

DOIRSWG May 2009 Meeting Notes

A reminder on how to access the DOIRSWG wiki:
To register, visit the following website and click "register":
<https://max.omb.gov/maxportal/>

Once the account is set up, the DOIRSWG wiki location for materials for this discussion, including the agenda, will be at:
<https://max.omb.gov/community/x/bYLSLc>

May 12, 2009

Welcome and introductions

Keynote Address: Presentation by Eli Rodemaker, University of Wyoming-

Mapping and inventory

Problems with Drought, Non-Native Species and Fire, oil and gas buildup

Project put together by the state to coordinate maps

Sage grouse habitat – new maps of the habitat for whole state for sagebrush

51,000 ground wells will be in the Powder River Basin within the next few years

BLM wants to use these maps to mitigate oil and gas development by using the maps to identify wildlife coordinators that they should protect.

Bureau presentations:

Ken Bailey, BIA is doing a lot with GIS, but not remote sensing. Trying to get RS going again. Only two individuals. They have developed a business case for the application of remote sensing. DOIRSWG could recommend that BIA set up a remote sensing hub. Ken is developing reservation base layers, esp. boundaries

Matt Bobo, BLM – plan to rebuild BLM's use of remote sensing. NOC is the center of excellence for remote sensing and photogrammetry. Define goals to achieve an operational remote sensing program. Several initiatives to bring funding. Big driver is the Assessment, Inventory and Monitoring (AIM) is about to release a plan. New BLM Science Strategy does not directly address remote sensing, but will be a key component. Three pillars for multi-scale program services

- extending the field data, deploying unmanned vehicles with aerial stereo to collect indicators (would like a network of platforms)
- Landfire and regional assessments
- Rangeland Ecological Land Monitoring (RELM) system

Discussion on the conflict with the FAA on deployment of UAS

Issues with Landfire data – what level should we get involved. Need continuous field maps. More value than classified data; percentages allow flexibility for setting thresholds appropriate for different management decisions.

BLM is looking at establishing contract vehicles with commercial sector to acquire data.

Photogrammetry staff at BLM (4) – in-house capability available to outside

BOR – Dave Eckhardt. BOR covers western 17 states. The Denver Technical Service Center is entirely funded by reimbursable projects. Thus, no standardized protocols for GIS and remote sensing, Regional offices are independent. Coordination is ad-hoc.

Dave gave an overview of reclamation remote sensing activities including

- Mapping areas of potential unauthorized water use
- Acquiring HD video from BOR helicopter for time-sensitive applications
- Mapping detailed natural veg classes for NPS
- Highlighted his ET mapping using ReSET Model

Brian Huberty , FWS

Very broad base using GIS and RS; Brian highlighted several activities.

DOIRSWG should address data licensing issues. We discussed training course for DOI bureaus, perhaps at NCTC

National wetland mapping is a major issue with FWS. Wetlands most vulnerable to climate change – IPCC June 2008

FWS is sending aerial archive to EDC

We discussed the RADARSAT-2 MOU w/ CCRS, Greg Snyder will check status

Highlighted SAR work on great lakes

Critical actions presented by Brian

- More bandwidth to move data
- Acquire national 1m leaf off spring, every 5 years
- Radar apps for climate change
- Increased hi-res lidar DEMS
- Mandate OGC compliant data
- Real-time Thermal IR needed for all wildland fires mapping

Strategic Habitat Conservation initiative – what could the DOI RSWG do to support this new initiative.

Dianne Osborne, OSM National Support Center – MMS is focused on surface coal mining. Remote Sensing program in OSM started about five years ago. Data acquisition, tech transfer, tech support. NSC has a remote sensing team; has management representative! Robust training program. Identified 8 prototype projects in 2006 using remote sensing technologies. Example, mining impact to bat habit. OSM monitors reclamation with remote sensing.

NPS, David Duran and Mike Story, NPS is highly fragmented. Used to have a remote sensing hub, now expertise is distributed. NPS Remote Sensing Subcommittee of the GIS Council, primary role to communicate activities to park units, mainly use website
Presented remote sensing highlights.

Issues

- Effective communication on issues and trends
- Imagery requirements, etc.
- RS software licenses
- Training
- Anything for the nation, , hi-res, dems, etc.
- AK statewide dem, ortho
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May 13, 2009

Objectives of the DOIRSWG - Bruce Quirk gave a presentation in the morning – First, we talked about communication of our activities. Specifically, should we publish a DOI remote sensing document based on our input to the NASA Space Report to the President. Put on the DOI WEB site? Bruce took an action to lead the development of this document. We could design a DOI RS web site with applications, contacts, etc. Think of it as a marketing approach. Use the latest technology such as utube. DOI has no single lead for remote sensing. Could Karen Siderlis be our headquarters lead? We need to find a champion. Also need someone in Congress as well. National Geospatial Advisory Committee (NGAC) has 28 members...it is a FACA committee. Non-federal members, advises the FGDC on future directions. NLIP had a similar design to get advice to the program. How do we get more consistent funding? We could develop a DOI Fact Sheet. Outside customers help; ranging from Google to NWI maps. Could be a good action for us to identify our external consistuents.

Then, Bruce talked about the DOIRSWG purpose. Do we need a formal charter? Helps justify travel and attendance at meetings. Get the secretary to sign this. NDEP has no charter. NDOP has a charter as well as an MOU. If this group is primarily communication, then a charter is not essential. FGDC? Larry Pettinger hosted DOI-wide remote sensing conference calls. These were only information exchange. Do we want this group to do more? If NLIP becomes a reality, this group would become more formalized.

DOIRSWG could have management representatives. We should see MMS Remote Sensing Team charter.

By August, 2009 OSTP, NASA and USGS have to come up with a report for continuity after Landsat 8. We talked about the big picture future for NLIP; DOI would pay NASA to launch operational land imaging satellites (similar to current NOAA/NASA relationship on operational weather satellites) .

Department has a Science Council, we should brief them. Also EGIM Team MRLC, GAP, and LANDFIRE briefings – how these cross-pollinate NPS is doing a comparison of these three and NatureServe and will report to their parks on which product they should use for which application.
List of available sensors and applications, cost estimates
We could use the GIO liaisons for information dissemination
This group could point to Bill Stoney's ASPRS website which characterizes sensors and satellite systems
Make our agreements DOI-wide for data and perhaps even software

Bruce – Data Gap – talked about SPOT, IRS, DMC, possible future teleconference topic

We are at a crossroads. Do we stay an information exchange group? Or do we become an advocacy group? If so, the make-up of the group needs to be re-accessed.

Abandoned Mine Lands (AML) on BLM lands – use remote sensing to detect unknown mine sites, looking for openings to underground mines; many on a cliff side. Related dump in front of them. We suggested thermal imagery and hyperspectral imagery and classified imagery. Bieg issues for BLM from a human safety perspective. Stephanie O'Dell is joining the Washington Office on AML. They have stimulus funding to address this issue. Define and make a list of all of the characteristics you are looking for by landscape type. AMLs are an issue for OSM as well. Deaths and lawsuits make this a big issue. www.abandonedminelands.gov. Diane (OSM) talked about using Quickbird imagery to locate mines. Funding is available from the states. Good contacts and expert on hyperspectral imagery
Terry Slonecker, USGS, Reston, VA,
Paul Pope, Los Alamos, 505-667-9135, email papope@lanl.gov
Trude King and Roger Clarke, USGS, Denver Federal Center

Russ Jackson and Diane Osborne – action to provide this group a description of landscape features associated with mines
June Thormodsgard – will create a DOI-wide conference calls on this topic, include FS
Mike Hutt – work with small UAS.
Bob Horton, USGS – working to find tunneling activities on the border. Could be some similarity

Alaska Special Issues –Craig Seaver and Carl Markon, USGS. Powerpoints are on the wiki along with one prepared by Garth Olson, BLM

Remote Sensing requirements gathering – Tom Cecere, USGS. Powerpoint on website. Actions captured on list below.

Highest priorities for the DOIRSWG:

1. DOI report based on our input to the NASA Space Report to the President. We will give the Bureaus 45 days to update this input for the management of the Department. Will be web enabled. Send to Ron Beck. Due July 1
2. Tom Cecere will compile a list of existing sensor/satellite/airborne compilations for this group's next conference call
3. June will put out info on the wiki. Ask for comments on the content.
4. Send in data sets that you know of, but can't get access to, due end of May to Tom Cecere.
5. DOI Fact Sheet
6. All please reference this group at conference presentations to increase visibility of the use of remote sensing in the Department
7. List of professional organizations
8. Identify current training programs (classes, webex, etc.) to Tom Cecere by end of June. Tom will compile and discuss at one of our conference calls.
9. Return on investments – how we can communicate the savings to the Bureaus of the use of remote sensing. Topic for upcoming WebEx; June will ask Po-wen Lu to lead this discussion as he developed BIA's current business plan.
10. Identify what agreements are available to acquire data by each Bureau to see if we can all use it.
11. We will continue monthly WEBEX/conference calls. June will ask for topics. Plan at least an annual meeting. June will compile a list of meetings/conferences we could piggy-back with.
12. We will ask Jim Mauck to give us an update on procurement approaches with States at one of our conference calls. Action: Tom Cecere
13. We need an organizational structure to help raise the level of the value of DOI remote sensing. Action to Mike Story to draft up some options for us to consider.
14. Action Tom Cecere: how will distribution of NAIP imagery happen to the DOI partners
15. Each Bureau will identify a program to work with on gathering data requirements for DOI (phase 1 identified in Tom's presentation). Tom would like to interview a program/activity before August 1st. Action to Bureau leads to work with Tom Cecere to identify a group. Tom will send out a short description of his objectives to the Bureau leads to kick off this action.
16. June will send up a Webex on remote sensing and Abandoned Mine Lands and include Russ Jackson, BLM, Dianne Osborne, OSM and Barbara Hite, BLM