Louisiana Geographic Information Systems Council

Meeting of July 15, 1999

1. Call to Order

Chair Scott Leachman (LPJA) called the meeting to order at 1:40 P.M. in the First Floor Louisiana Room, Wildlife and Fisheries Building, Baton Rouge, Louisiana. A quorum was presented with ten agency/organization representatives present.

2. Roll Call

Agency/Organization Representatives Present:

Scott Leachman, Louisiana Police Jury Association, Member
Joe Holmes, Department of Environmental Quality, Member (late arrival)
Bo Blackmon, Department of Natural Resources, Member
Glen Daigre, Division of Administration, Member
Sharon Balfour, Department of Transportation and Development, Member
Jim Patton, Department of Wildlife and Fisheries, Member
Gene Stephens, Department of Economic Development, Member
Dennis Eilers, Department of Culture, Recreation and Tourism, Member
Sherel Martin, Louisiana Assessor's Association, Member
Truman McDaniel, Department of Health and Hospitals, Alternate
Bill Blair, House of Representatives, Alternate

Others Present:

Lynda Wayne, Louisiana Geographic Information Center (LAGIC)
Joshua Kent, Louisiana Geographic Information Center (LAGIC
Ed Leachman, Office of the Data Base Commission (ODBC)
C.P. O'Neil, US Geological Survey (USGS)
Marty Beasley, State Land Office (SLO/DOA)
Rob Cunningham (CCEER/LSU)
Herman Melancon, Department of Environmental Quality
Mattie Coxe, Louisiana Municipal Association
Kay Henderson, Department of Transportation and Development
Eric Jeansonne, Department of Transportation and Development
Jacqui Sanchez, Department of Transportation and Development
Jim Hanifen, Department of Wildlife and Fisheries
Suzanne Harrison, University of Southwestern Louisiana / EE-IR Center
David Gisclair, Louisiana Oil Spill Coordinator's Office

3. Approval of June 18, 1999 Minutes

The minutes were submitted and approved on a motion made by Glen Daigre (DOA) and seconded by Sharon Balfour (DOTD).

4. Chairman's Report

Chair Scott Leachman (LPJA) reported that he had distributed a letter to all member Agency Secretaries requesting their assistance in rejuvenating agency

participation in LGISC activities. Leachman's letter highlighted problems associated with inactive appointees and requested that the Secretaries consider reappointments at this time. As a result of Leachman's letter, Mr. Gene Stephens (DED) was appointed as the new member for that organization. Mr. Bo Blackmon (DNR) added that the letter has raised some questions within his department's administration and that he was able to use the opportunity to highlight DNR's active role in the LGISC.

Chair Leachman also announced that Pat O'Neil (USGS/NWRC) had provided a letter from the Louisiana Society of Professional Surveyors strongly supporting the need to maintain a National Geodetic Survey (NGS) Advisor in Louisiana.

5. LAGIC Report

August Metadata Workshop

LAGIC will hold a 'Making More Metadata' Workshop on Friday August 6, 1999, LSU Middleton Library, 8:30-4:30. LGISC members are encourage to register online via the LAGIC website.

NSDI Node

The NSDI node is established at LAGIC and fully declared. Users can access the node via the National Spatial Data Clearinghouse at http://130.11.52.184/. The national declaration of the node is further stimulus for State Agencies to produce and submit metadata for their GIS data products.

Data Lineage Issue

The following text was presented to the LGISC for discussion.

Metadata, Lineage, Multiple Data Sets and Other Horrors

The recent GIS data collection effort lead by LOSCO has proven a milestone in the State GIS community's development. We have matured to a point where data can be shared, collectively purchased, and applied outside of its original purpose. While it has not been an easy process, all have survived and prospered.

With maturity, however, come the growing pains. One of the most difficult situations that we now face is that of multiple data sets. The majority of these data sets are slight, and necessary, variations from the source. These variations commonly include minor edits such as line cleaning and changes in geographic projections and datum.

Multiple data / Multiple metadata

When an organization imports data from another organization there is a need to document and manage that data as an in-house resource. For example, at a minimum, it will have a new storage location path, e.g. C:\newroadsproj\hydro_24K.dgn. In addition, it may be necessary to rename the file, change the format/extension, and/or re-project the data. While these are minor changes that do not affect the data content, they do represent a 'view' of the data that is different from the source. Using the watershed subsegments as an example:

DATA	TITLE	FILENAME	DATU	COORD'S
HOST			М	
DEQ	Louisiana Basin- Subsegments, UTM15, LDEQ (1999) [subseg99g]	subseg99g.*	NAD27	UTM_15
LOSCO	Louisiana Watershed Basin-Subsegments, Geographic NAD83, LOSCO (1998) [hydgeog3dpbsn]	hydgeog3dpbsn.*	NAD83	geographic
LA GIS CD	Watershed Boundaries	subsegments.*	NAD83	geographic

Why is this a problem

1) The source of the data is no longer apparent

Each of these data hosts will most likely distribute their 'watershed subsegments' data. Data lineage will be 'muddied' at each future exchange. Because the data hosts listed above are responsible data producers, they have created robust metadata records for each of their products that clearly describe the lineage and processing history. However, problems still persist: few GIS data producers are as responsible as those used in the example and metadata is often not created; data consumers may not read or use the companion metadata, and; the metadata may become separated from the data.

2) Which data set(s) should be included in the State GIS Metadata Catalog and, as such, the Louisiana NSDI node?

Most will agree that the source version of all data sets should be documented in the Metadata Catalog. Some organizations may even want to assume a 'stewardship' role for specific data themes. However, data derivation will continue, and, in many cases, the data produced will be of value to the GIS data user community, particularly those that lack data processing capabilities. As such, it would be beneficial to provide users multiple versions of data.

3) If we do provide multiple versions of the same data, how do we make the differences apparent to the user?

The GIS Metadata Catalog interface must be developed to highlight key differences among related data. This is a technical issue that can be resolved internally by LAGIC staff. The interface will be designed to provide users a subset 'view' of the each metadata record that promotes those fields determined to best aid in data selection. At a minimum those fields would include:

Title Time Period of Content

Abstract Horizontal Coordinate System

Orginator (Author) Geodetic Model (Datum

Publication Date

4) Who is the 'Originator' of a derived data product?

When a derived data set is produced, who should be listed as the originator? If the source organization is identified as the originator, they will be unknowingly made responsible for data that has been, and will continue to be, subject to alterations. Therefore, it is more accurate to identify the data 'derivist' as the originator, with the assurance that the source data provider will be fully acknowledged within the metadata at every reasonable opportunity. While this approach may initially cause offense to the source organization, resulting in cries of data thievery, upon further consideration, the source must ultimately realize that data will proliferate and they will not want the added responsibility generated by the many offspring.

CONCLUSION

While we have been able to address items three and four with a technical approach, items one and two remain unresolved. Administrative in nature, these items require the construct of guidelines or policies that ensure that GIS data users in the state are well aware of the source and lineage of the GIS data they secure from the state.

In general – the Louisiana GIS community has evolved from toddlers fussing over vectors and pixels to young adults prepared to work collectively in a fair and ethical manner for the betterment of that community

After the presentation, the LGISC was presented with a set of proposed guidelines for addressing these data lineage issues. After extended discussion the following was accepted as 'draft guidelines' on a motion by Glen Daigre (LDOA) and seconded by Bo Blackmon (LDNR)

DRAFT LOUISIANA GIS COUNCIL

DATA LINEAGE GUIDELINES

Louisiana State agencies producing GIS data will diligently recognize the contribution of their data sources in the following manner:

Adjusted Data

definition - Data created from a single GIS data source and adjusted to a new geographic representation. May include some minor data edits but data content remains the same

Agencies agree to fully document the source, lineage, and processing history of their data as required by the state Metadata Resolution (1998) and to reference the source data provider in the *TITLE* and *ORIGINATOR* fields. For example:

TITLE: Louisiana Watershed Basin-Subsegments, Geographic NAD83, LOSCO (source LDEQ) (1998) [hydgeog3dpbsn]

ORIGINATOR: Louisiana Oil Spill Coordinator's Office (source LDEQ)

Adapted Data

definition - Data created from a single GIS data source and re-organized to produce new data categories, symbology, or other form of representation. May include some spatial operations such as buffer zones but contains no true analysis or added scientific knowledge.

Agencies agree to fully document the source, lineage, and processing history of their data as required by the state Metadata Resolution (1998) and to reference the source data provider in the *ORIGINATOR* fields. For example: *ORIGINATOR*: Louisiana Oil Spill Coordinator's Office (source LDEQ)

Derived Data

definition - Data created from any number of GIS data sources and subjected to true spatial analysis including, but not limited to, change detection, pattern analysis, network analysis, cartographic algebra, or spatial statistics. May include data sets significantly altered based upon the integration of scientific knowledge.

Agencies agree to fully document the source, lineage, and processing history of their data as required by the state Metadata Resolution (1998).

6. Old Business

LAGIC Technical Support Role

Lynda Wayne (LAGIC) made a brief presentation of the technical service role LAGIC has traditionally served and addressed recent suggestions by the LGISC to expand those services. The presentation summarized key issues that must be addressed prior to establishing a more formal technical support program including: identification of client base, clear delineation of role and tasks, identification of services not supported, and specific guidance in prioritizing requests for service. Much of the discussion focused on agencies in need of assistance in 'getting started' with GIS. LAGIC staff expressed concerned about the added workload and potential problems associated with specifying vendorspecific software. LGISC members suggested several approaches, most focusing on the need for decision support. Dennis Eilers (CRT) requested the LGISC continue this discussion such that support might be available to CRT in their anticipated GIS development effort. CRT was suggested as a 'pilot' organization for such activities. Bo Blackmon (LDNR), Glen Daigre (LDOA), and Sharon Balfour (LDOTD) were assigned to 'Technical Services' committee with Balfour serving as Chair.

DOQQ Status

Mr. David Gisclair (LOSCO) provided the following summary. Phase I funding is complete for FY1999. Production for 30.5° south is 95% complete. Acceptance by USGS is approximately 80% to date. Phase II contract has started for those areas north of 30.5° - the USACE St. Louis District has contracted with 3001. Inc. and funding is in place for FY2000. MrSID 50:1 compressed versions of completed DOQQ's will be available to state agencies on CD (15 total) by September.

LIDAR high-resolution elevation data will be acquired for SE Louisiana (to mid-Atchafalaya) under agreement with the USACE and FEMA.

NGS Advisor

Pat O'Neil (USGS/NWRC) reported that a coalition had formed to support the NGS Advisor position. Participants include: DNR, USGS, State Land Office (DOA), USACE, and DOTD. Though the coalition lacks \$10,500 of the total funds required, they expect to complete the agreement with the NGS in the coming month.

NSGIC Conference in New Orleans August 27- September 2, 1999

Sharon Balfour (LDOTD) reminded the LGISC that early registration ends July 27th, 1999 and that reservations with the conference hotel, the Monteleone, should be made soon. Audio-visual equipment is still needed. Poster slots are still available. Suggestions are needed for speaker gifts. Those able to assist should contact Sharon at 225.379.1477.

7. New Business

GIS Day

ESRI is promoting November 19, 1999 as GIS Day. Friday of Geography Awareness Week, the day will feature nation-wide GIS presentations, open houses, web activities, and outreach to K-12. The LGISC will participate in a NSGIC web presentation. Individual agencies and organizations are encouraged to sponsor a related event and to register their event online (GISday.com) and receive support materials such as banners, publicity announcements, etc.

Offshore Platform Data Needed

Bo Blackmon (LDNR) requested that anyone with information about available near shore (inside the 3-mile limit) platform data please notify him.

Adjudicated Property Data Available Online

Mattie Coxe (OCD) announced that the Baton Rouge Office of Community Development (OCD) had expanded the information available online about adjudicated properties and encouraged members to visit the East Baton Rouge website at http://ci.baton-rouge.la.us and follow the links to the Office of Community Development Adjudicated Properties Listing.

Louisiana Land Use / Land Cover Data Available from USGS / NWRC Jimmy Johnston (USGS) announced that the NWRC will soon be releasing an updated land use / land cover data set for Louisiana and offered to present additional information about the development and distribution of the data at the next LGISC meeting in August.

8. Determine Next Meeting Date

The next meeting is scheduled for August 18, 1999, 1:30 in the third floor Conference Room (*minutes altered to reflect actual vs. proposed meeting room*) the Wildlife and Fisheries Building, Baton Rouge, Louisiana. The meeting adjourned at approximately 4:45 P.M. on a motion by Glen Daigre (DOA) and seconded by Sharon Balfour (DOTD).