
North Shore Management Board

Thursday, January 20, 2011 5:00 PM

Beaver Bay City Hall

Beaver Bay, MN

Minutes

Attendee	Representing	Absentees	Representing
Rich Sve	Lake County	Mary Rosati	City of Two Harbors
Mike Hoops	Silver Creek Township	Jan Sivertson	City of Grand Marais
Mark Russell	City of Beaver Bay		
Tim Musick	Town of Lakewood		
Peg Sweeney	St. Louis County		
Dave Mount	Duluth Township		
Scott Johnson	Silver Bay		
Bruce Martinson	Cook County		
Andy Hubley	ARDC		
Jon Mason	ARDC		
Liz Sarabia	ARDC		
Hollie Parsons	North Point Geographic Solutions		

1. Call to Order

The meeting was called to order by Rich Sve at 5:10 PM and introductions were made.

2. Committee Business

A quorum was present. Call for approval of agenda with teleconferencing item added. (Followed call for public comments).

Call for changes and/or corrections to the September 20, 2010 Meeting Minutes. None heard. Motion to accept by Mike Hoops/second by Mark Russell; passed unanimously.

Call for changes and/or corrections to the November 29, 2010 Meeting Minutes. None heard. Motion to accept by Peg Sweeney/second by Tim Musick; passed unanimously.

Introduction of Bruce Martinson from Cook County who was appointed to replace Bob Fenwick; Jim Johnson will serve as the alternate for Cook County.

Call for public comments. None heard.

Peg Sweeney suggested that in order to save on travel expenses the NSMB should consider teleconferencing especially when only resolutions or other items requiring a vote are on the agenda. NSMB has been having teleconference meetings to handle issues that weren't able to be covered in a regular meeting and the teleconference meetings do not include a speaker or presenter. A question of legality arose, but the response was that the phone meetings are advertised as any other meeting of the NSMB (note: minutes are also recorded) and that the public is welcome to attend. Andy Hubley expressed concern regarding any hearing problems with using a conferencing phone, but that issue was considered and resolved. An additional recommendation was to have the chair present at the site where the teleconference is generated.

3. Reports

ARDC has been involved in two projects for the NSMB, the first is the North Shore Oblique Photograph Analysis and the second is the North Shore Environmental Website.

Jon Mason, now a Planner with ARDC (formerly an intern), presented the latest information on the North Shore Management Website. When the project was begun in the summer of 2010 information about the NSMB and a link to website was under the Regional Planning Division website as part of ARDC. With research and cost analysis it was determined that www.northshoremanagementboard.org was available for usage (nsmb.org was taken) and could be affordable for the NSMB. Jon provided a printout of the main page, the environmental website page and an example of a link to a watershed.

The main page contains a list of board members, contact information, a general overview of the Board, meeting information, initiatives and the NSMP Update from June 2004. To get to the NSMB Environmental Website, visitors follow a link on this main page to the Environmental Website page. As previously reported, the Environmental Website has been divided into three areas of interest – watersheds, North Shore Counties and Cities, and Lake Superior shoreline. A printed sample was provided for the Poplar Watershed to illustrate the range of information available under a specific item. Articles pertaining to the subject have short summaries and links to full articles, reports, etc.

Andy Hubley will do a press release once the website is fully functional so that towns, cities, etc. will be able to access the information. It was also suggested that the Board members be updated and that links be placed to the representatives' areas (townships, cities, etc.).

The next project was the North Shore Oblique Photograph Analysis. The data creation process and analysis was contracted to North Point Geographic Solutions. Hollie Parsons was the technician responsible for the project. The purpose of the analysis was to compile a GIS database of impervious surfaces, including near shore

structures, major vegetation clearing sites and other man-made changes. It was hoped that changes between the photographs of 2002 and 2007 would be able to show land use trends along the shore and aid in land management policy decisions.

Through the use of a power point presentation Hollie was able to explain the steps it took to prepare the data for analysis. The first step was to create a geodatabase to digitize data into a feature class then create a domain to store each feature type. The purpose of the domain is to expedite feature selection which provides for standardization and reduces editing errors. The second step was the digitizing of the 2007 obliques based upon the anticipation of more impervious features in 2007 than 2002 thus making the collection process for 2002 quicker (features present in 2007 likely also present in 2002). The base ortho imagery was the 2009 color DNR orthophotos (aerial photos which provide scale, relief development, x/y coordinates and tonal adjustments). The oblique photo and its corresponding photograph were hyperlinked and features in the linked oblique were compared to the base map and digitized by hand. Each feature was categorized and comments were added for any variances or observations. This produced over 7500 features for the 2007 oblique photos.

This same procedure was applied to the 2002 set of oblique photos. In this instance a copy of the 2007 feature class was created and renamed to 2002. As this feature class was examined and compared to the 2002 set of oblique images, changes were made to the feature class, notes and modifications were added as the comparison continued. This also occurred with the 2007 feature class as items that were missed, overlooked or in error and became apparent; notes were maintained for all changes.

For the analysis both feature classes were used, landuse 2002 and landuse 2007, to calculate overall percentage of area by feature type within a city, township or county. To determine city and township boundaries the shapefile from the CTU database (MNGeo's City, Township and Unorganized) was used and for adjustments to NSMB lakeshore the MN DNR's pls_sectpy3 shapefile was used. Features outside of both feature classes necessitated the merging to the CTU and the county boundaries in order to determine total area. This feature class was used to clip land use feature classes for calculating total area of features within each county, city, township and unorganized territory within the NSMB boundaries. Additionally, this helped with avoiding duplication of data for feature classes and areas.

Some discussion followed and further research will be conducted. One area that will be looked at will be the Township of Lakewood as it was used as an example of results. The percent increase for total acreage of impervious surface from 2002 to 2007 was calculated as 29.53% which seemed excessive. Also a request was made to check on the months the photos were taken and if there is a significant time period difference, determine if that may have contributed to variance.

Hollie went on to explain that this analysis has some limitations. It is subject to the subjectiveness of the technician; variance in photo location or view (replication not

consistence); inability to recognize impervious features present but not visible in photos. Only features visible in both sets of photos were drawn and counted. Recommendations were also made if further work would be considered such as an improved GIS road dataset, different technology such as Pictometry oblique images, LIDAR data for the north shore, and high spatial resolution.

Board members discussed some of the applicability of this project. Andy Hubley will set up a link on the website once the ARDC final report is completed and submitted to the Coastal Program. Some concern was on the acceptability of access and usage of the analysis, interpretation of data, need for more explanation on results.

4. Other business included the Certificate of Appreciation to Bob Fenwick. Everyone agreed that he had contributed greatly to the North Shore Management Board and Plan. A letter will be written and sent along with the Certificate.

Next meeting location and time will be determined at the next teleconference meeting which will be held in February. The same method (MeetingWizard) will be used in determining the day and time.

Meeting adjourned.

ATTEST:

Rich Sve, Chair

Elizabeth R. Sarabia, Recording Secretary