

UPEnvironment



In 2018, the people of Michigan put an end to three decades of Republican gerrymandering by passing a citizen-led initiative to take redistricting out of the hands of legislators and put it under the control of an independent commission. At the time, the initiative was hailed as "historic," and that word was used again to describe the outcome of this year's midterm election—the first to be contested using the new, non-gerrymandered districts. Voters gave Democrats the majority in both the Michigan House and Senate, and reelected Democrats to the top three executive posts in the state, headlined by Governor Gretchen Whitmer. For the first time since 1983, Democrats will control Michigan's executive and legislative branches at the same time.

What does this political upheaval mean for the environment in Michigan as a whole, and here in the Upper Peninsula?

First and foremost, it means that environmental issues will be decided by lawmakers who, collectively, fairly represent the genuine political makeup of the state, which has leaned Democratic in recent years. This is hugely important. For more than a generation, on issue after issue UPEC has advocated for actions that clearly are favored by a majority of Michiganders, but which were blocked by the entrenched Republican majority in the legislature. Now, we can expect to at least get a hearing in Lansing on environmental concerns.

Beyond that, the answer is: We don't know. The new Democratic majority will almost certainly not give us everything we want (mining comes to mind). And the Democratic majority is a *statewide* majority; once again the UP is solidly in the hands of Republicans. An exception is Jenn Hill, newly elected to represent the State House 109th District. Could she be named to a committee having jurisdiction over natural resources? It's entirely possible, but we'll have to wait and see. Likewise, we can suppose that some of Governor Whitmer's priorities, like the Healthy Michigan Plan, will get a boost. And we can expect her fight against Line 5 to continue.

Whatever happens, UPEC will keep doing what we've been doing for nearly 50 years: watching, informing, advocating, and, whenever and wherever necessary, taking action to protect our environment. Stay tuned ... it should be interesting!

Concerned about the future of the UP's environment Help shape it by joining the UPEC governance team.

We are looking for a few good people who want to help us protect the lands, waters, and communities of the Upper Peninsula. UPEC currently has several positions available on the Board of Directors, and we invite YOU to apply! Board members help us track critical issues like mining, forest management, energy policy, and more. The Board also organizes annual events like Celebrate the UP, informational programs like our Livestream Series, and our Environmental Education and Community Conservation Grant Programs. The time commitment is flexible, and you can concentrate on the issues you care about most. You don't have to be an expert — you just have to care! Positions begin in March 2023. To apply, send a note along with a short statement about yourself and your areas of interest to upec@upenvironment.org. We'll follow up with you.

FISHER IN MICHIGAN

Bill Ziegler

Fisher History in Michigan and Wisconsin

Fisher are native to Michigan and Wisconsin, but essentially disappeared during the extensive original logging period in the states in the late 1800s and early 1900s. In Michigan, historical records indicate fisher were found in both the Upper and Lower Peninsula. Fisher were reported as far south as Washtenaw and Wayne Counties in the Detroit area. Wisconsin fisher trapping harvest figures outlined in the book *Historical Perspective on the Reintroduction of the Fisher and American Marten in Wisconsin and Michigan* show 559 fishers were taken during the 1917–18 trapping season in Wisconsin. Three years later only three were taken. Trapping seasons were shut down, although apparently too late. Trapping bans in other states allowed remaining fisher populations to slightly recover. Records indicate fisher had disappeared from Michigan and Wisconsin by the 1930s.

Between 1956 and 1967, the US Forest Service re-established them with a re-introduction effort in Wisconsin's Nicolet and Chequamegon National Forests and Michigan's Ottawa National Forest. The re-introduction was carried out because Forest Service biologists felt the fisher habitat had recovered enough to attempt to re-establish a population. In addition, the value of fisher fur had dropped dramatically, from as high of \$300 per pelt down to only \$5 to \$15 at the time of re-introduction. It was felt that their low fur value would discourage illegal trapping of fisher. A follow-up translocation of fisher from the western UP to the Hiawatha



An adult fisher investigating bear bait. Fisher are reported to be curious animals, which likely explains this animal investigating bear bait covered by logs. The bait was old granola and fruit flavors, which would not seem to be preferred food for the fisher. Trappers say this natural curiosity makes fisher easier to catch than some other furbearers. BILL ZIEGLER

National Forest and eastern UP counties took place between 1988 and 1992.

Current Status of Fisher

Adam Bump, formerly the Michigan Department of Natural Resources (DNR) furbearer specialist, said fisher have re-established their population across the UP. Fisher have spread out from the initial re-introduction and translocation sites into new areas across the UP. Some fisher also likely moved into the UP from neighboring northern Wisconsin populations. Bump said fisher populations had dropped from a high point after they were re-established, although in recent years their population has stabilized. Wisconsin DNR calculated their state's fisher population at 11,700 in 2007. Bump went on to say there have been confirmed observations of fisher in the northernmost part of Michigan's Lower Peninsula since the early 2000s. He said the Michigan DNR does not have any indication fisher have established a significant population below the bridge, and their numbers are likely very low. The Straits of Mackinac appear to be a formidable geographic barrier to other species (e.g., wolves) that are common in the UP but have not migrated in sufficient numbers to the Lower Peninsula to establish a viable population.

Fisher and Prey

Fisher are an opportunistic predator. Fisher eat porcu-

pines, rodents like mice and squirrels, snowshoe hare, birds, and sometimes other carnivores. They have been observed to scavenge deer carcasses as well. One of the motives to re-establish fisher in the UP and northern Wisconsin was their reported ability to control porcupine populations. Bump pointed out that the "fisher is one of a few species able to readily prey on porcupines." Porcupines are considered a nuisance because they have been documented to kill a significant number of trees when they reach a high population level. The US Forest Service report indicates that there is no formal study proving that fisher control porcupines, although there is considerable correlational evidence. Increased porcupine damage to trees was observed when fisher declined to the point of disappearing from northern Wisconsin and UP. Subsequent porcupine damage to trees declined as the fisher population re-established in both states.

Fisher Habitat

Wildlife studies report that the preferred fisher habitat is conifer forests and mixed conifer and hardwood. Fisher are often found in older-growth forests. Mature forests provide numerous hollow trees that can be utilized by fisher as dens. Trees typically found in fisher habitats include spruce, fir, white cedar, and some hardwoods. Also, as would be expected, their habitat preference reflects those of their favored prey species.

An adult fisher moving across a woods trail during early spring. Fisher appear to cover a wide area of habitat on their hunts for food. Studies indicate their average home territory is about 10 square miles. BILL ZIEGLER





An adult fisher peering around the trunk of a hemlock tree. Fisher have been observed to be agile tree climbers. This hemlock habitat would be typical for fisher. Fisher are one of the few animals that can readily prey on porcupines.

Fisher Description

A male fisher is larger than a female. Typical males weigh between 8 and 13 pounds. Females weigh between 4 and 6 pounds. A record of a 20-pound male fisher was reported. Fisher are a member of the weasel (mustelid) family. They somewhat resemble their larger relative the wolverine. They have a reputation of being relatively fearless, similar to the wolverine. UP DNR offices have received public reports of wolverine sightings that turned out to be larger male fishers. They are very capable tree climbers like their smaller relative, the pine marten. Bump was not certain how the fisher got its name. They may eat fish, although that is not a common part of their diet.

Fisher Reproduction

Fisher live their lives as solitary animals other than mating or the rearing of young. Wildlife studies have found the average number of young in a litter is 3, ranging from 1 to 6. Healthy females first breed at age 1, produce their first litter at age 2, and probably breed every year after that. So females essentially spend almost all of their adult life in a state of

pregnancy or lactation. Males breed for the first time when they are 2 years old and do not take part in rearing the young.

Fisher Behavior

Fishers have been observed to be quite agile and speedy tree climbers, but they usually move on the ground. As just noted, they are quite solitary, except possibly during the mating season. DNR life history information indicates fishers use "resting sites," such as logs, hollow trees, stumps, holes in the ground, brush piles, and nests of branches, during all times of the year. Ground burrows are most commonly used in the winter, and tree nests are used all year, but mainly in the spring and fall. During the winter, fishers use snow dens, which are burrows under the snow with long and narrow tunnels leading to them.

Fishers are active during both the day and night and may be agile swimmers. The average fisher home territory is reported to be about 10 square miles.

Bill Ziegler is a frequent contributor to UP Environment.

Please help us protect the UP's environment with a year-end donation!
Fill out the form on the last page of this newsletter,
or donate online at upenvironment.org – Thank you!

WATER WALKERS AND TRAIL-BLAZERS: Fighting to Protect Clean Water from Mining

Kathleen Heideman, UPEC • Adapted from remarks at the Water Celebration sponsored by the Coalition to SAVE the Menominee River, July 23, 2022

Before we consider the challenges ahead—the next hardfought mining proposal, the next permit hearing where we each get only three minutes to speak—I thought it would be helpful to look back and remember a few of the individuals and groups that blazed the trails we've followed to reach this place.

SAVING LAKE SUPERIOR FROM MINE WASTE

Looking back, let's remember the work of Verna Grahek Mize, born and raised in the Keweenaw. She went on to work in the federal government, holding positions in several agencies, but returned to Houghton every summer. In 1967, Verna observed that Lake Superior appeared "grimy" and "was not as clear as it used to be." She soon learned that Reserve Mining Company of Minnesota was dumping 67,000 tons of taconite waste tailings into the lake every day, roughly fifty times greater than all of the natural sediments being deposited by all of the rivers on the U.S. side of Lake Superior. Outraged, Verna Mize swung into action. She worked with Arlene Lehto and other concerned citizens in Minnesota, leading a "SAVE LAKE SUPERIOR" campaign to stop Reserve's dumping of mine waste. Verna wrote thousands of letters to politicians, scientists, newspapers, and governors. She collected thousands of signatures on a petition asking President Nixon to save Lake Superior from mining waste, and won the support of six U.S. Senators.

Verna Mize. MICHIGAN WOMEN FORWARD



When the Environmental Protection Agency eventually told Reserve Mining to stop dumping their pollution in the lake, the company refused, forcing the Justice Department to file suit against it in 1972. I was only four years old at that time, and I am deeply moved when I think of Verna and realize there were people fighting to protect the environment long before I was aware of such struggles. Reserve Mining lost their case in 1973, and the court ordered them to stop dumping mine waste, but a federal appeals court reversed that decision, so litigation continued for many years. Altogether, Lake Superior was used as Reserve's tailings dump for twenty-five years—ending in 1980. Michigan Governor William Milliken later honored Verna Mize with the title "First Lady of Lake Superior." She died in 2013, and I'm sad that I never had the opportunity to know her.

STANDING UP FOR SUPERIOR PUBLIC RIGHTS

Let's also remember Julia K. Tibbitts, founder of the environmental group SUPERIOR PUBLIC RIGHTS INC., who worked tirelessly from 1973–1977 to protect Lake Superior and Presque Isle from a planned quadrupling expansion of the coal-fired power plant that served Cleveland Cliffs Iron Company. She fought plans to convert Lake Superior shoreline into toxic coal-ash landfills and lagoons, and uncovered Cleveland Cliffs' scheme to import a type of industrial waste called mill-scale for reprocessing. Members of SUPERIOR PUBLIC RIGHTS remained anonymous to prevent retaliation from the mining company. Their mission was to protect and preserve Lake Superior shoreline, using the Public Trust doctrine, which still informs grassroots efforts to protect Public Trust- and Treaty-protected natural resources. Threats she identified included the industrial use of Lake Superior bottomlands, environmental impacts of water withdrawals from intake pipes, hot water discharges to freshwater, and pollution from coal unloading, coal yard runoff, and coal-fired emissions. SUPERIOR PUBLIC RIGHTS sued the Michigan Department of Natural Resources (DNR) for granting illegal permits, as well as the power company and the railroad. While their litigation efforts were expensive and ultimately unsuccessful, the judge did require that a public park be established, opposite the coal unloading area, as compensation for the loss of Public Trust resources. It was a small, but permanent, symbolic victory. Julia K. Tibbitts died in 2008; for the full story, I recommend her book Let's Go Around the Island.

DEFEATING THE CRANDON MINE

I'd like us all to remember the Crandon Mine fight—and we should be grateful that so many of the people who worked to oppose Crandon Mine are still here with us today: Dr. Al Gedicks and many others, continuing to protect natural resources, lending their support and freely sharing "lessons learned" from one environmental struggle to the next. From 1973-2003, Wisconsin tribes fought the Crandon Project, a copper-zinc sulfide mine proposed by Exxon Minerals. The Sokaogon (Mole Lake Band) of Chippewa and the Forest County Potawatomi spearheaded an intertribal effort to protect the Wolf River from sulfide mining degradation, leading a diverse grassroots alliance, including downstream tribes like the Menominee, Oneida, and Stockbridge Munsee; sports-fishing groups; and most of Wisconsin's environmental and conservation groups. Their decades-long battle to stop the Crandon Mine focused on Indigenous rights to clean water and wild rice beds, which would be decimated by the acid mine drainage. The potential impacts of the Crandon project were truly crazy. At one point, Exxon proposed building a 40-mile pipeline to send the mine's wastewater to the Wisconsin River, to avoid the Wolf River. Ultimately, the tribes prevailed purchasing the land proposed for the Crandon Mine, and protecting it forever. The tribal-led grassroots effort to stop Crandon Mine also resulted in Wisconsin's "Prove It First" moratorium on sulfide mining, which prevailed from 1998-2017, and probably protected Wisconsin from a dozen other metallic mining proposals during that time.

UNCOVERING THE TRUTH ABOUT FLAMBEAU MINE

We should remember those who worked tirelessly to protect clean water from the Flambeau Mine, including Laura Gauger, Roscoe Churchill, Walter Bresette, and others. Flambeau was a relatively tiny metallic sulfide mine in Ladysmith, Wisconsin: first proposed in the mid-1970s, it

Map at the "reclaimed" Flambeau Mine site. MATTWJ2002 / CC BY-SA 4.0



would have included decades of operation, with both open pit and underground phases. When locals objected, the scope of the project was revised. The final plan called for high-grading the deposit, via open-pit mining only. The environmental impact estimates were artificially minimized by shipping all of the ore to Canada for milling and smelting, to avoid on-site tailings. Flambeau permits were issued in the early 1990s, mining was completed, and the pit was backfilled by 1999. The pit mine was only 32 acres in size, and impacted 10 acres of wetlands. From the start, the controversial project led to protests and arrests in the early '90s due to the mine pit's being just 150 feet from the Flambeau River, and threats to Treaty-protected resources. Regrettably, the Wisconsin DNR now calls Flambeau Mine an example of a "successfully operated and reclaimed" sulfide mine, although environmental watchdogs like Laura Gauger continue to document ongoing degradations of groundwater and surface water around the mine site, with increased heavy metals, including elevated copper, zinc, iron and sulfate levels, and manganese 30 times higher than pre-mining levels. For a complete history, I recommend the book The Buzzards Have Landed: The Real Story Of Flambeau Mine and FLAMBEAU MINE EXPOSED (flambeaumineexposed.wordpress.com).

SAVING THE WILD UP

I'd like us to reflect on the grassroots opposition to Eagle Mine, Michigan's first metallic sulfide mine. Although we could not stop the project, environmental vigilance continues. Eagle Mine, targeting a nickel-copper orebody underneath the Salmon Trout River, was initially owned by Rio Tinto's Kennecott Minerals, and later sold to Lundin Mining. Eagle Mine was fought for two decades, even as Michigan's Sulfide Mining regulations were being written. A scrappy nonprofit called Save the Wild UP formed along the way, to educate the public about the dangers of sulfide mining; they later merged with the Upper Peninsula Environmental Coalition to form the Mining Action Group. Community resistance has included public education, media outreach, peaceful demonstration, occupation of a sacred site at the proposed mine, and litigation by a diverse coalition of the Keweenaw Bay Indian Community, Yellow Dog Watershed Preserve, National Wildlife Federation, and the Huron Mountain Club landowners.

Eagle Mine is being called a "successful nickel mine" by those who are promoting metallic sulfide mining, but in fact it is a cautionary tale:

 Eagle Mine morphed from an eagle into a spider, blasting miles of underground tunnels to connect to a different orebody that lies beyond the boundary of the permitted mine facility, and 2,000 feet deeper than the original orebody.

- Eagle Mine claimed their treated wastewater would be "cleaner than rainwater" and pose no threat to the aquifer—but the mine's septic system has leaked, and bottled drinking water is trucked to the mine site for their employees.
- According to the State of Michigan, Eagle Mine's
 wastewater treatment plant has accumulated more
 than 70 permit violations since operations began; the
 wastewater treatment plant at their mill has racked up
 more than 50 permit violations.
- Eagle Mine is currently operating with a groundwater discharge permit that expired three years ago.
- There is no filter on the mine's vent stack, which exhausts tons of particulate matter (including sulfides and heavy metals) into the air over the Yellow Dog Plains.
- Accidental "environmental releases" and worker injuries are increasing.
- The Humboldt Mill's tailings disposal "facility"—merely a deep pit lake—is rapidly filling with toxic mine waste.
- Salts and dissolved solids have increased exponentially as deeper ore is mined, requiring expensive reverseosmosis treatment.
- Permits were changed to allow Eagle Mine to *lower* water quality in the Middle Branch of the Escanaba River, by pumping wastewater directly into the river.

Environmentalists are not impressed by Eagle Mine, and insist that Michigan's *first* sulfide mine should also be Michigan's *last* sulfide mine.

FIGHTING TO PROTECT THE MENOMINEE RIVER

Looking back, let us also applaud the work of our friends and trail-blazers, Ron and Carol Henriksen, who banded together with neighbors and concerned citizens to form the "FRONT FORTY" environmental group in 2003. From the beginning, their mission was to protect the Menominee River from the hazards of sulfide mining—specifically the Back Forty Mine proposed by Aquila Resources, now owned by Gold Resource Corporation. Wherever you drive in this area, you'll see their signs, saying "Don't Undermine the Menominee" and "Save Our Water—Stop the Mine!" The Back Forty Mine aims to extract gold, zinc, silver, and copper (as well as lead) from an enormous open pit mine on the bank of the Menominee river. Members of the Front Forty worked tirelessly to educate the public about the dangers of sulfide mining pollution, and risks to the Menominee River. As I understand it, information



Menominee River near the site of the proposed mine. SIERRA CLUB

was spread one fish-fry at a time! At the same time, the Menominee Indian Tribe of Wisconsin was working to identify and protect culturally important sites along the Menominee River in an area previously occupied by the Menominee people, with ancient garden beds and burial mounds. Grassroots resistance to the Back Forty project spilled over into Wisconsin, spreading along the Menominee River, and culminating in the formation of the Coalition to Save the Menominee River. Both the Menominee Tribe and the Coalition have pursued litigation, with success.

Mining lobbyists claim "Our Western Civilization Depends on Mining." Aquila representatives, interviewed about the Back Forty Project, warned that we need mining in the UP or "we wouldn't have cars—we wouldn't have anything." They claim mining in the UP is essential, ethical, that it is clean and safe and modern—they claim that metallic sulfide mines can produce wastewater cleaner than river water! But contrary to these assurances, there is no safe sulfide mine, and no metallic sulfide mine has operated without polluting water. When tailings and waste rock are left on-site, as in the Back Forty mine proposal, acid mine drainage threatens to contaminate freshwater resources in perpetuity.

ENOUGH IS AS GOOD AS A FEAST

So how do we protect our water from mining? There is an external effort to educate ourselves, to participate and resist, but there is also a private, internal fight—we must work to curb our own *consumption*.

Everyone is familiar with the phrase "Less is More," which can be traced back to the 1850s. It echoes a far more ancient phrase, "Enough is as Good as a Feast." Not all-you-caneat, but *enough*. Enough to sustain life—enough clean

water, enough clean air, enough healthy food, enough wild, undeveloped land to support healthy ecosystems. "Less is more" has become popular as we seek to clear space in our cluttered minds and garages. "Less is more" becomes poignant if we try to picture our ancestors, or those who were living in the Upper Peninsula in the 1800s, making do with a kettle, a frying pan, a knife, an axe, a canoe, fishhooks, needles and thread. What would they think of us and our heaps of gadgets, our degraded lands and polluted rivers, our overflowing closets and basements and garages stuffed full of the surplus "stuff" we don't really need but can't seem to get rid of?

It won't be easy to change. We'll need to think long and hard before buying more digital gadgets—doorbell cameras, Alexas, garden lights, dusk-til-dawn lights, trail cams, web cams, go-pro cameras, video drones, gaming consoles, cell phones, laptops, flat-screen TVs, even hybrid and electric vehicles. Each high-tech device is full of promises, and metal; few of the metal components can be easily separated or fully recycled. Our magical, must-have modern conveniences contain copper, nickel, manganese, cobalt, platinum, palladium, zinc, lead, graphite, lithium, and rare earth elements. And since most of these metals can be found in the Upper Peninsula of Michigan, mining companies will continue to target our wild lands in search of new metallic deposits. Unless we change ourselves, and work to change the culture, environmental threats will radically increase in the coming years.

NO GREEN NICKEL AND NO SIMPLE SOLUTIONS

In 2018, the Federal government published a long list of the "Critical and Strategic Minerals" deemed essential to our economy and national security. The list was expanded in 2022, and now includes both *nickel* and *zinc*. Michigan's State Geologist is working with academic researchers, scouring historic mining documents and drill cores from the 1800s, looking for mine sites where these "critical metals" may have been overlooked by miners in past centuries. Changes urged by the mining industry, at the same time, include:

- STREAMLINING the mine permitting process;
- NATIONAL STOCKPILING of critical minerals;
- IMPROVING the mining industry's "environmental image"; and
- HIGHLIGHTING "how mining contributes to a CLEAN ENERGY FUTURE."

Hoarding stockpiles of critical metals, fast-tracking environ-

mental permits and greenwashing the reputation of the mining industry?—these are serious threats. And Michigan's auto companies are already looking to create supply chain partnerships with individual mining companies, competing to secure a steady feed of "critical metals" as they ramp up production of electric vehicles. According to researcher Brian Roemmele, a typical electric vehicle (EV) battery contains:

- 25 pounds of lithium
- 60 pounds of nickel
- 44 pounds of manganese
- 30 pounds cobalt
- 200 pounds of copper
- 400 pounds of aluminum, steel, and plastic

The fabrication of a single EV battery requires extracting:

- 25,000 pounds of brine to obtain lithium
- 30,000 pounds of ore to obtain cobalt
- 5,000 pounds of ore to obtain nickel
- 25,000 pounds of ore to obtain copper

In sum, that means disturbing 500,000 pounds of the earth's crust, including waste rock—to produce a single EV battery!

Obviously, there are no simple solutions, no single technology that can fix our old problems without creating new problems. We must scrutinize our own choices, and consciously resist the propaganda of the mining industry, which invents meaningless phrases like "Green Nickel" and "Sustainable Mining." Metallic mining is not sustainable. Metallic mining degrades our environment and contaminates water. There is no such thing as "green nickel" and all metals are non-renewable resources—even when they are used to build "renewable energy" devices like electric vehicle batteries or wind turbines.

Going forward, each of us must become a trail blazer, carrying on in the tradition of Verna, Julia, Roscoe, Walter and all the others who've guided us this far. For the sake of future generations—of all species—we must become stewards of Upper Michigan's clean water and wild places, making difficult, cautious, well-informed decisions about non-renewable resources. This is the only way we can guarantee a future with more clean water, more Milky Way, more northern lights, more silence, more fish, more owls, more frogs, more wolves. Less mining—and NO METALLIC SULFIDE MINING—is the only way we can safeguard Lake Superior or the Menominee River, now and in the century to come.

ANNOUNCING THE 2023 ENVIRONMENTAL EDUCATION & COMMUNITY CONSERVATION GRANTS PROGRAM

Applications accepted through January 15, 2023

Are you a teacher with a great idea for getting your students interested in the environment? We invite you to make your idea a reality through our **Environmental Education Grant Program.**

For over 15 years, UPEC's Board has approved grants of up to \$500 to support educator-promoted environmental projects. Educators in Upper Peninsula schools, public or private, or other groups and institutions wanting to create or enhance an environmental education program or support an ongoing activity, are eligible to apply.

UPEC believes this grant series is especially important because schools are strapped for dollars to do innovative environmental education programs. Applicants may propose either an in-person project with a virtual component, or an all-virtual project. UPEC supports pandemic safety measures, and we require all grant applicants to abide by whatever Covid safety directives are in place at the time the project is carried out.

For more information and to apply, please visit: upenvironment.org/environmental-education-grants.

UPEC's Community Conservation Grant Program is designed to challenge UP communities to promote conservation values within their watershed or local area. The program honors the late Tom Church of Watersmeet, a long-time UPEC member whose bequest made this fund possible. The program is also supported by the Saari Family Fund and many individual donors.

The grants, up to \$10,000 each, are for planning or implementing local conservation projects that engage a variety of stakeholders within a community, from recreational and sportsmen's groups to naturalists, township officials, churches, and schools.

We want to encourage proactive stewardship with this program. Grants could be awarded for finding ways to enhance native plant and animal life. They can be for starting a community forest, restoring a stream or wetland, or putting on a program about local medicinal plants. These are only examples; your community can come up with its own ideas.

For more information and to apply, please visit: upenvironment.org/community-conservation-grants.

ENTER YOUR BEST SHOTS IN UPEC'S 2023 PHOTO CONTEST

Every year, UPEC invites people to help us recognize and share the beauty of our northern landscape and its inhabitants by entering our Photo Contest. This year we've simplified things: you can send us up to three photos of any subject, so long as it's a picture of the Upper Peninsula. To be considered, photos must be a high-resolution shot in .jpg format (file size: 1 megabyte minimum; 5 megabytes maximum).

The winning photo will be enlarged, printed, and matted, and we'll display it at our Celebrate the UP! event next March in Marquette.

The photographer will get to keep the print.

The winner and 3 runners-up will also be published in our spring newsletter. To enter, go to: upenvironment.org/contest-form. The deadline for entries is January 8, 2023.



Escarpment in the Porkies – an entry from the 2022 contest. JAKERING

UPEC AS GAME CHANGER: MINING, CLIMATE CHANGE, ENERGY & MORE

The UPEC year in review by President Horst Schmidt

Once again, in 2022 your intrepid UPEC Board members have been working hard to keep the UP green. This all-volunteer group organizes events, watchdogs industry and agencies, answers questions from people far and wide, and administers grants that make our peninsula a better place. Here are some highlights of what we've accomplished this past year—with your support!

Our team brought off another successful Celebrate the UP! event in March, under the theme "Re-Wild the UP." Because of Covid uncertainties, once again the celebration was virtual (we plan to go in-person in 2023). This, the 13th annual installment of the celebration, featured presentations on Treaty Rights, wolves and the Endangered Species Act, the next generation of environmental education, a panel discussion on wolf hunts, and wilderness designation efforts on the Ottawa National Forest. We added arts to the mix with a poetry reading and a documentary film screening.

We also started the year by supporting worthy projects across the UP through our Environmental Education and Community Conservation Grants Programs. Schools in Dollar Bay/Tamarack and Powell Township received EE grants to enable students to observe honey bees, participate in a salmon release, and join in an explorer's program. The CC grants funded protection of the Menominee River, the Yellow Dog Watershed Preserve, a native garden restoration near Calumet, and a new community-managed forest near the Wisconsin border.

Our Livestream Series continued throughout the year with discussion of timely environmental topics that draw presenters, UPEC members, and other viewers together virtually. This year, topics have included:

- Refinery workers impacted by climate change
- Ecological odysseys in the Great Lakes
- Wind power
- The Glasgow Climate Summit as seen by students
- Climate ghosts
- Great Lakes for sale
- The PR industry's promotion of fossil fuels
- The environmental impacts of palm oil
- Grassroots protection of the Menominee River
- Tribes' view of Michigan wolf management
- The end of oil

The broadcasts can be viewed anytime on our Facebook page (https://www.facebook.com/upenvironment/). We are always looking for ways to connect to you, and the Livestreams have proved to be another valuable way to get that done.

A year-round task is keeping up with political developments in Lansing and across the state. We spend a lot of time reading newsletters from kindred Michigan grassroots environmental organizations, as well as all the key statewide players in the environmental nonprofit space. This work is both rewarding—there is always a lot of good stuff happening, even in the worst of times—but also, to be candid, exhausting. There is a lot to keep up with!

We follow lots of topics, but one of our focal points is responding to climate change by moving away from fossil fuels and transitioning to a cleaner-energy economy. This was the topic of a talk at the 2022 Celebrate the UP! event by Jenn Hill. We were pleased when Jenn won election to the State House of Representatives in the midterms. In her earlier work on the UP Energy Task Force and the Governor's Climate Solution Council, Jenn showed a genuine interest in answering one of the biggest questions of our time: How do we produce energy without the carbon? She now heads to Lansing with legislation on her mind to make Michigan Healthy again.

We continue to work with other groups for the removal of Line 5, the Enbridge pipeline that runs almost the entire

Falls on the Yellow Dog River. CARRIE WHITTAKER / WIKIPEDIA



length of the UP and then dangerously crosses the Straits of Mackinac. Enbridge and its allies spend millions of dollars to tell the public the line is safe, and to get it shut down is an uphill battle. But the fight goes on.

Another never-ending battle is over mining, an industry that is getting a boost across the country. As Kathleen Heideman of our Mining Action Group points out in her article in this issue, even at its most benign mining is still an enormously damaging activity. The Eagle Mine produces pollutants, violates safety protocols, and is out of compliance on its permits. Yet it is proclaimed as a success story. We have to ask: Is the state really monitoring Eagle? On top of that, this year new entrants have come into the picture at the old Back Forty proposed mine site on the Menominee River, and appear ready to challenge local community members again. New projects are cropping up elsewhere: Rio Tinto one of the world's biggest miners—wants to drill holes in eastern Baraga and western Marquette Counties through a subsidiary, Talon, a mining exploration company. We are also working with Wisconsin residents against a possible mining site near Wausau where another copper ore body exists. No matter how much mining companies promise, acid mine drainage cannot be eliminated with present-day technology so degradation of rivers and lakes is inevitable again.

We also helped promote the Stop the Rocket campaign of the Citizens for a Safe and Clean Lake Superior. This Marquette County-based grassroots band of activists has put up a sturdy—and effective—fight against an ill-advised proposal to put an industrial rocket launch facility on unspoiled Lake Superior shoreline north of Marquette.

A staple of UPEC activism since our founding in 1976 has been staying abreast of wildlife management issues,

Going shopping? You can help UPEC at the same time!





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particularly the most controversial of them all: the restoration of wolves to the UP. This issue has matured to the point where we are no longer arguing about whether to restore these majestic wild canids to the UP landscape—they are here, hopefully for good. Now we are in the trenches over their management. As responsibility for wolves seesaws between the federal government (during times when they are on the Endangered Species List) and the state (during times when they are not), UPEC keeps a sharp eye on proposals to hold a hunt to reduce their numbers—keeping in mind the disastrous one that Wisconsin recently allowed to take place. UPEC Board members provided powerful testimony to a May 2022 meeting of the Michigan Wolf Management Advisory Council that there is no credible scientific reason to allow a wolf hunt in Michigan.

Here's what all this comes down to. We're made to exist on one planet in this universe. If we make it uninhabitable, there is no Planet B—at least, not one that does not require major technological support for oxygen-breathing creatures like us. Globally, we face daunting challenges, none greater than the linked biodiversity/climate changes crises. As the recently concluded COP27 international climate change meeting in Egypt shows, corporations and countries would rather keep putting greenhouse gases into the environment to increase profits than do the right thing. It might seem that small grassroots groups like UPEC have no impact on the world stage. But another lesson from COP27 suggests otherwise: through relentless pressure from environmental NGOs and small countries, the world's leaders agreed (in principle, at least) to compensate the poorest people on the planet for the climate change-related damage that they shoulder through no fault of their own. This is something that most pundits laughed off before the meeting ... yet it happened. The message for our UPEC community is this: keeping plugging away, no matter how slow progress seems to be. One day you might just wake up to find that the impossible has come true. Thank you, UPEC members and supporters, for keeping dreams alive!

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- 1. Donate to the Community Conservation Grants Fund These grants fund planning and implementing local conservation projects that engage a variety of stakeholders to stimulate grassroots conservation in the LLP
- 2. Donate to the Educational Grants Fund These grants underwrite educator-promoted environmental projects within K-12 schools.
- 3. Donate to the UPEC Mining Action Group MAG educates citizens on the environmental and social threats brought by mining activity.
- 4. Donate to the UPEC General Fund Your contribution is used where it's needed the most!
- 5. Volunteer to help on any of our projects
 Write to us at upec@upenvironment.org and we'll
 show you how!
- 6. Renew your membership for 2023 today!

Support UPEC by becoming a member or renewing your membership today! Just fill out the form below. All memberships run with the calendar year. Not sure if your membership is current? Email us at upec@upenvironment.org. (All memberships expire on January 1.)

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