

NATURAL RESOURCES COMMISSION

Minutes - April 29 and April 30, 1997

MEMBERS PRESENT

Michael Kiley, Chair
Jack Arnett, Vice Chair
John Goss
Steve Cecil
Damian Schmelz
Joe Siener
Jodi Perras
Jerry Miller
Mary Titsworth Chandler

NATURAL RESOURCES COMMISSION STAFF PRESENT

Stephen Lucas	Hearings
William Teegarden	Hearings
Jennifer Kane	Hearings

DEPARTMENT OF NATURAL RESOURCES STAFF PRESENT

David Herbst	Executive Office
John Costello	Executive Office
Lori Kaplan	Executive Office
D.J. Sigler	Executive Office
Angie James	Executive Office
Virginia Simone	Legal Section
Ed Troche	Law Enforcement
Jeff Tenuth	Museums and Historic Sites
Ron Richards	Museums and Historic Sites
Gary Miller	State Parks and Reservoirs
Randy Lang	Fish and Wildlife
Joe Tutterow	Forestry
Terry Coleman	State Parks and Reservoirs
Mark Basch	Water
John Davis	Land Acquisition
Dawn Deady	Water
John Bacone	Nature Preserves
Mary Ann Habeeb	Fish and Wildlife
Gary Doxtater	Fish and Wildlife
Kenneth Spence	Law Enforcement
Louise Krick	Personnel

GUESTS PRESENT

Phil Miller
Mike Cracraft
Larry McHugh
Tony Arvay
Bernie Bauer
Michael Ryan

Ron Maglio
Duane Alverson
Charlotte Read
Janet Ryan
Wendell Morse

MONTHLY REPORTS

Michael Kiley, Chair, called to order the regular meeting of the natural resources commission at 7:10 p.m, CDT, on April 29, 1997 in the Holiday Inn, Duneshore Room, 5820 South Franklin Street, Michigan City, Indiana. With the presence of nine members, the Chair observed a quorum.

Jerry Miller moved to approve the minutes of March 19, 1997 meeting. The motion was seconded by Joe Seiner and approved by voice vote of the commission.

With the absence of Larry Macklin, Jack Costello, Deputy Director for the Bureau of Lands and Cultural Resources, gave the Director's Report. Costello said Director Macklin expressed his regrets but indicated the closing hours of the Indiana General Assembly required the Director's presence in Indianapolis. Costello said the Heritage Trust Program was introduced as a budget item at \$10,000,000, dropped to \$0, then re-negotiated at \$5,000,000.

Costello also reported that the golf course in Fort Benjamin Harrison State Park was tentatively set to open in mid-July. He asked whether the commission members wished to receive weekly bureau reports, and he was informed they did.

Jerry Miller, Chairman of the Advisory Council for Lands and Cultural Resources, asked that Item 3 (consideration of adjusting rate structure of Indiana State Park Inns) be tabled for additional study.

Joe Siener, Chairman of the Advisory Council for the Bureau of Water and Resources Regulation, said his council would be meeting on May 8. He said would like to have council members on the bureau report mailing list.

David Herbst, Deputy Director for the Bureau of Water and Resource Regulation, said Wayne County would be added by rule to the list of counties contained within the Pine Shoot Beetle Quarantine. Herbst said one-half million muskellunge eggs have been collected from adult fish captured at Lake Webster. Upon hatching and rearing, young fish will be stocked into select Indiana lakes. Herbst reported that Larry Macklin had been appointed to the Great Lakes Commission.

BUREAU OF LANDS AND CULTURAL RESOURCES

Personnel Interviews

Consideration of Appointments of Assistant Property Managers at Lieber State Recreation Area, Harmonie State Park, and Winamac Fish and Wildlife Area

Steve Cecil presented the report of the personnel committee. He indicated there were six applicants for three open positions, with one applicant seeking two of the positions. Cecil said the committee recommended: Paul ("Mike") Clingerman be appointed Assistant Property Manager at Lieber State Recreation Area; Carl Lindell be appointed Assistant Property Manager at Harmonie State Park; and Nathan Levitte be appointed Assistant Property Manager at Winamac Fish and Wildlife Area.

Jerry Miller moved to select Paul Clingerman, Carl Lindell, and Nathan Levitte for new assistant managers at Lieber SRA, Harmonie State Park, and Winamac Fish and Wildlife Area, respectively. The motion was seconded by Mary Titsworth Chandler. Upon a voice vote, the motion carried.

DIVISION OF STATE PARKS AND RESERVOIRS

Consideration of a Request to Adjust the Rate Structure of Indiana State Park Inns

Chairman Kiley noted initially that the request by Jerry Miller to defer this item would be granted. He asked, however, that the Division of State Parks and Reservoirs provide a brief overview of the proposal.

Gerald Pagac, Director of the Division of State Parks and Reservoirs, provided the overview. Pagac said there had been no increases in room rates since 1992. He suggested to the commission it was "not a good policy" to keep rates "artificially low." Pagac noted, for example, that the minimum wage had been increased twice since 1992, and he expected the minimum wage to be increased again in September.

John Goss reflected that 1,300 private-sector hotel keepers were recently surveyed concerning their rates. The survey revealed that base rates had increased an average of 20% since 1992. He said hotel keepers had expressed frustration with a system which caused inn rates to remain artificially low, posing unfair competition.

The Chair expressed appreciation for the comments. He said the item should be shown as deferred.

Consideration of a Request to Increase Ticket Prices for the 1997 Season of Young Abe Lincoln Repertory Drama at Lincoln State Park.

Jerry Pagac, Director of the Division of State Parks and Reservoirs, presented this item. He explained that the University of Southern Indiana was seeking an increase in admission fees for the Young Abe Lincoln repertory drama held at Lincoln State Park. Pagac said the increase was

necessary to offset rising production costs. Pagac said "we're unhappy with the low attendance," but the increase was needed to "get closer to the bottom line."

Damian Schmelz moved to approve an increase in admission fees for the production of Young Abe Lincoln held at the Lincoln State Park. The motion was seconded by Jodi Perras. Upon a voice vote, the motion carried.

Consideration of a Request by Dolph Becker for a Four-Year Permit for the Use and Maintenance of an Access Road Across Martin State Forest

John Friedrich, Property Specialist for Division of Forestry, presented this item. He explained that Dolph Becker owns property adjacent to state forest land in Martin County; and Becker must cross state forest land lying between his property and the county road. Friedrich said Becker previously had a permit to use the existing access (twelve feet wide and 1,519 feet long) across state forest land, but he allowed the permit to lapse in 1992. Friedrich said the division of forestry recommended approval of the permit.

Damian Schmelz moved to approve the four-year permit to Dolph Becker for the use and maintenance of the access road across Martin State Forest. The motion was seconded by Jodi Perras. Upon a voice vote, the motion carried.

Consideration of A Request by Town of Dugger for a Four-Year permit for Installation, Operation, Repair, and Maintenance of Water Transmission Line Across Greene-Sullivan State Forest

John Fredreich also presented this item. He said the Town of Dugger requested a four-year permit for the replacement of an existing water main with a new eight-inch transmission main along Sullivan County Road 250 South. The main crosses approximately 5,200 feet of Green-Sullivan State Forest. Fredreich also said the permit would allow for the operation, repair, and maintenance of the new transmission main.

Damian Smeltz moved to approve the four-year permit to the Town of Dugger for the installation, operation, repair, and maintenance of a water transmission line across Greene-Sullivan State Forest. The motion was seconded by Mary Titsworth Chandler. Upon a voice vote, the motion carried.

DIVISION OF MUSEUMS AND HISTORIC SITES

Consideration of A Request by the Board of Trustees of the Indiana State Museum and Historic Sites for Deaccession of 4, 011 Items From the Division Collections

Jeff Tenuth of the division of museums and historic sites presented this item. He said the Indiana State Museum Board of Trustees requested deaccession of 4,011 (misprinted in packet as 5,011)

items in 76 lots. Tenuth said the process for deaccession was established by commission rule. The items to be deaccessed were duplicates, deteriorated, or lacked physical integrity. He said the items may be transferred by sale, donation, or exchange with another public or nonprofit museum or historical society.

Jerry Miller moved to approve the request by the Board of Trustees for the deaccession of 4,011 items from the division collections. The motion was seconded by Joe Siener. Upon a voice vote, the motion carried.

DIVISION OF LAND ACQUISITION

Consideration of Transfer of Land in Starke County to LaPorte County for Construction of Bridge Spanning Kankakee River

John Davis, Director of the Division of Land Acquisition, presented this item. He said the proposal was for the transfer to LaPorte County ownership of DNR land located in Starke County. The transfer was needed to reconstruct Bridge 162 spanning the Kankakee river between LaPorte and Starke counties. Davis indicated he recommended approval of the proposal. Jack Arnett moved to approve the transfer of land along Bridge 162 to LaPorte County as recommended by John Davis. The motion was seconded by Jodi Perras. Upon a voice vote, the motion carried.

LEGAL PROCEEDINGS

Consideration of Report, Findings of Fact, and Nonfinal Order of the Administrative Law Judge in the matter of Save Clay-Harris Water v. Department of Natural Resources and City of Mishawaka; Administrative Cause 95-027W

William Teegarden, Administrative Law Judge, introduced this item. He said there has been an on-going dispute at the Gumwood Well Field since 1988 between some adjacent citizens on private water-supply wells and the City of Mishawaka which uses the field for public water supply. The citizens claim well failures and unacceptable water quality as a result of the water withdrawals by Mishawaka. For consideration in this proceeding is administrative review of a declination by the DNR to declare a groundwater emergency in favor of the complaining citizens pursuant to IC 14-25-4.

Teegarden explained that Indiana common law generally provides for the absolute ownership of subsurface water by the fee simple owner. As a result, a landowner typically can use or dispose of the groundwater in any manner without regard for the consequences to adjacent owners. By statute, the Indiana General Assembly has established a few exceptions to the common law. The groundwater emergency law set forth in IC 14-25-4 is one of the more important exceptions, but in order for a landowner to qualify, each of the statutory conditions must be met. One of the conditions is that there must be shown to be a significant lowering of the groundwater in the private well of a complainant, and the experts who testified in this case were unanimous in their

analysis that the withdrawals by the City of Mishawaka had not yet caused a significant lowering of groundwater at any of the complainant's wells.

In addition, the deposition of Roland Mauer, an area well driller with 30 years experience (listed as an expert by the citizens), showed that the many wells he had replaced in the Gumwood area were old two-inch wells. His written testimony was these wells failed because of age and construction. Mauer indicated he did not believe any well failure resulted from pumping by the City.

Teegarden said there was a caveat to his determination. The City of Mishawaka is currently withdrawing water only to 30% of the capacity of the public well's facility. When greater withdrawals occur, there could be an impact on private wells. The DNR continues to monitor local conditions. Teegarden reflected that currently, however, his nonfinal order would affirm the declination of the DNR to declare a groundwater emergency with regard to the Gumwood Well Field.

Burnett Bauer argued his objections to the findings and nonfinal order. According to Bauer, the DNR gave permission to the City of Mishawaka to drill the public supply wells within the Gumwood Well Field. These City's wells had caused private-well owners to receive "rusty water," and DNR should be responsible for correcting the problem. Bauer also argued the City of Mishawaka had promised to pay for the cost of replacement wells where failures occur. "Here is a case of equity and of justice." Bauer said records show that when the City of Mishawaka pumps from the public supply wells the "level goes down as much as 30 feet. We should be made whole for those wells that we've had to dig."

Virginia Simone distributed several documents previously received into the record of the proceeding. She said the DNR does not have permitting authority for water well construction. No permit is required from the agency, and so none was issued. Every person who operates a large water withdrawal facility is required to "register" the well, but the requirement is exclusively for reporting purposes and does not place in the agency the ability to grant, condition, or deny a permit. She said that according to the evidence presented, the DNR could not lawfully have issued a groundwater emergency. Simone urged approval of the findings and nonfinal order of the administrative law judge.

Simone introduced Mark Basch of the Division of Water and said he would explain the current status of the Gumwood Well Field and why he had determined a groundwater emergency could not be issued. The Chair ruled the presentation was out of order, however, because it would constitute the introduction of evidence neither under oath nor subject to cross-examination. Evidence had been received in the hearing process before Judge Teegarden, and the Natural Resources Commission essentially sat as an appellate tribunal. "We don't want to open Pandora's box by allowing witnesses to testify."

Michael Craycraft spoke as counsel for the City of Mishawaka. He said the "good neighbor policy" espoused by the City for neighbors covered persons adversely affected by the operation of the Gumwood Well Field. Only once had a citizen sought to implement the policy, and in that instance, there was no finding of causation between the well failure and the City's pumping

activities. He urged the findings and nonfinal order of the administrative law judge should be affirmed.

Laurence McHugh spoke as co-counsel for the City of Mishawaka. He said the complainants' evidence consisted largely of efforts to impeach their own expert. McHugh reflected that most of the complainants' wells were of marginal and now outdated construction. He said St. Joseph County was proposing an ordinance which would require wells with a minimum diameter of four inches and a minimum head of 20 feet, standards which should greatly reduce the likelihood of any future claim resulting from a private well failure.

Dr. Wendell C. Morse, Legislative Chairman of the Clay Harris Group, also spoke. He said that prior to construction of the Gumwood Well Field, the City of Mishawaka represented its only purposes were for fire prevention and safety. Instead, the well field had made possible considerable urban expansion. "The Mayor of Mishawaka sent me a personal letter in which he said, You people cause me a lot of nuisance."

In response to a question by Jerry Miller, Mark Basch said that monitoring under IC 14-25-4 was directed to whether there was a substantial lowering of the water table. In the absence of a substantial lowering, no relief could be provided to complainants.

Mary Titsworth Chandler asked if there were objective standards for what constituted "potable water." Basch responded that DNR used the water quality standards set forth by IDEM. High iron content is an aesthetic concern but not a potability concern. Objective standards existed, and higher iron content would not violate those standards.

Jack Arnett moved to approve the "Report, Findings of Fact, and Nonfinal Order of the Administrative Law Judge" as a final order of the commission. The motion was seconded by Steve Cecil. Upon a voice vote, the motion carried.

LAKE MICHIGAN INFORMATIONAL ITEMS

Review of DNR Personnel Focused in Northwest Indiana

David Herbst presented this item. He provided the commission with a listing of personnel within the Indiana Department of Natural Resources whose responsibilities were primarily directed to issues in Lake Michigan and the Indiana portion of the Lake Michigan basin. Herbst reflected that the Michigan City field office was an important element of this effort. The DNR was working ever more closely with other state agencies, and no where in the state was this tendency more important than in Northwest Indiana where IDEM also maintains a regional office in Gary. Herbst said a positive trend was to address issues using a "watershed approach," and efforts in Northwest Indiana were consistent with this trend.

Lake Michigan Coastal Coordination Program Review

Steve Lucas introduced this item. He reminded the commission that in 1995 it had passed a resolution "in support of efforts to improve communications and coordination in the use and enjoyment of Indiana's Lake Michigan Coastal Region." DNR and commission employees were given general directives to implement the resolution, and they were instructed to report at least annually on progress toward achieving the directives. This informational item was designed to provide the annual report for 1997.

Lucas said the "Lake Michigan Coastal Coordination Program" was the focal point for responding to the resolution. Housed in the Division of Water of the Department of Natural Resources, the effort was consolidated by Dawn Deady. Not in the traditional sense a program structured by a chain-of-command, the effort was a confederation of DNR divisions, agencies, and private volunteers dedicated to maximizing the worth of Indiana's Lake Michigan shoreline. The success of the effort was ultimately dependent upon the contribution of individuals.

Lucas said he felt the comments by Dave Herbst relative to watershed management were particularly appropriate to the Lake Michigan Coastal Coordination Program. While every watershed could legitimately claim to be unique, Northwest Indiana contained Indiana's freshwater sea. Perhaps no where in the state were the needs for reasoned watershed coordination so identifiable.

Dawn Deady, Lake Michigan Coastal Coordinator, then circulated the Lake Michigan Coastal Coordination Program Annual Report to the Natural Resources Commission (1997). She explained that the publication was organized according to the action clauses of the 1995 resolution. Deady said she would not cover everything in the report but would touch upon a few highlights.

Deady outlined the efforts of a major public workgroup process intended to receive public input concerning the needs and opportunities of Northwest Indiana and the Lake Michigan shoreline. Open without limitation to the general public, the process identified 865 possible actions supportive of needs of the region. In an effort to prioritize and direct those actions, a "Blue Ribbon Advisory Panel" was established of citizens of Lake, Porter, and LaPorte Counties. Included in the panel are representatives of county and municipal government, a local utility, the steel industry, a petroleum refinery, a labor union, the farming community, an environmental group, and a property rights advocacy group. Chairmen of each of the four committees which served the original workgroup process also participated. She said the Blue Ribbon Advisory Panel has chosen to focus its efforts upon permit streamlining and how that might reasonably be accomplished.

Deady referenced two initiatives funded through exploratory CZM grants and performed within divisions of the DNR. She said John Bacone led an effort by the division of nature preserves to re-inventory priority wetlands identified in the 1970s. Jodi Dickey of the division of outdoor recreation continues to work on a recreational needs assessment to scientifically inventory recreational opportunities and demands within the watershed.

She referenced the very informal "Lake Michigan Coastal Club" which meets monthly and includes DNR and NRC employees who are actively involved in Northwest Indiana issues.

Typically, the meeting is a teleconference connection through offices in Indianapolis and Michigan City which has proven successful in improving the understanding of activities by other divisions and bureaus. The "Club" has helped implement the knowledge and expertise present within the agency. For example, a recent meeting identified the potential for "mosquito wafers" as an alternative to mosquito fish for controlling mosquito populations in shallow waters.

Deady referenced current concerns for beach erosion with the higher water levels on Lake Michigan. She pointed out a recent newspaper article from the South Bend Tribune which chronicled those concerns at Ogden Dunes, and she outlined coordination efforts directed to encouraging the placement of beach nourishment.

Deady closed by expressing the hope the Annual Report would prove informative. She offered to answer any questions.

AQUATIC NUISANCE SPECIES

Randy Lang, Aquatic Nuisance Species Coordinator, presented this item. An employee of the division of fish and wildlife, Lang reflected upon the problems and challenges posed by the introduction of non-native animals and plants into Indiana waters. In many instances, these exotic species are able to "out-compete" native species and cause native species to become reduced in number or even extirpated.

Lang referenced some of the best-known aquatic nuisance species. Sea lamprey are predaceous, eel-like fish native to the coastal regions of the Atlantic Ocean. They entered the Great Lakes through the Welland Canal about 1921. Sea lamprey have contributed greatly to the decline of lake trout in Lake Michigan and continue to be a major source of expense and concern.

Zebra mussels were the subject of a recent NRC nonrule policy document. Well-established in Lake Michigan and the Ohio River, a secondary infestation is now centered around Lake Wawasee and nearby waters. Lang reflected that zebra mussels can be devastating to native mussel varieties, and they may be a contributing factor in the decline of yellow perch. Efforts to control their populations by municipalities and businesses, which are dependant upon surface water intakes, cost millions of dollars annually.

Alewives often suffer major die-offs in the spring and early summer. Beaches can become littered with dead fish, at a social cost both in terms of direct cleanup and lost recreational opportunities and revenues. Alewives may also contribute to the decline of yellow perch populations.

Other aquatic nuisance animal species identified by Lang included goby, ruffe, and spiny water fleas. Plant species include purple loosestrife and watermilfoil.

Lang explained that the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 calls upon states to develop and implement comprehensive state management plans for

aquatic nuisance species control. As staff time permits, the hope is to pursue a comprehensive management plan in Indiana.

Lang added that the U.S. Coast Guard has implemented a mandatory ballast water exchange program for transoceanic slips entering the Great Lakes. Ballast water is a major source of foreign introductions of aquatic nuisance species into Lake Michigan and the other Great Lakes.

Recess and Resumption of Lake Michigan Information Items

At approximately 9:46 p.m., CDT, the meeting recessed. Discussion of Lake Michigan information items resumed on April 30, 1997 at approximately 8:14 a.m., CDT.

Healthy Beaches Initiative Slide Presentation

Dawn Deady presented a slide presentation which reviewed the Healthy Beaches Initiative. She explained that this initiative is directed to promoting an environment along the beaches of Lake Michigan. Its primary operative component is the Interagency Technical Task Force on E. coli. The Technical Task Force is a combined effort of 17 federal, state, and local agencies with special expertise or interests directed to resolving beach closings which sporadically result from high bacterial counts. Preliminary studies suggest that E. coli pollution of beaches is associated with periods of heavy rainfall, but the data are not sufficient to detail the correlation. Studies have thus far provided snapshots of the problem but not a panoramic view. Deady said it is presently difficult to understand the nature of the problem, much less how to develop effective solutions.

She explained that the Technical Task Force was currently organizing into four committees which will focus upon particular areas. One committee will look at nonpoint source pollution, a second at point source pollution, a third at improved testing techniques and reporting (particularly using computer technology and the Internet), and the fourth at marine pollution.

Terry Coleman, Division of State Parks and Reservoirs, is one of the members of the Technical Task Force. He explained that one concern was the time delay between testing and the receipt of test results. As a consequence, beaches may be closed when bacterial counts are actually low. The task force had identified a need to shorten the time between when samples are taken and when beaches might be closed or reopened.

John Goss asked how many persons had been documented as becoming ill from swimming at contaminated beaches in Indiana. Deady responded that meaningful statistics were not available. There was no active reporting system, and even if there were, an individual might attribute sickness to any of a variety of sources. Typically, a swimmer is on vacation and may be eating irregularly or may be eating previously prepared food for a picnic. An individual might reasonably attribute sickness to any of a variety of sources.

Goss acknowledged the need to assure a healthy beach environment. He reflected upon the hope, however, that reporting not overstate the health risk. Deady concurred and noted that the task force was working on the development of a dependable reporting system. Part of the communication should be that closings are rare, and even when they occur, will not apply to the entirety of the Indiana shoreline. There are numerous public beaches, and the closure of one does not imply the closure of another.

Discussion of Clean Vessel Act and Sewage Discharge from Vessels on Lake Michigan

Steve Lucas presented this item. He explained that the Technical Task Force on E. coli was looking primarily to terrestrial sites as sources of bacterial contamination. One spin-off the task force's efforts, however, was also to direct greater attention to laws governing sewage disposal from vessels operating on Lake Michigan and its tributaries.

Lucas explained that since 1975, a boat manufacturer which includes onboard toilets has been required to connect the toilets to a "marine sanitation device" (or "MSD"). A person operating a boat with an onboard toilet must assure that it is equipped with an MSD and that the MSD is certified by the U.S. Coast Guard. Smaller recreational vessels are typically equipped with a Type III MSD, which is essentially a holding tank for later disposal at a pumpout station. Some larger vessels have Type I or Type II MSD which anticipate onboard sewage treatment and lake disposal.

Generally, in Indiana the disposal of sewage from vessels is prohibited by IC 14-15-2-7. The U.S. Coast Guard has concluded that state statute is superseded by federal regulation, however, as it applies to Lake Michigan. On the Great Lakes, federal regulation allows disposal through Type I and Type II MSDs unless a petition is made to the Environmental Protection Agency, and the EPA declares the site where disposal is prohibited. Wisconsin and Michigan have already successfully petitioned the EPA to prohibit disposals in their portions of Lake Michigan. Indiana and Illinois have not pursued petitions.

Lucas said he had discussed with both advisory councils the possibility of petitioning the EPA to declare the Indiana waters of Lake Michigan as "no-dump" zone. The advisory councils encouraged the DNR to pursue the possibility, possibly acting through Major Larry Rhinehart, the Indiana State Boating Law Administrator. Lucas suggested that, if a petition were ultimately determined to be appropriate, a joint effort might be pursued to also include IDEM and the Indiana Water Pollution Control Board.

Lucas also commented briefly upon the Clean Vessel Act, Pumpout Program, administered in Indiana by IDEM. He said the program could provide 75% of the funding needed to place a new pumpout facility or upgrade an existing pumpout facility. The program provided an important element in the effort to assure good water quality and to minimize the likelihood of beach closings in Lake Michigan. The program was also significant to the current discussion because a factor in determining whether to grant a petition for a no-dump zone is whether adequate pumpout facilities are available.

Chairman Michael Kiley asked about the NRC rule which mandates that marinas be equipped with pumpout stations. Lucas responded that the rule was currently in effect and was a further incentive to marina operators to participate actively in the IDEM Pumpout Program.

Yellow Perch, Trout, and Salmon Status Report

Yellow Perch

Jim Francis first gave an update on the Lake Michigan yellow perch population. He said there has been a 90% to 95% reduction in the population since 1990. Sixty percent of the remaining population is at least eight years old, and the life expectancy of yellow perch is only eight to ten years. Before 1994, there was a good larval production, with a high mortality in the first month of life, but since 1994 production has also been greatly reduced.

Francis said the early die-off may be caused by alewife predation or increased competition in the food chain. He explained the inverse correlation between alewife and perch populations; with increased alewife populations there is a decrease in the perch population and vice versa. "The alewife seems to be a key factor."

Dave Herbst asked whether the cause of die-offs might be sediment contamination rather than biological factors. Steve Cecil suggested new compounds could result in new forms of contamination not yet well-recognized. Francis responded that he was aware of no specific research concerning contaminant effects on perch for Lake Michigan. His best impression was that water quality on Lake Michigan is generally improving, and he had no evidence to show a correlation between the yellow perch decline and sediment contamination, but the possibility has not been ruled out.

Francis said there is in place an overall perch harvest reduction program. To increase the likelihood of a healthy perch population for the future, a multi-agency research proposal has been formulated to gather the best scientific data possible. He said that Ball State University has a large yellow perch database which dates from 1975. With most agencies able to obtain funding, and with sport group donations, the research program should be implemented this year. Francis said the division of fish and Wildlife is in full support of the multi-agency research effort. He also said most of the Great Lakes states are "on-board" in developing a system approach to address perch issues collectively.

Chairman Kiley asked what was known about the spawning habits of yellow perch. Francis responded that most spawning probably takes place in 15 to 20 feet of water. Yellow perch are very mobile and may venture well into Lake Michigan, but they are inclined to return to their birth place to spawn.

Trout and Salmon

Francis said the quality of trout and salmon fishing in Lake Michigan is "very" high. Even though there have been difficulties in recent years, he said "we have a world class trout and

salmon fishery in Lake Michigan." Francis reported the division of fish and wildlife stocks Lake Michigan with 350,000 chinook; 150,000 coho; and 300,000 summer and winter run steelhead trout annually. He also said that Michigan City is the "coho capitol of the Midwest." Francis said that Lake Michigan states collectively stock 2 « million coho annually; "however, it seemed as though all 2 « million ended up in Indiana waters due to the shallow waters."

Francis said there were some minor hatchery setbacks in 1993 and 1994 lakewide. These setbacks were a Lake Michigan issue and not just an Indiana issue. He said the introduction of thiamin to the water increased survival for a time, but by 1997 its effects had diminished. Francis reflected that in the past the hatcheries experienced a 20% to 40% survival rate, but present survival rates are under five percent. Francis explained the lake stocking program supplies not only the sports fishery, but also provides adult brood stock for egg production. Francis said a 5-3-2 catch restriction was implemented in 1995 and continued in 1996 to protect the egg production.

Francis expressed the need for a long-term solution to salmonid issues before the situation becomes "unmanageable." He said an emergency rule currently in effect lowers the size limit of coho from 16 inches to 14 inches. Francis explained that the smaller coho have a high "hook mortality," and reducing the size limit eliminates some of the waste. He said the emergency rule could be incorporated into a permanent rule.

Francis said the relations between sports groups, sports fishermen, and division of fish and wildlife has improved immensely. He explained that the public has been involved with fish management decisions. Because user groups are better informed, relations among constituent groups are better. He suggested that inviting public input created a "good spirit of cooperation" among user groups.

Tony Arvay, a Lake Michigan charter boat operator, said he also believed communications between the DNR and constituent groups had improved. Because of efforts by the fisheries staff and of the Lake Michigan Coastal Coordination Program, there were more frequent and better discussions. He said he believed "a lot less darts are being fired."

A question was raised concerning the effects fishing restrictions had on the charter boat operators in Lake Michigan. Francis explained there has been an increase in charter boat operations, with approximately 45 charters licensed annually. He also said the charter boats operators were generally satisfied with the 5-2 bag limit.

He said a Trout and Salmon Stocking Task Group was formed to develop a long-term management plan for trout and salmon in Lake Michigan. He explained that the task group would compile research data to generate a biological justification for the numbers and species of fish that should be stocked, given the current conditions of Lake Michigan.

Adjournment

At approximately 10:38 a.m., CDT, the meeting adjourned.