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## Lake Michigan Fisheries Forum Notes May 12, 2003

**Members Present:** Phil Moy, Roger Stack, Hayward Anderson, Mike LeClair, Bill Willis, Dennis Hickey, Mark Maricque, Chuck Weier, Mark Hasenberg, Jerry Viste, John Janssen, Lee Haasch, Ed Rewolinski, Mark Holey

**Alternates:** Ted Eggebraaten (Charlie Henriksen)

**Members Absent:** Mike Collins

**Others Present:** Gerald (JAG) Hagele, Tod Maurina, Mike Rusch, Frank Herres, Ken Poludnianyk, Al Blizel, Steve Hogler, Dave Weber, Ryan Volenberg, Mike Neal, Bob Dumovich, Vicky Harris, Richard Bishop, Jim Schlegel

### **Welcome**

The meeting began at 6:10 PM with a welcome from Phil and review of the agenda.

### **New Sea Grant Brochures**

Phil had also distributed two new Sea Grant brochures: the Protect Our Waters brochure on aquatic invasive species and the new Don't Get Trapped brochure on how to avoid trap nets. Both are available without charge from WI Sea Grant. Contact Phil for more information.

### **Economic Value of Sport Fishing – Dr. Richard Bishop**

Rich began by citing some recent (2001) statistics about Wisconsin anglers. There are 200,000 Great Lakes anglers in Wisconsin, that's about 14% of all Wisconsin anglers. The G.L. anglers fished about 2 million days in 2001 spending nearly \$60 million dollars on the trip and equipment.

Dr. Bishop last conducted a sport fishing value study in 1996. Since then, slightly more anglers have become active in the fishery targeting walleye, perch, salmon and trout. The number of days fished has nearly doubled since 1996 but for some reason the spending appears to have dropped by about 1/3. The exact causes for these relationships and trends are not yet clear but may be clarified as the current study progresses.

Either way, this level of spending is important in the way it affects the local economy. For example, 30% of the anglers are non residents; this is important to the state overall. Dr. Bishop is studying the value of the fishing experience – this extends beyond the actual expenditures of the angler or the cost of the trip. He calls this the *surplus value* of fishing; it is an estimate of how much anglers are willing to pay for the Great Lakes fishing experience.

If, for example anglers are willing to pay \$60 for the trip, an angler who lives near the lakeshore, may only have to pay \$10 to go fishing but it may cost a Madison-based angler \$50 for the same trip because he or she lives farther away. The difference between the \$60 value and the actual cost is the surplus value. These surplus values can be used in policy formulation as well as litigation both in terms of potential value or lost recreational values.

Researchers like Dr. Bishop use travel costs, modeling and surveys to assess or measure these values. A Sea Grant funded study that examined SE WI anglers between Port Washington and Kenosha, found that 192 anglers took about 2000 trips. Dr. Bishop also surveyed private anglers in fishing clubs between Milwaukee and Racine. These surveys and trip data are then plugged into a predictive model to be able to determine what factors may significantly affect the likelihood that a person will go fishing on a given day. Some of the factors in the model include wind, air temperature, number of fish, whether a tournament (salmon-a-rama) was going on, time since last trip, angler age, angler experience, employment status and whether it is a weekend or weekday.

The model and results of the surveys also is able to discern groups of anglers classified by age, experience and their estimated time value. Young, less experienced anglers who place a high value on their time are less likely to go fishing. Older anglers who are less experienced but have a moderate personal time value are the most likely group to go fishing. Middle-aged anglers with moderate experience and have a lower time cost, actually are predicted to take the least number of trips. Dr. Bishop feels this is a group that might be at risk for attrition in the angling population.

The average private angler is willing to pay \$2,950 per year to fish on the Great Lakes in Wisconsin. Fixed costs such as boat, vehicle or travel costs need to be subtracted from this to determine the surplus value. WI Lake Michigan private salmon and trout anglers are willing to pay \$50 – 100 million / year beyond the trip costs to fish on the lake. Dr. Bishop estimated the value of the salmon and trout sport fishery to be about \$10/fish in the recreational catch.

The most predictive variables in the model were salmon tournaments and weekend time frame. Things like consumption advisories that didn't change during the study period are essentially fixed variables and so did not affect willingness to fish or pay.

Dr. Bishop estimated the economic value or impact of commercial fishing to be about 1/10 the value of sport fishing. Though he admits it is somewhat difficult to accurately assess the value of commercial fishing except through the marketed products. One way to examine it might be to look at number of salmon “lost” to commercial fishing or that cannot be caught by sport anglers because they were caught in commercial nets at the time. Alternately, live entrapment gear may cause less “friction” between sport and commercial fishermen than gill nets. Dr. Bishop feels there should be plenty of room on the lake for both interests to share the available resources.

### **Restoration of the Barrier Islands in Green Bay – Vicky Harris**

Historically the Cat Island chain provided lots of habitat in southern Green Bay. The islands protected the Duck Creek delta. The chain of islands was quite extensive; the substrate was

primarily sand and cobble. Vegetation in the delta/marsh area was cattails and trees. Much of the wetland habitat was lost to filling, urban development and erosion. Rising lake levels also seems to have adversely affected the stability of the islands that had persisted over thousands of years. High water in association with bad storms and heavy ice floes removed vegetation and eroded the islands. In 1966 some islands were still remaining in the chain but by the 1970's the islands were nearly gone.

There was a 30 year period of high water from the late '60's through the 90's. During this time water quality was poor due to pollution. The poor water quality may have contributed to the loss of submergent vegetation, which, along with hardened shorelines created a higher energy wave zone in the near shore areas resulting in rapid erosion of the islands.

The concept of island restoration began in 1979. The idea was developed further through the Green Bay Remedial Action Plan. The main thrust is to protect remaining habitat and develop new or restore habitat. In an Ecological Risk Assessment participants identified habitat loss and exotic species as the primary concerns in Green Bay; PCBs were ranked second on the list. At the 1994 Habitat Restoration Workshop participants identified Cat Island for restoration, citing this as the best use of the available funds.

Funds for the project will be Corps of Engineer section 204 which provides funds for beneficial use of dredged material. Vicky wanted to make it quite clear that the Kidney Island is NOT part of this project. The kidney island project is used as a confined disposal facility for contaminated sediment.

The restored Cat Island chain will provide a backbone of habitat to protect the near shore shallow water habitats for fish, shorebirds and waterfowl. The project sponsors hope that the islands will benefit submerged vegetation too. The over-arching concept is to enhance habitat and reduce human disturbance. This may require on-going management of the islands.

The feasibility plan for the project was completed in 2001. The plans and specs will be completed in 2003 and they hope to begin construction in 2004 with a 2010 completion date. The planning team examined other similar projects. Some of the alternatives considered different shapes, sizes and number of islands; stone or geotube perimeters, elevation and slope, filling by mechanical or hydraulic means, construction access and the source of the fill. The Cat Island project will use clean fill only. The material will be dredged from outer portions of the navigation channel that can provide uncontaminated sediment for the project.

The cost of the project is estimated to be \$5 million dollars, 75% of the funds will be federal; 25% local for a total of about \$8 million. The local share is anticipated to come from the NRDA funds. Portions of the plan are still in development. They are examining circulation patterns in Green Bay and wave dampening effects of the islands. Vicky felt it is important to note that the current discharge model used to assess the effect of effluents in Green Bay includes the presence of the old islands so the possible effects of the islands on near shore circulation is already accounted for in the discharge standards.

There were some questions about deterring cormorant use of the islands. Vicky suggested use of different substrates for construction may deter various species from nesting on the islands and noted that cormorants prefer to nest in trees. Vegetation initially planted on the islands will not include mature trees. Any vegetation will be beyond the scope of the Corps project and will have to be addressed by the local sponsor. The vegetation as well as the fauna on the islands will have to be managed.

There will be 3 opportunities for public review of the plans. The environmental assessment, the lakebed grant and the water quality certification all provide opportunities for public comment.

Another aspect of the project will be to improve water clarity in Green Bay. This will have to come as a result of a 50% reduction in phosphorus loading, a 50% reduction in sediment deposition and through the clean-up of PCBs. Right now the Corps and Brown County have the lead on the project.

### **Smelt Trawling and By-catch – Steve Hogler**

Steve quickly reviewed the regulation and season for smelt trawling in Green Bay and Lake Michigan. In 1991 trawlers could not longer take a mixed trawl and had to target smelt specifically. There has been an overall decrease in the harvest of smelt since 1991 – both in harvest and catch per unit effort (CPE). On the lake smelt has varied from 70% of the harvest to 30% of the harvest. On Green Bay the smelt comprise a greater percentage of the harvest but overall there has been a decline in smelt harvest on Green Bay. Currently there are 5 to 6 trawlers operating on Lake Michigan.

The USGS performs bottom trawls to assess forage fish abundance in Lake Michigan. The trawls occur in depths from 27 to 330 feet. Each 27 foot depth change is separate trawl cast. The trawl results showed high abundances of smelt in '82 and '88. Since then smelt abundance has decreased. Lake-wide forage fish biomass has decreased sharply in 1997 and 1998, particularly chubs. Alewife and sculpin have increased slightly.

The graphs Steve shared with us appeared to indicate an increase in alewife catch since 1999. This is actually due to a change in the reporting requirement in 1999 where trawlers were required to report alewife catch separately from the unsorted trawl catch they were formerly lumped into.

How will the DNR assess smelt in Green Bay now that there is no commercial harvest? The DNR will do the trawl sampling or they will contract out the work.

Mike LeClair commented on the apparent relationship between alewife abundance increases associated with smelt abundance decreases. Steve did not feel the relationship was as clear as that.

### **Electronic Reporting – Al Blizel**

The Lake Trout Incidental Catch Subcommittee asked that Al come talk about electronic reporting as it appears to be an essential part of the incidental catch retention issue.

Electronic reporting is attractive because it offers the opportunity for real-time reporting of data and increased accuracy. Al is looking at two units for the reporting system a less expensive smaller unit, much like the Palm Pilots currently available; these would cost \$600 each. He is also examining another larger unit that costs \$4600 that might be easier to use and better suited to the marine environment. Al will be seeking participation by 10 to 12 fishers for the pilot program.

Al gave a short demonstration of how the system will work. Some Forum members were concerned about the use of a stylus to enter data particularly on an unstable boat for a platform. This is one reason why the large unit is attractive. Any data entered will go directly to Al at the DNR office rather than an on-line site. Any tagging program could easily be incorporated into the electronic reporting process. We will need to obtain a hard-copy too, at least at the start.

How many fishers will be participating overall? There are 80 licenses but the number of units will vary by season.

#### **Lake Trout Incidental Catch Subcommittee – Dennis Hickey**

Discussion of the subcommittee focused on costs of enforcement and the need for electronic reporting system to be in place prior to establishment of an incidental catch program. The cost for tags was estimated to be \$50 / 1000. The incidental catch is currently estimated to be 35,000 fish. The committee tabled further discussion of incidental lake trout catch until electronic reporting is implemented.

#### **Other Items – Phil Moy**

The Forum members opted not to make a recommendation on the Algoma dive site boat.

We discussed the need to change the fish health certification requirements. Bill Willis stated there is a bill currently in the legislature that would remove the fish health certification law. Some members felt this was going too far the other way, that altering the existing law would be best rather than rescinding it. Phil stated that Myron Kibus reported back to him that DTCAP attorneys decided the law did not need to be changed. Bill Willis is ready to put up a fight.

The DNR (Scott Hasset) responded favorably to our letter requesting \$15,000 to fund the white perch monitor. We will pair this money with Sea Grant funds to support monitors who will ride with commercial fishers involved with the white perch test fishery in Green Bay.

The Green Bay Fisheries Research group met in March. Weather was poor and we had about 50% turnout for the event. We hope to meet again in late May or early June. We had good discussion of possible factors affecting yellow perch in Green Bay.

Fred Binkowski asked that I mention the Percid Conference in Madison in the third week of July. There will be a special two-day session on yellow perch.

#### **Next Meeting**

Topics will include stocking reports, the fish health certification issue, the results from the trap net hearings and a report from the finance committee on the DNR funding increase request. The next meeting will be 6:00 PM June 30 at the Lakeshore Technical College in the Wells Fargo Room.