

National Coal Mining Geospatial Committee (NCMGC) Meeting
Knoxville, TN; January 9th - 10th, 2007

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Welcome to Knoxville

Brief introductions and comments by Knoxville Field Office Director Tim Dieringer.
In Attendance: Len Meier, Rick Koehler, Doug Mullins, Larry Evans, Bill Card, and Jo Gault.
This was followed by a quick review of the agenda, led by NCMGC Chair Bill Card.

SMCRA Data Stewards Geospatial Technology Questionnaire

Discussion of the results of the SMCRA Data Stewards Questionnaires, including response rate, and gleaned meaningful results from the responses. Response rate was high, nearly total, although no response was received from Indiana programs. The results had been briefly summarized for the 2006 TIPS National Steering Committee Meeting in Baltimore, but NCMGC feels a longer summary might be in order. The summary could be used to inform management and the public, etc.).

Rick asked if we should make a document from summary results? Bill said yes, but there's no time to do it.

ACTION ITEM: Rick volunteered to start work on a summary, no more than five pages. That summary could then be made into an executive summary.

The team reviewed the compiled responses, discussing some of the more notable trends indicated by the questionnaire, such as lack of an organizational geospatial plan, use of RDBMS or lack of same, use of ArcSDE, and difficulties some respondents had in answering the question.

ACTION ITEM: Len will contact Indiana to determine who will be the Indiana SMCRA Geospatial Data Steward.

The question was raised: "Which four states are not using GIS to support SMCRA (according to survey responses)?" Perhaps the NCMGC could develop a "Road Show" using a small team to visit these states, and others, to encourage them to use the technology, help them find solutions to problems they might have in getting started, etc.

LM – We should talk with the appropriate TIPS Service Manager, and work through them to encourage the use of geospatial technology & GIS for those states.

LE & RK – The questionnaire used the word "primarily" frequently when asking about whether an organization uses AutoCAD or ArcGIS 9.x or ArcView 3.x, which lead to confused results, as an organization cannot be "primarily using both ArcView 3.x and ArcGIS 9.x at the same time". Some organizations use several packages while others are focused on one product - "primarily". We should change or delete that phrase entirely, and send out the questionnaire again. Or not. A discussion followed about the questionnaire being a snapshot in time, and whether we should be sending a revised one out. The conclusion was there is potential for doing another at a later date, taking advantage of knowledge gained to refine the questions.

LE - from his viewpoint, the SDE world is radically different in 9.2. He feels more offices will use 9.2 as it is "Standard SQL Aware". BC – are we now moving even more into "Centralized Geospatial data"?
DM – AutoCAD now works with SDE. LE – Erdas Imagine (from Leica Geosystems) is also working on SDE. BC – In the near future custom applications will be available to workers and they will not even realize that the data retrieved will be coming from GIS.

LM – Let's use this questionnaire as a tool to push geospatial technology out to customers. DM – Let's get TIPS to develop web-based survey to gather current information from the states. LM – Service Managers should take this survey to the state offices either by phone or a personal visit. DM – what might help us in

the future getting money into TIPS budget as far as these surveys are concerned. LE – need question that clarifies how many states receive paper maps as opposed to electronic data. LM – Using paper maps is not using Geospatial technology.

It was noted in the results that 24 organizations do not have a written development plan; this included 80% of the states (18 of 24), 100% of the tribes (3 of 3 have no plan), and 67% of OSM offices (6 of 9). RK - the plan does not have to be a totally comprehensive plan, but can be phased just as a GIS might itself be, but having some direction to begin with is a good thing. The ESRI “Planning for a GIS” course and guidebooks are quite good, but perhaps a bit daunting to novices. LE - This should be addressed through TIPS training – develop a course for developing a geospatial plan. LM – Absolutely!! There is an on-line ESRI course, but an OSM TIPS SMCRA-centric course would be better for states/customers.

It might be a better idea to design a way to just get them started – starting a plan is the most difficult thing. Perhaps we could provide a template for creating the plan. But there are things like this already in place, including an organization that provides tools / templates and guidance for states dealing with this same issue, albeit on a larger scale - the National States Geographic Information Council (NSGIC): their website can be found at <http://www.nsgic.org>.

National Meeting of SMCRA Geospatial Data Stewards

Discussion of the next national SMCRA geospatial data stewards meeting, tentatively scheduled for next year (FY08). Plans need to be made now to lay the groundwork for a successful meeting. We need to use these next 12 months to push states to write papers and/or develop presentations to present case studies for geospatial technology. If this geospatial conference will be professional we have to begin immediately. We want to have hand outs for case studies and CD’s with presentations, so attendees have something to take home. Discussion for this meeting is on-going in TIPS right now. Planning for this conference should be outside this team, drawing in expertise available from OSM, tribes and states.

ACTION ITEM: Bill and Len will get started on developing a planning team.

BREAK - 10 minutes

Len reported that during the break he talked with Lou Hamm, and apparently not much planning has been done concerning the 2008 GIS Conference, so we have an opportunity to integrate our needs and plans with that of the greater group. BC - We should form a committee rather than ask for volunteers. DM – Need to get call for papers out pretty quick. LM – Abstracts should be asked for in four to six months. RK – Need to be careful about asking too far in advance because technology changes quickly, and wondered about the need for abstracts with that much lead time, as opposed to 3-4 months prior to meeting.

Concerning the earlier SMCRA Geospatial Data Stewards meeting held in Denver (June 2006), another discussion ensued about getting the word out, so LM and DM volunteered to work together on writing an article for AML news letter.

ACTION ITEM: Len and Doug will get write an article for the AML Newsletter.

Note of upcoming meetings where NCMGC might want to present:

American Society of Mining and Reclamation (ASMR) meeting in Gillette, Wyoming, June 2-7, 2007

National Association of Abandoned Mine Land Programs (NAAML) meeting in Bloomington, Indiana on October 7th - 10th, 2007.

Business Networking Session on Local Needs of SMCRA Entities

LM – SMs need copies of these summaries to use. RK – Need to get these summaries/articles out quickly. LM – suggests setting up a link on TIPS web site so states can go their individual summaries. AMLIS to GIS –what is it?

LM - The database is only as good as what the states put into it. OSM uses it and five states want it to be more capable. OSM uses the database as their view to AML in the states. Len states that AMLIS is in horrible condition. BC – Is there anything about AMLIS that is not geospatial? LM – No! There is nothing about AMLIS that is not geospatial. AMLIS needs more support to make the database more accurate and capable.

LE – agrees with Len and would like for the AMLIS database to be upgraded – perhaps be upgraded from FoxPro to SQL. BC – described how OSM has made a connection between three SDE data servers and maybe we could provide the model to improve AMLIS. RK – pointed out that not all states have SDE and may not ever have it.

Rick stated the request for typical equipment purchases (as opposed to leading edge technology), contractors and data acquisitions will no longer be part of the TIPS budget, as the National TIPS Steering Committee decided at the last meeting that these types of expenditures do not fall under TIPS umbrella. They are needs of the individual programs, but needs which should be addressed through the grant process, rather than by TIPS monies. NCMGC, as an outgrowth of TIPS, should be focused on advancing technologies and not on supplying basic needs.

BC – The team will take another look at AMLIS and determine how to assist in the improvement of the database.

Industry Standards for Submitting Digital CAD Data

Doug said Virginia is working on a template to acquire CAD data in a usable format to get into GIS. Doug will give a presentation at the National GIS Conference in 2008. Digital signatures are another problem. Len suggested that Service Managers be tasked to identify which states have which needs, and then expressed concern about CAD data conversion from CAD files. Doug stated that he is currently working on a template for CAD conversion standards and there will be a presentation on this at the FY08 meeting.

Len then suggested that we push the need for standards in TIPS CAD training courses.

Data Standards - AML issue

Rick said the discussion of the data standards efforts have mostly been about current surface coal mining permit boundaries, or the surface expression of underground mining extents, but not much attention has been given to AML datasets. He recalled the earlier discussions in Santa Fe, when the concept of producing some national datasets related to SMCRA was initiated: the thought was to have one dataset for Title V and one for Title IV. So, why not have a national layer for AML that reflects what has been done?

This led to a discussion of constraints on publishing AML information in great detail - creating a situation where the dataset is attracting people to dangerous areas. Len suggested have Data Stewards determine from states what future layers should be developed with some examples included.

ACTION ITEM - Bill will e-mail data stewards to conduct survey to identify future layers from both Title IV and Title V programs.

Coal Mining Spatial Data Infrastructure Team Presentation

Discussion of the Coal Mining Spatial Data Infrastructure Team, and its members and activities, and progress report on same by Bill. Included roles that the team members could serve in furthering the goals of the NCMGC, OSM and SMCRA. This led to a review of potential technologies which could be put to use in distributing spatial data to all clients.

Larry recommends using a hybrid approach. Would publish through ARC GIS Server through SDE. Don't have to worry about fire walls. Don't have to worry server going down – would only happen in the state.

Like a clearing house. ARCIMS is going away. A discussion of Google Earth potentially supplanting other more established GIS software packages continued, which led to Rick mentioning that the free version of Google Earth can't be used by businesses, including government agencies. It licensed for personal use only; if one wants to use Google Earth commercially, there is an appropriate license one is expected to obtain and pay for.

Committee Member Reports

Brief committee member reports were given by the various representatives.

Data Standards ASTM Task Group

Larry said the first data steward standards meeting did not get off to a good start. It was confusing. Surface mine boundaries dataset went well but the underground dataset discussion was confusing. At best—it was a poor start. Larry recommends to Alan to restart at the next meeting to get off on a better footing. Rick asked how close did the team get to the objectives identified in the Santa Fe meeting held a year ago? Did anyone answer?

Larry said industry has come up with a representative to work on the team: Darrel Trent from Peabody Coal. Joe Ritchie is working on the agenda for the January meeting. Larry can't make the meeting in January and cannot continue to be a co-chair for this effort. Larry suggests another co-chairman be selected to assist Alan Wilhelm in this effort. Larry recommends Daniel Kestner. Larry also recommends doing one layer at a time—to complete one and have a success then move on to the next layer. Larry also thinks the involvement of ASTM was pre-mature. Rick agreed, and reiterated his belief that working through the FGDC-established mechanisms would be more appropriate, given the subject matter, and the involvement of a federal agency, OSM, part of DOI - in relation to the coalescing of geospatial activities under the DOI USGS umbrella.

Bill said we need to talk to Billie about what direction to take. We have money obligated to ASTM in a contract with Joe Ritchey. Rick suggested postponing the meeting to re-group and start in a different direction; if things are in a bit of disarray (one Co-Chair stepping down, uncertainty about the other Co-Chairs availability, etc.), this might be a time to step back and reassess.

Bill said we can't postpone the meeting—it's part of the contract, and suggested having the scheduled late January meeting in California, and then have the team meet without ASTM to get back on track. This meeting could possibly be held in Charleston KFO. Also, hold a pre-meeting of the team to discuss. Len said agreed that we should drop back, re-think, get co-chairs, have a team meeting without ASTM and then, farther down the line, involve ASTM when we are ready.

Bill expressed concern about leadership and keeping the team on track. Bill will hold a teleconference to talk with Alan W., Larry, and Billie to see where on earth to turn. Len firmly believes that the Costa Mesa trip will be a complete waste of money, time, and energy. Doug suggests dropping the Jan. meeting, having this team telecon and then hold a telecon with the data steward team. Rick also felt it was best to "drop back and punt" at this juncture.

ACTION ITEM: Bill will hold a telecon with Alan, Larry, and Billie Clark to determine the best option.

NCMGC Budget for FY-08

Bill Card led the discussion on the budget for NCMGC team for FY-07, including a review of earlier budget versions, the expenditures made versus allocations, the likely funding levels available from OSM's budget as a whole. The group focused on those items which were deemed essential and/or provided a lot of "bang for the buck". During this discussion changes were made to the budget document as necessary.

Len suggested using the data stewards to determine who (from the states) will attend the training identified in the budget document for SDE training. Rick suggested creating a list of criteria (a decision-tree similar to a flowchart) to help in the determination of attendees for the training.

ACTION ITEM: Len and Rick will come up with a list of criteria to be sent to the data stewards to assist in the determination of who will attend the SDE training. [Note this topic was covered again during Day Two; see below.]

Budget discussions will be continued the following day.

END of day 1

January 10, 2007

NCMGC Budget for FY-08 (continued)

Discussion on the NCMGC budget for FY-07 continued from the previous day. During the budget discussion, the issue was raised: "How to get MSHA actively participating in a working partnership?"

ACTION ITEM: Len will set up a telecom with John Craynon, Clark, and Card to discuss MSHA participation around Feb 1st.

Budget FY-08 NCMGC Activity Projection

Bill Card led the discussion of the NCMGC Activity Schedule for FY08, including the projected activities and initiatives the committee will undertake, along with carryover and on-going items. He reviewed both the older schedule and the proposed schedule, and the group made suggestions for revision, addition, etc. as necessary.

Len said to consider the necessity of upgrading the features of ArcGIS Server and the need to provide training for the software. Few states and few OSM offices have this technology currently, so there will need to be more evaluation of ArcGIS Server. Rick and Larry mentioned that some feel it will supplant other ESRI technologies at some time in the future, so it is worthwhile to investigate it now. Bill feels that there may be money for this issue since monies in the budget have been shifted between different priorities. Len suggests the team ask that TIPS fund the software upgrades.

Bill suggested that, considering the timing of things, budget cycles, and NCMGC plans for future activities, it would be a better idea to conduct the annual NCMGC Annual Planning session sooner than has been the practice so far, perhaps prior to the first of the calendar year. After some consideration, it was decided that the NCMGC meeting will be held in Charleston, WV during the first week of November.

A brief discussion of various events and the upcoming year's schedule ensued.

ACTION ITEM: Bill will revise the schedule of events for FY-07 and send to the team.

Planning Committee for 2008 Geospatial Data Conference

The team held a telecon with Lou Hamm to discuss the kick-off for the planning for the 2008 meeting. Lou agreed to coordinate with NCMGC to ensure that the data stewards will be present and topics from the team will be incorporated into the agenda. Lou wants representation from NCMGC on the planning committee. The team began discussion about forming the planning committee. The following decisions were made:

1. Bill Winters will be asked to be team leader for the committee;
2. Kim Vories would be an excellent choice also for team leader, if Winters cannot do it;
3. The other members of the planning committee will be:

- a. Alan Wilhelm - GIS
 - b. Daryl Hines – GIS
 - c. Shellie Willoughby - OK
 - d. Min Kim - GIS
 - e. Natalie Carter - CHFO
 - f. Dianne Osborne – Remote Sensing
 - g. Bill Joseph or Tonya Blackburn – CAD
 - h. Bruce Johnson – ND
4. Title of Conference: “*Integrating Geospatial Technology into SMCRA Business Processes*”
5. Tentative List of Topics:
- a. Electronic Permitting
 - b. Data Conversion
 - c. Mobile Computing
 - d. CAD Standards for e-Permitting
 - e. Data Conversion & Transforms
 - f. Templates
 - g. Public Outreach & Publishing
 - h. Remote Sensing
 - i. Arc GIS Server
 - j. ArcSDE
 - k. Coal Mining Spatial Data Standards
 - l. Integrating GIS into the work flow
 - m. Data Models for SMCRA
 - n. Coal Mining Spatial Data Delivery to Public
 - o. IT Integration Support for GIS
 - p. Customized GIS Applications
 - q. Supporting Mobile GIS Applications
 - r. Coal Mining Infrastructure Team
 - s. Case Studies Using SMCRA
 - t. Improving Inspection with GIS
 - u. Improving Bond Release with GIS

ACTION ITEM: Bill will draft an e-mail with this information and send it out to the team, and after team discussion send it on to Lou Hamm. The e-mail to Lou will also say that Call for Papers should be at least three months prior to the meeting.

Charter

The team discussed proposed changes to the charter. All suggested changes were discussed in some detail; the team agreed with the proposed revisions to the NCMGC Charter.

Questions/Criteria Decision-Tree to determine candidates for ArcSDE training.

The group tried to develop a series of related questions or criteria to ferret out whether a program or organization was a suitable candidate for ArcSDE training. RK - If a state, for instance, didn't even have any kind of robust relational DBMS (SQL-based, like MS SQL Server, Oracle, MySQL, Informix, etc.), then that organization has a long way to go before they're ready to jump into ArcSDE, which is predicated upon having such a system. A discussion ensued concerning the appropriateness of providing training in something so basic to a proper geospatial infrastructure as a SQL-based db, and whether NCMGC should be in that line of business - as opposed to being in the geospatial business.

The questions the group came up with were:

1. Are you currently using Arc GIS Server, Arc SDE, or Enterprise Standard?
2. Do you intend to implement and use SQL Server or Oracle in the next 12 months?
3. Do you have staff trained in SQL Server or Oracle?
4. Do you need funding assistance to receive training for SQL Server or Oracle?

5. Do you intend to implement and use ArcSDE Geodatabase in the next 12 months?
6. Do you have staff trained in ArcSDE?
7. Do you need funding assistance to receive training for ArcSDE?

ACTION ITEM: Len, Bill, and Alan will call the states that are using SQL Server or Oracle but are not using ArcSDE and ask the above questions. Then they will re-convene to discuss the results.

Coal Mining Geospatial Data for the Nation

LM – This is a great place to put in real examples of successes from the states.

RK – Make sure that every thing in this document is FACA consistent.

LM – Let's try to site all examples – there are plenty that aren't documented.

Outreach / News Release for NCMGC

Team members will work towards crafting several types of news releases to get the word out on NCMGC activities and initiatives. The website work will continue with Bill working with Veronika Eskova for the time being to discover the requirements. The team will be expected to help with providing content and suggestions.

ACTION ITEM: Rick will finalize a Communications Plan for review by the rest of the team and OSM management by May 1st.