



Barrington Area Council of Governments

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May 28, 2008

Ms. Victoria J. Rutson
Chief, Section of Environmental Analysis
Surface Transportation Board (STB)
395 E Street, SW
Washington, DC 20423-0001

RE: STB Finance Docket No. 35087
Canadian National Railway Company and Grand Trunk Corporation – EJ&E West
Company

Dear Ms. Rutson:

The Barrington Area Council of Governments (BACOG) remains concerned about the proposed Canadian National (CN) /Elgin, Joliet and Eastern Railway Company (EJ&E) transaction for the metropolitan Chicago region. This letter contains comments for the Environmental Impact Statement (EIS) in the areas of: rail traffic projections, groundwater impacts, and timeframe for the EIS.

As a regional planning organization, BACOG serves the greater Barrington area including the villages of Barrington, Barrington Hills, Deer Park, Lake Barrington, North Barrington, South Barrington, and Tower Lakes, plus Cuba and Barrington Townships. The region's 35,000 residents are contained in parts of the four counties of Lake, Cook, McHenry and Kane. BACOG was formed in 1970, and its comprehensive land use plan provides the framework for the organization's policies and programs, guiding environmental protection and development within the area.

Before offering comments, I first want to thank you for responding to comments at the January 23rd agency meeting by organizing the stakeholder meetings in Chicago on April 29th and 30th. These were valuable meetings for agency staff to share information and help develop data and ideas for the EIS. We also noted changes in the final scope that responded to comments submitted by BACOG and communities and organizations with similar concerns, and these changes are appreciated.

Surface Transportation Board
CN-EJ&E EIS FD-35087
List of Distribution
BACOG
STB
STBCTA
Original - Job File

Carrying Capacity

As discussed with staff of the Chicago Metropolitan Agency for Planning (CMAP), BACOG agrees that the National Environmental Protection Act (NEPA) allows and intends a higher level of environmental protection than is implemented by interpretations such as the “reasonably foreseeable” clause that has historically been applied. BACOG believes it is time to set a new precedent and pursue an approach that will better and more pro-actively protect the environment, while still complying with the Council on Environmental Quality (CEQ) regulations. I believe CMAP will more fully explain this position in their letter, which BACOG has not yet reviewed but of which we are generally supportive.

Chicago is reportedly the largest rail hub in the country (Federal Railroad Association, June 2003), and this region is poised for substantially more growth in the short-term and the long-term. The Federal Highway Administration’s national forecasts for rail tonnage are projected to *rise by 55 percent between 1998 and 2020*. In light of the opening of Port of Prince Rupert in Canada and CN’s own website videos and materials, we believe CN also is poised for very significant growth in this region. CN and Mr. Hunter Harrison have made it very clear that expanding CN’s intermodal business between Port of Prince Rupert and Memphis is a key element of the proposed transaction.

Although the EIS extended the time horizon for rail traffic to the year 2015 (a 2-year extension from what CN originally offered), BACOG continues to believe this time period is inadequate and does not meet the public expectation for government protection of our communities and infrastructural assets. Many parties have commented that the laws that govern this situation were created in a different era and no longer relevant today; short of “fixing” these issues now (for which there is no time), we urge you to look at the CN proposal in a more forward-looking manner, and in a longer timeframe. The very far-reaching impacts of this transaction are cause for the Surface Transportation Board (STB) to consider whether to proceed with methods based on historical precedent or consider new, still-compliant possibilities that better respond to the unique factors of the situation. The various forecasts for rail freight growth are entirely relevant to the CN/EJ&E line over 10 or 20 years or longer, and we believe the EIS is obligated to consider these growth projections in some way.

BACOG recognizes that the STB hesitates to require growth projections in the ways and timeframes previously requested by BACOG and others because what is “reasonably foreseeable” is dependent on economic conditions and business decisions by others; in saying that, however, we wish to re-affirm our support for a different approach that would look at the “carrying capacity” of the line and request that the EIS include development of this information. The concept of carrying capacity would remove the question of *when* and examine operations on the line assuming rail traffic at full capacity. In light of rail expansion that is forecasted globally and nationally, it is reasonable to assume the worst case scenario for freight rail traffic through the Chicago area is an eventuality.

We ask that the EIS fully explore the carrying capacity of the line, including, for example, identification of: traffic volumes at capacity; improvements that would have to be made to correct problems on the line such as bottlenecks; strategic changes that would be necessary to

operate at capacity such as additional double tracking; operational changes such as elimination of passenger service on shared tracks. The EIS would establish thresholds for freight traffic, regardless of when those levels are reached, that would warrant additional mitigation. The thresholds would be capacity measures and not points in time, and there could be one or more capacity thresholds between “best case” (CN’s submittal) and “worst case” (carrying capacity). To be clear, the thresholds and mitigation measures under the carrying capacity concept would be *in addition to* any mitigation required under the CN proposal currently before the STB. We would encourage the STB to consider extending its period of oversight to monitor future growth on the line.

Groundwater Data

BACOG reiterates its request that the EIS study groundwater resources thoroughly, especially the shallow aquifer system where a contamination event has the potential to reach a significant number of people. This would not be an unprecedented activity for the STB as groundwater studies were done in the Giesmer, Louisiana EIS.

The hydrogeology underlying the BACOG area is relatively complex due to glaciation. The uppermost hydrogeologic unit is the unconsolidated aquifer system, which was formed from materials deposited by retreating glaciers. These units vary in thickness from less than 50 feet to more than 200 feet in the BACOG area and consist of interconnected sand-and-gravel aquifers, fine-grained aquitards, and aquicludes (clays) within the unconsolidated glacial materials. Buried sand-and-gravel aquifer units are present at most sites throughout the area.

The BACOG area is unusual in that the low density development that is characteristic of the region incorporates private well systems for individual lots. In addition to the four public wells that serve the population in the Village of Barrington, there are thousands of private wells that serve the population of private residences in the countryside communities surrounding Barrington in the other BACOG communities. Virtually all these wells, including the four wells in the Village of Barrington, are located in the shallow aquifer system. Although some of these wells go to the shallow bedrock, the vast majority of these are in shallow sand and gravel deposits.

Good recharge areas, i.e., those areas that favor the penetration of precipitation or stormwater runoff into the subsurface so that it can reach and replenish underground aquifers, are described and identified in work conducted by BACOG. (Recharge was also discussed in the 2/14/08 BACOG submission.) Water travels rapidly through soil materials (surface soils and subsurface soils) with large pore spaces and high conductivity values. When precipitation or stormwater penetrates to a saturated aquifer, it replenishes that aquifer – and if it is carrying a contaminant, it contaminates the aquifer as well. The characteristics that encourage rapid refreshment of the groundwater are the same characteristics that favor the travel of contaminants and can degrade the water supply. The recharge area map is attached as Figure 1, Estimate of Recharge Characteristics.

The historic water levels in the shallow aquifer system in the BACOG area are identified in Figure 2, Historic Water Levels in Vicinity of EJ&E Railroad. These levels were determined from one-time measurements as new wells were drilled and recorded in well driller logs over the years. Current data on water levels would be needed to determine existing groundwater flow patterns. The 2/14/08 BACOG submission also contains information about water levels, and it is noted that of wells within 2,500 feet of the rail line, a majority are less than 100 feet from the groundwater level, and 15% of wells are within 50 feet of the water level. Since all these wells are pulling groundwater from an interconnected system, a fact which is demonstrated in the BACOG study, a contaminant introduced at any location has the potential to affect wells down the groundwater flow gradient of the introduction location. Figure 3, Three Dimensional Distribution of Aquifer Materials in the BACOG Area, demonstrates the interconnectivity of the aquifer units in the sand and gravel units in the shallow aquifer system. Figure 3a, which is untitled, overlays the BACOG boundary (irregular white outline) and rail roads (red lines) onto the top view of the full-color BACOG study area model shown in Figure 3 to orient the reader.

Other submissions have pointed out the substantial increase in train traffic on the line, with proportional increases in hazardous materials being carried by that train traffic. The risk of spills from those trains increases with increases in: the number of train cars loaded with hazardous materials, number of trains per day, and speed of trains, for example. These are all conditions projected with the CN transaction.

Additionally, under new federal regulations announced this year, poisonous chemicals, radioactive substances, explosives and other high-risk materials may increasingly be routed onto the CN/EJ&E rail line, because trains will be required to operate on the safest possible routes. There may be more than a proportional increase in hazardous materials on the CN/EJ&E line. The new rules mandate that trains transporting the most toxic hazardous materials use the safest, most secure routes determined by criteria that include population density. The EJ&E line passes through some lower density areas, probably making it relatively “safer” for all risks to Chicago’s population than other CN lines in Chicago -- although the risk will quadruple or more for the children and adults in back yards, schools, playgrounds, hospitals and downtowns in suburban areas of the EJ&E where traffic will quadruple.

What is not recognized in this “safe” trade-off is the risk to groundwater because of the public and private well fields and recharge areas along the length of the train line that would become vulnerable to hazardous materials spills. Additionally, derailments could spill contaminants directly into remote areas such as forest preserves and natural areas with no or limited access. Cuba Marsh in the Barrington area, for example, has no access roads into the area, and it would be extremely difficult to get assistance for clean up of a spill. Not only would such a spill harm the flora and fauna, but the waters of Cuba Marsh may be a conduit to the shallow aquifer system.

Railroads will analyze alternative routes and pick paths that are safest, most secure, most practical and commercially viable, according to news reports. The analyses will be performed by the railroads themselves, with no outside review and limited input from state and local leaders or emergency responders. Decisions on rerouting will be left to the railroads. (“Deadly Cargo to

Roll On”, story by David Nitkin, Baltimore Sun website, May 25, 2008) Because groundwater concerns are not mandated for inclusion in the analysis, they almost certainly will not be.

Though your consultants purport that the risk of spills is low, the safety record shows that hazmat rail spills happen with regularity and frequency. We ask again that you consider CN’s Canadian safety record because it is relevant to significant adverse impacts.

In addition to a description of water resources and various mapped elements, a host of relevant political factors and unique conditions come into play in the discussion of how rail traffic affects groundwater resources, including:

- An international agreement between Canada and the US Great Lakes states’ governors protects water diversions from the Great Lakes. Lake Michigan water is not available to the greater Barrington area nor is it ever likely to be.
- Water supply from Illinois rivers is limited by laws that require maintenance of minimum water levels and baseflow. River water is not available to the BACOG area nor is it ever likely to be.
- Recent mining of the deep aquifers and water quality issues in the deep aquifers make them a problematic and expensive alternate source of water supply.
- There is limited or no infrastructure in the communities along the rail line in the BACOG area to distribute water from any public source even if it were to become available, with the exception of the Village of Barrington.
- If there is contamination from hazardous materials spills, the cost to drill a private well to another, unconnected deeper aquifer could be in the range of hundreds of thousands of dollars per well, per homeowner -- OR to supply infrastructure to neighborhoods for public or community water supply in the millions of dollars -- both of which are cost prohibitive.

The consequences to the population of the region are extraordinarily high, in that the water supply would become unsafe or potentially lethal. There is no other source of water available, and even if there were, there is no distribution system in place. The unique conditions of the region elevate the risk to a new level, which warrant a higher level of analysis.

Specifically, we request more in-depth study of groundwater in relation to the potential for contamination of groundwater in the shallow aquifer system, including:

- Groundwater water levels and flow patterns
- Stormwater flow patterns; stormwater flow patterns in relation to groundwater recharge areas
- Behavior of hazardous materials (to be carried by rail) in stormwater and groundwater
- Toxicology of hazardous materials, human and wildlife
- Baseline water chemistry in groundwater in the shallow aquifer system
- Well water sampling along the rail line before transaction start date, and at identified intervals thereafter to verify there are no changes to baseline conditions
- Economic impacts:
 - Municipal liability to provide public water and public infrastructure to contaminated properties;

- Re-routing of hazardous materials to “safe” train lines, per 2008 federal regulations, where spills could impact flora, fauna and water supply through introduction into natural areas that are components of water supply system.

It is a new era for environmental awareness about groundwater, with much thought and attention devoted to water supply issues. Water supply is receiving attention nationally, and in Illinois the Governor issued an Executive Order in 2006 mandating water supply planning in areas of the state, including northeastern Illinois. New data and mapping is being developed by federal, state, county and local governments to understand geology, aquifers and water supply and contamination issues in regions of the country, the state, and metropolitan Chicago. This includes mapping and data development by the Central Great Lakes Mapping Coalition, the Illinois State Water Survey and Geologic Survey, McHenry County and other metropolitan counties, and BACOG. At every level, there is a coalescing of concerns, conditions and information that calls for new approaches and more in-depth study of water resources. The STB's studies now must address how the groundwater environment is affected by rail proposals. The necessary resources are available, and a different kind of EIS is in order. We believe it is a public expectation and an obligation of the STB to embrace a more comprehensive study of groundwater resources for the CN/EJ&E transaction.

Timeframe

We are aware of the letter submitted by Canadian National on May 13, 2008, suggesting an expedited timeframe for the EIS for this transaction. We feel the requested timeframe is much too short for the extensive analysis needed for this project. A project of such magnitude would have a significant impact on Illinois and the metropolitan region, and it warrants a very careful review. The EIS must allow enough time for data to be developed and submitted by communities and interested parties and for this data to be fully considered by the STB consulting engineers. Anything short of full consideration in the full time period needed would be perceived as a short-cut of the process that does not benefit the public interest.

Again, thank you for your consideration to our comments and for your efforts in making this process especially participatory through the stakeholder meetings. Please do not hesitate to contact my office if you have questions.

Sincerely yours,



Janet L. Agnoletti
Executive Director

cc: BACOG Executive Board

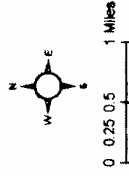
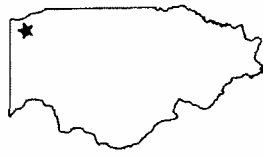
BACOG Area Large Study Area

Estimate of Recharge Characteristics

Figure - 1

BACOG

BAGIS



Legend

BACOG Boundary

Railroad

Municipalities

Fox River

Critical Recharge

Important Recharge

Moderate Recharge

Poor Recharge

Very Poor Recharge

This Digital Elevation Model (DEM) indicates the estimated Recharge Characteristics for the BACOG area.

Raw Well point data was purchased from the USGS, transferred into units and examined for quality control.

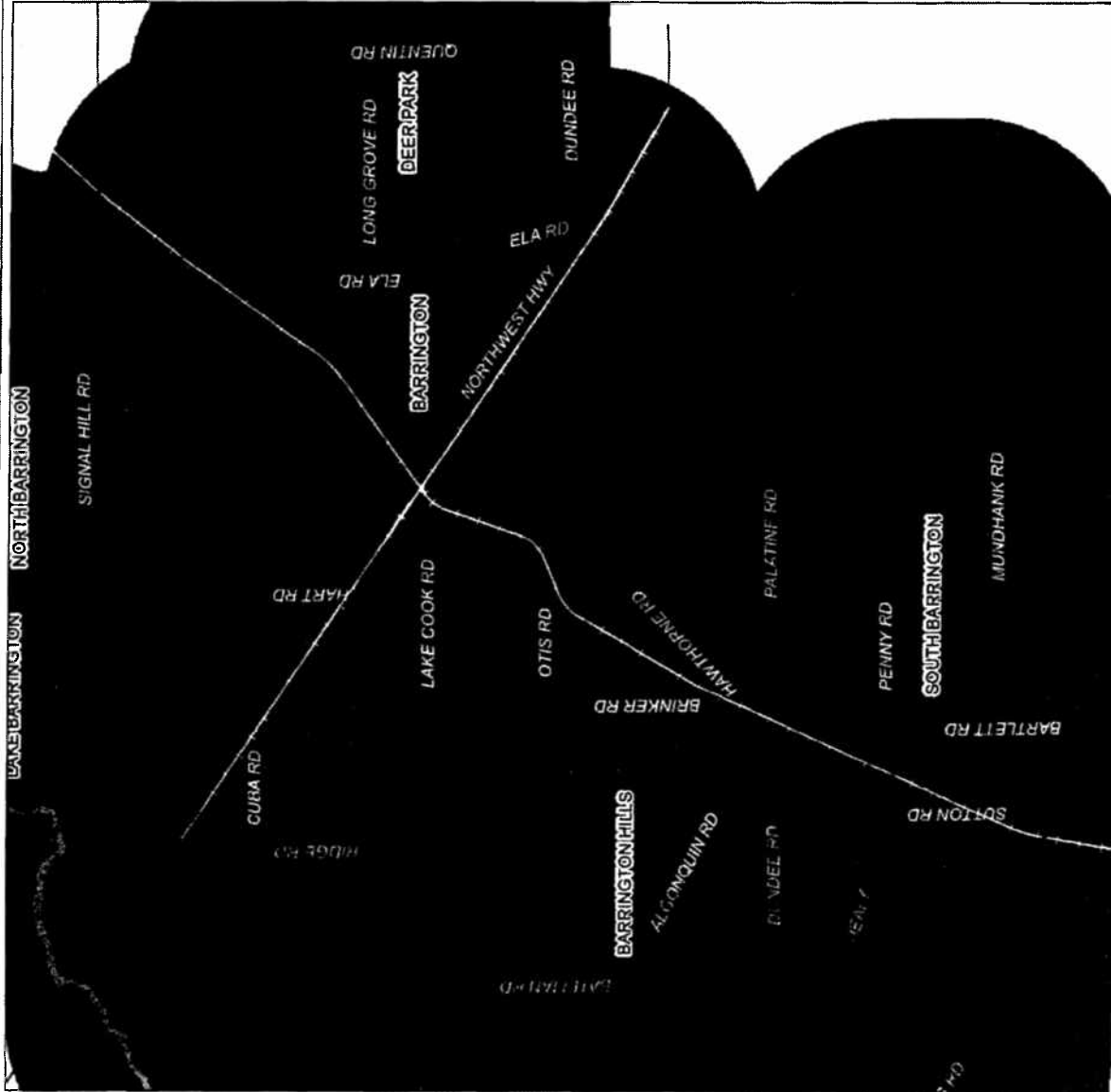
This data was developed using the protocol of Kurt Thompson, and recharge values were assigned manually.

To interpret this surface, ArcGIS Spatial Analyst was used and the output method was used.

Map created: Connie Polkomy, September 2006
Barrington Area Council of Governments

Sources of the data are the Barrington Area Geographic Information System (BAGIS 5) and Lake, Cook, Kane and McHenry Counties. Well data is from the Illinois State Geological Survey.

Connie Polkomy - September 2006



Historic Water Levels in Vicinity of EJ&E Railroad

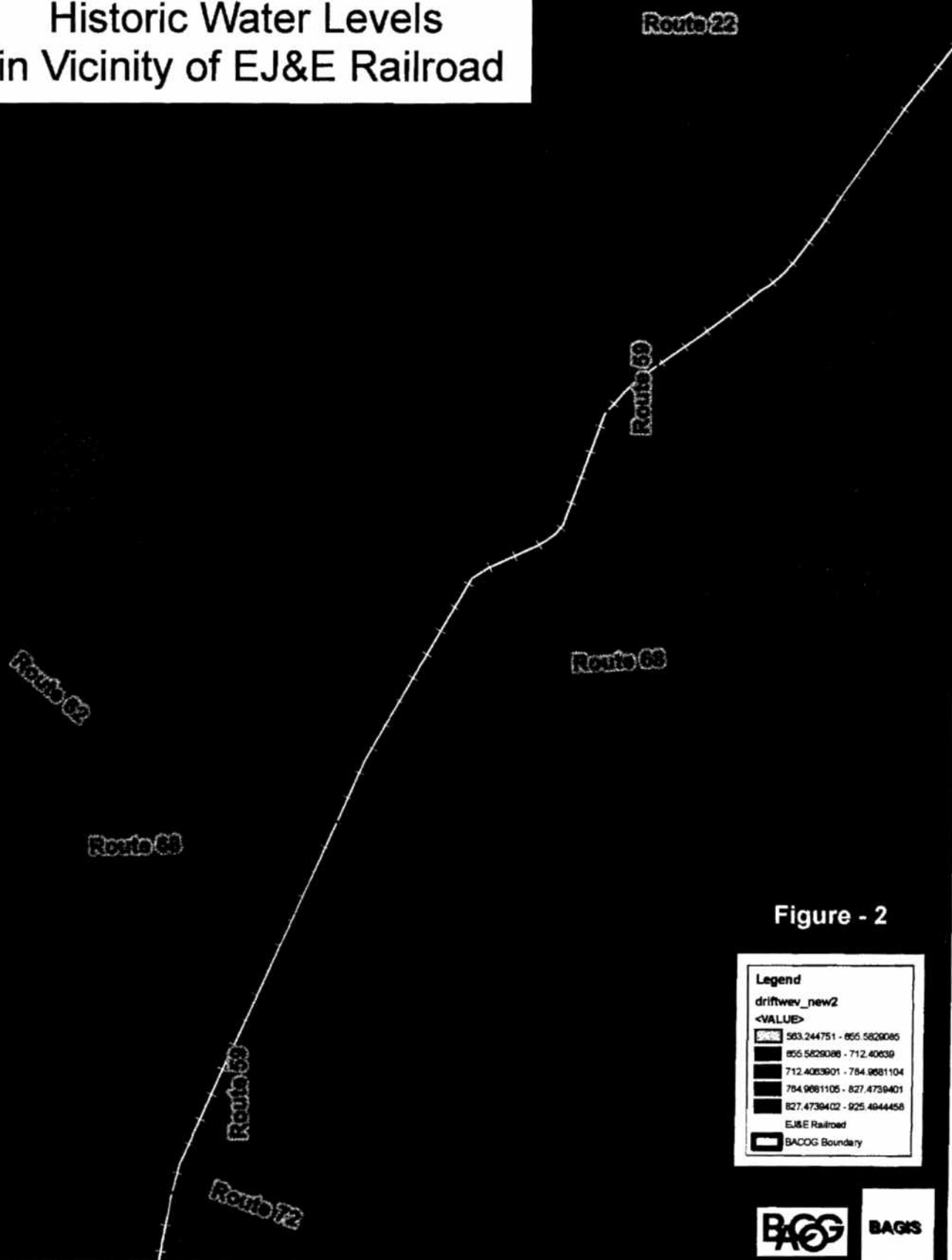


Figure - 2



BAGIS

Three Dimensional Distribution of Aquifer Materials in the BACOG Area



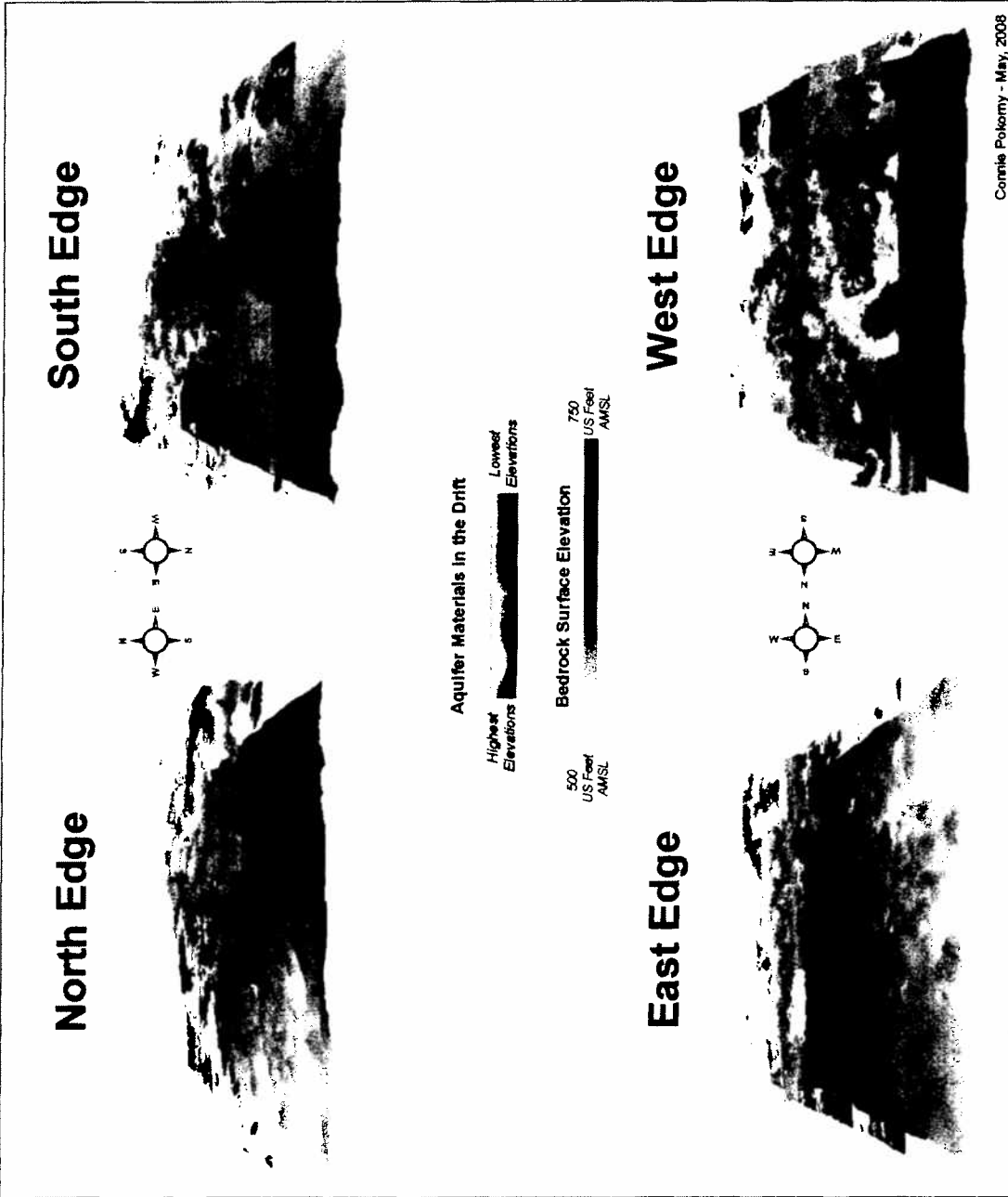
Figure 3

The graduated color scheme indicates the aquifer units located on top of the shallow bedrock in the BACOG study area.

Raw well point data from the ISSGS was purchased then sorted and examined for quality control and queried for depth and hydroconductivity. Hydroconductivity was assigned by Dr. Kurt Thomssen.

To interpolate this surface, ArcGIS Spatial Analyst Extension and the Kriging method were used. Aquiclude and aquifard materials were removed so that only aquifer materials are symbolized on this figure.

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Sources of the data are the Barrington Area Geographic Information System (BAGIS 5) and Lake, Cook, Kane and McHenry Counties. Well data is from the Illinois State Geological Survey.

BACOG BACOG

Figure 3a.

