

September 6, 2001

Participants

Jim Nicholas, U.S. Geological Survey, Water Resources Division
Roger Gauthier, U.S. Army Corps of Engineers, Detroit District
Chuck Southam, Environment Canada, Ontario Region
Dave Cashell, Ohio Department of Natural Resources, Division of Water
Dan Injerd, Illinois Department of Natural Resources, Office of Water Resources
Ian Cameron, Ontario Ministry of Natural Resources, Water Resources Section
Becka Carson, Ontario Ministry of Natural Resources, Water Resources Section
Emma McKennery, Ontario Ministry of Natural Resources, Water Resources Section
Tom Crane, Great Lakes Commission, Resource Management
Tom Rayburn, Great Lakes Commission, Resource Management

John Glenn Bill, Biohydrologic Study

Gauthier said that the U.S. Army Corps of Engineers (USACE) will be funding the Great Lakes Commission (GLC) to assist in three components of the John Glenn Bill: 1) Strategic planning for water resources development; 2) analyzing the economic effects of recreational boating in the Great Lakes; and 3) looking at the biological and hydrological aspects of the Great Lakes System utilizing the existing framework of this project. The biohydrologic aspect of this work will be looking at how accurately demand on Great Lakes water can be predicted and handled. Within the next 20 days, GLC staff will provide USACE with an outline on the biohydrologic portion including a brief review of what studies will be available and applicable to this work.

Water Balance Report

Nicholas reported-out for Tom Croley, National Oceanic and Atmospheric Administration (NOAA) Great Lakes Environmental Research laboratory (GLERL). Nicholas said that he expects the Water Balances to be completed by the end of September. He believes it will only be the balance summations and not the actual report, but perhaps Croley will be able to provide a summary of the report for the Project Management Team (PMT) and Stakeholders Advisory Committee (SAC) meetings. Injerd wanted to know what the Water Balance Report was going to say. Nicholas said the Report will include monthly data on the seven tracked waterbodies of the Great Lakes from 1948 - 1998. Nicholas said the report will be used to evaluate how well we know the water balances and to identify and formulate a plan to reduce future errors in the calculations. Injerd wondered if runoff was an included category in the Report. Nicholas said yes it includes stream gauge data and interpolated data for ungauged areas. Evaporation is calculated based upon thermodynamic equations. Nicholas feels the Water Balance Report will

be an initial point to begin the Errors White Paper. Nicholas said beginning October 1 he will have two individuals working on the TSC activities. One is currently assisting now with the errors work but will switch over to compiling data for the Status Assessment once the other individual begins October 1. Nicholas will provide name and contact information to the group when they are on board.

Status Assessment Report

Nicholas thinks the Status Assessment data could be displayed online with ArcIMS. Nicholas wants his GIS and web staff to get together with GLC staff to explore and develop this. Crane suggested that maybe we could use the annual state data report prepared by USGS. Nicholas said that yes developing the online data by “water year” (federal fiscal year) would be a good start but this only includes USGS data and not other federally or state generated data. Crane noted that the PE 2 TSC will need to produce a hardcopy report to augment the online/ArcIMS version. Nicholas said the hardcopy version should not list every report on hydrology on the Great Lakes, but rather should utilize some of the more comprehensive reports.

Errors

Nicholas said that at this point nothing substantial has begun on the errors work. However, sources are beginning to be identified by an undergraduate student working with USGS. On October 1, a hydrologist will take this person’s place. Nicholas believes the errors work is the real meat of Project Element 2. Rayburn asked if a strawman draft of the Errors White Paper could be prepared for the PMT Meeting on September 20? Nicholas said preparing a draft prior to having the person on board who will write it seems inappropriate. Crane said Mike Donahue, GLC, would also like to see an outline of the hardcopy Status Assessment Report. Crane and Rayburn will rough-out an initial outline and forward it to Nicholas for review for potential presentation to the PMT and SAC. Nicholas said to scope the outline per watershed.

Needs Assessment

Gauthier said the existing Water Balance is being developed and addressed within the current state of the science. This status assessment exercise needs to include “what we know/what we don’t know” sections and their influences on the system. Gauthier will set-up needs assessment workshops throughout the Basin with the objective to include concrete recommendations and provide linkages to such work as the John Glenn Bill. The first meeting is tentatively scheduled for Chicago on river diversion. The second will be in Detroit on the St. Marys River. The third will be in Burlington on Canadian diversion plus the New York Barge Canal. We want to gauge how accurate are our assessments of outflow. Southam said that errors, the level of errors, and errors associated with outflows will be of particular importance. Gauthier believes we should be breaking this process into components. Gauthier said the Errors White Paper should address the question what needs to be done to get better numbers. Inflows, outflows, and changes have to accurately reflect the withdrawal request levels. Injerd agreed this is generally the right direction, focusing on the level of detail. These workshops will give enormous details into measuring flows. The Chicago diversion experience should add greatly. However, what does this tell us

with regard to withdrawal requests. Southam answered the level of scales, detail of measurement capability and requests. Gauthier said one focus could be on finding a way measurements and decisions can be made in a more timely fashion. Nicholas said we need to move forward with the workshops, and we need to develop a list of participants, dates, and the agenda. Gauthier said he would bounce some names and the tentative agenda off Southam and then forward these out to the TSC for final review. Nicholas will handle the logistics with an eye toward having all the workshops completed by the end of CY '01. Perhaps the Detroit meeting could be tacked onto the Coordinating Committee's meeting in Ann Arbor at GLERL on November 13 and 14. (This date also conflicts with the Experts' Workshop also scheduled for November 13 and 14 in Ann Arbor.)

Gauthier said that maybe the PE 2 TSC should get together to go over the Water Balance Report. Nicholas said perhaps in January in person to review what we have, need, and missed. Then again to put together the conclusions and recommendations. Gauthier said that we will then need to put a "price tag" on the recommendations. Injerd said we should look at station data such as St. Marys and determine when that error becomes significant and how it impacts decisions. Nicholas wondered if we are trying to hit zero tolerance with the errors? Injerd said he believes what we really want is to determine how we are measuring flows and domestic and PWS withdrawals. Nicholas said he believes that the Water Use TSC is taking a look at this as a consumptive use. Injerd wanted to know if what is being done in Chicago is being done throughout the Basin. Gauthier said we need to start at a "Year 0" (2000) and develop this cumulatively from this point on, addressing the sensitivity and relevance of the data.

Communications Tools

Rayburn stated that the current project web site www.glc.org/waterquantity/wrmdss has been updated on a regular and ongoing basis and includes all information presented by the PMT, SAC, and TSCs. He feels that as draft and final reports are now coming on line (including the revised Literature Search and Analysis, Draft 1998 Water Use Report, Water balance Report, and others) the web site will begin to morph into the originally conceived site as hosted on GLIN. The reports, linkages, and structure will have to be looked at by the TSC as it begins to be developed into the framework of the decision support system. Rayburn will begin to focus on this following the PMT and SAC meetings, drawing in other GLC staff and also Gauthier for assistance at the preliminary stages. The site may eventually include such things as habitat, ecological, and geological reports. As with the standard structure of GLIN, this site will act, in this case, as a web pointer for such things as, "I need information on Southern Ontario watersheds, where do I go?" Gauthier said when producing hardcopy reports, we will need to include hyperlinks in order to "marry some of the resources we've invested in." Crane said mostly this will be a web tool but will develop hardcopies of products as a part of the process. Gauthier said we will need a hardcopy of any recommendations and conclusions. Cameron said we should ensure that at a minimum, everything developed in hardcopy is included on the web page.

PMT/SAC Meeting

For the PMT and SAC meetings scheduled for Thursday and Friday, September 20 and 21, 2001,

this TSC may have ready a Strawman of the Errors White Paper; the Water Balance Report presentation (Croley); a review and update on the assembly and compilation phase related to the status and needs assessment; and minutes from this meeting. At the PMT and SAC meeting Cameron wondered if we should bring up the fact that the potential errors may dwarf the Water Use Report numbers. This may be beneficial to help eliminate or minimize any potential disconnect when people review each set of numbers. Crane believes this is one very good reason to bring together both the Water Use and Status Assessment TSCs for a joint meeting. Nicholas said that consumptive use is not included in the Water Balance Report and that to his knowledge no one actually measures this variable. Crane said maybe at a January or March/April meeting would be appropriate timing to hold a joint half-day session. Nicholas said TSC members should send specific dates that they are not available for an in-person next meeting in January. Also, include any travel restrictions. This meeting could then also be used to delineate the final substance and direction of the associated plans and reports. Perhaps sometime during the week of the proposed January 2002 PMT meeting would be a good time to get together.

Next Meeting

The next conference call for the PE 2 TSC is scheduled for December 3, 2001 at 1:30 PM (Eastern).