Bob Swanson commented that he allows use of business phone for minimal personal use as long as the employee does not go over minutes.

ACTION - Terri will follow-up on the policy about reimbursement for use of personal phones. Katherine also commented about cable access when working from home and getting it paid for.

UPDATE: Centers can't just pick a number for reimbursement. It has to be something that documents the usage and pays only for calls related to work. The problem is that most individuals have plans that allow for lots of minutes so the calls could cost nothing. If that's the case, the employee could not claim reimbursement even if there were then calls at the end of the month that pushed them over the minutes.

The key from the charge card perspective is to assure that proper documentation is maintained with the cardholders statement regarding the costs and how they are charged. For instance, the personal account will have to have a way to allow the charging of the data plan as a *separate* charge, unless the charge will be one integrated single charge that the Cost Center is agreeing to pay (which would then also potentially limit the personal use option on the phone). The Cost Center decision on being appropriate is one that will probably get much attention in the coming months because of questions relating to telecommuting and what we will and will not pay for organizationally. Until that time, the discretion lies at the Cost Center level.

Excerpt from the policy: "Any official call being claimed on the SF-1164 must be supported by documentation with official charges clearly highlighted. Only the cost of the service differentiated, and itemized as an additional cost actually incurred by the employee, may be claimed for reimbursement." <http://www.usgs.gov/usgs-manual/330/335-4.html>

Additional questions should be sent to Margaret Seaboy to assure an understanding of what is needed with regard to documentation.

Bob Lent commented that we haven't talked about the future of satellite telemetry – the administration has talked about selling some bandwidth. We may have a need for increased G4 networks. Davis McCormack commented on available technology. Bob Swanson noted that GOES is 1960's technology. A network called Lightsquared – <http://www.lightsquared.com/> is up and coming.

Q: Where are we at on DOI access cards?

R: Karen Baker will be sending email out soon on HSP-12. We will see policy soon with deadlines. Be proactive in getting your card if you do not have one, etc...

Q: When will we use the access cards?

R: Oct. 31, 2011 – the date has changed, but it should be soon.

Q: Security on RFIE?

R: shielded carrier. Dave has not heard of any issues with this.

Round Table Social media in USGS (Robert Mason, Scott Horvath, Brian McCallum)

Quick introductions were made around the table for Brian and Scott.

Bob Lent gave a brief introduction noting that ITAC is interested in discussing the potential use of social media during emergency events. What can ITAC look at in the future? Is there a potential role for ITAC?

Bob asked for the ND WSC to give a brief overview of their use of social media.

- Karen Ryberg commented that, in general, ND has used Twitter and YouTube. Initially, these tools were blocked by DOI. This led to efforts to unblock these tools. Have since set up accounts for use with both tools. Karen mentioned the use of TweetDeck. There are no artificial boundaries in Twitter. Karen commented about a reporter at the Winnipeg Free Press – Karen would not have known of certain tributaries if not for the Twitter feed.
- Information comes out the fastest in Twitter – from daily press conferences. Karen noted that Twitter is a good way to start rumors, but also to respond to rumors.
- Makes people think about how you look at resources – expectation of information all the time. You start expecting instant updates – if no tweets, there is no new information. Affects how people view the frequency of updates.
- Videos were posted on YouTube – photos to USGS multimedia gallery
 - o Every video has lengthy documentation about what the video is about. Need to have someone posting who knows what it happening. We do not always know how the information is being used.

Bob Lent asked Brian to provide an overview of the use of social media in the GA WSC. Brian commented that GA is now applying for a Twitter account. Brian noted USGS WaterAlert – the product is not social media, but is similar. We need to be proactive in getting our name and information out – by whatever means possible. Brian noted Karen's efforts and commented that it would have been helpful to have social media tools during the 2009 Atlanta floods. We could have gotten information out – make folks more knowledgeable. The GA WSC is working diligently to do this.

Scott Horvath – Karen and Brian make good points. Scott commented that people want instant feedback. If we are putting USGS out there to provide information to the public, then we need to expect to be available to respond quickly. Questions are asked any time of the day – cannot predict when an emergency situation will occur. Scott commented that social media is unique from a standard web site because it is a customer service opportunity. Three staff initially monitored USGS Twitter – rotated shifts... We now have 10 people running the account – rotate SILS staff daily and the original initial staff help on a weekly basis. Scott noted that it is important to think strategically about how you will manage the tool and resources required. You need to know where to find the expertise to respond to a customer. Scott noted the USGS FaceBook (FB) page – the nature of FB lends itself to longer discussions. You need to have a strategy in place before you start the account. Scott encourages setting up social media accounts, but be aware of the need for a plan, and think about what the public wants to see.

Q: A scientist presents a poster – the data must be approved, but yet, non-scientists can post unfiltered information using social media tools. This seems to be a broken aspect.

R: Scott responded that USGS reports go through an approval process – when announcing a report, we are posting what is already public information.

Katherine Lins asked if there are repercussions if someone is incorrect. Scott responded that there are guidelines for use of social media. If you're using social media in any capacity, knowing you are a USGS employee, use your common sense. Do not post information that is not already public.

Scott commented that the poster can modify the language that is coming in - use "preliminary" ex. earthquake – added text to indicate that the information may have changed. Check the website that it provided. The information needs to be labeled such that it is preliminary.

Brian commented that his Center is not going to have a student (for example) put out Twitter messages. They will have a knowledgeable person respond. Brian commented that this is no different than responding to email or a phone message with Scott saying that this is a good point. You need to have an experienced person sharing the information. As USGS employees, we need to put ourselves across as professional. Know what you are sharing. You will not get this from an intern.

Do not say the river is going to rise x feet in an hour – this is forecasting and not our job.

Scott commented that there is a process for vetting Ambassadors for FB.

FB will get those who have “friended” the page. Twitter can “go viral”

The potential for discovery of information is greater on Twitter

Twitter – have an archive of what was sent out. Speaking directly to a reporter – can lead to being misquoted.

Katherine expressed concern that sending out a link via social media tools has the potential to grind networks to a halt – due to current bandwidth issues. The plan is just not a people plan, but a network plan as well. Scott agreed and noted that during an emergency situation, there will be more traffic than normal. This is part of the plan. There are mechanisms to help with server issues.

Scott commented on USGS Live account. This is used for live tweeting when something is happening; for example, a town hall meeting for flood, press conference. Used when Live commentary is happening. A dedicated person will tweet as the event is happening. Think ahead of time about the kinds of things you want to share.

Bob Lent commented that this has been a great discussion, and he would like to address the potential of there being a role for ITAC.

Bob Swanson commented on Corps of Engineers use of social media. There is power in figuring out how to use these tools. There will always be flooding.

Bob Lent commented that people want our information all the time, not just during times of emergency response.

Brian McCallum commented that citizen science is becoming important. Social media tools may be an important mechanism by which we gather qualitative information from citizens. Brian suggests that this may be a way for ITAC to become involved.

Katherine commented that there is a need for identifying a process that can be “turned on” during a time of emergency.

Swanson noted that the Corps was sending out our data... they became focus of media. Is this what we want? We need to get our brand name out there.

Scott commented that yes, getting our brand out is important, but he emphasizes that we must be prepared to respond. Scott agreed that the group needs a process. Look at social media as part of the process – integrated with how we do business. Currently developing a process for how we deal with an event prior to, during, and after it happens. Look at the complete picture. Integrate it or it will always be an extra thing to do. Make it part of your business practices. Look at what can replace or more tightly integrate. Scott encourages working with him and his team – they do policy for the Bureau. Scott urges ITAC to work with his office.

Gregg Wiche noted that there is always great communication with Regional office. This isn't the case with other parts of USGS – Swanson noted. This has not been useful for Nebraska. Scott urged bob to work with the office to resolve these concerns – layout the problem and work with them to create a solution. Jump through the hoops a bit faster. This benefits all parties.

Scott commented that not everything needs to go up to HQ. Regions have the ability to approve certain things. If it's going to raise eyebrows, then send to HQ. Otherwise, they have templates to plug and play for news releases. Work with them... if problem reaching out, then talk to Scott who can forward to AB Wade. Not here to stop things from happening, just ensuring that there is strategic thought put into the effort.

Bob – is this something that ITAC should approach?

Lins – explore this more. Noted concerns are about the processes involved. This is internal. Woody Woodward can help address this. This part is out of ITAC's hands. ITAC – what can WSCs do to address the common need to interact with others. Perhaps interact with Storm Team. Katherine commented that there is no specific action right now. Katherine suggested talking to OSW and a handful of WSCs who use social media tools. We can discuss this at a later date.

Bob Lent added – identify WSCs using social media.

Effective if we can leverage multiple WSCs. The power is in keeping the issues in front of people. Keep them hot on the topic. How do we come at this in a coordinated effort?

Suggestion to have consistency with Twitter names (a naming convention)— do have USGS logo, but worth looking at – usgsnd, usgsco, usgsme, etc. Scott commented that this is part of developing strategy.

Scott commented that it wasn't that long ago that USGS was slated for cutting from government. We have worked hard to build USGS up, and we need to continue to re-enforce our brand.

Look at what cooperators and customers want.

Karen noted that we are the historic documenters – historic repository – for data.

Katherine commented that this is worth pursuing.

Bob commented that we can start trying to formulate a position for ITAC to take.

“Latest Developments in the Devils Lake Outlet Saga” -- Skip Vecchia

Looking at the 'why' of the changes – this happened when climate change was the big buzzword of the time

- Studied water balance closely – looking at snow+precip
- Noticed both more fall precipitation and more variability in fall precipitation.
- Had not seen documented change in other studies – first or early study showing this. Other more recent papers have also noticed a similar trend in fall precipitation in the Midwest.
- Still not certain if its climate change or natural variation. This is a phenomenon that is now well-documented across the Midwest
- Cause: position of jet stream. Higher incident of 'Colorado lows' causing more storms, more unstable weather
- 20% increase in precipitation causes 500% increase in inflow. Increased runoff as well as increased precipitation
- Recent report- these trends might continue for a while. Expect high inflows & high intakes for a long while to come.
- See from geologic evidence that over geologic time frames (5,000 years) this is not unusual
- Did modeling – seeing that there is good evidence for a shift between wet & dry periods that shift more or less at random. Is roughly 30 years wet & 120 years dry – 150 cycle, but the periods are not predictable or continuously one or the other.
- Recent – SIR 2011-5050

Outlet from West Bay –

- Very expensive outlet as planned by Corps. Never built; state went ahead with their own construction.
- Started with 100 cfs; got increased to 250 (+ relaxed QW standards for the Sheyenne)
- Looking at E Devils lake – want to build another 350 cfs outlet into Tolna Coulee.
- Resistance to lowering Stump Lake - QW issues - natural dam may erode eventually
- Corps is looking into building a control structure so that it will not erode catastrophically

QW issues

- Sulfate – Devils Lake levels similar to Sheyenne
- Stump Lake levels are much higher
- Can see why there is resistance to draining both to rivers
- Current model considered the two outlets & QW impacts.
- Ran at no outlet, baseline, 650 sulfate limit, and 750 sulfate limit
- At each simulation, still peaks, but the larger outlet has a much faster drawdown
- Still have a much more rapid drawdown when you use the more restrictive 650 sulfate restriction

Q: are there any sediment issues?

A: There are a lot of concerns about the sediment in the Sheyenne. DOT is concerned about bridges and structures downstream

- Corps has mentioned funding baseline area capacity table
- Looking at risks to houses, roads – talk about raising levels of roads when there's a 50% chance of overtopping.
- Also many roads working as levees/dikes when they weren't designed for that – looking at strengthening some of those roads so they could be ok as barriers
- People just want things done. They don't care about funding, agency. Just get it done.

Q: What is the possibility of this happening?

A: They think this is possible. Believe they'll be pumping water by next year. Pipes are ordered, being delivered. Getting it done – doing whatever it takes.

Q: What happens when it starts to go down again?

A: Gages will be way out of the water. Roads will be way up there.

“Web Site and Social Media Use of USGS Resources during Flooding” -- Karen Ryberg

Karen commented that she started doing web usage analysis when she started, and Greg has always been very supportive of the metrics. Karen combines the analog, WaterWatch, and NWIS Web logs and narrows down to ND as much as possible - throws out bots, internal use; combines like search terms. Looking at word clouds.

Comment – “level” is a groundwater term to many internal users, but for the public “level” means surface water.

Request/Recommendation for ITAC to create webmaster recommendations on terms that should be on search pages.

- flood pages need to have the word flood, the body of water
- webpages need to be discussing the rising floods before the falling ones

Karen showed combined graphs of web hits and gage levels.

Karen commented that the story is over before the flood is over – you have to have the news released before the peaks. Traffic is peaking early and dropping off fast

Red River webcam –

- One of the most popular features on the pages, with lots of feedback and news etc.
- Located next to a monument showing peaks; gives people a easy frame of reference for understanding the image

Fargo webcam is not as popular

- The Fargo gage is more used, but the webcam doesn't have a frame of reference for people to see what it is
- When it's high, it just looks like a lake, so the webcam isn't used as much as the Red River webcam

ND trends

- Bing is rising trend
- Getting more city, and county government traffic
- Seeing more mobile traffic – Blackberries, Verizon (cell phones, wireless cards)
- Seeing more traffic from FaceBook and Twitter

YouTube analytics – they don't give you numbers until you reach a certain amount of traffic

Video 1 - Looking at video and then a graphic... while the graph is very popular on the website, you can see that the traffic drops off for the YouTube viewers.

Video 2 – showed a lot of interest in this ice flow video.

Insight into when they would get an invitation to enable video sharing is related to the demographics of the viewership. Can't use it, but it's an indicator of the interest in the video.

Saw that there was increased viewership when the video was embedded on the flood tracking page.

Karen pointed out that you can also embed Twitter posts on your website to keep the content fresh.

FaceBook -

Pete – cooperators requested a FaceBook page for technical support. Created MyUSGS and SharePoint sites; these were not well received.

Karen uses the Multimedia Gallery a lot. This is good because it forces documentation (date, keyword, location .. not geolocation (lat/Ing)). Easy to embed

Q: Do these tools bring traffic to the website?

R: Twitter – very difficult to determine, YouTube – They always put in a whole lot of documentation with the video. Generally less than 1 hit per day, Press Releases – shows that there's not much impact, particularly after the event.

Shows that a “clever” title had the least impact. Looks at the press release – breaks a whole lot of usability guidelines. Shows that the press releases are still being written for the print world.

NOAA does good press releases. Pictures, main link in the first sentence, bulleted list

Science picks – they’re not very flexible for titles, words – Very important to put the information in the language of the people who are reading it. OC wasn’t impressed with that argument.

Karen ended with her QR code, noting that QR codes are being used currently. We should use them too.

Day 2 – September 28, 2011

GIS Training Plans (David McCulloch)

David began his talk by giving kudos to Ramona for her help with the setup of GIS training.

David commented that there is trouble with data preparation due to inadequate training. David came up with a 3-day set of seminars with off-line exercises. Suggestion for ITAC to sponsor this training. There would be minimal involvement for ITAC other than setup logistics.

Bob Lent asked if this would be part of our regular webinar series or if this is separate? David commented that there is no schedule currently.

- Terri asked if Jennifer Sieverling will be involved.
- Katherine feels that the need for this is past due. Katherine feels this should not be part of our webinar series, but should be a structured course.
- Terri asked if the training would be videoed. David commented that previously, he tried to do a class by video, however, the bandwidth was bad and it was unsuccessful.
- A suggestion was made to do the training as a virtual classroom, podcast, etc...

There are a lot of people using GIS. GIS HELP answers a lot of very basic questions – ones that a GIS specialist should not have to ask. Katherine commented that not sure what is involved to set this up, but she would like ITAC to take ownership of the training. Katherine suggested advertising the training to WSCs, and see if other parts of the bureau show interest. Document the needs expressed.

ACTION: Set up a GIS training class and determine the need within USGS for such training. Develop a curriculum for ITAC review and comments.

OWI Special Projects -- Gary Fisher

Gary discussed OWI special projects – accomplishments, challenges

- SIMS – <http://sims.water.usgs.gov>
 - o Accomplishments – records management functions provide status and tracking, revisions tracking, real-time operations (PASS)
 - o Gary identified the team members
- Site Management Advisory Committee (SMAC)
 - o Role is to provide guidance to SIMS Project Team
 - o SMAC – SIMS ADR team meeting – did a cyber seminar kickoff for the SMAC team
 - o Next challenge is to get a call together with SMAC – get the process rolling.
 - o Gary reviewed who is on the team
 - o Challenges – these take time – complete in winter due to Spring Data Conference
 - Annual user survey
 - Chair and SIMS leads attend the National Data Conference
 - Next big item is to get SMAC rolling
 - o FY2012 Plans –
 - *Images* - One of the biggest items for the year is images and how we handle them. There is currently no national solution. Shaun Wicklein has had a long-term interest in how to handle photos. A solution will involve working with ITAC – ex. working on resolving Picasa – to help identify possible solutions.

- *Element data service* - SIMS interfaces with many other applications – ie., Streamstats, SWAMI, mostly in the form of site information. The goal is to develop a data service for pulling this information “on the fly.” A subset is to analyze elements – look at how people use the information. Over time, it would be good to get consistency on how things are said across WSCs.
 - *Reports for managers* -- useful because the reports help determine funding and other needs. Goal is to streamline this process.
- Annual Data Report (ADR) –
 - o There are large gaps for water year 2010 – New York has not posted site data sheets, Massachusetts and Rhode Island are behind.
 - Katherine asked that with continuous record being mandated, will this change? Gary responded, yes, some Centers have lost a lot of staff. Hoping this turns around. Can refer to the SIMS page – data and time stamped to see status. Katherine commented that this is a page that the REXs can see, but are they using this tool? This would allow them to see what the status is and determine what the issues are for a specific WSC. Gary suggested a reminder once a year from AD Water may help.
 - Communication of tools to managers – maybe need a dashboard of tools to help. Suggestion heard for ADR team to send out Quarterly – make them aware of status. Bob Lent commented on the concern for REXs to determine the priority – maybe they do not know the importance.
 - Katherine commented that she can bring this to Bill Werkheiser's attention at staff meeting.
 - Bob Lent commented that we want to support offices, but not enable them.
 - Katherine noted that a memo coming out that states once data are published in NWISWeb, they are published – they are now a digital product.
 - Moving away from the belief that we need to have a citeable page-like sheet. Looking for cost savings by not having an ADR. Katherine suggested that sensitivities need to be raised.
 - Katherine suggested taking this to Bill Werkheiser with the suggestion that this be a performance standard. If this is important for Water – then Bill can ask for it.
 - o Accomplishments:
 - 25,000 site data sheets each year
 - Operations are very smooth, and scripts have been upgraded for Word 2010
 - Can accommodate an early start for 2011 report
 - Preparing for biological data
 - o Challenges:
 - Word 2010 is required for the 2011 report – otherwise two sets of scripts would need to be supported
 - Implementation of biological data – Office of Water Quality is going to help with this
 - Interim ADF Advisory Committee – determine the need for an ADR
 - Members: Linda Debrewer (OGW), Jim Kolva (OSW), Yvonne Stoker (OWQ), Gary Fisher (OWI), Pam Breton (WSC)
 - o Decisions needed:
 - Future of the ADR
 - Enhancements to ADR (ex. New York hydrographs)
- Field Computing (FCIS) – waiting for the outcome of the report
 - o <http://www.rustla.er.usgs.gov/fcis/>
 - o Review of the FCIS Team
 - o Accomplishments:
 - Project plan submitted to ITAC – waiting on ITAC recommendations
 - Training cyberseminars – November to December
 - o Challenges:
 - Developer conference call in October to analyze future requirements
 - April-June - Annual Data Conference training
- WaterAlert
 - o Biggest issue is longevity. David McCullcok and Gary have talked about whether this functionality can be integrated to NWISWeb. Doing exploratory work – work with programmers, Robert Mason, etc...
 - o Accomplishments:
 - 29,000 active subscriptions
 - o Challenges:

- Keep to the charter and avoid mission creep - keep the product at base level and grow it as we are able to grow it
- NWIS Users Group (NWUG)
 - o The group met in Tacoma last week
 - o Accomplishments:
 - Search by geography is now available in NWIS Mapper application
 - Groundwater service is being added (approved by the steering committee)
 - o Challenges:
 - Need to revamp the help and troubleshooting web pages
 - Develop new web services in the future (site, daily values, instantaneous data)
 - o Gary reviewed the team members and noted that there is a vacancy to be filled. The NRP was approached in July, but has not yet responded. Mark Farmer is filling in for Joe Kalfsbeek while Joe works on CARP
 - o FY 2011 Project Accomplishments
 - Site service, daily values service, integrate instantaneous values service, site mapper
 - Real-time graph linked to WaterAlert
 - Add statement of revisions history
 - Approval status included for instantaneous values
 - Groundwater discrete and continuous values can be viewed together on graphs and in tables
 - Challenge is to keep momentum and aim for the future
 - Webservices have increased our growth – increased number of page requests
 - o Plans for FY 2012
 - Groundwater web service
 - Redesign help system
 - Update tutorials
 - Google Analytics
 - Cyberseminar – January 2012 - ITAC may want to consider sponsoring
 - Improve testing of webservices
 - Add social media links
 - o Recommendations for FY 2013
 - Water quality web service
 - Mobile NWISWeb – will work on a tablet, will need to pick and choose what is seen
 - Plot multiple sites/parameters
 - Serve all IV-POR

eFTP Discussion – Melna Jones

Melna gave a brief overview of the history of eFTP services noting that there was a DOI mandate to shut down FTP servers – USGS had over 200 ftp servers at the time.

TSS owns this enterprise service – Linux servers for internal and public; 1 FTE manages the service in the Denver office.

Proposed solutions were taken to the Customer Advisory Board (CAB). It has been suggested to look into cloud services.

Problems presented by users:

- Lack of ownership
- eFTP is an Enterprise service
- Changes are not communicated to customers
- System is not redundant
- Storage becomes an issue – some use the servers to store large datasets. As data sets become larger and larger they consume valuable space. Not meant to be a storage system.

Possible actions –

- Move service to another team – this would result in disruption of services
- Move service to DOI – eFTP was to be an interim solution, not long-term
- Repurpose for mission critical service – this is not cost prohibitive – would cost approximately 25-30 K for this and would involve rebuilding and redesigning. Would involve building a backup site – to build in redundancy. Get away from Denver network in case of disaster. This would take time and resources to do. Not an immediate solution.

Boyce asked if giving the function back to WSCs is an option. Let ESN earn money maintaining firewall. If there were security guidance, centers would have more ownership and management. Melna commented that she does not know if

this is an option. She would need to talk to security. Melna commented that we are trying to keep e-FTP under the radar as it is not sanctioned by DOI. **ACTION:** Melna will ask if this is an option, however, we still need to have an enterprise solution – though Water may be able to do this, others may not.

Suggested action is to move to cloud services.

- Advantages
 - o Use resources that already exist
 - o Dedicated technical support from a 3rd party vendor
 - o Supports an unlimited number of users
 - o Redundant
- Disadvantages
 - o Cost of data transmission
 - o Vendors prefer to invoice each client. Terri expressed concern over this.

Melna commented that this is still in the exploratory phase – they are hoping to find a solution that fits for USGS.

Boyce emphasized that this issue sets precedence for other enterprise services. It is difficult to explain that eFTP services are down to cooperators who depend on our data. e-FTP is important for communication. Bob Swanson commented that WSCs consider e-FTP to be a basic function and they did not expect to have to pay for it.

Melna commented that they are trying to find others with a different cost model. We are not trying to push a cost back down to the WSCs.

ITAC glad to participate in a review if this would help. ITAC is interested in keeping up with this issue.

Bob Swanson asked that at \$.50 per transmission, do you pay for transmission both ways? James Sayer commented that it depends on the vendor, so cooperator may have to pay.

There are other solutions – consider Rex Sanders' solution (SOAP)

James commented the solution should be about file transfer, not file storage.

James noted other less well-known solutions --- SharePoint – if less than 1 GB; less than 2 GB, MyUSGS; larger than 2 GB, SOAP

Terri asked if Rex Sanders' solution is available? James commented that Rex has opened it up, but he gives priority to Marine geologists. James continued that there is potential to expand SOAP by adding nodes to the network. This could become a real enterprise solution. Rex is looking for people to use it to get feedback on use and performance.

Bob Swanson noted that EROS is also looking for people who want them to host their data

Katherine expressed concern that MyUSGS and SharePoint are the same thing. What advice do we give WSCs? When should they use SharePoint versus MyUSGS? This needs to be clarified.

Status to date:

- Analyzing cloud for CAB
- Reviewing software solutions for storage and data transfer
- CAB review October 5, decision by EOM

James Sayer commented that another solution may be the use of https – a multi-threaded model. A lot of vendors offer this. Would anyone have heartburn to modifying scripts to a different protocol – https instead of ftp? James asked if ITAC can take this back to their constituents and provide feedback to James and Melna. This may also require cooperators to change their protocols as well.

Comment was made that if this provides stability, then it is a good thing. This may also provide an opportunity to do cleanup.

Terri requested that James to email her comments he receives.

Gage Funding Program – Brian Reece

Brian gave a demo of the Texas WSC web site where gage funding program information is maintained.

- Cooperator Station Funding System -- <http://tx.cr.usgs.gov/funding/> - tools available to make the process easier
- There is a lot of payoff in the long run not having to go to admin to get information
 - o Master list of customers and contacts
 - o Master list of agreements
 - o Congressional maps (for theme) in minutes
 - o Data calls – especially Cooperative Water Program and NSIP tracking
 - o Program analysis and consistency
- Other centers have expressed an interest in using this system and would like Brian's help.
- Challenges
 - o A lot of cleanup to do
 - o “handshake” factor
 - o Admin and data program “stovepipes”
 - o Change “I have my spreadsheet (until I retire)” mentality
- Implementations underway / lessons learned
 - o GA, CA, NV, CO interested in using this system
 - o Analyze what “system” WSCs are using
 - o Identify weaknesses in admin / data stovepipes
 - o Buy-in from field chiefs
 - o Acknowledge it is a 2-year process – duplication of work in years 1 and 2

Q: Woody – I am hearing from Bob Johnson about the Corps reducing funding for gages in Texas. This is a good tool to show these losses in funding – a great way to visually see what local cooperators would be most impacted.

R: Yes, Brian noted that earlier in the year they had 70+ gages threatened and are now down to 15.

Q: Katherine asked who this has been presented to.

R: Brian responded “anyone who will listen.” It has been presented to Robert Mason – Robert thinks this is what is needed at HQ. Brian has also met with Pixie Hamilton, Terry Schertz and Stan Skrobialowski.

Q: Is this a public site?

R: No, do not want cooperators to see who gets what money.

Q: What was Pixie's take on this?

R: Need to get Jerad Bales on board – bridge the divides between discipline offices; also get Mike Norris' attention. This is a great tool for data calls.

Q: Katherine asked about having this on water senior staff.

R: Pixie suggested working through Jerad.

Q: Katherine – in looking for national support; funding, is there a sense that Pixie may fund this effort?

R: Brian cannot say for sure... need to generate momentum and get offices on board.

Katherine thinks this is good to have on agenda at Senior Staff. If this is worth doing, then get funding. Katherine commented that OWI may be able to help with servers and set up, but not funding.

Brian commented that the servers are in place – infrastructure and code are in place. Need to get others to see that it takes a little investment to get something out of it.

What is needed?

- National coordination – look for commonalities between WSCs
- Admin participation – local, water mission area, and FBMS-level
 - o Brian asked if there are suggestions for admin help – Katherine suggested discussion with Dan Cavanaugh and Gene Summerhill.
- Programmers and database developers
- Implementers – onsite implementation visit (at WSC expense) to jumpstart the process

Katherine would like to talk to Pixie and Robert Mason and also suggested doing a briefing for Senior Staff (January) as well as a webinar.

Brian provided the following summary of his presentation.

I've shown several individuals our Texas gage funding application (<http://tx.cr.usgs.gov/funding/>), and also demonstrated it at several WSCs I've visited. Other centers have expressed interest. GA, CO, NV, and CA are underway

This work could have national applicability. Many national questions (what NSIP gages are funded, what gages have USGS Coop applied, where are water quality samples proposed to be taken, etc.) could be quickly answered without data calls to the centers, and folks in the centers can be working in a consistent, more organized fashion rather than managing countless spreadsheets of information. Additionally, contact information can be easily obtained / maintained, icons and urls for cooperators can be compiled, and even local applications related to gages funded by a particular cooperator (USACE for example) could be quickly developed.

Thanks in advance for considering this topic for the next ITAC agenda. I would like to present this application and discuss lessons learned already from attempting to get this going in several WSCs and hear any ITAC ideas for future directions.

Some quick examples.

The main page, which automatically shows our "master list of customers", which can show just customers with sites, with active agreements, and / or all customers in our system regardless of current agreement or not.

<http://tx.cr.usgs.gov/funding/>

Texas and Nevada "NASCAR" gages where cooperator credits for these gages and all approximately 900 other real-time gages in the two states are objectively updated automatically in less than 5 minutes as needed.

http://nwis.waterdata.usgs.gov/nwis/uv/?site_no=08049500 (Texas)

http://nwis.waterdata.usgs.gov/nwis/uv/?site_no=10301500 (Nevada)

Funding details (internal only) for the TX "NASCAR" gage as seen on NWISWeb and an example agreement and cooperator overview page with one of the cooperators (City of Fort Worth)

http://tx.cr.usgs.gov/funding/sites.aspx?site_no=08049500

http://tx.cr.usgs.gov/funding/agreement.aspx?agmt_id=397

http://tx.cr.usgs.gov/funding/customer.aspx?cust_id=88

Distribution of gages funded with 2010 NSIP funding to TX WSC (note there is a tabular or map-based option)

http://tx.cr.usgs.gov/funding/agreement.aspx?agmt_id=743

Day 3– September 29, 2011

Hand Held Computing Strategic Planning -- Review 2006-2012 - Bob Swanson (Michael Lewis, by phone)

Bob Swanson thanked the team for their hard work with Katherine commenting that the team did a lot in a short period of time.

Team Members – Bob Swanson, Steve Robinson, Nelson Williams, Michael Lewis, Cameron Marshall, David McCulloch, Myron Brooks, Kevin Housel, James Cornwall

- Representation – WSC Director, Chair (1), Office of Water Information (1), National Water Information System (1), Water Value Engineering Team Member (1), WSC Systems Administrator (1), WSC Data Chief (2), Field Users (2)

Bob gave an overview of the quick timeline for the review process and walked the group through the report. A final copy will be provided to be posted on the SharePoint site.

Survey observations indicate that there is a desire for field software to be compatible across different platforms, and field personnel would prefer to use tablets, notebooks, and smart phones. They want to move away from the use of laptops and PDAs.

Long terms benefits:

- Savings in field and office times for individual visits are small, but cumulatively significant
- Increased completed data fields in NWIS
- Easier retrieval of archived hydrologic data
- Reduced database administrator costs
- Complete archival and storage of data

Recommendations include:

- Rethink current application development strategy.

- FCIS Unit should have independent oversight from a steering committee – NWIS ownership, budgeting, configuration management and versioning, user testing, review of documentation, review and update for FCIS Web pages.
- Increase investment in FCIS
- Evaluate use of commercial vendors
- Support existing applications
- Perform future user testing over Enterprise Services Network from a field office to a remote NWIS server
- More hands-on training and “train the trainers”
- Inform WSC leaders of cost savings potentials
- Integrate best features of all mobile apps into SVMobile
- Incorporate SVMobile into CARP requirements

Questions and comments from phone participants –

Michael Lewis noted that Bob correctly described the potential cost savings. These pale in comparison to the savings from automated records. It is important to realize that field computing is the necessary front end for records automation. This will pay off in the long run. This is where we are headed with the adoption of SMART.

Nelson Williams added that he went through an exercise to see how much time is saved. Techs noted that there is an improvement in the data – in the number of data points entered and with the quality of the data being entered.

Katherine asked that if we continue with SVMobile, is this different than multi-tier? Can these be combined? Bob Swanson responded that he can check on this.

Gary Fisher commented that the real benefit is in the quality of the data.

David McCulloch commented that SVMobile represents a transition period. Improve/enhance what we have during this transition.

Comment was made that it is costly to get smart phones for staff. Bob Lent noted that we need to consider maintenance and support of devices in addition to the cost of getting the devices.

Bob Lent commended the group on a job well done, noting that hopefully this will give Katherine some direction.

Question about CARP. Joe responded, we want the best system that can grow over time; don't want something that is difficult to grow and maintain. No system will be exactly what we want from the get-go. Planning on a 1-year implementation period from when the vendor is selected. Build in absolute minimum and continue to add on as we move forward. Open to doing anything with field computing that is wanted – this can be put into our requirements. Joe embraced the idea of incorporating field computing.

Bob Swanson commented that the FCIS group should be included in these discussions.

Which tablets that have been tested? Kevin Housel responded by email.

- Here are the three tablets/slates that WI-WSC have tested. The best one we have found is the Acer-Iconia, it's a very good tablet which can be imaged for better enterprise use, supports smartcards. If you have any questions about our testing or this device, please let Kevin know.
 - o <http://store.shopfujitsu.com/fpc/Ecommerce/buildseriesbean.do?series=Q550>
 - o http://www.amazon.com/10-2-Windows-Tablet-PC-Processor/dp/B004D6R9T2/ref=cm_cr_pr_product_top
 - o http://www.amazon.com/Acer-Iconia-W500-BZ467-10-1-Inch-Tablet/dp/B004SBI2PW/ref=pd_cp_pc_2
 - o http://www.amazon.com/HP-Slate-500-8-9-Black/dp/tech-data/B00465QM6Q/ref=de_a_smttd

CARP - Joe Nielsen

Joe noted that he wants to emphasize that we need to use caution in what we say and don't say due to contracting procedures. Communications can then be more traditional in nature once a vendor has been selected.

A formal announcement will be made once the CARP charter has been approved by Bill Werkheiser.

3 surveys that will follow the initial announcement – 2 on website –

- Survey for those who have an interest in working on the project for the life of the project.
- Survey on who uses ADAPs data; the needs fit hand-and-glove with NWISWeb
- Survey on user satisfaction. This will be part of the metric to determine success over time
-

Current status – We are nearing completion of the first draft of RFP. Documents have been put together and sent to a select group for review. Once the reviews are back and comments incorporated, we will begin working with contracting officer in mid-October to get the RFP out. Goal is to have the RFP released in December for a 90-day period – want to provide vendors an opportunity to flesh out their proposals.

The group is working on a plan for the entire project. Team is scheduled to meet in October to discuss the project. Much will remain nebulous until we have a vendor.

Challenges:

- Money – there is no budget for 2012. The group is working on assurance from Bill Werkheiser that this is important.
- This is new for Water especially with the NWIS process

CARP URL (Not Official – please do not share) -

<https://collaboration.usgs.gov/project/carp/usgs/SitePages/Home.aspx>

Streamview – Katherine Lins, Sandy Williamson and Jared Criscuolo (by phone)

Sandy is the interface between USGS and Jared Criscuolo of Below the Surface

Jared noted that USGS and Below the Surface are working on putting together a collaborative effort. (USGS, Surfrider, and The Nature Conservancy) – The Riverview Project

- The concept is to visualize rivers in a different way
- “Navigate” from source to sea on your own
- Allows viewer to see changes in the river, surrounding areas

Jared Criscuolo gave the group a demo of the River View pilot on an Alaskan stream.

- Sandy noted that we want to be limited in sharing the website - riverviewproject.org – Please do not send this out yet... working on a news release.
- Katherine urged folks not to share the URL until the formal press release comes out. Jared commented that this will be in a week or 2.
- Jared will send the news release to Sandy, and Sandy will forward to ITAC.

Jared provided his contact information - Jared Criscuolo jared@belowthesurface.org , 203-887-3272

Discussion and Questions:

Kate Flynn asked if the issue of people being identifiable is being addressed. Jared responded that yes, that information will be censored out. No PII will be on-line.

Jared commented that they are developing a relationship with Google Oceans contact – hopeful to integrate with Google Earth

Katherine asked Jared to comment on work with USGS WSCs –

- Sandy responded that the partnership may work. Jared is assembling camera, web site where data is hosted, and training camera; USGS contribution – approach cooperator to say we can show your favorite site upstream x miles. Sandy commented that our offices have the equipment and experience to be the platform for the camera for any state. Sandy can envision this being similar to StreamStats – funded by individual interest base, not nationally. Sandy asked for comments.
 - o Bob Lent commented that this opens up a new cooperator base for USGS. There are a lot of reasons to want this other than just scientific. Good for areas where better flood documentation is wanted. There is

a lot of potential application.

- o Sandy commented that photos are an integration thing. Everyone likes to see a photo of where they are. The set of pictures along streams becomes an integrating force for those interested in a stretch of river.

Jared commented that The Nature Conservancy has the goal of acquiring 30,000 acres of land on the Sacramento River –they are setting a historical baseline. Provides a benchmark of how the site was at a given point in time.

Bob Lent commented that USGS brings to the table a huge library of photographs, and suggested that it would be good to hold a spot for future development to mine some of the historic data – ex. Kinnebec River flood. Not only set a perspective for the future. Sandy commented that Jared has other cooperators interested in that part – these are parallel activities.

Sandy noted that the Biodata team is working on documenting historic photos, but progress is slow.

Jared and his partner have met with people from Scripps Research Institute (<http://www.scripps.edu/>), and they are excited about such a project. Jared and his partner are hoping to bring them into the conversation.

Katherine commented that within USGS we have a visual dataset of rivers – National Hydrography Dataset (NHD) – give stream addresses that could prove to be useful. Also, we have cameras at a number of our gages – might you be interested in showing some of our real-time cameras? Jared responded that they would like to use the cameras – would love to integrate the data that comes from these into this project. Katherine commented that David Yancey would be a good person to work with.

Katherine noted that we have agreement to work together and share knowledge and data. Sandy mentioned WSCs may want to consider incorporating this into their cooperative efforts. WSCs can run with it, but there is no formal agreement to facilitate funding.

Jared commented that the goal now is to get contacts in the WSCs – working with his partner to determine funding. Plans are to do the Colorado next year. Circle back to the Sacramento, etc... Will be determined partly by where there is interest.

Jared commented that he and his partner have a large following. They won the Outside magazine's Reader of the Year Award – there will be an article in December – will be able to blog to an audience of 675,000 people. Increase interest with the general public and outdoor enthusiasts.

Kate commented that USGS is sensitive about safety in the water. We are not supposed to show people in water that are not wearing personal floatation devices (pfd's). This could become an issue. Brief discussion of how this could be handled with the suggestion to have the cameraman pan up so as not to include people in the photos. Jared will make note of this.

Katherine asked if Jared and Sandy would like to brief the NHD program at USGS or EPA. Sandy and Jared both expressed interest in this. Sandy noted that Jeff Simley was on an initial call. **ACTION:** Katherine will see if the NHD (USGS/EPA) would like to have a River View briefing from Sandy and Jerad at their upcoming meeting.

Bob Lent noted that we have ideas for the future. Bob asked if ITAC is comfortable with this approach, and what does Jared see as USGS' role to help facilitate the project. Jared commented that the business model is in place except for funding. Jared asked if USGS is aware of grants, etc... local level or beyond, looking for this type of information. Help with getting conversations going with WSCs would also help.

- Bob Swanson commented that there are a couple of potential opportunities. Jared noted that it is okay to share the website and his contact information with these types of contact.

Katherine commented that this solves a problem USGS has for getting our info to Google Earth. Because we are entering into a cooperative agreement, we need to ensure that the site will be available. Jared commented that they are working w/ IBM and have been working with Google for a year to address these issues as well as storage issues.

Katherine commented that having a collaborative partnership with a hosting non-profit may get us around the issue of DOI data on public sites. This provides a potential advantage.

Mainstreaming OWI special projects (Strategic planning for Special Projects)

Bob Lent opened the discussion by commenting that OWI is a good place to fund short-term projects. Katherine responded that OWI came into this role when Bob Hirsch was AD Water.

Bob Lent commented that we mix and match “program” and “project” too much. We need to discriminate more closely between projects and programs – they are uniquely different. Katherine added that we need to set bounds for those projects we do take on. Katherine would like to know to what degree a program manager should be involved.

Q: Should the technical offices be on board early if they are going to be the managers of these?

R: Katherine referred to WaterAlert – OWI/OSW – OSW is taking a strong interest, but the effort does involve an OWI staff member. This is a great idea, but how do we manage it? Correct, we should not just drop a project on a discipline office.

- Bob Lent responded that if we are developing something that is of primary interest to SW, and it's not important to them, then drop the project. OWI is accumulating burden. The function of OWI should be to plant seeds, grow them and determine if the tools are effective. If not, then drop them.
- ITAC is one of the last best places to deal with these types of issues. Bridge national and local levels.
- Identifying a decision making process is important
 - o When a project is started, need to identify it as a development effort and keep from committing to full funding. Once an idea is proven successful, come up with a plan to move the idea forward. WaterAlert is a good example of what we don't want to do in the future.
 - o SIMS is another example – OWI provides funding.

Bob Lent suggested next steps may be to begin the process of writing a short document about procedures for handling short term projects. Identifying the role of ITAC is important. What is our goal?

- For example: new projects should work with area / partner where there is long-term funding available
- Transition out of OWI funding

Katherine commented that we need to state how ITAC is going to function as an advisory committee for projects that will be developed for long-term maintenance. ITAC can also help determine if a project is cross-discipline.

ACTION: Come up with a short document that details ITAC's role in handling short term projects. Review goals on a yearly basis.

ITAC Communication Strategy

Terri commented that ITAC members are supposed to be sending minutes from face-to-face meetings to their constituents. This has not been done in a while.

Proposed plan is for Kim to send the minutes to all members. Kim can make changes/updates. Bob Swanson will send out to all WSC Directors until end of his term. Bob Lent or Katherine will announce availability of the minutes. There was a brief discussion around the table about what email aliases still exist. Comments around the room indicate that it is difficult to identify correct email aliases.

ACTION: Ramona will compile constituent email aliases and post these to the ITAC SharePoint site.

Terri commented that in the past, the agenda was sent out to constituents prior to a meeting - announce the meeting and ask if there are questions/issues to address.

Bob commented that, at a minimum, WSC Directors, section chiefs, data chiefs, and database administrators – should be sending the minutes or a summary to their constituents.

Bob Swanson suggested setting up a text file for these areas on the SharePoint site – direct successors to these files.

ACTION for meeting minutes (long-term) - Kim will add a reminder to send agenda, minutes, other important information to constituents when sending out meeting reminders.

Terri suggested that we compile questions prior to the meeting and try to get answers early on. Terri volunteered to be the contact for compiling questions ahead of meetings.

Katherine commented that we may have better Town Hall attendance if we have questions and answers ahead of time to forward to the WSC hosting the meeting..

Katherine also suggested that we give Senior Staff periodic ITAC briefings.

The goal is to:

- Reinvigorate the old way of communicating with constituents.
- Look for better ways to communicate using new technologies

Navigating ITAC Sharepoint Website – Ramona Traynor

Ramona began by giving a brief demo of the SharePoint site to the group noting updates that have been made since the last meeting. Ramona asked if we can now disband the HTML version of the ITAC site. If not, then we need to identify the parts of the web site that should be maintained

Ramona commented that we will continue to work on organizing the site. In using the SharePoint site, members can help us identify what may be missing or where navigation is confusing. What works? What should we change?

Suggestions to ITAC:

- Set an alert for face-to-face meetings. A notification will be sent when content is updated.
- Members can enter their own itinerary information.

Ramona also noted that we are looking for ideas on what information to get when an agenda topic is clicked. Should we link to PowerPoint presentations? Hearing comments in the room that this is a good idea.

Ramona also mentioned to the group that this is still ITAC only – what parts should remain ITAC only and do we have a public landing page. If so, what content do we put on this page?

Bob Swanson suggested having a link to the minutes to reference – editing back and forth keep internal – suggestion to have draft and final minutes

A suggestion was made to move historic minutes to SP over time.

ACTION – Use the SharePoint site, and send feedback to David, Ramona, and Kim

Webinar planning – Ramona and All ITAC

Ramona reviewed the process of webinar planning for the group. Ramona commented that plans have typically been based on discussion around the table on ITAC calls – identify potential topic, presenter, and dates and then set up the WebEx sessions.

Bob asked Katherine if she has received feedback on whether the webinars are beneficial. Katherine commented that she has been approached by people asking “would ITAC like to do a webinar on...” As a whole, the group feels that these are well attended and well appreciated.

Bob Lent commented that the webinars are a valuable tool.

Suggestions to increase attendees:

- Add an “announcement” to the minutes with upcoming webinars.
- Members forward webinar announcements in their offices.
- Future webinars do not always need to be instructional, can be informative.

Current schedule:

- Tim Lee is ready to do the network webinar – last week of October or first week of November
 - o Terri commented that Tim is looking for someone to host for him – Ramona can do this
 - o Terri will get a blurb from Tim and send it to Ramona
- Other planned webinars:
 - o SIMS interface – Gary Fisher – January
 - o Database Administrators (DBA) have been asking for an appendix or workshop to extend from NWIS DBA class – having a difficult time moving around in WebEx

- Bring in high end DBAs or SAs
 - Susan noted DBA SharePoint site
- o Stream View / Geotagging photos – February timeframe – get other WSCs involved.
- o Macs
- o Katherine suggested maybe Brian Reece might want to present on the gage funding project he is working on – show to Pixie, Dan Cavanaugh – we can help with that.

Review of 2011 Goals and Previous Action Items

ITAC discussed the current Goals document.

- Goal One
 - o Q: Should all five committees be on the list? R: All are active.
 - o Q: Are there committees we should add? R: SMAC, Mobile Applications Development Group, NWUG
 - o Bob Lent also suggested that ITAC develop a list of groups we want to keep in contact with
 - o Suggestion was made to invite chairs of TSTs to the Town Hall meetings to help facilitate discussions and respond to questions. Katherine like this idea but noted we need to make sure we have questions ahead of time so as not to waste the chairs' time.
 - o 1 B – Change number four
- Goal Two
 - o Remove both bullets
 - o Gary Fisher to look at this goal and comment
 - o This is a good place for Special Projects

Rewrite Goal two bullets. Bullets should reflect discussion, evaluate the role of ITAC in facilitating these programs. Identify new technologies and ways to transfer this technology to other parts of Water

- Goal Three
 - o Bullet 1
 - How do we measure how successful we are with this?
 - Replace AD with e-FTP
 - Add IT Transformation
 - o Bullet 2 is complete

ACTION: Kim will send out Goals document to ITAC for review. **DONE – Sent with meeting reminder.**

Spend time on goals in more detail on later call.

Review of Town Hall Meeting

AI from Town Hall –

- Check on reimbursement for cell phones
- Access cards

ITAC Action Items (AI) - new from meeting

- David McCulloch to develop a syllabus for GIS training.
- Social Media – David Boldt – Water interested, but do not have a handle on what data or when to post. David wants guidance
- Senior Staff agenda – Gage Funding Program, Stream View, Hand-Held Computing
- Field Computing plan – before Katherine takes it further, ITAC needs to review and share comments/concerns.
- Incorporation of CARP into NWIS – Susan will review
- Cloud Hosting/ Stream View – present to Senior Staff and host a webinar – January timeframe.

Next F2F location and dates

Proposed locations

- Virginia – January/February – week of January 9
- Nebraska – June
- West Virginia – a small center that is harder to get to; suggestion to invite West Virginia to Virginia meeting and give a presentation on West Virginia WSC activities

- New Jersey – have not been there yet

Succession planning

The group discussed and updated member terms on the SharePoint site.

Decisions:

- Bob Swanson will stay on until the next face-to-face meeting
- Boyce and Kevin – one will continue until June 2012
- Do not rotate off DBA and SA at the same time
- Suggestion that each member rotating off nominate a replacement, next determine interest, and then proceed up the chain of command
- Geographic diversity is important

Suggestions:

- Dar Crammond (OR) or John Hoffman (AZ)

New Business

No new business.

Next call is on October 19, 2011

Adjourn

IT Questions and Responses from the Meeting:

Comment: My concerns are about having information to help in our spending decisions. Our IT working capital fund is used for our hardware purchases. But WCFs have a spend-down order from HQ of 50% for the combined years FY 11-12. Apparently there's some wiggle room in the spend-down order if the Areas or Regions meet the goal as a whole, but still every cost center needs to make valiant efforts to reduce the balance in our WCFs by the end of FY 12.

Because of this, I'm trying to see how much WCF I will spend in FY 12. The big item is the new sun/oracle server. I'd like to know if the purchase will be in FY 12 or FY 13 because at \$22 K, that could be the difference if we meet the spend-down amount or not, or at least come close to our amount. For example, if the new sun is a FY 13 purchase, then perhaps my center needs to look at buying a vehicle in FY 12 using our WCF for vehicles. I realize it may be too early to know if the new sun is a FY 12 or FY 13 purchase, but I'd like folks to know that knowing this information is quite important to us. We need to spend-down our WCF, but still do it wisely between all our different accounts. If I'm going to spend a lot from the WCF IT account, then perhaps we wouldn't need to spend money from the vehicle WCF. And as usual, early heads-up information is always appreciated. The WCF IT and WCF for Vehicles are two different pots of money for different purposes that will each need to be spent down 50%. I would recommend talking with a finance person or your REX RMO about your spending plan. If there is an opportunity and a need to replace equipment in FY-12 due to equipment end of life, I wouldn't take the risk in waiting until 2013.

Along those same lines, I'd like to know if there will be any suggested hardware requirements on the windows end of things for users that run NWIS programs. For example, by the time the new sun is operating, I'm guessing that most folks will be on win7 OS. We may have a mix of 32bit and 64bit machines. I hear bits about the new ADAPS being done by a contractor, but where does it fall in the timeline with the new sun and possible hardware specs for desktops? The reason I ask is because I'd like to get an idea if there will be suggested hardware specs (32 or 64 bit, processors, ram, etc) to run the new ADAPS. Because again, these spending decisions will play into how we strategize spending money from all our different WCFs. It is highly recommended to simply purchase the 64 bit version. Win 7 64bit will run 32 bit applications and 64bit is the future.

On the information side of things, I could simply be lost in all the web pages. I'm looking for information about the new ADAPS. I think there's information at Data Conferences, but since many managers don't attend, I'm trying to find the information online or see if there are memos being sent to directors. I'm especially interested in timelines and anything suggested or required to make things as smooth as possible for our users. The timeline of the new sun being purchased and deployed, move to new ADAPS, move of the whole NWIS from ingres to oracle, are all big events that I'd like to know how soon they're coming. AEI doesn't support this, perhaps Susan Trapanese can answer?

Reply: Your center will need to receive your replacement NWIS-server during the Spring of FY12 for arrival no later than April 2012 which will cost between \$22,000 with 8GB memory and up to \$27,000 with 16GB memory. In order to get a better price than listed above, we plan to coordinate a volume purchase for WSCs utilizing the DOI Enterprise Hardware Contract for Oracle Sun SPARC equipment. We will provide guidance with SunTAC by the end of November.

The current optimistic timeline for the Commercial ADAPS Replacement Project (CARP) shows the release of the new/commercial ADAPS to WSCs sometime between January to July 2014. At this time we don't know what kind of hardware the new-ADAPS solution may require: the new-ADAPS could be a distributed system/application utilizing WSC desktops-PCs and servers or even a centralized system accessed via a web-browser. As far as what IT hardware will be needed for the new-ADAPS solution, once the Request For Proposal (RFP) has been awarded and a vendor /solution selected, NWIS and the CARP team will provide additional information to assist WSCs in their IT system planning. WSCs will be more involved if the solution requires a distributed plan. Even if the new system is centralized, the WSCs will need to shut down the ADAPS software so we still need tight coordination.

GRSAT is compiled in 32-bit program which runs on Windows 7 on a 32-bit or a 64-bit machine.
Project Networks is compiled in 32-bit and runs on Windows 7 on 32-bit 64-bit machine. See link at:
http://nwis.usgs.gov/IT/ProjectNetworks/ProjectNetworks4.11_install.html
MAPS link at: http://nwis.usgs.gov/IT/maps/maps4_11_install.html,
SWUDS link at: http://nwis.usgs.gov/IT/swuds/swuds4_10_install.html, and
AWUDS links at: http://nwis.usgs.gov/IT/awuds/awuds2_0_0_install.htm describes the architecture.

The estimated timeline for CARP (new ADAPS) and website for additional information will be announced by a memo from CARP team after the charter is approved by Senior staff. The location of the website will likely be:
<https://collaboration.usgs.gov/project/carp/usgs/SitePages/Home.aspx>

The timeline for the NWIS migration from Ingres to Oracle is during the usual NWIS release cycle (August – December 2012). Initial loads of the Solaris 10 OS on the new machine with a new standard NWIS server name and Oracle is planned to begin as soon as April. SunTAC will be closely involved with this process.

Refresh/Replacement of the NWIS Sun Server Communications:

May 17, 2001: Office of Water Information guidance memo

<http://nwis.usgs.gov/communications/2011news/110517Oracle-Sun-hardware.html>

September 20, 2011: Updated SunTAC guidance: http://nwis.usgs.gov/communications/2011news/110920New_Sun-SPARC-hardware.html

Further guidance on volume purchasing assistance and guidance will be coming from SunTAC and NWIS by the end of November. Your center will need to receive your replacement NWIS-server during the Spring of FY12 for arrival no later than April 2012.

Selected NWIS Communications on the ORACLE Migration and Release (NWIS 5.0):

USGS Water Application Developers:

June 2, 2011: Email announcing listserv as a means of communication to NWIS Oracle Migration information to USGS-Water Application Developers: <http://nwis.usgs.gov/communications/2011news/110602Oracle-Migration-Information.html>.

September 26, 2011: Communication about Migration Cookbook, tsq, SSO and more

<http://nwis.usgs.gov/communications/2011news/110926Oracle-cookbook.html>

User Groups and Staff:

March 7, 2011: <http://nwis.usgs.gov/communications/2011news/110307Oracle-status.html>

Communications to the SAs and DBAs will be distributed throughout the winter months.

Comment: I'm also struggling to keep up with all the PDA information. It seems like there is lots of use of all the new programs nationwide. The advances made with the PDAs in our line of work are fabulous! But, announcements of upgrades seem a bit scattered. Is it possible for the NWIS group to release it under a name we are all familiar with? For example, we see BJ's announcements about upgrades, Jeff Christman's about security. But I'm not sure how the word is going out about swami or monkes upgrades. We upgraded to NWIS 4.11, but we're trying to see who updated their swami to the "beta" version like the website says. Being that all the PDA programs are on the same web page, perhaps the same person can make the announcement so that there's familiarity with the name. I know upgrades to PDA programs are handled differently in the WSCs, with some having their IT folks take care of it and others having the hydrographers take care of it. I'm just trying to see if there are ways to make broader announcements of upgrades and having it be more like

other NWIS emails. The NWIS group has a long history of having detailed, well-organized emails. Those emails make it real easy to follow along regardless if it's about the annual installation or quarterly ref lists or the painful security emails. With budgets squeezed all over, this may not be a big enough issue to address because bottom line is that we don't want progress to stop or slow down on the programming side of things. Answer: NWIS team will need to answer regarding communications about SWAMI.

Reply: *Communication of information from NWIS has been very structured and effective as has been pointed out. However, communication regarding collateral requirements such as PDA support has been unstructured and unpredictable. A strategic review of Mobile Computing accomplishments and requirements was delivered to ITAC at the end of September, and more effective communications should be anticipated as an outcome of the review. We will consider the suggestion to communicate collateral requirements with NWIS communications for not just PDAs, but also for SIMS, ADR, and other relevant systems.*

Comment: I was really discouraged about the responses received from the last ITAC meeting. However, it's still worth hammering C&A tasks/assignments. According to Karen Baker's May memo, 116 system administrators will spend 376 hours on S&SS C&A tasks this calendar year. More than nine weeks. If you figure that the average system administrator costs the USGS about \$50/hour (including benefits), the S&SS task is costing the Bureau more than \$2 million, this year, at the science center level. AND, 45 water science centers will spend about another six weeks doing C&A tasks for NWIS (17 documents, some more than 100 pages). So I'll be spending 15 weeks doing C&A this year. Over the past ten years, how many threats, vulnerabilities, or natural disasters caused any one science center system administrator to dedicate 15 weeks towards resolution?" The perception is that we are spending much LESS time on C&A than the original estimates. I spend more time, because I'm trying to do an honest and accurate job. There are clearly some system administrators who fill out the forms without thinking about accuracy, and hence spend less time, but I think most USGS system administrators are trying to do things correctly.

From my vantage point -- 1) Bureau managers have no clue what we've been tasked with, or how much time and effort is involved; 2) C&A should be done at the Bureau level. Not in science centers; and 3) The CISO office doesn't have enough competent and motivated people do to C&A at the Bureau level, so it's being pushed down to us.

Reply: *The hours were based on 2009 efforts. Now that the new templates are in place, the amount of time needed to create an SOP is much less. For Example, for AC, the original estimate was 40 hours, the feedback that the CISO is getting is that it can be done in approximately 3 hours, correctly.*

Some SAs may be taking less time because they have developed their SOPs in the last 3 years, therefore, they are ready to just plug them in to the templates.

Most of C&A is done at the Bureau level, but the local SAs may not realize it. Assets do not have to do the PIA, SSPs, RAs, POAMs, eCPIC, Exhibit 300s, etc. These are either done by the high level system managers or for S&SS, mostly by the CISO and ITSOT staff.

The CISO office has changed the SOPs to a fill-in-the-blank format, unfortunately, we do not know the answers that need to go in to those blanks and do not have access to local systems or people to acquire the necessary information. The only other possible step left is for the CISO to hire a bunch of people to interview Science Center staff so that we can fill in the blanks for them. Time will still be needed from the local Science Center staff even if we document things for them. We do not think the expense is worthwhile and can only guess where the money would come from to fund. If this is what Science Centers want, they can lobby for it through their Center Directors/RExs. We would not mind at all. The CISO is currently staffed with 6 full time federal employees.

We would like to discuss more with this person regarding how they are handling C&A that is considered at the Bureau Level to get a better idea of what we can change to be more efficient.

Comment: My biggest concern is the lack of communication between the GIO and NWIS and the local office Directors. This is especially in regards to C&A activities because local management is not being notified of the entire C&A work coming from both the GIO and NWIS. It is back to directly contacting IT Specialists with deadlines and no notification to management that this work is being required of us.

We are also receiving data calls and requests for review from the GIO Liaisons and again there is no notification to the local managers.

Without anyone telling the managers, the managers have no idea that this work is being requested to be done and in some cases with some pretty unreasonable deadlines. For example, at 2:30pm yesterday we were given the draft of the Telework document and requested to have it reviewed with comments by 4pm. Do they really want our comments or is it just a way to rubber stamp and say we asked the IT Specialists for review and only a few responded. This Telework will greatly affect how IT folks do business in regards to user support, computer security and information security. Surely with

Reply: In reference to the NWIS C&A activities. This concern has been discussed with the team and all future NWIS C&A emails that are sent to the SAs will also be copied to the Center Directors to assure the Directors are informed of deadlines and tasks that are required by the SAs.

No intentions to rubber stamp and thank you for the information. This was a last minute data call but it needed to be reviewed from the Centers and they should have had more time for comment. In this case, many did respond regarding their concerns and it was sent upwards. We will take this back to Senior Technical Staff and request more time for the Area IT CABs to review.

Reply: We can look into seeing what the contractual constraints will be to request a specific OS to be loaded on a machine by the vendor without trying to compete it out. However, many Centers use imaging software to load the OS with security requirements and other USGS and local standard applications on them so they are not configured individually. This provides a consistent load and settings for new systems that come in and saves a great deal of time. This works better however if the Center is buying bulk which creates hardware consistencies.

Hours of Operations - 5AM to 6PM MST

The issue has come up with groundwater models: occasionally models have individual files >2GB. Also, if we want to zip and serve an entire model archive, there are complete models where the compressed file is >2GB. Right now the files I'm dealing with are on internal USGS sites, but it's reasonable to expect that WSCs may start making their groundwater model archives available via the public web sites in the near future.

Reply: Currently, our FTP software is limited to handling files less than 2 GB due to operating system limits. There are applications that will support the transportation of files up to 20 GB, but we do not have that software. FTP has never been designed to archive data files. This person may ask Rex Sanders about building a SOAP node at his/her cost center as a possible solution. This is a Linux based application that has been designed for archive and discovery of science files in a federated network. The final release version is now a year old, and it has been in development for more than three years. Once the node is up and working, anyone may search the federated contents for subjects of interest. SharePoint has limited uploads to 50 MB and really is a support tool for Office documents, not large data sets. MyUSGS may be a solution, but I haven't seen the newest platform, so this would need to be researched. Questions about MyUSGS can be sent to Scott McEwen in Denver. Addition info on SOAP can be found at:
https://cotuit.er.usgs.gov/forum/?page_id=290

Comment: What can we do about Sysadmins who have little interest in supporting GIS work. (It doesn't give them those semi-ludicrous "bootcamp" diplomas. like the training they prefer does.)

Reply: *This will need to be discussed with Center Level Leadership regarding GIS work efforts in support of their centers and to properly resource them according to customers expectations and available funding. If the Sys Admins are responsible for support of GIS, then the local Center leadership will need to hold them responsible for that support.*

Comment: My biggest concern is the internet speed in the field offices.

Reply: *ITAC is aware of the network speed issues throughout the WSCs. We have been working with the Telecommunications Operations Manager, Tim Lee and a few of our WSCs to test Quality of Service (QoS). Quality of Service is the ability to provide different priority to different applications or data flows to guarantee a certain level of performance. We are testing our NWIS applications to see if QoS makes a difference in our field offices and if QoS will impact other traffic within the centers. The testing should be completed by the end of October. If our results show this to make a difference, we will look at implementing this in the Centers that are experiencing speed issues when accessing the NWIS database from the field. So far the tests have shown to have no impact on the Centers, but have showed increased speed in accessing the NWIS dbase from the field.*

In addition, ITAC will be sponsoring a Webinar from Tim Lee the end of October and the first week of November to discuss some basic network troubleshooting tips and tricks to assist the field. History has shown that many (but not all) speed issues have been tied to configuration issues on the local network. ITAC will continue to monitor network issues in the WSCs and work with the Telecommunication Group.

Comment: WRD has expressed some interest in expanding availability of real-time stream gauge information into social media such as Twitter, but doesn't have the technical expertise to know the best way of approaching use of that forum. We are also not sure whether the type of data that we produce is even a good match for social media. If it were possible to subscribe to a specific gauge, that would be useful for some people, and then they might get a gauge height every 15 minutes to 4 hours depending on the sampling interval. But we aren't really sure how that would be implemented in twitter...And it would require throwing a heck of a lot of information at their servers continually. Plan B might be something as you suggest about flood stage or percentile notifications; the issue there might be granularity ... Would it be for specific gage, or hydrologic unit, or county or ...

Reply: *ITAC recently had the opportunity to hear about a Science Center's experience with using social media for sharing real-time streamflow data during a flood. One of their observations was that Twitter users expect a somewhat continuous interaction of information sharing, so if a Science Center chooses to tweet streamflow data, they should anticipate maintaining that interaction throughout an event. This concept is different than USGS WaterAlert which only sends data by text or email when a user set threshold is met. Science Center's who have used social media for sharing data also caution that it is important to communicate that data are provisional. The USGS endorses the use of social media to communicate and engage with the public and has developed guidelines to do so. Science Centers who are considering using social media tools should use the resources posted at <http://communities.usgs.gov/blogs/usgsdev/social-media/> and are encouraged to contact Scott Horvath, the USGS Web and Social Media Chief.*

Comment: Is there is any thought about having the vendor chosen to replace ADAPS, to create their own version of SWAMI or ECLIPSE. This would enhance compatibility of all the programs as the software evolves.

Reply: *All options are on the table with respect to what will go into the "new ADAPS" and this is being considered. Most likely, additional elements in the new ADAPS will be handled as task orders to a base product, but that is all being considered as the Request for Proposal is being developed by CARP.*

Comment: We've had a couple of incidents with PDA's and difficulty trying to get them to connect with the Windows 7 environment. We get these instruments from HIF and for whatever reason HIF doesn't seem to be doing a very good job testing these things before they ship them out to the end user. I suggest HIF conduct more testing and evaluation prior to a product being cleared for use by our work force.

Reply: *HIF does conduct some QA checks before the units are put into stock in the warehouse. The current procedure doesn't include synching the device with a Windows 7 machine. HIF will be looking into modifying the QA protocol to include some sort of check in both OS environments.*

Comment: One of the biggest problems is the incredible speed at which things are changing in the area of field computing technology. In the field office we are constantly stuck on the upward slope of the learning curve, never quite able to achieve a plateau at which point the technology and methods used are known and established making our tasks more efficient and easily done.

Reply: *This is more for an IT response, but the basic problem that you state will never change. We probably need to*

select a hardware and software platform that is stable and stick with it for a period of time rather than try to keep up. So instead of trying to stay always current, we provide updates in steps that are conducive to good data program management.

Comment: Currently there are a vast number of ways one can use to accomplish the same field computing goals. As a result Science Centers are becoming increasingly isolated and unable to use other Centers for assistance and guidance, essentially, each Center is reinventing the wheel. I feel we are losing consistency USGS wide as a result. I would like to see more focus on standardizing and limiting technologies for a period of time, then re-evaluate after that period.

Reply: *this depends on local managers not allowing significant deviation from supported applications. Of course experimentation should be encouraged, but when that leads to an unsupported system things will fail and WSCs will be isolated.*

Comment: We use a laptop to run all of our field software. Therefore it is imperative that laptop programs get the support needed from headquarters. The PDA emulator is not sufficient for a laptop and many hours are spent trying to get PDA programs to work on a laptop. We have continual problems with that and would like to have laptop software endorsed by the higher echelon.

Reply: *It is important to recognize that the program has always been to develop software that is suitable for a handheld platform. Programs developed for laptop do not usually work well on a handheld, and vice versa. However, the Mobile Computing project has evolved to recognize that some WSCs would like to use the tools on a laptop, so SWAMI-PC has been released, and CHIMP-PC is in development.*

Comment: Migration to non-windows mobile based field data collection devices (this needs to be done more rapidly).

Reply: *Alternative operating systems are always being evaluated, but the Windows environment is still the most suitable for sustainable support. This may change, and we may also see future support for multiple platforms, but experience has shown that the "latest" is not always the best solution.*

Comment: Integration of tablets (Android or Apple based) into data flow.

Reply: *This is being evaluated with all other solutions for future development.*

.....