INTERNATIONAL UPPER GREAT LAKES STUDY

Scheduled Study Board Activities in Sault Ste. Marie, MI

September 4-6, 2007

FINAL

Day 1 – September 4, 2007

International Lake Superior Board of Control Public Meeting

Points raised at the meeting:

- Why was there a sudden drop in water levels in August 2007 on Lake Superior?
- Why is no one accounting for the community diversions from the lake? Water is being withdrawn but not returned.
- Suspicion that water is being diverted out of Lake Superior to US watersheds.
- Need to consider regulating Lake Superior outflows more frequently than monthly.
- Need more accountability of hydrologic components.
- About 40 people attended. May have been more had a better date been selected (not first day of school and day after Labor Day).
- There was significant press coverage with CNN, CBC, CTV and a local TV station.

Day 2 - September 5, 2007 - morning

Tour of the Sault Ste. Marie Control Works Facilities

This trip was very informative, including tour of the locks, US Power Dam and compensating works. A brief presentation was given by Steven Rose, US Army Corps of Engineers Area Engineer. Study members that attended were: Gene Stakhiv, Ted Yuzyk, Syed Moin, Tony Eberhardt, Kay Felt, Jim Bruce, John Gee and Don Burn. PIAG members who accompanied the tour were Don Marles and Dan Tadgerson. A CBC crew also participated and conducted interviews.

Day 2 – September 5, 2007 - afternoon

Study Board Meeting #4

Note: Action items are shown Bold and summarized in Attachment 6.

- 1) Welcome. Gene and Ted welcomed the group and the agenda was approved as provided with one amendment, item 8 was taken up before item 7 in view of Kay Felt's departure (Attachment 1). Those present were: Gene Stakhiv, Ted Yuzyk, Syed Moin, Tony Eberhardt, Kay Felt, Jim Bruce, Alan Chow, John Gee, Don Burn, Paul Pilon, Bill Werick.
- 2) Review Status of Action Items from Minutes of Meeting #3 Tony Eberhardt & Syed Moin. Status was given with updates. Of the 19 items, 5 needed additional clarification and follow-up as shown below:

No.	Description of Action Item:	Action Lead:	Due by:	Status:
1	Fact sheet on current water level conditions – revised to include all Upper Great Lakes	Syed Moin	On-going	Syed will provide links to historic data citing source and where additional info can be found.
5	Make three versions of the Study Org Chart (basic framework, TWG leads, Study Board liaison)	Syed Moin	Complete	Study Team needs to define how PIAG members will liaise with TWGs for PIAG Co-Chair consideration. A short guidance document is to be prepared and forwarded to PIAG for comments.
7	MOU between IJC and Environment Canada	Ted Yuzyk/ Jon Gee	Complete	John Gee is finalizing. Completion imminent.
17	Information about Great Lakes water diversions (related paper)	Jonathan Bulkley (Paper distributed by Syed Moin)	Complete	Paper will be included on the web site.
18	Board members will provide comments to Syed Moin for revising and re-issuing the flyer prior to the conference.	Syed Moin	Complete	Booth will be set up at A.D. Latornell Conference (November 14-16, 2007).

- 3) <u>Status of Technical Work Groups</u> Tony Eberhardt and Syed Moin:
 - a. TWG Leads:
 - i. 27 of 32 positions are filled. Revised versions of the Organization Chart are given in Attachment 2.
 - ii. New member is Dr. Marcelo Garcia from Univ. of Illinois, Urbana-Champaign for Sediment Studies TWG. Tony Eberhardt will send official notification, terms of reference, etc.
 - iii. John Gee will suggest an Ecosystem TWG Canadian Lead from Environment Canada. Need to go to the Lake Superior LaMP as a way of providing experts to cover the various aspects of the TWG.
 - iv. Alan Chow may have suggestions from OMNR (for Eco) and Ministry of Tourism (for Rec. Boating). Jim Bredin is also looking for Rec. Boating TWG Lead.
 - v. For the Hydrology TWG, Rob Caldwell and John Kangas will be officially considered members rather than co-leads due to public perception that there may be a conflict of interest. However, they will function as alternatives to the TWG co-leads, Debbie Lee and Al Pietroniro.
 - b. Terms of Reference (TOR):
 - i. Jim Bruce commented that there should be a clear definition within the TOR of what the Study Board expects each TWG to address in answering the key questions of the Study.
 - ii. Jim Bruce provided suggested changes regarding "climate change" paragraph in the Hydrology TWG TOR.
 - iii. TOR for Lake Huron Outflow/ St. Clair River Task Team will be revised to include wording that incorporates input/linkages to the NBS/ Climate Change TWG. Syed Moin.
 - iv. The following questions should be asked of the TWGs at the CCIW workshop (Sept. 10-12):
 - A. Has the conveyance of the St. Clair River changed (since the sequence of dredging in the 1920s)?
 - B. If so, identify and quantify sources of the changes.
 - C. What impact has this change had on the relative levels of Lakes Superior, Michigan-Huron and Erie?
 - D. Quantify the relative impact of hydrological components for the recent changes in the recent (1997-2007) water levels?
 - c. Work underway and proposals related to hydrology:

- i. Update on the six funded proposals was given. Point was made that work by others on 2-D and 3-D modeling will be shared. Work by USGS (Holtschlag & Bennion) will be complete by Summer 08. GIS should visualize how river bed has changed since 1817. Tony Eberhardt to contact Dave Bennion regarding this earlier database.
- ii. After meeting with Debbie Lee and Al Pietroniro, a follow-up miniworkshop will take place to discuss hydrologic proposals. Don Burn mentioned how prominent over-lake evaporation has become from a media standpoint since the hydrologic workshop and should be carefully assessed and determined.
- iii. Gene suggested a one-day workshop in November of invited 1-D, 2-D and 3-D modelers to demonstrate the need for adopting their approaches.

4) <u>Discussion regarding Climate Change Workshop</u> – Jim Bruce

- a. Proposed workshop agenda received overall acceptance from Board with minor changes (Attachment 3).
- b. Gene suggested inviting outside facilitators like Upmanu Lall, Columbia University (first day) and Paul Whitfield, Environment Canada, BC (second day).
- c. Change title to: Hydro-Climatic Impacts on Great Lakes Water Levels.

5) Shared Vision Planning – Bill Werick

- a. Described the successes of the approach taken during the International Lake Ontario-St. Lawrence River Study Board suggesting a similar approach be used for the IUGLS.
- b. Suggested improvements:
 - i. Information management (use of internet, software, best "nerd" team, etc.).
 - ii. Public involvement (inclusion of utilities like hydro, comm. navigation. as public, consider using mass media agencies, improve web site, etc.).
 - iii. Risk & uncertainty (need to formally write up approach. Determining climate change uncertainty is critical to IUGLS).
 - iv. Board Rules of Engagement (clear on Board consensus).
 - v. Feature climate change rather than just use it to test robustness of plans.
 - vi. Integrate regulation and St. Clair investigations.
 - vii. Collaborate with states and provinces on related issues like flood plan management.
- viii. Develop emergency response plans (long- and short-term measures).

- ix. Improve Great Lakes levels management institutions (no real coordination).
- x. Prepare for adaptive management during, not after the Study.

Day 3 – September 6, 2007

- 6) Update on the Public Interest Advisory Group (PIAG) Kay Felt
 - a. Summary of 1st PIAG meeting provided which included member concerns and action items identified (Attachment 4).
 - b. Need to hire a public information officer as quickly as possible. Good candidate interviewed, but not available. Second candidate to be interviewed on September 7th. Tony to follow-up on hiring with target start date October 1st.
 - c. Next meeting: Saturday, Nov. 3rd in Toronto.
 - **d.** In order to keep members engaged until then, need to define how members will liaise with the TWGs. **Gene to develop memo defining PIAG member liaise.**
 - e. Discussion about some of the media coverage the Georgian Bay Association has been getting through Mary Muter and the responses from the Board (actions underway) and IJC.
 - f. Gene requested that all present provide 3 slides on the message that should be conveyed to the public. Ted suggested that PIAG have a teleconference in late September to discuss procedures (September 25th) Board Member Action Item.
 - g. May suggest U.S. Power Squadron for membership on PIAG.

7) Communication – Ted Yuzyk

- a. Brochures, posters, press releases, web site
- b. Important to have our own public information person
- c. Commission will be asking the Study Board how we can speed things up, for example, two instead of three years for the interim report. Need to make it clear to TWG (at the kick-off meeting) regarding the specific things that they must do to answer the questions posed.
- d. Remediation issue: message regarding dredging and lack of remediation (1914 Order) is being developed for release as a fact sheet. **Syed Moin to follow up.**
- e. Web site: continuing to be improved (approximately 1200 hits daily).
- f. John Yee (Contractor) and Joe McIlhinney (EC) are in charge of web development and information management.

8) <u>Independent Peer Review</u> – Gene Stakhiv

- a. Requirement for external advice and independent review.
- b. Council of Canadian Academies (CCA) very clear on how they would proceed. Independent, credible and objective good from a long term perspective. They would select their own participants. Would need \$100K to begin looking for panelists, which is essentially the total annual budget.
- c. International Panel of Experts (IPOE) permit IJC to have input into panelists. Cost less than CCA. May have public perception issues.
- d. Suggested IPOE panels: hydraulic modeling, net basin supply, climate change and variability, possibly impact analyses for specific interests (environmental, rec. boating, etc.). Final assignments may come from international organizations.
- **e.** Decision: Using independent advisory panels (each with about 3 people) will be recommended to the IJC. Commission will be apprised of this recommendation and presentation given in Ottawa (**Ted Yuzyk and Gene Stakhiv**).
- f. Gene will finalize TOR for IPR with input from Ted, Mark Colosimo and Paul Pilon.

9) Financial Report

a. U.S. Summary of pre-Study and Year 1 – Tony Eberhardt gave the status of funding through mid-August. Further displays will have "Pre-Study" funds included within "Year 1" funds.

			Pre-Study (US Year 1 (US FY07) FY06)		S FY07)				
			Obligated	Committed	Spent	Plan of Study	Obligated	Committed	Spent
Common Data Needs	(Bathyme	etry)/ IT	0	0	0	25	180	180	150
Wetland/ Environmental		50	49.05	49.05	100	25	25	25	
Recreational Boating Tourism	&		0	0	0	25	0	0	0
Riparian/ Shore Prope	erty		0	0	0	100	0	0	0
Commercial Navigation	n		0	0	0	10	0	0	0
Hydroelectric			0	0	0	10	0	0	0
Domestic, Industrial &	Municipa	l Water Use	60	55.27	55.27	25	0	0	0
Hydrology, Hydraulic a	& Regulat	ion Plans	55	58.27	58.07	400	275	0	0
Public Involvement,&	PIAG/ Co	mmunication	50	1.89	1.89	63	146	8	3
Plan Formulation			160	157.28	157.28	50	0	0	0
Independent Technica	l Review		0	0	0	15	0	0	0
Study Board, Management			145	130.82	119.57	150	235	209.67	162
		Grand Totals	520	452.58	441.13	972.5	861	422.35	340.27
	Running	Total all Years				1492.5	1381	874.93	781.40

b. Canadian Funding: Syed Moin gave the status of funding indicating \$300K in carry over funds were provided, but \$963K in Year 1 – not yet available.

CANADIAN SI	ECTION - OTTA	WA-Upper C	Freat Lakes Refere	ence - General		3469797979
Description	Budget	Expended	Committed O/S	Balance	Forecast	Available
Acquisition of Informatics Equipment Under \$10,000	5,000.00	1,499.60	0.00	3,500.40	0.00	5,000.00
Holiday pay in hew of leave	0.00	374.17	0.00	-374.17	0.00	0.00
Miscellaneous Goods and Products	5,000.00	60.80	0.00	4,939.20	0.00	5,000.00
Non-professional Contracted Services	35,000.00	12,375.20	5,688.60	16,936.20	0.00	35,000.00
Other business services	15,000.00	0.00	0.00	15,000.00	0.00	15,000.00
Postage and Freight	10,000.00	0.00	0.00	10,000.00	0.00	10,000.00
Professional Contracted Services	60,000.00	6,930.00	28,000,00	25,070.00	0.00	60,000.00
Publishing and Printing Services	3,000.00	0.00	0.00	3,000.00	0.00	3,000.00
Rentals	2,000.00	0.00	0.00	2,000.00	0.00	2,000.00
Salary & Wages	60,000.00	20,934.00	0.00	39,066.00	0.00	60,000.00
Special fess and services	15,000.00	792.97	0.00	14,207.03	0.00	15,000.00
Telecommunication Services	10,000.00	1,581.42	4,449.80	3,968.78	0.00	10,000.00
Travel and Relocation	30,000.00	22,272.62	0.00	7,727.38	0.00	30,000.00
Total	250,000.00	66,820.78	38,138.40	145,040.82	0.00	250,000.00

c. A mutual spreadsheet will be developed. – Syed Moin & Tony Eberhardt

10. Review Reports

- a. Draft Semi-annual Progress Report **Syed Moin & Tony Eberhardt to refine the report as follows:**
 - i. Include a figure showing the bathymetry from circa 1860
 - ii. Need to include a place for up-coming events
 - iii. Section on Board, PIAG and TWG appointments
- b. Six-month Strategy Report Jim Bruce suggested that the NBS information be addressed prominently. The Strategy Report will be prepared by the Study Team.
- 11. <u>Up-coming Meetings (revised schedule shown as Attachment 5)</u>
 - a. Public Meeting sometime in November/ December
 - b. 6th Study Board meeting tentatively set for January 29-31, 2008 in Washington, DC area or combined with PIAG meeting and public meeting at Alan Steinman's office.

INTERNATIONAL UPPER GREAT LAKES STUDY

Scheduled Study Board Activities in Sault Ste. Marie, MI

September 4-6, 2007

<u>Day 1 – September 4, 2007</u>

International Lake Superior Board of Control Public Meeting

The meeting will be held in the Michigan & Ontario Rooms at the Walker Cisler Student and Conference Center, Lake Superior State University, 650 West Easterday Avenue, Sault Ste. Marie, Michigan.

The event will take place from 7:00 P.M. to 9:00 P.M.

Day 2 – September 5, 2007 - morning

Tour of the Sault Ste. Marie Control Works Facilities (rendezvous point TBD).

Day 2 – September 5, 2007 - afternoon

Study Board Meeting #4

Holiday Inn Express, 1171 Riverview Way, Sault Ste. Marie, Michigan

Agenda

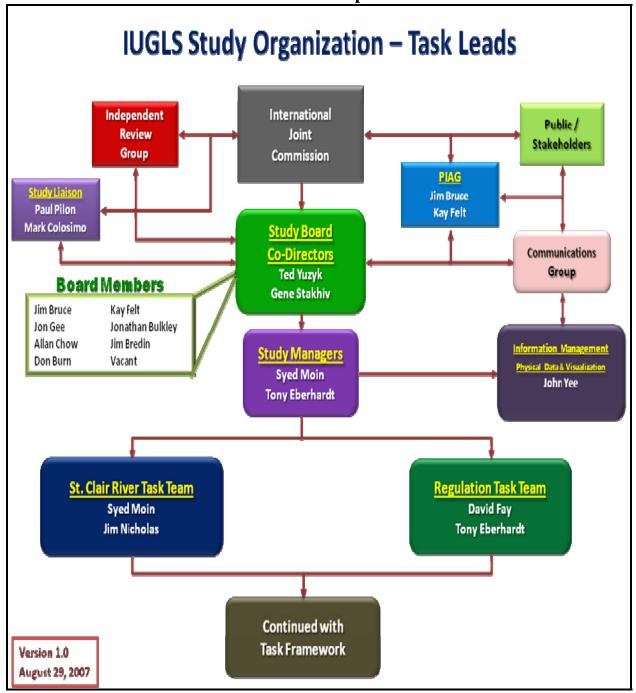
Item	Time	Topic	Lead
1	1:00 - 1:15	Welcome	Gene Stakhiv/ Ted Yuzyk
2	1:15 - 1:30	Review/ Approve Agenda; Review Status of Action Items from Minutes of Meeting #3	Tony Eberhardt/ Syed Moin
3	1:30 - 3:00	 Status of Technical Work Groups TWG Leads (bios to be provided to the Board) Terms of Reference Work underway regarding the Lake Huron Outflow/ St. Clair River Task Team Proposals related to Hydrology Start-up meeting at CCIW 	Tony Eberhardt/ Syed Moin

	3:00 - 3:15	Health Break				
	3:15 - 4:30	Continuation of Item 3	Tony Eberhardt/ Syed Moin			
4	4:30 - 5:00	Discussion regarding Climate Change Workshop	Jim Bruce and All			
5	5:00 - 6:00	Shared Vision Planning	Bill Werick			
	Break for Day and Meet for Dinner					

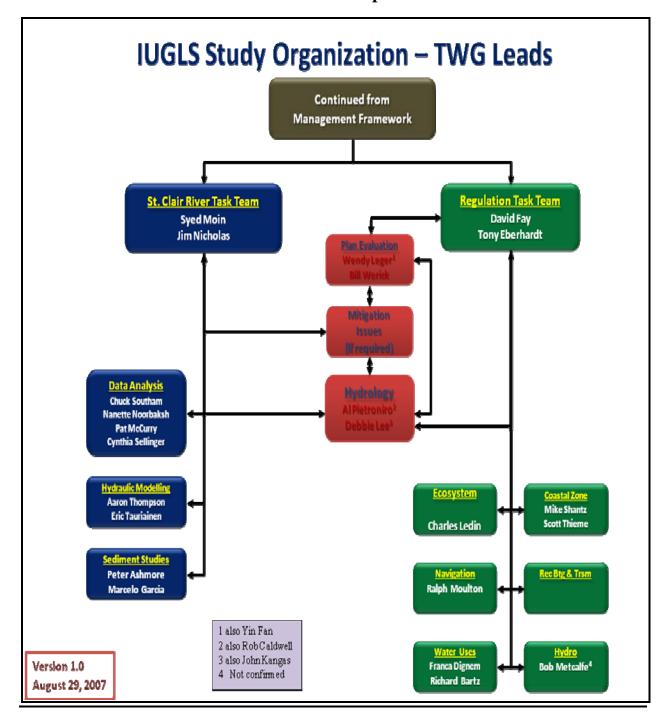
<u>Day 3 – September 6, 2007</u>

Item	Time Topic		Lead
		•	
6	8:30 - 9:30	 Update on the Public Interest Advisory Group Membership Public Information Officer Upcoming Events 	Kay Felt/ Jim Bruce
7	9:30 - 10:00	Status of Independent Peer Review & Suggestions for Framework	Gene Stakhiv/ Ted Yuzyk
	10:00 - 10:15	Health Break	
8	10:15 - 11:15	 Communication Communication Plan Communication Products – Brochure & Poster Status of the Web & SharePoint 	Ted Yuzyk/ Gene Stakhiv
9	11:15 - 12:00	Financial Report • Status of U.S. and Canadian Funding • Retooling of Plan of Study Funding Estimates	Tony Eberhardt/ Syed Moin
	12:00 - 1:00	Lunch	
10	1:00 - 2:00	Review of Reports Draft Semi-Annual Progress Report Draft Outline of Six-Month Strategic Report	Tony Eberhardt/ Syed Moin
11	2:00 – 2:20	Upcoming Meetings, Conferences & Workshops	Gene Stakhiv/ Ted Yuzyk
12	2:20 – 2:30	Concluding Remarks & Departures	Gene Stakhiv/ Ted Yuzyk

Organizational Structure & Memberships



Memberships



DRAFT AGENDA

IUGLS WORKSHOP

HYDRO-CLIMATIC IMPACTS ON GREAT LAKES WATER LEVELS

Toronto - 1-2 November, 2007

Purpose;

Determine recent changes in climate related factors that influence components of net basin supply, evaporation, precipitation on lakes and runoff to Lake Superior, Michigan-Huron and Erie with a view to:

- 1. assess the extent to which such changes have contributed to the observed reduction in level differences between Huron and Erie, and
- 2. assess the main factors affecting the current low levels of Lake Superior.

The workshop is to determine what is known and what further work must be undertaken to quantify the effects and assess whether recently observed trends are likely to continue.

Day 1 Chair: Eugene Stakhiv

1:00 – 1:15 Welcoming and workshop objectives.

Ted Yuzyk, Canadian Study Director, International Upper Great Lakes Study

1:15 – 1:45 External and internal factors affecting the climate system.

Francis Zwiers, Environment Canada, Victoria, B.C.

1:45 – 2:40 Hydroclimatic factors of the recent record drop in Great Lakes water levels

Tom Croley and Cynthia Sellinger, GLERL, Ann Arbor, Mich

2:40 - 3:00 **Health Break**

3:00 – 3:30 Have storm tracks changed around the Great Lakes?

Xioalan Wang, Environment Canada, Toronto, ON

3:30 – 4:00 Observed changes in lake-effect snowfall

Adam Burnett, Colgate University, Hamilton, N.Y.

4:00 – 5:00 Discussion **Facilitator:** Upmanu Lall

- What is our state of knowledge with regards to precipitation, especially on the Great Lakes?
- What can we imply is impacting the shift in water levels between Lake Michigan/Huron and Lake Erie?
- What steps are needed to refine estimates of components of Net Basin Supply?

Day 2 Chair: Ted Yuzyk

8:30 – 9:00 Water temperature trends and their implications for evaporation.

Jay Austin or Steven Colman, U. of Minnesota, Duluth

9:00 – 9:30 Palmer Drought Severity Index trend analysis for North America including Great Lakes Basin.

A. K. Dai or Kevin Trenberth, NCAR, Boulder, Col

9:30 – 10:00 Runoff trends around the Great Lakes.

Al Pietroniro, Environment Canada, Saskatoon, SASK

10:00 - 10:20 Health Break

10:20 – 11:00 Are recent trends consistent with results from Regional Climate Models?

Daniel Caya, OURANUS Consortium, Montreal, Quebec

11:00 – 12:00 Discussions **Facilitator:** Paul Whitfield

- What is our state of knowledge with regards to evaporation, especially on the Great Lakes?
- How can we get a better estimate of evaporation on the Great Lakes?
- What additional data and modelling are required to improve our understanding of the hydrology of the Great Lakes?

12:00 – 1:00 **Lunch**

1:00 – 3:00 General Discussion **Facilitator**: Bill Werick

- Do climate factors explain the changes in lake levels over the past decade?
- Where are our knowledge gaps and what actions need to be taken to improve our understanding?
- How good are our climatogical and hydrological models in explaining the changes/trends?
- Do we see these trends continuing for the immediate future?

PIAG MEMBER STATED CONCERNS

Below is a summary of issues raised by members. More complete remarks are in the attached minutes. Comments marked with the symbol * were presented in writing and read by James Bruce.

James Bruce Climate change: does the current cycle reflect long-term change

or natural variability

Water conservation and net basin supplies

Kay Felt Accretion in Lake St. Clair; affect on shoreline properties

Invasive species; lesser diversity of fish species St Clair River conveyance issues; loss of wetlands Overriding need to get the science right; do no harm

Avoid unintended consequences

What is controllable and what is not controllable

Focus on PIAG role: see that all issues are covered; assure information going to and coming from public; establish places and

times of public meetings; identify all affected publics

James Anderson Resource management and protection of coastal wetlands

Accountability framework for how the planning process handles

the realities of implementation

Focus Study on concept of natural capital (ecological or natural

goods and services)

Doug Cuddy Water level change is generally good for system, but has this gone

too fara

Concerns on safety, recreational boating, tourism, shipping and

property values

Dick Hibma Look at St. Clair River expeditiously; may already have gone

beyond tipping point

Concern about how little is known about these complex issues and

the brief history of time for which data is available

Focus on water quantity/quality (e.g., bioaccumulation of

pharmaceutical waste Need to involve public

Ken Higgs* Need for agency with power to act to protect beaches and dunes.

Has the cyclical regime changed? Is it related to human

intervention/climate change?

William Hyrb Need for transparency of the Study process

Concern about sustainability of the shipping industry, loss of

shipping capacity and access to heartland of Canada Balance environmental issues with commercial viability John Jackson Lessen manmade impacts and unintended consequences

Bring Great Lakes to more natural state

Use Study to understand impact of manmade factors, affects of water levels on toxins; ecosystem management; and predictions for

future

Don Marles* What are the measured affects of water levels on recruitment of

fry?

Balance water levels by adjusting Lake Superior regulation

Mary Muter Lack of control structures on outflow of Lake Huron into St. Clair

River; hardening of southern end of Lake Huron with bed-load traps; loss of wetlands (conversion to grassy meadows); loss of fish

spawning and nursery habitat

Changes in St. Clair River and impact on conveyance capacity; loss of natural sand and gravel bar that acted as a weir at lower end

resulting in erosion and increase in conveyance capacity

Need to stop erosion in St. Clair River by covering with rocks as soon as need/effects can be confirmed; install control structures

in manner not to interfere with navigation

Recognize IJC Orders and funding will be required, but have concern about continuing loss of water from Lakes Michigan and

Huron pending study and approvals

David Powers Affect of water levels on property values, invasive species and

economics of recreations

Roger Smithe Need for balance of issues to alleviate extreme changes in water

levels; recognize issues related to low levels and their impact on recreation and tourism, but would not want return to high levels of

1980s and 1990s; need for balance

Sam Speck Need to determine what has happened; what will happen if

conditions continue; consider cumulative effects of withdrawals

and diversions; consider limits and standards for limits

What trade-offs will be required?

Develop a common understanding for Great Lakes States Protect Lake Eric as resource for fishing; may be going back to

former low level conditions

Allen Steinman* Ecological issues related to coastal wetlands and wetlands as sinks

for nutrients; affects of changes in water levels on coastal biodiversity and filtering capacity; accounting for value of

ecological services; invasive species Water balance; recreational boating access Dan Tadgerson -

St. Marys River issues related to access to fisheries, loss of and

restoration of native fish

Need for balance of issues related to diversity of needs of the

tribal population

ACTION ITEMS

Staff to Forward the Following to PIAG Members

List of all Study activities undertaken and studies approved since initiation of Study and during scoping meetings

Revised organizational chart reflecting flow of information from Study Board and PIAG to public and from public to PIAG and Study Board

Copy of Boundary Water Treaty

Information about 1962 St. Clair River structure project

PIAG Members to Provide Information and Resources to Staff

Information on animation products (Mary Muter)

Information on teleconferencing services (John Jackson)

Initiate Public Information Process

Interview candidates and select Public Information Officer

Develop Study information protocol and process for conveyance of information from PIAG to public

Identify websites for linkages

Initiate Public Meetings

Develop model PIAG information packet

Schedule initial sets of meetings

PIAG Engagement

Facilitate liaison with selected TWGs

Provide ongoing information as developed

Solicit regular feedback

LESSONS LEARNED

Anticipate PIAG concerns

Prepare detailed scripts

Avoid imprecise language

Provide as extensive information and documentation as circumstances permit

Involve PIAG members at all appropriate steps

Keep process visibly moving

Schedule of Meetings – International Upper Great Lakes Study

Date	Time	Location	Purpose	Status
2007				T-tentative;
				S-scheduled;
				R-related but not IUGLS
Mon., Sept. 10 – Wed., Sept. 12	Noon to noon	Burlington, Ontario	"Kick-off" Meeting with Study TWG	S
Wed., October 17	9:00 am	Ottawa, Ontario	Second Study Board Appearance with IJC	S
Mon., Oct. 29 – Wed., Oct. 31	TBD	Duluth, Minnesota	"Making a Great Lake Superior" 2007 Conference	R
Tues., Oct. 30 – Thurs., Nov. 1	Noon to noon	Toronto, Ontario	Fifth Meeting of the Study Board	S
Thurs., Nov. 1 – Fri., Nov. 2	Noon to 5 pm	Toronto, Ontario	"Hydro-Climatic Impacts on the Great Lakes" Workshop	S
Sat., Nov. 3	9:00 am to 4 pm	Toronto, Ontario	Second PIAG Meeting	S
Wed., Nov. 14 – Fri., Nov.16	TBD	Alliston, Ontario	A.D. Latornell Conference	R
November	TBD	TBD	Review of 1-D, 2-D, 3-D modeler proposals	Т
November – December	TBD	TBD	Study Public Meeting	Т
2008				
Tues., Jan. 29 – Thurs., Jan. 31	Noon to noon	Washington, DC	Sixth Meeting of the Study Board	Т
February	TBD	TBD	"Climate Change" Workshop	Т
April	TBD	Washington, DC	Third Study Board Appearance with IJC	Т

Action Items from 4th Study Board Meeting

No.	Description of Action Item:	Action Lead:	Due by:
1	Official notification along with Terms of Reference to Marcelo Garcia	Tony Eberhardt	Sept. 21
2	Suggestion for Canadian Ecosystem Lead	Jon Gee	Oct. 1
3	Suggestion for U.S. Recreational Boating TWG Co-Lead	Jim Bredin	Sept. 21
4	Modification of Lake Huron/St. Clair River Conveyance Task Team Terms of Reference – revised to include input/linkages to the NBS/Climate Change TWG.	Syed Moin	Oct. 1
5	Contact Dave Bennion to see if GIS work can include data back to 1867	Tony Eberhardt	Sept. 27
6	Hiring of Public Information Officer	Tony Eberhardt	Oct. 1
7	Memo to PIAG members defining their liaison role	Gene Stakhiv	Sept. 25
8	Three slides that reflect messages that should be conveyed to the public	All Board members	Oct. 15
9	Remediation/ Dredging Fact Sheet	Syed Moin	Oct. 15
10	Recommended Independent Peer Review to IJC at Ottawa Hearing	Ted Yuzyk & Gene Stakhiv	Oct. 17
11	Development of Mutual (U.S. & Canadian) Financial Spreadsheet	Syed Moin & Tony Eberhardt	Oct. 28
12	Revisions to the Second Semi-Annual Progress Report	Syed Moin & Tony Eberhardt	Sept. 21
13	Strategic Framework and Work Plan	Ted Yuzyk, Gene Stakhiv, Syed Moin & Tony Eberhardt	Oct. 06
14			
15			