

The International Upper Great Lakes Study

October 29, 2007

Duluth, MN

presented by

Bill Werick

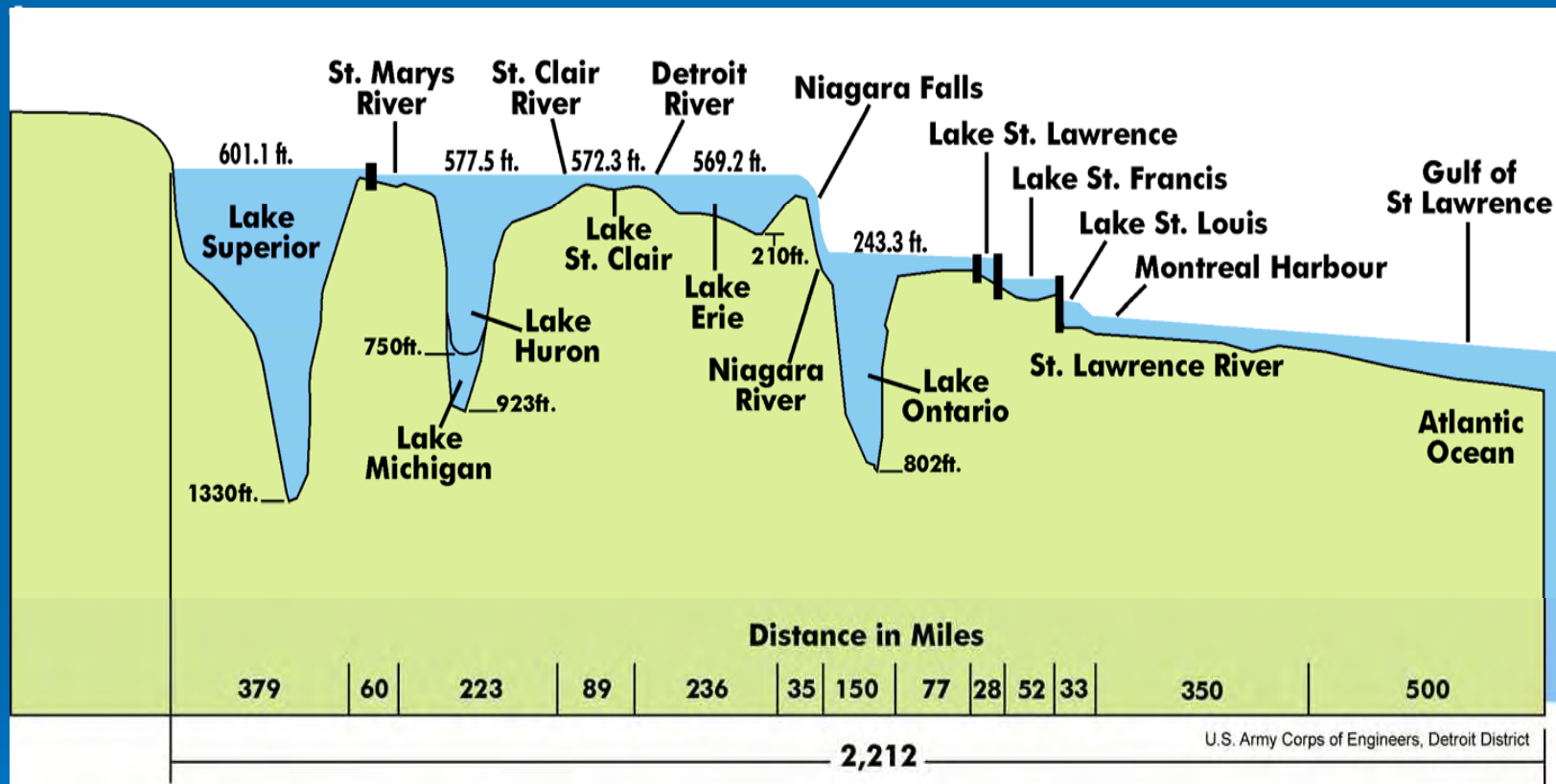
U.S. Chair Plan Evaluation Group IUGLS



**International
Upper Great Lakes Study**



Upper Great Lakes Profile:



International Upper Great Lakes Study



Study Overview – Basic Questions

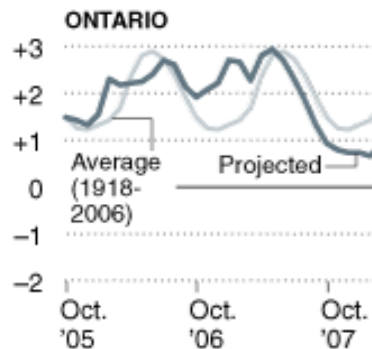
The New York Times

October 22, 2007

Shallow Waters

Water levels in the Great Lakes are rising, forcing more ships to transport the surplus.

Approximate feet above or below average



Source: U.S. Army Corps of Engineers

- Contemporary recreation



Unifying question -
can we be prepared
to deal with water
levels we haven't
seen before and
didn't expect?

International Joint Commission - Commission mixte internationale



Date: October 18, 2007
For immediate release

St. Clair River portion of IJC Upper Lakes Study to be Expedited

Ottawa, Canada - The International Joint Commission announced today that its International Upper Great Lakes Study Board will expedite its study of the St. Clair River to determine whether there are ongoing channel changes leading to a potential increased conveyance capacity of the channel and whether changes in water levels are the result of natural or human influences. The Study will produce a draft report a full year ahead of schedule by February, 2009, with interim progress reports throughout 2008. A peer reviewed final report on the St. Clair River is expected in June, 2009. Board co-chairs Gene Stakhiv and Ted Yuzyk presented the revised plans in Ottawa this past week, that they drafted at the Commission's request.



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IUGLS Timelines

Start Up Tasks (underway now)

- study organization, data collection, science and monitoring plans, evaluation methods, public participation

Early Tasks (Years 1-3)

- Investigate St. Clair River physical processes & report (remediation recommendations)
- Net Basin Supplies; water balance; climate change scenarios
- Lake Superior outflow regulation, capabilities and limitations, operating improvements

Subsequent Tasks (Years 4-5)

- Formulate plans, criteria
- Evaluate impacts on the resource groups
- Broad public consultation and reporting to IJC



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International Upper Great Lakes Study Organization

- Binational Study Board
- Public Interest Advisory Group
- Independent Technical Review
- Communications, Information Technology
- Technical Teams on Lake Superior outflow regulation and St. Clair River
- Technical Working Groups (Resource Evaluation Teams)

Study participants to be drawn from experts from governments, citizens, First Nations / Native Americans, industries and academia.



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The Study Board



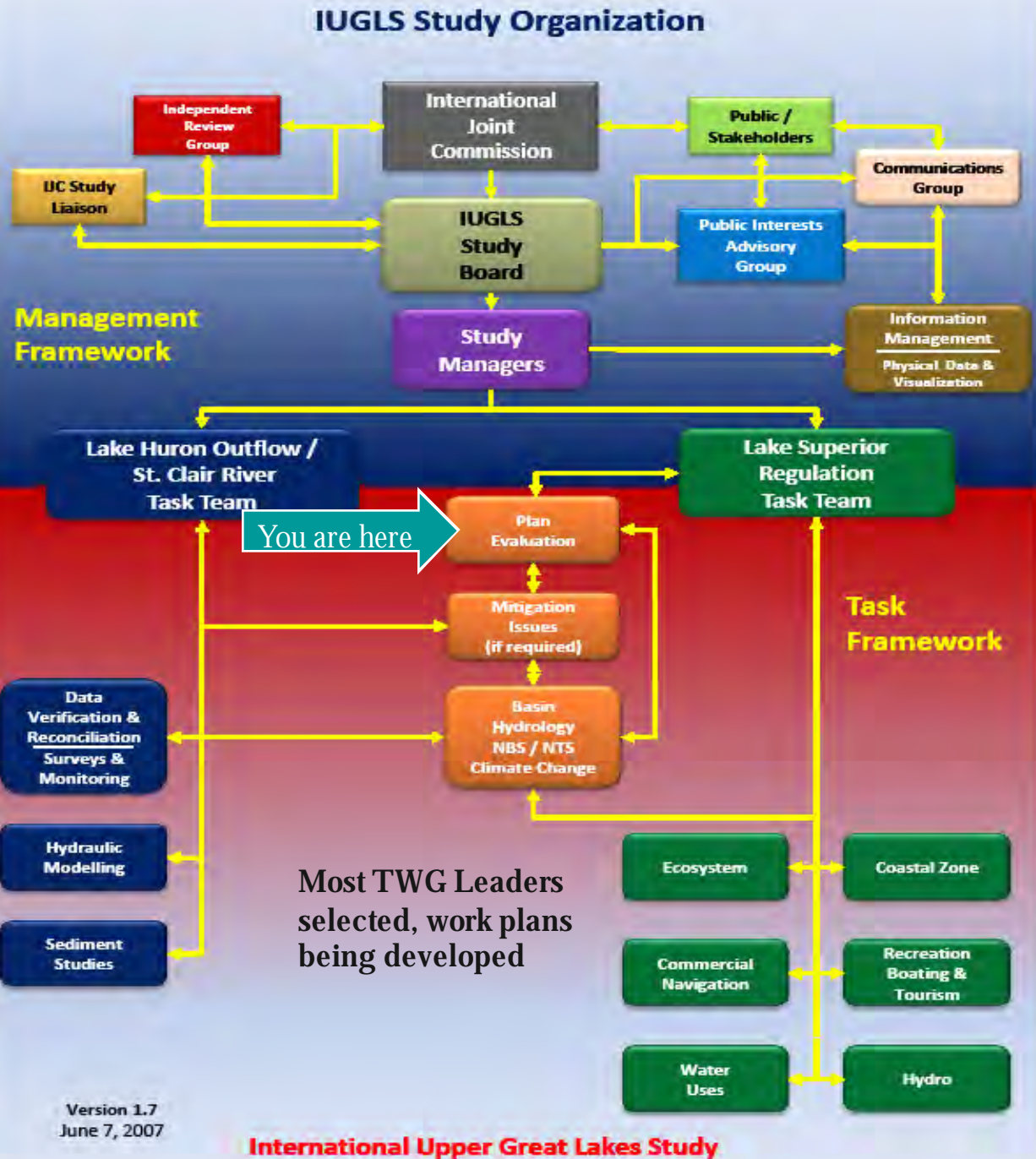
Ted Yuzyk - IJC
Gene Stakhiv - CoE
Jim Bruce – (PIAG)
Kay Felt – (PIAG)
Don Burn – U of Waterloo
Jim Bredin- MI DEQ
Allan Chow- ON MNR
Jonathan Bulkley - UofMI
Jon Gee - EC



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Organization Chart



What Affects Great Lakes Water Levels?

➤ Natural Influences

- Historical hydrology/Net Basin Supply (precip, runoff, evaporation, inflow/outflow)
- Short-term weather fluctuations (storms), seasonal fluctuations (higher summer, lower winter)
- Long-term climate variability, climate change, global warming
- Glacial isostatic adjustments

➤ Human Influences

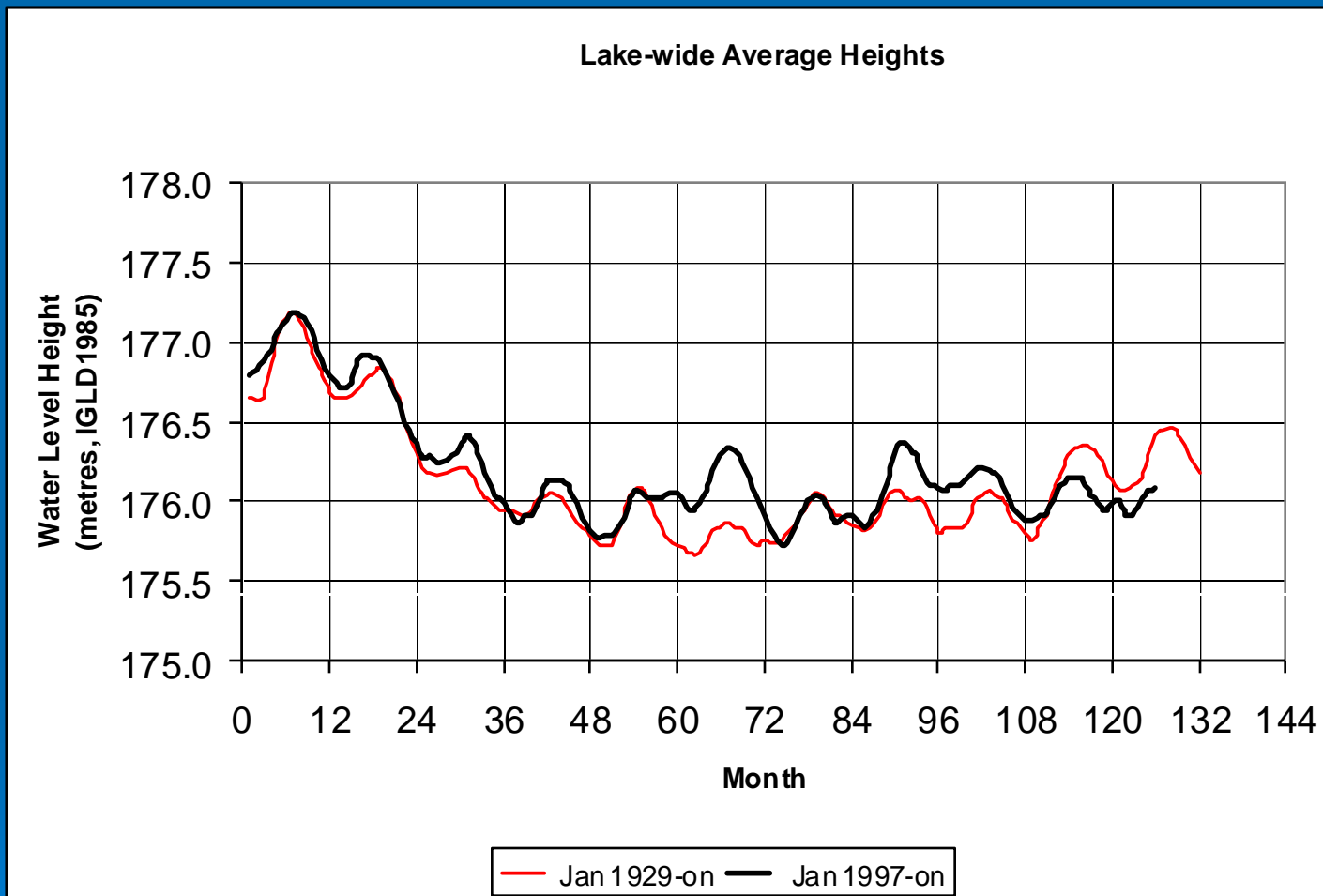
- Dredging/deepening of navigation channels
- Diversions of water outside/inside the basin
- Consumptive Uses (loss of water to evaporation)
- Regulation alters natural hydrologic variability



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Recent conditions compared to the 1930s (L. Michigan-Huron)

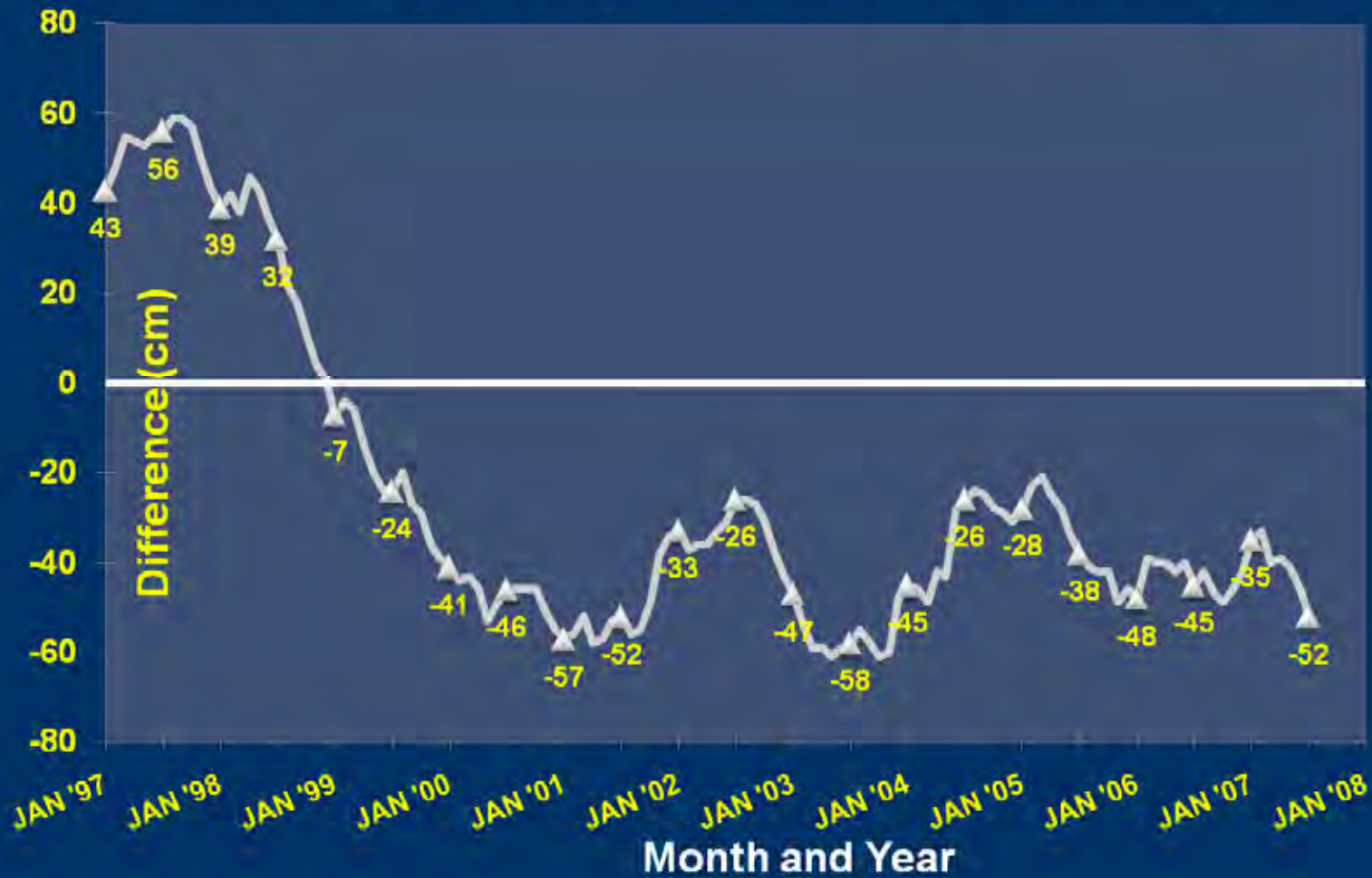


Plots starting in

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Lakes Michigan-Huron B-O-M Month-by-Month Departure from Long-term Average



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International Upper Great Lakes Study Approach

- Understand how water levels affect people and the ecosystem
- Understand the hydrological and hydraulic processes of the Great Lakes system
- Appropriate science and tools will be used to evaluate water management options
- All interests (active and passive users of Great Lakes), including the ecosystem will be taken into consideration
- Active public participation throughout the study
- Continuous peer review & Independent review



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Understanding the St. Clair-Detroit River System:

- Investigate the factors affecting Great Lakes levels and flows, including physical changes in the St. Clair River related to:
 - Basin water supplies,
 - Diversions and consumptive uses,
 - Glacial rebound and subsidence,
 - St. Clair – Detroit River flow conveyance capacity.
 - Dredging, erosion



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Improving Lake Superior Outflow Regulation:

- Review how the present management plan, Plan 1977-A, and the operation of the control structures affect water levels and flows.
- Identify potential updates and improvements to Plan 1977-A criteria, requirements, operating rules and outflow limits and incorporating operational experience.
- Review institutional arrangements.
- Test plan performance under climate variability and climate change scenarios.



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Affected Resources:

- Determine whether the water management options meet contemporary and emerging needs and will manage the system in a sustainable manner evaluating:
 - The ecosystem,
 - Recreational boating and tourism,
 - Hydropower,
 - Commercial navigation,
 - Municipal, industrial and domestic water uses
 - Coastal processes



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The Public Interest Advisory Group

U.S.

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FOR IMMEDIATE RELEASE
October 22, 2007

Contact: John Nevin, 20

Key Great Lakes Adv Up

Boaters, Anglers, Citie

The International Joint C
today announced the ap
Weakley and Jeff Vito to
advising the Internationa
urgency of moving the s
shortly with their new co
levels study is looking at
Superior can be improve
Lakes.

David Irish brings 55 years of experience racing sailboats on all of the Great Lakes. Irish founded a full service marina, boat yard and dealership in Harbor Springs 1961 and expanded to Charlevoix a decade later. Irish has served as president of the U.S. Sailing Association, is currently vice president of the International Sailing Federation and is a former director of the Michigan Boating Industries Association. A dedicated public servant, Irish also served as mayor of Harbor Springs for six years.

Dan Thomas has been president of the Great Lakes Sport Fishing Council since 1989. Founded in 1973, the Council is non-profit binational umbrella organization representing 325,000 anglers in the U.S. and Canada and has been recognized as the leading advocacy group for sport fishermen and the sport fishing industry in the region. A resident of Illinois, Thomas is a lifelong fisherman and a founding officer and charter member of Salmon Unlimited and member of Illinois Steelheaders.

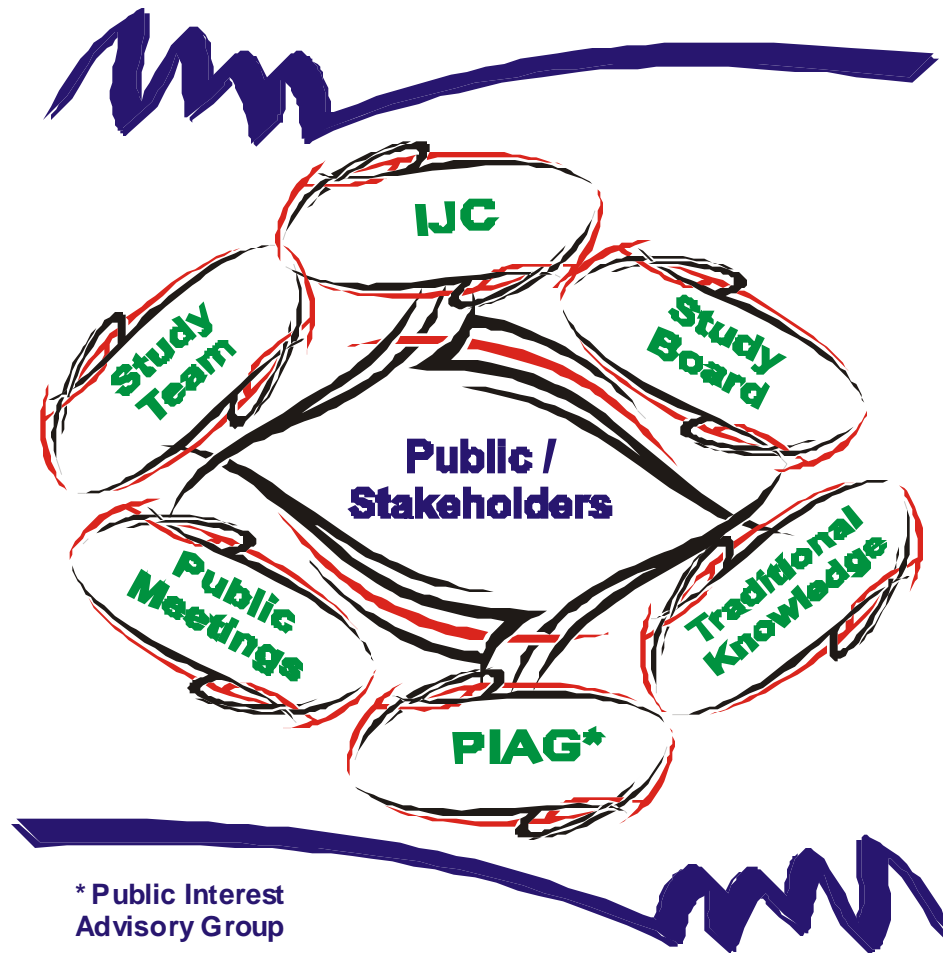
James H. I. Weakley is a 1984 graduate of the Coast Guard Academy and has served as President of the Lake Carriers' Association since 2003. He is the chief spokesman for the U.S.-flagged Great Lakes carriers and is also an officer of the Great Lakes Maritime Task Force, a member of the Board of Marine Transportation National Advisory Committee and represents Ohio as a Commissioner on the Great Lakes Commission. The Lake Carriers' Association is one of the oldest trade associations in the nation, representing 18 American corporations and 63 vessels.

Jeff Vito has devoted 33 years to municipal public service has currently serves as Superior's Director of Economic Development & Government Affairs. With 17 years as Superior's Director of Public Works, Vito oversaw a wide range of city services, including planning and administration of all major construction projects. Vito has an intimate knowledge of the Port of Superior, including development of a new marina and many other waterfront projects. Vito is also an active participant on behalf of Superior in the Great Lakes & St. Lawrence Cities Initiative.



Upper

Public Transparency



* Public Interest
Advisory Group



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Questions?

Discussion

