

# Notes from the Eleventh Study Board Meeting

Embassy Suites  
Washington, DC  
30-31 March 2009

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## *Day 1 -*

### **1. Welcome/Attendance**

#### Board Members:

John Boland, Jim Bredin, Jim Bruce, Jonathan Bulkley, Don Burn, Allan Chow, Kay Felt (by phone), Gene Stakhiv, Ted Yuzyk

#### Managers:

Tony Eberhardt, Syed Moin

#### IJC Advisors:

Mark Colosimo, Paul Pilon

#### PIO:

John Nevin, Jill Wingfield

#### TWG & TT Leads:

David Fay, Bill Werick

### **Agenda is Attachment 1.**

**Action Items are displayed as bold and summarized in Attachment 4.**

### **2. Update on Report Writing (Ted Yuzyk):**

- a. Chapters 1-3 are in fairly good shape.
- b. Early drafts of Chapters 4 & 5 arrived over weekend, but won't be available for review until around April 8<sup>th</sup>
- c. The first draft of the Synthesis Report is complete. This and the first three chapters will be provided to PIAG for the April 7<sup>th</sup> meeting.
- d. May 1<sup>st</sup> is still target for report completion.

### **3. Findings regarding St. Clair Studies (Syed Moin):**

- a. Key Sediment Findings:
  - i. The bathymetry changed between 1971 and 2000 resulting in an enlarged channel (Bennion)
  - ii. Since 2000, there has been no change in bathymetry (Bennion)
  - iii. There is limited bed mobility (bed forms), but no net erosion (Best)
  - iv. Shear stresses throughout the entire river are insufficient to erode bed material (Xiaofeng & Parker, Krishnappan)
  - v. The river is not capable of eroding existing bed material, however, factors like shipping activities and ice jams could increase shear stress (Various researchers)
  - vi. The river is mostly gravel with sand along sides indicating that potential for erosion is very low (Foster)
  - vii. The capacity of the river to move gravel sized material at all transects is extremely limited (Best)
  - viii. The calculations/ observations so far do not support global mobility of the gravel (Xiaofeng & Parker, Krishnappan)

- ix. Around the 1984 ice jam, “local” (extent needs to be defined) scour & disposition could have been triggered; the surge in flow under the jam could have caused the sediment transport rate to increase from 73 to 237% (Daly)
- x. Combined with river flow velocity (1-2 m/s), max. shear induced by propeller wash could be ~ 20 Pa. This shear could move sediment up to 64 mm (Obergh)
- xi. Ship propeller wash is suspected to have contributed to the big hole (Ashmore) – a discovery, but not a key factor impacting conveyance.
- xii. There is indirect evidence that something happened in the St. Clair River in the 1980s. **Need a definitive report on dredging to help pin down causality of conveyance change. Study Team will attempt to acquire.**

b. Hydraulic Key Findings:

- i. An increase in conveyance accounts for a 10-12 cm decrease in the Lake Huron level between 1971 and 2000 (Various researchers)
- ii. Conveyance appears to have stabilized in late 1990s (Bruxer)
- iii. Conveyance has increased the corresponding flow by 180-250 m<sup>3</sup>/s (less than 5% of the mean flow) (Various researchers)
- iv. Conveyance appears to have changed in the mid-1980s (1984 ice jam) (Daly)
- v. About 88% of change in conveyance has occurred between Dry Dock and Port Lambton. The mouth of the river is not a control section (Giovannettone)
- vi. Flow measurements in the 1960s and 1970s compared with measurements in late 1990s and 2000s confirmed results of the hydraulic models (Fay & Bruxer)
- vii. Hydraulic Performance Graphs (HPG) provide a good platform for Study findings (Schmidt)

c. Hydroclimatic Key Findings:

- i. Hydroclimatic models suggest an increased conveyance change (8-9 cm) and climate factors (24-27 cm) account for a drop in Lake Michigan-Huron between 1986 and 2005
- ii. Climate was by far the major factor for the 1996 to 2005 period
- iii. For the early period (1962 to 1986), both climate and conveyance were major factors
- iv. If the fall is attributed to climate factors, it is then a very rare event

**4. Conclusions and Recommendations (Study Board Discussion):**

- a. We are confident of a conveyance change in the St. Clair River of about 10 cm (4 inches)
- b. Net Total Supply accounts for about 2/3 of the lake-to-lake fall since 1962
- c. There is no evidence of on-going erosion since 2000
- d. An episodic event in the 1980s is a possible cause of the conveyance change.
- e. GIA accounts for about 2.5 cm (1 inch).

**5. Presentation to the IJC (Gene Stakhiv & Ted Yuzyk):**

- a. Comments were made and incorporated into the final presentation.
- b. Congressional/ Parliamentary meetings (John Nevin): The proposed and tentative dates are shown on Attachment 2.

## 6. Discussion regarding PIAG (Jim Bruce):

- a. PIAG meeting (April 7<sup>th</sup>): Focus will be on the synthesis report and plan for the release of the May 1<sup>st</sup> report.
- b. Emphasize confidentiality.
- c. Synthesis Report: The initial draft report will be available.

## Day 2 -

## 7. Discussion of Action Items from the 10<sup>th</sup> Study Board Meeting (Tony Eberhardt & Syed Moin):

- a. Action Items:
  - i. Detroit District will be made aware of the Baird Remediation Report (item 5);
  - ii. Regarding the conveyance increase, impact should reach equilibrium after 15 months to 10 years (item #7). David can provide details if required.
  - iii. GIS support may be available from a McGill student, working for IJC – Board approved pursuing this assignment (item #10).
  - iv. TWG lead replacements: Ralph Moulton, Commercial Navigation TWG lead may come from Transport Canada (CN), Glenn Warren, Rec. Boating TWG lead will be pursued through the Ministry of Tourism (Chow)
- b. LSR Task Team proposals:
  - i. Water Uses Inventory SOW - Need a more detailed cost estimate. Refine and send to Board, include letter of intent from Directors which will be provided to Utilities with copies to higher authorities, e.g., Commissions, to demonstrate legitimacy. Refine to include specific site collection. Maybe consider a marker approach – lower level problems, frequency of occurrence. **David Fay and Tony Eberhardt will refine with the TWG leads and send to Board electronically for consideration and approval.**
  - ii. Rec. Boating Tourism SOW - Tourism RFP should be passed to economic advisors to determine whether it should be pursued. **Contextual narrative SOW will be sent by David Fay to Steve Renzetti for comment. Tony Eberhardt will attempt to hire John Hoehn (MSU) through US means.**
  - iii. IERM – approved with follow up conference call with Niemi & Ciborowski to determine if other investigators can be considered in addition to LimnoTech. **Tony Eberhardt will pursue.**
  - iv. PFEG strategy for IPR needs to describe adaptive management strategy. **Study Team will work with Bill Werick and Wendy Leger to refine their strategy document.**

## 8. Summer Public Meetings – who should attend? (Study Board discussion):

- a. Congressional/ Parliamentary briefings – last week of April.
- b. Public meetings through May and June. Attendance by Study Board, PIAG members and technical representatives are shown in Attachment 3, along with indicators of PIAG hosts.

## 9. Next Meeting (Study Board discussion):

- a. Thursday, April 23 – Teleconference (1:30 – 3:30)
- b. Wed. & Thurs., September 9-10 in Chicago



## Study Board Meeting #11

Embassy Suites, Wine Room, Washington, DC  
Monday, March 30 – Tuesday, March 31, 2009

### Draft Agenda

#### Day 1 – Monday, March 30, 2009

Item	Time	Topic	Lead
1	9:00 – 9:15	Welcome	Gene Stakhiv & Ted Yuzyk
2	9:15 – 9:45	Update on Report Writing	Ted Yuzyk
3a	9:45 – 10:30	Findings regarding St. Clair Studies	Syed Moin
	10:30-10:45	Health Break	
3b	10:45 – 12:00	Findings regarding St. Clair Studies (continued)	Syed Moin
	12:00 – 12:30	Lunch	
4	12:30 – 3:00	Conclusions and Recommendations	Study Board Discussion
	3:00 – 3:15	Health Break	
5	3:15 – 5:00	Presentation to the IJC	Gene Stakhiv & Ted Yuzyk
6	5:00 – 5:30	Discussion regarding PIAG <ul style="list-style-type: none"> <li>• PIAG meeting (April 7<sup>th</sup>)</li> <li>• Synthesis Report</li> </ul>	Kay Felt & Jim Bruce
	5:30	End of Day 1	

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#### Day 2 – Tuesday, March 31, 2009

Item	Time	Topic	Lead
7	8:30 – 10:00	Discussion of Action Items from 10 <sup>th</sup> Study Board Meeting	Tony Eberhardt & Syed Moin
8	10:00 – 10:45	Summer Public Meetings – who should attend?	Study Board Discussion
9	10:45 – 11:00	Next Meeting	Study Board Discussion
	11:00	End of Day 2	

Attachment 2 – Congressional, Parliamentary and Other Briefings

Date /Time	Format	Group	Location	IUGLS Lead Presenter/ participants	Confirmed
Friday, April 17 11 am – 12 am EDT	Telecon/ Webex	Great Lakes Interagency Task Force Regional Working Group**	n/a	Stakhiv/Yuzyk, Felt, Bruce	Yes
Monday, April 27 10 am – 11 am	Telecon/ Webex	PIAG	n/a	Yuzyk/Stakhiv Felt, Bruce	Yes
Monday, April 27 4 pm – 5 pm EDT	In person	House of Commons	Parliament Hill, Ottawa	Yuzyk/Bruce/Moin Others? (Pilon?)	Yes
Tuesday, April 28 2:30 pm-3:30 pm EDT	Telecon/ Webex	Council of Great Lakes Governors (includes ON)	n/a	Stakhiv/Yuzyk, Felt, Bruce	Yes
Wednesday, April 29 3 pm – 4 pm EDT	Telecon/ Webex	Great Lakes and St. Lawrence Cities Initiative	n/a	Yuzyk/Stakhiv, Bruce, Felt	Yes
Thursday, April 30 3 pm – 4 pm EDT	In person	Great Lakes Congressional Task Force	Capitol Hill, Washington	Stakhiv/Felt Others? (Colosimo)	Tentative
Friday, May 1 10 am – 11 am EDT	Telecon/ Webex	CA & US Media	n/a	Stakhiv/Yuzyk Bruce, Felt	Yes
Friday, May 1 11:00 am - noon	Telecon/W ebex	CA & US NGO's etc.	n/a	Yuzyk/Stakhiv Felt, Bruce	Yes
Wednesday, May 6 8 am	In person	Michigan Legislature	State Capitol Lansing, MI	Felt/Bredin	Tentative
TBD	In person	Ontario Provincial Government	TBD	Yuzyk/Chow/Bruce/Moin	Planning stage

Attachment 3 – Public Meetings and Attendance

MEETING DATE	LOCATION (Live=L; Satellite=S)	PIAG HOST(S)	STUDY REPRESENTATIVE(S)	A/V Tech Support
May 19, 2009	Sarnia, ON (L)	<u>Jim Bruce</u> John Jackson	Gene Stakhiv Ted Yuzyk Syed Moin / Jacob Bruxer/ Al Pietroniro	Jill Wingfield
May 19, 2009	Detroit/Lake St. Clair area (S)	<u>Kay Felt</u>	Jonathan Bulkley	John Nevin
May 19, 2009	Owen Sound, ON (S)	<u>Dick Hibma</u>	Don Burn	Trilby MacDonald
May 20, 2009	Cleveland, OH (L)	Jim Weakley <u>Kate Bartter</u>	Gene Stakhiv Ted Yuzyk / Syed Moin Debbie Lee / Eric Tauriainen / Marcelo Garcia	Jill Wingfield
May 20, 2009	Manitoulin Island, ON (S)	<u>Doug Cuddy</u>	Jon Gee	Trilby MacDonald
May 20, 2009	Chicago, IL (S)	<u>Dan Thomas</u>	Jim Bredin	
May 20, 2009	Thunder Bay, ON (S)	<u>Bill Hryb</u>	Allan Chow	LU student
June 9, 2009	Muskegon, MI (L)	Roger Smithe <u>Al Steinman</u>	Gene Stakhiv/Tony Eberhardt Ted Yuzyk / Syed Moin Debbie Lee / Eric Tauriainen / Marcelo Garcia	
June 9, 2009	Parry Sound, ON (S)	Jim Anderson <u>Mary Muter</u>	Jon Gee	
June 9, 2009	Sault Ste. Marie, ON (S)	<u>Don Marles</u> Dan Tadgerson Doug Cuddy	Allan Chow	
June 11, 2009	Midland, ON (L)	<u>Ken Higgs</u> Mary Muter	Gene Stakhiv/Tony Eberhardt Ted Yuzyk / Syed Moin Peter Ashmore / Al Pietroniro / Aaron Thompson	
June 11, 2009	Traverse City, MI (or Petoskey) (S)	<u>David Irish</u>	Jim Bredin	
June 11, 2009	Duluth, MN/Superior, WI (S)	<u>Jeff Vito</u>	John Boland	
June 11, 2009	Bay City, MI (S)	<u>Dave Powers</u>	Jonathan Bulkley	

### Action Items from 11<sup>th</sup> Study Board Meeting – Washington, DC

No.	Description of Action Item:	Action Lead:	Due by:
1	Definitive summary of dredging activities in the St. Clair River, Lake St. Clair and Detroit River	Study Team	May 1 <sup>st</sup>
2	Refinement of the Water Uses TWG inventory scope of work and letter to Utilities	Tony Eberhardt and David Fay	April 17 <sup>th</sup>
3	Recreational Boating TWG contextual native scope of work to Steven Renzetti	David Fay	April 10 <sup>th</sup>
4	Contract to hire Dr. John Hoehn of MSU as economic advisor	Tony Eberhardt	April 17 <sup>th</sup>
5	Refinement of candidates for consideration of IERM development	Tony Eberhardt	April 10 <sup>th</sup>
6	Refinement of Plan Formulation and Evaluation Group strategy for Independent Peer Review Group	Study Team with Bill Werick and Wendy Leger	April 6 <sup>th</sup>
7			
8			