

Lake Huron Citizens Fishery Advisory Committee

Established by the Michigan Department of Natural Resources to improve and maintain fishery resources of Lake Huron through better communication and partnership.

Lake Huron Citizens Fishery Advisory Committee Meeting Jay's Sporting Goods, Inc., Clare, Michigan Thursday, February 1, 2018

Attendees: Gary Whelan, Todd Wills, Ed Eisch, Bruce Berger, David Jahr, Dana Serafin, Jerry Serafin, Ross Wellman, Randy Duff, Mark Lentz, Amber Petersen, Eric Petersen, Lee Martin, Eric Morrow, Sam McMurry, Dustin Van Orman, Jim Dexter, Donna Wesander, Leo Mrozinski, Gary Boersen, Dave Caroffino, Mike Feagan, David Shaw, Todd Ballor, Rich Kretzschmar, Dennis Gulau, Gary Decker, Ed Retherford, Tom Hamilton, Dave Borgeson, Judy Ogden, Julie Shafto, Steve Shafto, Jean Smith, Jay Smith, Eric Plant, Thomas Heritier, Gene Kirvan, Lowell Kiester, Andrew Briggs, Jan-Michael Hessenauer, Jim Baker, Randy Claramunt, Ken Merckel, Terry Walsh, Jim De Clerck, Randy Terrian, Richard Haslett, Eric Andersen, Doreen Campbell, Lance Campbell, Ji He, Frank Krist, Aaron Switzer, Tom Goniea, William Droomer, Laura Shorkey, Katie Kierczynski, Brandon Schroeder, Tom Keerl, Scott Lutz, Paul Vantol, Glen Buehner, LaKon Williams, Tod Williams, Tess Nelkie.

10:00 Welcome and Introductions (Frank Krist and Randy Claramunt, DNR Lake Huron Basin Coordinator).

Frank asked the group to be considerate of others. Frank recognized the excellent work done in the past by Lindsey Henski recording the meeting minutes, and that she will no longer be able to perform this task for the Committee. Dave Borgeson agreed to take meeting minutes for this meeting. To assist in the effort, Frank asked if anyone had an issue with him recording the meeting. No objections were raised.

10:05 Potential amendments to the Lake Huron Citizens Fishery Advisory Committee's Terms of Reference (Frank Krist and Randy Claramunt).

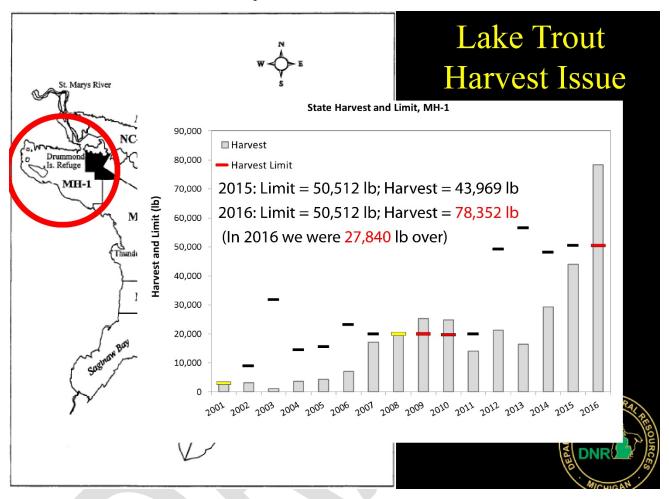
A recommendation was made by a Committee member prior to the meeting that for contentious issues it might be beneficial to include in the Terms of Reference, a provision whereby the Committee can invoke a time where all Committee members, can speak for 3 minutes uninterrupted on that issue. If time permits, then other participants would be welcome to express their input. Judy Ogden moved that the Committee accept this amendment to be included as number 5 under Membership Responsibilities in the Terms of Reference. Jim DeClerck seconded the motion. All members present supported the proposed change to the terms of reference. The updated version is attached.

Ed Retherford suggested that it might be a good idea to have all Committee members and others present have name tags so that they can be easily identified by Frank and each other. Frank asked it there were any volunteers that wanted to take on the task of supplying the name tags and issuing them at each meeting, but no one volunteered.

10:30 Lake trout overharvest in Northern Lake Huron lake trout management zone MH-1 (Rogers City to Drummond Island) (DNR Staff).

Randy recognized the DNR staff that put the data together, from collecting and aging fish, to analyzing and writing the reports. He asked that those present appreciate the effort, going above and beyond what is normal this

year, to get the information ready for this meeting. Randy reminded the group of the lake trout overharvest issue in MH-1 that was discussed prior to last fishing season and presented the harvest limit and harvest numbers throughout the Consent Decree period. We have overharvested several times during this period in MH-1, and the recent overharvest was substantial; 27,840 pounds over the 50,512 limit for 2016, see the chart below.



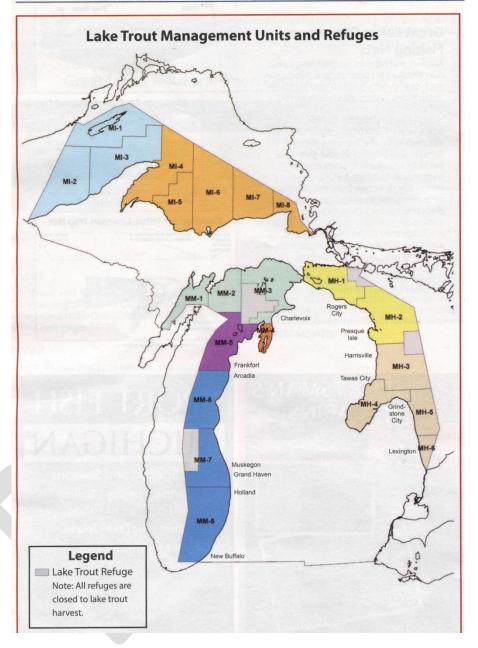
There were several factors that contributed to the overharvest.

- Total fishing effort nearly doubled from 2015 to 2016, but still half of the 2008 to 2012 average
- Lake Trout per Angler, up 40%
- Total Lake Trout observed in creel, up 52%
- Proportion of anglers targeting salmonids, up 40%
- Average weight of a harvested fish up 0.7 pounds (18%)

Last year's proposed solution was to combine MH-1 and MH-2, and put in place a 2 fish creel limit, see map below. Additionally, it was proposed that MH-3 thru MH-6 (Black River-Alcona County to Port Huron) be open to lake trout fishing all year. The rationale behind combining MH-1 and MH-2 was that the lake trout population in this area behaves like one population, and lake trout move and do not recognize the artificial boundaries. In addition, there was less fishing effort in MH-2, yet the annual quota was over twice that of the quota in MH-1.

Last year's proposed solution was difficult for many advisors to accept. Since it appears lake trout rehabilitation is getting closer and the population is building, restricting harvest did not make much sense. Another factor for some members and anglers to accept, was that the Consent Decree process did not allow sufficient time for stakeholder discussions and feedback. Stakeholders continually asked about how accurate the creel estimates were. The creel surveys are conducted under professionally approved statistical methods. Not all anglers are checked, but similar to polling, good results can be obtained by checking only a portion of the anglers. Finally,

some stakeholders thought the proposed reduction in creel limit would ruin the fishery, and MH-2 anglers would be paying a price for an MH-1 issue.



GREAT LAKES LAKE TROUT AND SPLAKE REGULATIONS

As a result of all these discussions and difficulties that anglers had with the proposal, it did not go forward. In addition to stakeholder opposition, there was tribal opposition with the proposal to combine MH-1 and MH-2 prior to the upcoming 2020 Consent Decree process. The DNR is still in a dispute with the tribes on this issue.

There is a requirement in the Consent Decree that if harvest limits (quotas) are not agreed to by the State and the Tribes, the harvest limit may not change by more than 15%, per the 2000 Consent Decree. The Consent Decree states that parties are required to take a management action to prevent an overharvest from reoccurring. Below are the calculations for the 2017 and 2018 harvest limits for lake trout in MH-1.

2017 Harvest Limit (Quota)

15% increase from 2016 minus over harvest penalty: 50,512 + 15% (58,089 lbs.) - 27,840 = 30,249 lbs.

2017 Harvest

54,301 lb. harvest resulted in 24,052 lbs. *over* the harvest limit = new penalty for 2018)

2018 Harvest Limit

15% increase from 2017 minus over harvest penalty: 58,089 + 15% (66,803) - 24,052 = 42,750 lbs.

Randy asked if the Committee could support a reduction in the bag limit for MH-1 in 2018 if combining the units fails. Frank agreed with Randy's assessment, and could foresee, with good weather, going way over the harvest limit this year; and compromising the future fishery. Jay Smith proposed a reduced season, foregoing the latter portion of the year due to the increase in salmon fishing that occurs in the fall. Frank agreed that an August and September closure may make sense. Glen Buehner asked if the season is shortened, and hooking mortality takes place during those months, will that count against the quota? The answer is yes. Seasonal regulation would have to take into account seasonal harvest, and the season cutoff would have to look at the seasonality historical fishery. Randy emphasized that a mid-season regulation change would likely be too late to react effectively. Fisheries Chief, Jim Dexter stated that for the DNR to put forth an emergency regulation, it would have to be posted for 30 days, which greatly inhibits our ability to be timely and for the change to be effective. To be practical, we need to be more strategic. Ed Retherford stated that 99.9% of MH-2 anglers are opposed to going to 2-fish limit. Ed mentioned the reduction in the creel program and asked if there were enough creel locations in MH-1. He noted that the reported harvest is subject to variability based on the design of the creel program and asked if that could be part of the problem. Randy says it is an estimate and there could be errors, but we actually may have underestimated harvest in the past. Ed said angler trust in the DNR in the MH-2 area is low and hinted that their participation in the creel program may decline. Randy said if we don't get good participation in the program, and reliable numbers, the bias will likely be greater. Ed said that the past license increase, coupled with past reductions in stocking, are important issues among anglers. Adding a reduction in bag limit will not sit well with anglers. Randy emphasized that we are only talking about MH-1 regulation changes now, and MH-2 is not currently part of the regulation change discussion.

As for stocking decreases, the stocked lake trout were not surviving, and there are difficulties getting many species of stocked fish to have good post stocking survival. Dennis Gulau asked at what point would we have to shut the season down? Randy and Dave Caroffino said that we can estimate that based on past seasons. Frank said that closing August and September might keep the harvest under the quota, but year to year changes will affect that. Judy Ogden asked what would anglers fish for in that closed period? Frank said potentially Chinook in many areas, as well as Atlantics and steelhead. He said that areas such as St. Ignace and the Les Cheneaux Islands may be at a disadvantage for this type of seasonal closure.

Randy stated that in many areas people prefer to choose daily bag limit reductions in order to allow some fishing to occur, and that a two-fish bag limit for MH-1 might be preferable to an early closure date. Jay Smith said that since Rogers City is near the border of MH-1 and MH-2, many Rogers City anglers would likely bring in 3 lake trout and indicated they fished in MH-2. Randy and Dave Caroffino stated that this makes law enforcement tough. Dave Caroffino said that if state anglers don't follow the rules, the regulation won't work. Frank said if the creel clerk records catch by the grid where it occurred, rather than by port, it could help the issue. MH-2 is only 7 miles southeast of the Rogers City Harbor and boats are fishing in that area regularly. Everyone was encouraged to abide by the fishing regulations in the waters in which you are fishing. Dave Caroffino admitted that fishing near the MH-1 and MH-2 border can be problematic. Because of the close proximity of MH-2 to the Roger City Harbor, many lake trout that actually have been recorded as caught in MH-1 could have been caught in MH-2.

Jim DeClerck noted the amount of lake trout are increasing in MH-1, so have the lake trout been hurt by the overharvest? As the lake trout population is growing, we should expect that more fish are going to be caught, correct? Randy said that while the State and the Tribes can't agree to the harvest limit, we can only increase it up

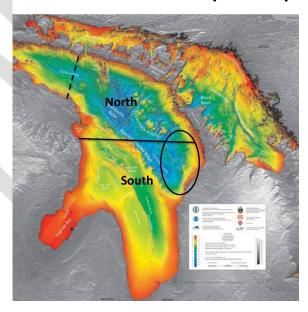
to 15% per year. This is how it is handled in the current 2000 Consent Decree. Changing how the quota is determined won't likely change until 2020 Consent Decree renegotiation. Randy also said that the decision made today will likely affect the 2020 process. Jim DeClerck said it seems to be a perfect time to make the right decision between us and the tribes. The original Consent Decree was salmon and whitefish based. The tribes were interested in the relatively abundant whitefish populations, while the state was mostly interested in the salmon fishery. However, now that both the whitefish and salmon populations are down, it is a totally different landscape. Jim Dexter told the Committee that the DNR thought they would make progress on many issues, but the tribes have indicated that they aren't willing to talk about a lot of issues until 2020. He indicated that our Federal partners have a say as well, as lake trout rehabilitation remains among their top goals. Ken Merckel talked about how salmon quotas were dealt with out west and once the target was hit, the salmon fishery was shut down.

Tom Keerl moved to lower the daily lake trout bag limit in MH-1 to 2 fish, and close season on August 1. Randy said that we probably won't have to do both measures. We could go to a 2-fish bag limit and achieve a 15% harvest reduction. Tom said he could agree to that, and the motion was changed to only include a 2-fish daily bag limit. People were reminded that this proposed regulation change was for MH-1 only. Randy Terrian seconded the motion. All members agreed with the proposal.

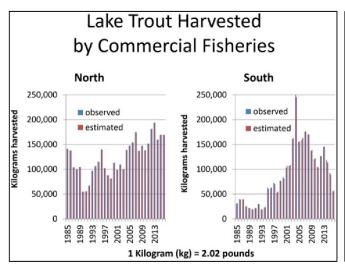
11:00 Potential changes in lake trout stocks in Central and Southern Lake Huron (Ji He DNR research biologist and modeler).

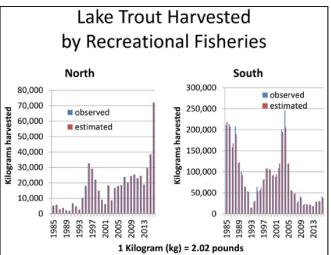
Jim Johnson could not make the meeting. Randy and Frank introduced Ji He, research biologist at the Alpena Fisheries Research Station. He has put together information on the lake trout population for the entire lake. Ji indicated his model incorporates all available sources of information to tell the lake trout story including the sport fishery creel data, lake trout surveys, and the commercial fishery harvest information. Ji showed a bathymetry map of Lake Huron, stating our artificial zonal divisions don't follow ecological boundaries. Ji will be comparing the northern region extending from Thunder Bay north, with the southern region, see map below.

Lake Huron Bathymetry



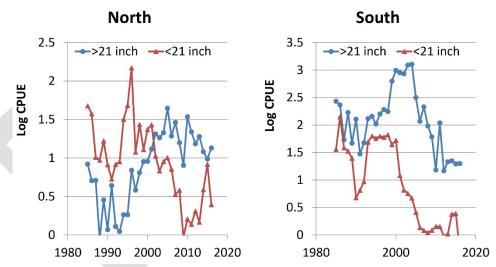
The lake trout harvested by commercial and recreational fisheries in the north have been increasing, while the harvest by commercial fisheries in the south are decreasing and the harvest by the recreational fisheries in the south has leveled off at lower levels, see the chart below.





Since the alewife crashed, the spring survey netting has shown a decrease in juvenile lake trout catch per unit effort (CPUE) which is shown in the red lines on the charts below. The data suggest a decline in juvenile lake

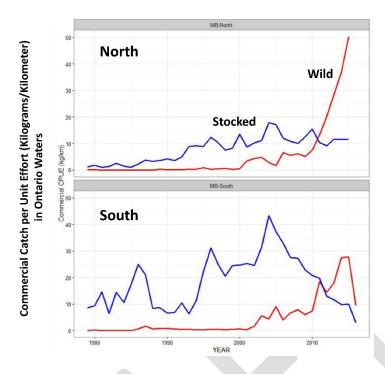
Spring survey lake trout catch per unit of effort



trout abundance. Some recent increases in juvenile catches, however, will hopefully lead to an increase in adults, resulting in an overall increase in spawning size fish.

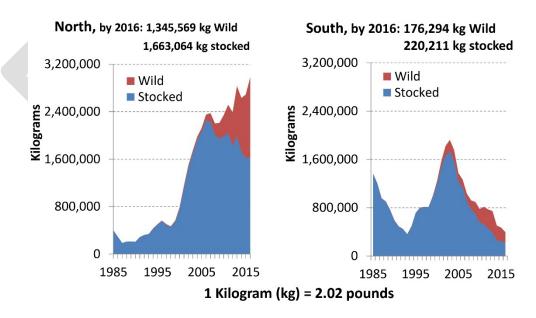
For southern Lake Huron, the catch per unit of effort (CPUE) has declined in the spring lake trout surveys for both adults and juveniles. Fishing mortality remains fairly constant, and the overall mortality remains fairly high, but below the suggested limit. Total harvest has declined. The survival of stocked fish has declined in southern Lake Huron prior to the decline in northern Lake Huron. Ji suggested that stocking sites in southern Lake Huron were likely of poorer quality and the alewife crash most likely started earlier in the south.

The growth and condition (fatness) of lake trout can be used as an indicator of lake status. Condition has declined over the years. Ji noted sharp increases in the catch of wild lake trout in the commercial fishery in Ontario, see the Chart below. The oldest fish in the Canadian fishery are about 15 years, while older lake trout are found in our fishery.



The trend in the increasing lake trout population in northern Lake Huron results from a decline in lamprey mortality and a decline in fishing mortality. Since the alewife crashed, there has been an increase in wild lake trout in both the north and south but a decrease in survival of stocked lake trout. See that table on the next page that compares the lake trout changes between the north and south.

Estimated Biomass (total weight) of Lake Trout Ages 3-30 Years Old



Discussion followed about the overall state of the fishery. Dana Serafin said the numbers presented don't match up with what he is seeing. He is seeing more lake trout than the guys in the north. Randy said that catchability must be accounted for, like the clear water in the north perhaps leading to gill net avoidance by lake trout. The lake trout could be more abundant in the north but possibly they are avoiding the nets or are more spread out because of more suitable habitat in the north. Since the condition of the lake trout is decreasing it was suggested

that it looks like we're getting closer to the carrying capacity for lake trout in Lake Huron. It seems like the southern part of the lake should be seeing more lake trout, and there seems to be some sort of disconnect. Frank mentioned that the DNR has a new boat and possibly surveys should be conducted on the offshore mid-lake reefs to determine if many lake trout are being missed in the spring surveys. Tom Goniea cautioned against comparing catches between commercial operations unless the operations are standardized to some degree. Dana said that the fish move, and at certain times of the year they are overrun with lake trout. Dana isn't seeing sport fishing boats when he's out there. Judy said that charter operations are going out to mid-lake reefs out of Port Sanilac to limit out on lake trout. She said most recreational anglers don't go out that far, and she surmises that the lake trout catch in the south has declined during the summer months. Terry Walsh asked if we are at the maximum carrying capacity? Ji said that time will tell. Frank asked what the Committee members thought. A participant wanted to move on to the next agenda item. Randy Terrian said he would prefer more information before charting a new

Summary

No.		
Data and model	Northern Lake Huron	Southern Lake Huron
Commercial Harvest	Increased	Declined
Commercial CPUE	Increased	Declined
Recreational Harvest	Increased	Declined
Recreational CPUE	Increased	Declined
Survey CPUE (All)	No Trend	Declined
Survey CPUE (Juveniles)	Declined and then recovery	Declined and stayed low
Survey CPUE (Adults)	Increased and stable	Followed juvenile CPUE
Mortality	Stayed low since 2000	Higher than the north, but below the max limit
Stocked recruitment	Decline and then some recovery	Declined earlier, more rapidly, and stayed low
Wild Recruitment	Continued to increase	No trend since 2002
Lake Trout Abundance	Increased and stayed high	Decline

CPUE = catch per unit of effort

direction on this issue.

11:30 Discussion of forming a Subcommittee of Advisors and, DNR biologists and managers to compile a draft Lake Huron Salmon and Trout Management Plan (Randy Claramunt and Frank.

Randy asked if there was interest among the Advisors in forming a small group (Subcommittee) to take a crack at writing the trout and salmon portion of the Lake Huron management plan. Frank asked Randy if a complete plan with all species should be drafted. Randy stated that in the past we have decided to focus on the trout and salmon, since the changes in the lake have had large impacts on the trout and salmon populations, and the management of them. Of course, trout and salmon are part of the entire food web so impacts on other species and other aspects of the lake's ecology will be considered. There were no objections to forming the Subcomittee.

Members were urged to send Frank a note indicating their interest in participating in the plan writing effort. The Subcommittee would include about 4-5+ DNR representatives, and 5-7+ stakeholder representatives, and the draft would be presented to the entire Committee for its review and input. The plan should include where we currently are, and where we are going and how to deal with possible changing conditions. It should include goals, objectives, and a tactical plan. Frank mentioned that any Committee Members interested in being on the Subcommittee should to let him know.

12:00 The number and location of the 2018 Spring Sea Grant Lake Huron Workshops (Brandon Schroeder, Michigan Sea Grant).

Brandon stressed the importance of these workshops, and the need for input from this Committee is vital to make sure we hit priority locations over time.

The current plan is for evening meetings, from 6-9 pm, Tuesday – Thursday. The proposed venues are: the Thumb, Rogers City, Saginaw Bay (Arenac or Bay City?), and Cedarville for 2018. Data shows that people who attend a meeting in Port Huron, do not necessarily attend the Thumb meetings, so rotation of sites is important. For 2019, the suggested locations are: Port Huron, Alpena, Saginaw Bay (Bay City?), and Cedarville. It was thought for this year, with all the MH-1 issues, that Rogers City would be a good location. Cheboygan folks could attend the Rogers City meeting, and Upper Peninsula folks could go to Cedarville. Brandon recognized that there are always good turnouts in Alpena and Oscoda, and after 2018, that rotation could resume. He suggested the possibility to rotate from Alpena in 2019 to Oscoda in 2020. There is a potential location for a meeting in Arenac County, and that could possibly serve folks from Oscoda. Terry Walsh said that the Arenac walleye club is big and active, so that location might work well. Brandon encouraged those present to get the word out, so the workshops are well attended.

12:15 Update on the progress of reinstating comprehensive cormorant control to protect sport and commercial fisheries (Dave Fielder, DNR research biologist and modeler, Randy Claramunt DNR Lake Huron Basin Coordinator and Frank Krist).

Dave Fielder discussed a recent strategy meeting he attended with United States Department of Agriculture Wildlife Services and DNR Wildlife Division. Wildlife Services and the MDNR work with the US Fish and Wildlife Service to implement the Cormorant Control Program. An environmental assessment has been developed by the Wildlife Services and the US Fish and Wildlife Service pertaining to impacts of cormorants on aquaculture facilities in the southern states. Our plan for Michigan is to try to obtain approval for harassment efforts that is reinforced by lethal control at fish stocking sites, as well as those sites needing vegetation protection, and those sites needed for research purposes (Les Cheneaux Islands-a working laboratory). Formerly, there were annual multi-agency meetings (including Wildlife Services), and the goal is to have that occur again. Hopefully, bill, H.R. 4429-The Cormorant Control Act (https://www.congress.gov/bill/115th-congress/house-bill/4429/text), introduced by Congressman Jack Bergman in the US House to allow lethal control of cormorants to protect free swimming fish, will get some traction. The bill is attached.

The US Fish and Wildlife Service has said that they plan to hold public meetings on cormorants in Michigan this year, so people need to turn out and speak up at the meetings. However, US Fish and Wildlife Service has already said cormorant management is not a priority for them. We are looking to explore opportunities for drones to count cormorant nests. Someone questioned Dave about the problem of counting nests with humans disrupting cormorants nesting, and that this did not make sense. Dave said that disturbing the other co-nesting birds of other species was the main concern that is preventing access to some islands. The ultimate goal is to have cormorant management with lethal control options as part of our toolkit again.

Frank has communicated with representatives from Senator Stabenow's and Congressman Bergman's offices, and the problem is there are not enough legislators from the other states that consider this issue a priority. The hope is to team up with southern legislators, where the birds that breed up north end up going and impact the aquaculture industry. Not much progress to date and Frank urged folks to contact their legislators and establish a relationship with them.

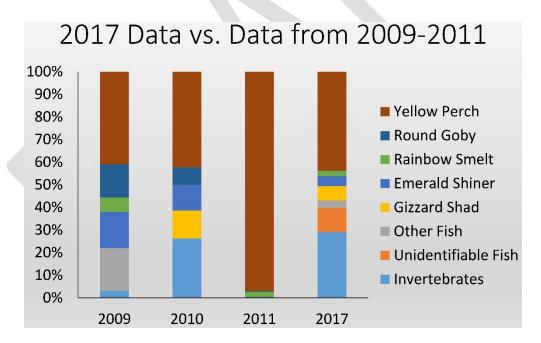
Ed Retherford said the cormorant effort reduced the birds greatly and was extremely effective. Tribes have lost the authority to control birds as well. Judy asked if cormorant talking points could be developed so that people could effectively communicate on this issue. Dave Fielder said this can be done but emphasized that folks need to remember that you must communicate to federal legislators, not state. It was suggested that the cormorant issue should be a topic for the spring Sea Grant workshops.

12:30 Progress report on the Lake Huron Predator Diet Study (Katie Kierczynski, MSU Graduate Student).

Katie showed some preliminary results from 2017. So far, 320 stomachs out of over 1200 have been analyzed. These included 295 walleye and 43% of the stomachs were empty. See table below.

Date	7-Jun-17	8-Jul-17	20-Aug- 17	24-Sep- 17	Total
Total Walleye	94	91	75	35	295
Total Walleye Used	86	84	70	27	267
% Empty	41%	49%	40%	37%	43%
Total Full Stomachs Analyzed	51	43	42	17	153
# Taxa Identified	14 (5 fish)	8 (3 fish)	14 (8 fish)	4 (3 fish)	22 (11 fish)

Most of the stomachs came from Saginaw Bay and were from walleye between 13 and 19 inches long. Content included mostly invertebrates by numbers. In June it was mayflies. Stomachs contained more fish in September. By weight, fish constituted the majority of stomach contents, except for June. Perch were the largest percentage by species of fish eaten. Not many round goby were found in Saginaw Bay walleye. To date, mostly walleye have been processed, since they were on the top of the freezer, and mostly from Linwood. Gizzard shad have been shown to show up big in September. The Chart below shows how these preliminary results compare to the results from the previous study.



Katie has a Facebook page https://www.facebook.com/Huron-Michigan-Predator-Diet-Study-593235801067783/ and is also posting information on an Instagram page https://www.instagram.com/greatlakespredatordiet/. There are a large number of photos and other information at these sites.

Julie Shafto indicated that the fish cleaning stations have bags and tags to assist in the stomach collection initiative. Katie said that if stomachs have a hole in them, they are not utilizing them. Frank took issue with this, stating that he looks forward to looking at what the fish he catches eat and actually that is the highlight of his day. There were comments that Frank must not have much of a life. Katie said she will keep them if she knows who is doing it and knows all stomach contents are assured to be included.

Katie provided info on the study's funding sources (including USGS and Steelheaders). Brandon shared information on the popularity of a presentation entitled "fish guts." He said that by simply using that name, more people have been motivated to learn about the effort. Asked about mayflies, local anglers agreed that mayflies are on the increase, in Saginaw Bay and this helps confirm what Katie's information shows.

1:05 Review of the Saginaw Bay walleye and yellow perch regulations for 2018 (Dave Fielder, DNR research biologist and modeler and Randy Claramunt DNR Lake Huron Basin Coordinator).

Dave gave a short background of the rationale for the past changes in walleye and yellow perch regulations in Saginaw Bay. Goals of the current regulation changes were to fully utilize the walleye population within the limits of sustainability and restore the yellow perch population more consistent with past performance. The strategy was to annually review and adjust if necessary the recreational regulations by adapting to the newest information and the changing fish community which is similar to how regulation changes are done in Lake Erie. For both Lake Erie and Saginaw Bay, the specific regulations are not listed in the Fishing Guide but can be obtained by going to the DNR website or by calling the phone number listed in the Fishing Guide.

Dave gave a list of measures and indicators that can help guide our decisions. See table below (DBL = Daily Bag Limit). The up and down arrows indicate the direction of change while the white bars indicated no change.

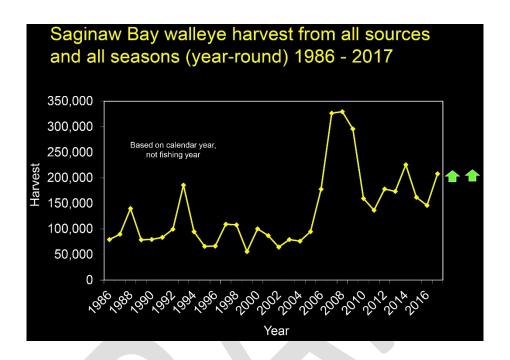
Measure	Performance Indicator	Expectation	Measu
Walleye Harvest	All Sources	1	
Walleye Catch Rates	Open Water	•	†
Walleye Angler Success	Harvest Prop above 5 DBL		
Perch Harvest	Annual Harvest	•	•
Perch Catch Rates	Annual Rec Catch Rate	•	
Perch Angler Success	Prop of Harvest Limited by DBL	1	
Saginaw Bay Angler Effort	Total Annual Fishing Effort	1	
Walleye Abundance	Gillnet Survey	•	
Walleye Recruitment	Yearling Estimates from Gillnets		•
/alleye Reproductive Success	Age-0 CPE and Origin in Trawls		1
Walleye Growth Rate	Average Length at Age 3	1	•
Perch Reproductive Success	Age-0 Abundance in Trawls		^
Perch Recruitment	Age-1+ Abundance in Trawls		
Yellow Perch Growth	Average Length at Age 3		1
Forage Fish Levels	Forage Index Biomass (lbs/ac)	1	•
Others?	Survival rate, exploitation, etc.		

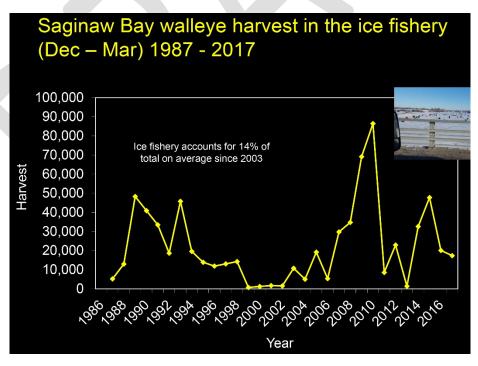
Dave showed that the walleye harvest went up in 2017 after it was down in 2016. Dana was surprised that the harvest did not go down even further considering the poor ice conditions for the past 2 years. Ice fishing was down, but it usually accounts for only 14% of the harvest on average, see charts below. Last year the open water harvest increased. Targeted effort is just above Lake Erie's targeted goal.

Dave looked at the impact of the walleye increased bag limit, and the 13 to 14 inch fish that are now available for harvest. He determined that 49% of the harvest in 2017 was due to the change in regulations.

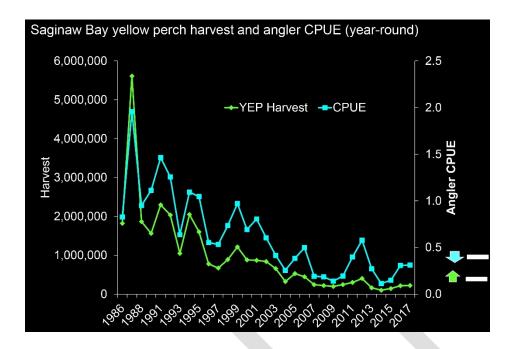
In the gill net walleye survey, the catch rate increased last year. There were lots of 1 year old walleye caught in 2017, indicating a strong 2016 year class. The trawl catch rate for age 0 walleye was similar to past years. The data indicate the age 0 catch is not the best predictor for walleye year class strength these days, and age 1 is a

better indicator. Walleye growth rate is within the recovery target level of 10% above state average, increasing slightly from the previous year.





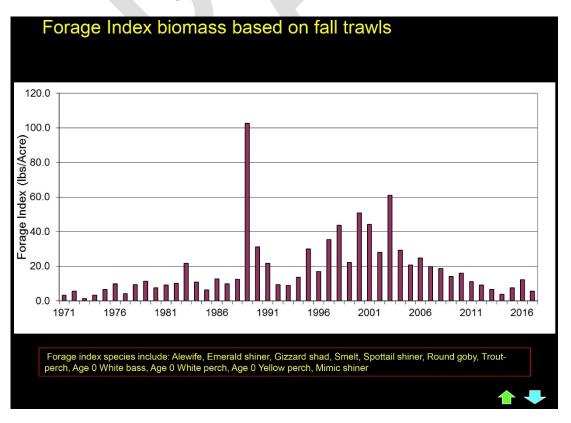
The yellow perch catch rate (CPUE) and harvest remained the same last year, and 11% of the parties reached the 25 fish limit, showing the regulation had some effect on reducing harvest, see the chart below.



Overall fishing effort has declined over the years, but stayed the same last year. As has been said before, effort in Saginaw Bay is highly dependent on the perch fishery.

Young of the year and yearling and older yellow perch catch rates remain similar to past years. Survival to older year classes remains low. Predation is high on young perch. Growth, as might be expected with low populations, is high since there is more food for the fewer surviving adult fish.

Last year's surveys indicate that prey fish levels are near an all-time low, and declined last year after a couple years of increases. A decline in white perch was notable. See Chart below



Dave was asked about future regulations and if any changes are needed. He didn't think there was compelling evidence to liberalize walleye regulations or to change to the previous regulations. Since the changes have been in use only 2 years, another year of data will help to better determine the impacts

Terry Walsh anticipated catching a lot of small fish last year, but they ended up catching more 18 inch fish. The small fish they did catch were plump and seemed to be in good condition. Dennis Gulau and others saw a lot of small fish in the river, especially in the fall. Dennis said there were some decent ones mixed in. He noted fewer young of the year gizzard shad in the river this year. Dave said that soon he will have the creel data put together to get a better idea of catch and size information. The river fishing has picked up this winter, and it will be interesting to see the results of the creel program. Dave Fielder said the fishing today for walleye is similar to the historical good years and anglers should not to be afraid of the good fishing. Perhaps this level of fishing is sustainable. Terry Walsh asked about when there was a commercial fishery and a lot of walleye taken what was the perch fishing like? Dave said the perch fishing was good back during that time frame, however, during that period, besides many yellow perch and walleye, cisco were very numerous which provided an alternate food source for the walleye. This reduced the predation pressure on the yellow perch.

Dana said the information we are presenting doesn't jive with what he is seeing. He feels September is the worst time of year to catch perch. Tom Goniea asked if water clarity changes might contribute to predatory differences from past to present. Overall high prey abundance was mentioned as a large factor in the past, providing a buffer to yellow perch predation.

Dave said the lack of the winter fishery the previous two winters and the continued walleye recruitment, are reasons why the regulation changes did not have the expected impact of reducing the walleye population. He expects this to change and said we are seeing indications of increased effort and harvest this year.

Jim DeClerck asked about the yellow perch food base. Randy said that for perch that are out there, there is enough food so that they have good growth. Dave said the young of the year perch may not be growing well and not getting out of predation window quickly, while older perch are growing well. Jim Baker said the indication of survival from age 1 to 2 may have increased. Jim discussed the types of zooplankton that perch target and said the spiny water flea was not a large component of the perch diet, answering a question from Tom Goniea.

Randy discussed potential changes in our timeline, perhaps moving this meeting to a later date so all the information could be analyzed and presented to the Committee. He said the DNR is going to go over the data after this meeting and decide on whether a change in the regulations is needed for 2018. This discussion would occur within the DNR Lake Huron Basin Team. The DNR will provide the updated data and the decision after that meeting.

Dana asked why the commercial fishermen can't utilize walleye caught in deep water over 100 feet deep since the walleye are dead. Randy said the next talk will lead into that question, noting that others at the meeting might ask about the commercial statute rewrite.

1:50 Status and moving forward with the experimental whitefish fishery in Southern Lake Huron (Andrew Briggs DNR Lake Erie/Lake St. Clair Station Research Biologist and Tom Goniea DNR Biologist).

Andrew presented the objectives for the fishery as detailed in the permit as well as the amount of gear to be removed from Saginaw Bay as shown below.

Goals and Objectives for the Harbor Beach Lake Whitefish Commercial Fishery

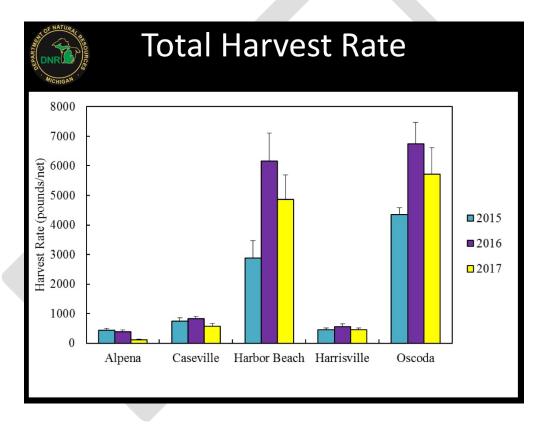
- Remove the greatest amount of commercial licenses and gear possible from Saginaw Bay.
- Reduce commercial yellow perch harvest in Saginaw Bay.
- Evaluate whitefish population and stock health in Southern Lake Huron.
- Harvest whitefish over 17 inches without taking game fish species.

- Evaluate and develop acceptable fishing grounds.
- Evaluate the timely collection and posting of trap net locations online.
- Evaluate the potential long-term sustainability and profitability of a fishery for whitefish in Southern Lake Huron.

Gear Reduction in Saginaw Bay

The following licenses and gear to be permanently removed from Saginaw Bay.

- License. 807 w/
 - ❖ 14 traps and 2 pound nets.
- License. 814 w/
 - ❖ 14 traps and 2,640 ft. of seine.
- License. 1119 w/
 - ❖ 33 traps, 1,280 ft. of seine, 9,600 ft. of gillnet, and 750 set hooks.
- License. 1122 w/
 - ❖ 25 traps, 660 ft. of seine, and 6,000 ft. of gillnet.



Andrew showed the harvest data from the whitefish fishery during 2015-2017 for Alpena, Caseville, Harbor Beach, Harrisville, and Oscoda, see chart above. Oscoda had the highest total harvest and was similar to Harbor Beach in harvest rate. Andrew showed the seasonal catch rates by season and port.

The table below breaks down catch rates (CPE) which are the average number of pounds of whitefish harvested per trap net lift, and total effort (trap net lifts) by year and by season. The lake whitefish catch rate varied by season, but it did not vary the same way for each location. For the most part, the values are not necessarily comparable across sites, however, you can focus on each individual site to see how each site varied seasonally. You can see that the catch rates were highest in the spring for Caseville and Harbor Beach, which are the two southern most locations. The Caseville catch per effort ranges from about 978 to 1311 pounds per net lift in

spring and from 257 to 601 during other seasons, while Harbor Beach had relatively high catch rates during each season, but you can see that each year the spring had the higher catch rate.

Seasonal Catch Rate							
		20)15	20)16	2017	
		CPE	Net Lifts	CPE	Net Lifts	CPE	Net Lifts
	Alpena	136.5	54	353.2	53	48.5	24
	Caseville	1014.6	17	1311.8	25	977.7	20
Spring	Harbor Beach	3826.7	3	7025.4	7	5626.2	10
	Harrisville	373.0	113	419.9	171	389.0	113
	Oscoda	4503.5	10	4550.7	3	7011.0	3
	Alpena	288.0	109	156.4	59	-	0
	Caseville	507.6	36	601.0	65	632.6	73
Summer	Harbor Beach	2418.3	24	5100.5	23	4405.8	19
	Harrisville	206.5	154	210.2	143	176.5	164
	Oscoda	3949.7	102	5951.6	46	4991.9	59
Fall	Alpena	1016.7	38	576.5	42	401.0	6
	Caseville	337.2	6	388.9	25	257.2	10
	Harbor Beach	2646.4	10	2031.0	2	2991.0	37
	Harrisville	1104.8	84	1242.0	55	981.6	102
	Oscoda	4971.0	30	4208.4	5	2262.3	17

CPE = the average number of pounds of whitefish harvested during each net lift

while Harbor Beach had relatively high catch rates during each season, but you can see that each year the spring had the higher catch rate.

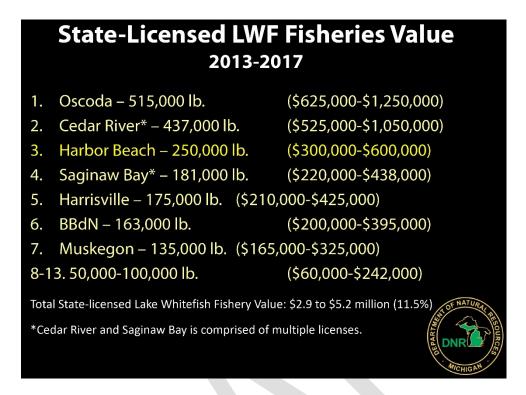
The catch rates were highest in the fall for Alpena and Harrisville, which are the two northern most locations. For Alpena, catch rates in the fall ranged from 401 to about 1000 pounds per net lift while other seasons ranged from about 155 to 350. One reason why the Alpena harvest rate seemed lower in 2017, may be because ownership of the Alpena license changed hands in late summer. The ownership change may have impacted how actively the license was fished during the fall. For Harrisville, catch rates in the fall ranged from about 981 pounds per net lift to 1242 and ranged from about 175 to 420 during other seasons.

Oscoda was kind of an odd ball with there not being an obvious seasonal pattern. You can see the catch rate in 2015 was highest in the fall, in 2016 it was highest in the summer, and in 2017 it was highest in the spring.

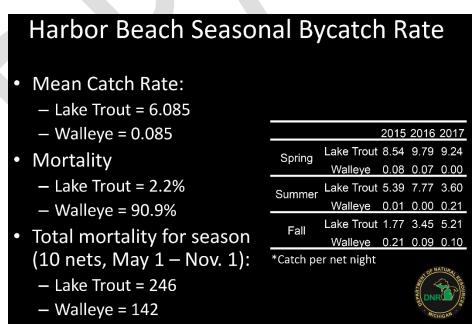
Tom Goniea said the expected harvest for the Harbor Beach fishery is about 250,000 pounds. This assumes that 10 nets are fished from May 1 through November 1, and there is a constant whitefish population. The whitefish price has varied from \$1.21 to \$2.42 per pound, averaging \$1.70 per pound over the last 10 years. This yields a value of \$302,000 - \$605,000, considering only the value of the fish caught. This rates as number 3 in the State in terms of value with Oscoda #1 and Cedar River #2 for state licensed commercial fishers. This demonstrates that the Harbor Beach fishery has shown ability to be profitable. If harvest trends hold, Harbor Beach is comparable or better than other whitefish grounds in the state, see the table below. The whitefish mortality rate for Harbor Beach was well below the acceptable level.

Initially, there were some worries about potential conflicts, but fishing grounds were developed to account for this potential problem. Over the past three years, there has been increased utilization of the fishing grounds, with

more nets fished and some deployed further south. The trap nets mostly have been fished during all years from 100 to 120 feet of water.



Andrew described the bycatch and mortality. Annual mortality of bycatch was estimated to be 246 lake trout and 142 walleye deaths. See the Charts below. Information suggest that the fishery is sustainable, viable economically, and not a threat to lake trout or walleye.



Tom mentioned the requirement of providing net locations online in an attempt to reduce conflicts and asked if this should continue? Because of the safety concerns, there was very strong support for making the trap net GPS coordinates available to boaters. Tom said that the posting of net locations on the DNR website is efficient and doable.

Tom was asked what the extent of the reduction would be in the number of yellow perch trap nets actively fished in Saginaw Bay once the license trade is completed. Tom said that number was about 150 which remained about the same as before. He said that 4 licenses and 85 pieces of gear were permanently removed from the potential fishery but changes in ownership to other licenses resulted in about the same amount of active gear being deployed. There were a lot of nets not being fished that were available with some licenses but down the line this action has the potential to result in an overall reduction in deployed nets because these 4 licenses will never be fished again. Dana asked who are we managing the fishery for, a small interest group, or for all the people of the state? He said he feeds a lot of people and this Committee is trying to put him out of business.

Randy said that all members of this group do not have to agree on all points. Randy also said it is the DNR Director who will have the final say over whether the Harbor Beach permit becomes a license.

Judy said that until the legislature comes up with a new statute, we won't know what a sport fish and commercial fish will be. Will the commercial fishery be able to take fish other than whitefish? That makes it difficult for anglers to know what the future holds. Tom Goniea said there is an option to extend the research permit for another year. We only have 1 year of data for a fully realized fishery and Dana has concerns as well and has approached the Division to extend the research permit to gather more data. Possibly we'll gain a better perspective on the fishery and the status of the Commercial Fishing Statute if we extend the permit for another year. If we do this the same conditions would apply on the fishery. Judy said it seems that the extension proposal was reasonable and said that the nets were well marked.

Glen Buehner mentioned that whitefish recruitment is down in many areas and asked about the future for Lake Huron whitefish. Is this a problem? Tom Goniea said that a harvest rate of 11% won't be the driver of the whitefish population. Southern Lake Huron whitefish populations seem to be doing better than those in the north. Tom mentioned the boom and bust nature of whitefish reproduction these days. Tom again mentioned that the commercial fishery is not the driver of the population and that ecosystem issues are the major drivers for the whitefish populations.

Jay Smith, who fishes around Rogers City, doesn't see the whitefish on his graph that he used to see. He said tribal fishers are not coming down that way anymore. Frank indicated the tribal whitefish fishery in the 1836 Treaty Waters has gone from over 2 million pounds in 2001 to 211,000 pounds in 2016. He said Jim Johnson is working on a paper that investigates this whitefish decline and it appears there may not be enough plankton available of the right size after the whitefish larvae stop feeding on the egg. In addition, there apparently is heavy predation on the few juvenile whitefish that survive the early life stages.

Tom said that historically whitefish consumed Diporeia, which was an energy rich large zooplankton but now after the quagga and zebra mussels were introduced, Diporeia is rare and whitefish feed on the mussels and other invertebrates. There is evidence the whitefish at times will eat small fish. Dave Fielder said that the consensus is that the whitefish survival bottleneck is in the early life stages for the newly hatched whitefish.

Frank asked for a recommendation from the Committee on where to go on this issue. The statute discussion seems to complicate the issue. A recommendation came from Rick Kretzschmar to continue the permit for another year. In response to Dana's earlier comments, he said he isn't representing only anglers, but others as well and takes offense to Dana's characterization of the members of the Committee. A conversation (getting back to Dana's previous question) on utilizing dead fish from commercial nets then erupted. The conversation then came back to the permit topic. Tom Goniea said that if we extend the permit, it is not a long-term deal. The recommendation for continuing the permit for 1 more year of study was made, with current conditions applying. Tom Keerl seconded Rick's motion. All members approved.

2:45 Manager and Law Enforcement updates.

Dave Borgeson, Fisheries Division's Northern Lake Huron Unit Supervisor, mentioned the upcoming Black Lake sturgeon harvest season was scheduled for February 3rd and is a large commitment of resources to ensure the State's harvest quota isn't exceeded. Dave also informed the group of a sea lamprey related issue that was

discussed at the Lake Huron Technical Committee meeting in January. Canada's Department of Fisheries and Oceans, their agency that oversees sea lamprey control operations in Canada, did not treat a couple of high priority streams last year due to First Nations concerns over putting chemicals into streams. Both the Garden and Mississagi rivers were scheduled to be treated last year but were not. The issue has still not been resolved and treatment is unlikely to occur this year as well. These streams are large producers of lamprey, and if left untreated could result in a relatively large increase in sea lamprey induced mortality of sport fish. The Lake Huron Committee and the Great Lakes Fishery Commission is aware of the issue and hopefully some resolution can be achieved quickly.

Jim Baker, Fisheries Division's Southern Lake Huron Unit Supervisor, gave the following update: "On October 31st, our crew did the annual shocking survey at Lexington Harbor to assess the Atlantic Salmon return. They collected 128 Atlantics in only 30 minutes of shocking; compare this to 53 in 2016 and 10 in 2015. The Atlantics ranged from 17 to 30 inches in length. Clearly, the 2016 plant made a good showing and a fair number of the 2015 fish are still out there. Of the 128 fish, 125 had adipose fin-clips. The crew also turned up 13 rainbow trout, size range 16 to 25 inches, and a fair number of walleyes, pike, perch and smallmouth bass. We had excellent walleye fishing in the lower Saginaw River in November and early December. Our Conservation Officers were writing tickets for over-limits, even with an 8-fish daily bag limit. One party of three was caught with 37 walleyes in possession. Ice fishing for walleye and perch has been very good in the inner bay this winter, but ice conditions are not very good right now. There are lots of active cracks out there and the river ice is extremely variable in thickness and quality. Lots of machines and anglers have been going through on both the bay and the river. Marine salvage contractors are having a very good year. The cost of having your machine pulled out starts at about \$1200."

Aaron Switzer, Northern Lower Peninsula Fish Production Supervisor, said that the Atlantic salmon at Platte River Hatchery have incurred average mortality rates with bacterial issues throughout rearing cycle. Cooler water temperatures have resulted in slower growth and the Atlantics are about an inch smaller than last year with decent numbers of fish remaining in the hatchery. Aaron visited a Maine Atlantic salmon rearing facility and brought back some ideas he would like to try including some involving densities even at the egg stage.

Tom Goniea, who works with the commercial fishery, the bait industry, scientific collection permits, reptiles and amphibians, and tournament, said most baitfish are collected in October through December when fish are shallow and wholesalers can pond them. A lot of the baitfish come from Saginaw Bay. He produces an annual report on the baitfish industry and can make that available to the Committee.

Gary Whalen, who supervises Fisheries Division's Research section and Habitat Management Unit, said his staff is busy analyzing data and preparing to help model priority fish populations, and sharing data with our partners. Gary also mentioned his unit has finished getting through a backlog of writing up 22 research reports, and they are now caught up. Crews are preparing the research vessels for the upcoming field season, including the RV Tanner. Whitewater park development initiatives have been proposed at current dam sites, and these have been demanding a significant amount of Division staff time to review and make recommendations. These locations include both Flint and Grand Rapids and involve fish passage issues. There is a state of the art research effort planned on the Boardman River to study the issue of trying to promote fish passage while eliminating sea lamprey passage. Hopefully, this could change the playing field regarding the historically difficult dilemma of fish passage and lamprey control. Connectivity of Great Lakes and rivers is vitally important, and much of that has been lost. The goal is to have more connectivity in the future as a result of this initiative. Gary mentioned the VHS outbreak in the Detroit River last year, causing the DNR to cancel the muskellunge egg take in 2017. This is again on the radar, and the Division will look for early indications of any potential outbreak in gizzard shad this spring.

Todd Wills supervises the Lake Huron and the Lake Erie/Lake St Clair Research Stations said the big news out of the Lake St. Clair Research Station was that Andrew Briggs was hired to fill the research biologist position, and one of his duties will be to work on Saginaw Bay with Dave Fielder. The Alpena Station will be hiring a new technician to replace Ed Barr (who transferred to Wolf Lake State Fish Hatchery) in the spring of 2018. Todd thanked his Fisheries staff for stepping up on getting data ready for today, going above and beyond regular duties, to get this done.

Ed Eisch, supervisor of Fisheries Division's Fish Production Section said it has been mostly business as usual. The fall egg takes went well, and they should meet targets. He did say they may be a little light on Chinook numbers. The capital outlay project is on track for final design at Little Manistee Weir and Thompson State Fish Hatchery. This should allow for increased production of about 220,000 of the good-sized steelhead. There is also a cool water facility and a production pond planned at Thompson.

David Shaw and Michael Feagan from Law Enforcement Division highlighted the increase in Great Lakes Enforcement staff, which will be important going forward with the 2020 Consent Decree effort. There are 7 new positions planned in Great Lakes enforcements. Terry Short will mainly focus on Tribal issues with 2 investigators reporting to him. The Law Enforcement Division posted 2 captain and 2 investigator positions, for filling. Shannon VanPatton will be retiring, and Michael Feagan will take over many of her aquatic invasive species related issues. The investigation unit will be promoting 7 new detective positions. They have put in a request for a new Great lakes enforcement boat on Lake Superior.

Dave Caroffino from Fisheries Division's Tribal Coordination Unit, said the unit recently hired Eric Crissman as a technician, making his return to the Charlevoix facility. Dave was excited to have an experienced hand on his staff. Dave indicated there was a lot of activity going on in the tribal unit.

Donna Wesander from Fisheries Division Charter Boat Program mentioned the ongoing effort to have a functional online reporting system for Charter Boats. She said the industry reported 400 more charter trips in Lake Huron during 2017 compared to 2016. Overall charter trips in the State increased by 800 over the previous year.

Jim Dexter, Fisheries Division Chief, noted how impressed he was with the attendance at this meeting with nearly 70 participants, and the varied representation including commercial fishing interests and the charter boat fishery. Two days ago, a bill was introduced into the U.S. House of Representatives, The Recovering Americas Wildlife Act. He said that offshore oil royalties have gone into a fund, but disbursement from the fund to the states has not been very large. The idea is for a portion of the money to be allotted to states, similar to the manner in which Dingell-Johnson (DJ) funds are disbursed. The estimate is that this has the potential to send \$10-25 million per state per year. The bill has only just been introduced, so its future is unknown, and if it goes forward it could look much different than it is currently configured. However, if approved, it could be a large influx of money to the states. Debbie Dingell is a bill sponsor. If approved as currently worded, money would be distributed to states via a formula similar to DJ, but that could change. Any allotment also currently carries a requirement of a matching component.

Randy thanked everyone for coming, and again asked for volunteers for the Salmon and Trout writing team. Frank mentioned that any Committee Member wanting to serve on the Subcommittee should let him know.

3:00 Meeting Adjourned.

Coming meeting dates of the Committee for 2018:

Wednesday April 25, 2018 Thursday June 14, 2018 Wednesday October 10, 2018