

**MEETING OF THE  
WATER WITHDRAWAL AND USE TECHNICAL SUBCOMMITTEE  
for  
A Water Resources Management Decision Support System for  
the Great Lakes/St. Lawrence**

Airport Marriott Hotel  
Detroit Metropolitan Airport  
Romulus, MI  
Director-s Room  
March 30, 2001

11:00 a.m. - 3:15 p.m. (EST)

Summary Minutes

- 1) The meeting was called to order at 11:05 a.m. by Tom Crane, Great Lakes Commission. Crane welcomed the group. Those present were: Francois Godin, QC; Carol Luukkonen, USGS, MI; Ron Van Til, MI; Leonard Black, OH; Scott Christilaw, ON; and Marilyn Ratliff, GLC. Also participating via conference call were: Michael Holt, NY; and Terry Lohr, WI.
- 2) Crane gave a brief update on the AWater Resources Management Decision Support System for the Great Lakes/St. Lawrence@ Project. He began by saying that the Project Management Team (PMT) and the Stakeholders Advisory Committee (SAC) met in Ann Arbor on January 25 and 26 respectively. Crane commented that both groups reviewed and approved the draft TSC workplan with a couple of additions. Crane mentioned that the PMT had suggested that the TSC review the current state of consumptive use information and the use of coefficients for estimating consumption of Great Lakes/St. Lawrence water. Also, the PMT had asked the TSC to prepare a report on Great Lakes state/provincial water conservation programs. Both of these items were on the agenda for further discussion. Crane also commented that the interim findings from these studies would be very important in developing the water withdrawal and use needs assessment for the Great Lakes Protection Fund as part of the two-year effort. Results from these studies will also help the Commission and others prepare for additional phases of this effort once Phase I is completed. discussing opportunities for a collaborative effort to begin implementing several of the recommendations from the May 1994 report. Crane explained that in March 1995 a proposal for the expanded Spill Protection Initiative was submitted to the Great Lakes Protection Fund and subsequently approved in June 1995.
- 3) Marilyn Ratliff updated the group on the status of the 1998 water use data submittal. Ratliff indicated that there was no change from January; three jurisdictions still needed to submit their data. The jurisdictions are: Ontario, Pennsylvania and Quebec. Crane then asked Scott Christilaw and Francois Godin to update the group regarding their data collection and reporting efforts.

Ontario Christilaw stated that Ontario=s water use data collection activities are being conducted under the AWater Resources Information Project@ which is designed to allow the province to collect water use data at a much finer resolution than is currently required by the Great Lakes Water Use Database system. Don Tate has been hired as a contractor to work with Ontario to collect water use data by sub-basin concentrating on three main categories: municipal, agricultural and industrial water use.

Quebec Beginning April 1, Godin will be part of a new agency dealing with technical aspects of water quantity including among other activities, hydrologic studies, hydrometry and public reservoir management. Another Service of the MENV deals with all the aspects of water protection policies and water management regulations in Quebec. Both the new agency and the Service will coordinate water use/supply issues for Quebec. Godin indicated that water use data for the industrial, public supply and hydroelectric sectors should be available within the next 30 days. However, the ability to provide full water use information for all categories of use will take much longer, possibly up to two years.

Pennsylvania (Pennsylvania was unavailable to provide a status report)

- 4) Crane then initiated discussion on developing a report on state/provincial water use data collection and reporting programs that would highlight important information on the individual programs and highlight constraints and needs within these programs. The group felt that this was an excellent idea and suggested that the report be as brief as possible and that the Commission staff consider presenting the information in a matrix format. The matrices might provide information on program issues related to legislative authority, statutes, regulations, how data is collected (e.g., measured, estimated from facility reports, estimated using trend analysis or census data, etc.). Other categories might include lead agency funding issues, personnel/staffing needs, sister agencies that have water collection and reporting responsibilities, and whether programs are Great Lakes Basin specific or are jurisdiction-wide programs.

**Action: Commission staff will develop an outline and draft matrices for the compilation of this information. This will be done by June 1, 2001.**

- 5) Next, the group discussed how to best address the issue of data compilation and reporting difficulties that are plaguing most of the jurisdictions. The discussion covered a range of topics related to using back years of data, going to a less frequent report cycle (i.e., three or five year reports), and using NR (not reporting) for those categories where measured data does not currently exist. Following lengthy discussion the group developed a proposal for addressing some of these concerns that includes the use of a ATier One, Tier Two and Tier Three@ system for collecting and reporting data. Tier One categories would include priority categories where the majority of state/provincial water use is occurring. For these categories, there would be two conditions for reporting data; one, only measured or facilities reported data would be submitted and two, data must be collected annually. Tier Two categories would include those where estimated data, provided by facilities or the state/provincial water use agencies, is currently used and Tier Three categories would include those where no or little data is available or where less reliable estimation techniques are employed (e.g., trend analysis, census data, etc.).

**Action: The TSC working with the Commission staff will recommend which categories fall into which tier; will come to agreement on uniform estimation techniques for other categories; and will develop procedures and a timeframe for bringing those other categories up to the next level.**

- 6) The TSC then discussed the state of consumptive use data and the use of coefficients to estimate consumptive uses. Lengthy discussion ensued over a variety of issues associated with compiling and reporting good consumptive use data. Many of the jurisdictions shared that there is much confusion and uncertainty among facilities and user groups over what consumptive uses are and how they are reported. The group talked about the difficulties in using coefficients related to geographic and climatic differences, differences in technology and practices among categories (i.e., irrigation). The TSC then reviewed the definition of consumptive use as established under the Great Lakes Charter and recommended one change.

**Action: The TSC recommended the following change to the Charter definition of consumptive use.**

**Consumptive Use:** AThat portion of water withdrawn or withheld from the Great Lakes and assumed to be lost or otherwise not returned to the Great Lakes due to **evaporation** *evapotranspiration*, incorporation into products or other processes.@

The TSC also discussed issues relating to the lack of good defensible consumptive use information in almost all categories. The TSC agreed that the current numbers would not be legally defensible and could be challenged from any angle. Also, the group agreed that there are serious consequences associated with the adoption of any annex to the Charter that relies heavily on our state of consumptive use information. It was also noted that to have each jurisdiction try to come up with a set of coefficients for each industry and category of use would be time consuming and not a good use of limited resources. The TSC then made the following recommendations regarding the consumptive use issue:

**Actions: 1. The GLC staff will conduct a literature search for sources of information on consumptive use. This will include such things as technical guides, circulars, bulletins and**

**other reports that might address this issue. The staff will complete this effort and report back to the TSC by June 30, 2001.**

**2. Carol Luukkonen, USGS, MI will consult with other USGS staff on the consumptive use issue and request and compile additional documentation on USGS use of coefficients. Luukkonen will report back to the TSC at its next meeting.**

**3. Based on the outcomes of items 1 and 2, the TSC may recommend some changes to the current consumptive use coefficients and will report back to the PMT at its August/September meeting.**

- 7) The PMT then discussed Great Lakes/St. Lawrence water conservation programs. Formal water conservation programs in most jurisdictions (especially for the Great Lakes/St. Lawrence Basin) are limited. Most programs, if they exist, are tied in with drought contingency plans. The TSC agreed that gathering this information and presenting it in report format will be valuable.

**Action: The GLC staff will begin to compile information on state/provincial water conservation programs and prepare a report for the TSC. This report may utilize the matrix approach discussed for the report on water use data collection and reporting programs (see item 4 above).**

- 8) Other Issues Throughout the meeting, some significant other issues were raised related to the work of this TSC. These are summarized below:

USGS Five Year Reports Carol Luukkonen updated the TSC on the process for preparing the 2000 five year water use report. Luukkonen indicated that the USGS was convening a five year report workshop during the week of April 2. One of the items to be discussed is the reduction of summary categories. Luukkonen indicated that USGS will likely reduce the number of categories in the 2000 report to four (down from nine in the 1995 report). This is due to scarcity of reliable data in these other categories. The categories to be covered will be: public water supply, self-supply industrial, thermoelectric and irrigation. This discussion influenced the TSC's thinking about its Tiered approach to water use reporting (see item 5 above).

Wisconsin Terry Lohr raised some very basic questions regarding the work of the TSC and the conduct of the overall project in general. Some of the questions raised are: Why is this study being conducted?, How is the data and information going to be used? There is a need for more information about the decision support system regarding what it is and how it will be used. Lohr then recommended that the TSC consider going to an every five-year water use data collection reporting program consistent with the USGS five year study cycle. Lohr argued that water use does not appear to change much on an annual basis and a five year program will save money and other resources and allow the states/provinces to tap into the USGS process. Although most of the other TSC members advocate water use data collection and reporting on an annual basis (at least for priority categories) no formal vote was taken on this issue.

Hydroelectric Power Generation The TSC discussed hydroelectric power generation and confirmed the need to include hydro-power data in the annual water use reports. The TSC recommended including hydro as a Tier 1 category and also recommended that the description of the hydro-power category be expanded in the report. The TSC did agree with the PMT on the decision to show water use minus hydro as the first set of tables in the report, but wanted to be sure that hydro data was also included in the second set of summary tables presented.

- 9) New Business No exact date was set for the next meeting, but the every quarter time frame was suggested for conference calls with in-person meetings being convened based on the availability of members and project demands.
- 10) With no further business, the meeting was adjourned at 3:20 p.m.

Respectfully submitted

Thomas Crane, Great Lakes Commission

**Meeting of  
A Water Resources Decision Support System for the Great Lakes-St. Lawrence  
Water Withdrawal and Use Inventory Sub-Committee**

Friday, March 30, 2001  
**10:00 a.m. - 3:15 p.m. (EST)**

Airport Marriott Hotel  
Detroit Metropolitan Airport  
Director's Room  
734-941-9400

Preliminary Agenda

10:00 a.m.	Welcome and Introductions	Thomas Crane, Great Lakes Commission
10:10 a.m.	Meeting Objectives	T. Crane
10:15 a.m.	Status Report of GLPF funded project: <i>A Water Resources Management Decision Support System for the Great Lakes-St. Lawrence</i> a. Review of Sub-committee workplan	T. Crane
10:30 a.m.	Report on 1998 Water Use Data Submittal and Report a. State and Provincial updates b. Recommendations on Report Format c. Discussion on reporting issues	T. Crane and Marilyn Ratliff, Great Lakes Commission
11:30 a.m.	Discussion of Consumptive Uses of Great Lakes-St. Lawrence Water a. Should we use consumptive use coefficients? b. Rationale for using coefficients c. Review of current consumptive use coefficients	T. Crane; all participants
12:15 p.m.	Lunch	A buffet lunch will be served
1:00 p.m.	Consumptive Use Coefficient Discussion (continued)	all participants
1:30 p.m.	State/Provincial Water Resources Management Programs a. State and Provincial updates b. What should be included in report? c. How do we want to present this information? (e.g., level of detail, format)	
T. Crane; all	Water Conservation Programs	T. Crane; all participants

participants 2:15 p.m.	<ul style="list-style-type: none"> <li>a. State and Provincial updates</li> <li>b. What types of information is available?</li> <li>c. How do we want to present this information?</li> </ul>	
2:45 p.m.	<ul style="list-style-type: none"> <li>Schedule for completion of sub-committee tasks</li> <li>a. request for 1999 and 2000 water use data</li> <li>b. state/provincial water use programs report</li> <li>c. water conservation report</li> <li>d. needs assessment</li> </ul>	T. Crane, M. Ratliff; all participants
3:00 p.m.	<ul style="list-style-type: none"> <li>Other Business</li> <li>a. next meeting date</li> </ul>	all participants
3:15 p.m.	Adjourn	