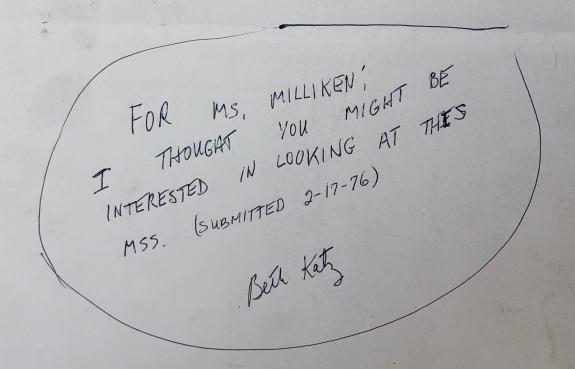
A CITIZEN'S CRITIQUE OF THE PIGEON RIVER EIS

To: The Michigan Environmental Review Board
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A CITIZEN'S PERSPECTIVE

I am writing to protest plans to drill for oil and gas in the Pigeon River Country State Forest. I have read the Environmental Impact Statement prepared by the Department of Natural Resources, and I would like to react to it the only way I know how.

I have no new facts. Indeed, I believe we are smothered in facts. I have no scientific expertise in wildlife management or hydrocarbon development. As a suburban housewife, citizen and mother, I have no facts whatsoever. But I have some extremely strong feelings which may add a new dimension or sense of perspective on an issue which I believe has been mired in technical and quantitative trivialities, corporate threats and whitewashes, and bureaucratic mindlessness.

The dominant feeling I have is fear. I fear for my children and my grandchildren and everybody else's. But I also have hope. It is hope which motivates this letter.

The battle to save the Pigeon River Country State Forest is but one small but very significant struggle to save Nature from its conquest by forces of economic growth and urban-industrial expansion. The retreat of Nature is occurring at the most ferocious pace in every state of the United States and in every country of the world -- communist and capitalist, rich and poor. Plants and animals are everywhere on the planet becoming extinct. Every day in little ways, Nature's diversity is defiled. With the irreversible destruction of each additional foot of wilderness, with the extinction of each living species, with the loss of each soggy patch of wetland, we all get a little closer to our own ultimate extinction.

I suppose it was in response to similar feelings that the MERB and the EIS were created. They are valuable institutions for protecting the environment.

I believe, however, that the initial sense or urgency and genuine commitment that were displayed in their infancy have disappeared. Many environmentalists who became officials of these

institutions have also lost their sense of purpose. Their positions, decisions, their influence and votes have become boring routines, or worse, ego-trips. The public is left with apathetic and arrogant environmental officials who, because of their lack of imagination, energy and concern, treat the natural environment as a resource to be exploited rather than as an irreplaceable treasure to be cherished and protected.

WHY IS THE EIS INACCURATE AND MISLEADING?

The importance of this EIS for me was its uneven tone, its omissions, its contradictory purposes and its fallacious underlying assumptions. Although there is much that I find commendable in the body of the EIS, I will concentrate on that which is not. My objections are primarily political and institutional.

Page 1, Paragragh 1 shows the D.N.R. s schizophrenic role: "Responsibility to manage the hydrocarbon resources extraction... protecting the environment." For those of us who view the extraction of oil and gas from environmentally sensitive areas as destruction rather than protection of the environment, the D.N.R.'s mandate is more illogical than appointing the fox to guard the hen house.

The scientific objectivity of the document becomes questionable as early as page 1, paragragh 2: "This Environmental Impact Statement (EIS) has been written to describe a proposed plan of hydrocarbon development which we feel is consistent with environmental protection, and to be responsive to today's and future citizen's desires."

Unlike most scientific studies which present the facts and then draw the conclusions, this EIS begins with a recommended course of action and then attempts to marshal evidence to support the introductory conclusion. I think one must be suspicious of facts presented through this approach.

The scientific objectivity of this document is further undermined by a recommendation which is based on misleading assumptions about Michigan's economic economic needs and political capacities.

The basic assumptions underlying the EIS recommendation are: (1) that we need the piddling few hundred 12-month jobs and 1400+ single-generation jobs to solve our state's unemployment crisis; (2) that the revenues from drilling are not only adequate, but irresistible compensation; and (3) that we need the energy to heat over a million and a half homes.

The first assumption is the weakest rationale of all. There are more economically effective and socially useful ways of creating jobs than supporting an industry famous for its high capital investments in wasteful, energy-dependent equipment at the expense of labor-intensive jobs. Furthermore, given the oil companies' role as adversary of the State of Michigan in this controversy, and given the proprietary status of their employment figures (as well as seismic data), it is in their financial interest (what other interest do they have?) to seduce our decision-makers with inflated job figures.

The second assumption demonstrates up-side-down priorities by putting short-term profits ahead of long-term social and environmental responsibility. There will be little consolation for the public in the fact that revenues from the rape of the Pigeon River Country will be used to buy more land for the state. There is no reason to entrust money to a thief, and there is likewise no reason to entrust precious, sensitive lands to a government unwilling to appreciate or protect them.

The third assumption is based on optimistic and misleading statistics as to how much gas and oil will actually result from the project. There appears to be no assessment in the EIS of the amount of energy wasted on exploration, drilling, construction, production, transportation, operation, abandonment, restoration, or advertising, administration, sales and distribution. The total amount of energy left over after all of these high energy-consuming activities have been considered would surely be less than the heat for "1,615,270 homes a year" as estimated on page 75.

Statistical inaccuracies aside, the Task Force's failure to investigate fully and fairly the potentialities and implications of a no-drill policy is the most dangerous of the three unsubstantiated assumptions because it forms the very essense of the EIS.

There are basically four reasons why the no-drill option was given such shabby treatment in this EIS:

- (1) As I have mentioned, there was a prior commitment on the part of the staff to the recommended course of action, hydrocarbon development.
- (2) The introductory statement to the no-drill "section" reads: "no action would mean that substitute energy sources need to be evaluated." (pg.13, par.3). The staff may have felt that the EIS was not the appropriate vehicle nor themselves the appropriate spokespersons for bold or controversial ideas about innovative substitutes. Perhaps the staff was discouraged or prevented from seeking out consultants on energy alternatives in the same

manner that they might have received information from experts on hydrocarbon development or wildlife management.

- (3) "Without a specific national plan for energy conservation, it is very difficult to perceive what Michigan's role should be." (pg.14,par.6). When in doubt about plans or roles, the bureaucratic rule would be to go ahead and drill because drilling is equivalent to a non-decision, in that destruction of the environment can be expedited without any major political, social or economic policy changes.
- (4) Tucked in among the conventional suggestions for conserving energy (e.g. reduced speed limits), is a statement of monumental truth and profundity: "The loss of other public benefits, those things termed negative impacts, as a result of extracting oil and gas, are more difficult to measure or place a dollar value on since they are not usually bought or sold." This is a perfect explanation for the causes of our modern nightmare, or what has come to be called "the environmental crisis." That which has no price has no value; the invaluable becomes the valueless.

WHY IS THE EIS UNSCIENTIFIC?

There are two ways to predict or assess negative impact on the environment: the objective, scientific method and the subjective, environmental method. I will show, first, that the report can claim no scientific legitimacy since the evidence for its central claims is either contradictory or non-existent. I will reject, however, suggestions that it be re-written to meet minimal scientific standards. Instead, I offer the Michigan Environmental Review Board a totally different method for assessing negative impact on the PRCSF. I recommend that the EIS be examined in this context and that the board's recommendations to the Governor reflect the responsible principles inherent in this method.

Science demands empirical specificity. Thus, if phrases like "significant adverse impact" (Pictorial Summary, pg.63) are to merit scientific status, they must be substantiated with quantitative data. Such data are totally absent from the key concepts of this report. Instead, the Task Force employs the "significant adverse impact" concept with no concrete references to what are presumably its two basic dimensions: quantity and time.

Figure 12 (pp.62-63) tells us, for example, that the elk population of the southern portion of the PRCSF will suffer

"significant adverse impact." Yet the number of elk actually predicted to be affected is never specified. Such a degree of specificity, we are told, is "'beyond the state of the art' at the present time." (pg.43.par.1)

Treatment of the time dimension is similarly flawed. "Recovery" from "significant adverse impact" will take "a long time," a period deemed to be "at least the length of the project," These phrases used to define "significant adverse impact" are utterly vacuous.

Endangered and threatened wildlife are expected to suffer the fate of a "slight adverse impact." This impact is defined as "a change in the element that is impacted to a status that can quickly return to normal after the gas and oil activity has ceased." (pg.63). We are told that there are six kinds of mammals, six kinds of birds and three types of reptiles and amphibians that are classified as threatened, rare or scarce whose range includes the PRCSF (pp.445). Despite the candid admission that "no recent work has been done in monitoring these populations on the forest" (P.4,par.8), the report makes the patently false claim that these animals "will not be significantly affected by this plan." (p.37,par.3).

The third category called "no impact" is used to characterize the fate of rare and endangered plants. The evidence of "present status" on which presumably any prediction of future status would have to be based is the state list which is still under going review." (p.6,par.2). It is added that some rare or endangered species on the "tentative list" may occur on "individual sites" in the PRCSF. (p.6, par.2). We are told that, in the case of an unexpected negative impact, "outside professional botamists" will "insure that no impact from hydrocarbon development occurs." (P.38,par.2).

Those who seek to gauge scientifically the effect of hydrocarbon development on the PRCSF will have to look elsewhere. Indeed, the scientific respectability of this document is so questionable as to appear to demonstrate on the part of the Task Force outright contempt for the environmental review process and for the members of INTERCOM, MERB, the Natural Resources Commission and the Governor. It appears that the Task Force is of the opinion that they need nothing more than 70 odd pages of neatly typed graphs, maps, statistics and a minimum of analysis——all with the D.N.R.'s stamp of approval——and even the most outrageous and environmentally criminal project can be approved.

ELK: A FAREWELL FORECAST

The most important question which an EIS should answer -- and which the Task Force never asks -- is "Will there be irreparable damage?" When we look at the worst thing that can happen -- "significant adverse impact" (Figure 12, p. 63) -- we are assured that nothing in this magnificent, pristine wilderness will be destroyed. Any changes made will be temporary. All damage can be repaired. This is the "They-Lived-Happily-Ever-After"Syndrome.

I would like to suggest that the total quality is equal to much more than just the sum of all its parts. Pigeon River Country State Forest is more than just twelve "elements" and eight "activities". The total quality equals more than the sum of its economic, biological, recreational and aesthetic attributes. The total quality defies scientific definition and economic profits. The total quality surpasses even concepts of the quality of life because it addresses Life itself.

I have shown why "significant adverse impact" (pictorial summary, p.63) is a dangerous oversimplification of an extremely complex and important question. Had the EIS authors been candid, their conclusions would have stated, "We don't know." The authors, had they been candid, would have said that this is a political or economic or ethical question which we are not equipped to answer. Instead, the Task Force dresses its political views up in scientific costumes and parades them out in front of the public in sanctimonious defiance of objectivity.

while
The really interesting point is that, welk experts admit that
drilling will mean the end of the elk herd, few wildlife managers
really care. One explanation is that the demise of the elk is seen
as the loss of a bunch of alien zoo animals that never managed to
muxter credentials as official as those of native Michigan animals.
This argument seems to me as illogical as suggesting that all Michigan citizens whose ancesters were not natives of the state a hundred years ago, will no longer be entitled to police protection.

Another argument is that elk are too fragile and too vulnerable to human intrusions to merit the extensive management effort that would be required to maintain them even without drilling. I believe, however, that their numbers remain a measure of our success at managing and maintaining a natural environment. The vulnerability of elk to human intrusions should be good reason to protect rather than betray them.

One of the most environmentally offensive themes e in this EIS is the compatibility of oil and gas drilling with the goals of wild-life management. If this theme reflects accurately the direction of the D.N.R.'s programs, I would suggest that those programs are too people-oriented. If animals could take a vote, few would favor drilling, even if deer like people or osprey build nests on oil rigs. Let us not be deceived: whenever the artificial environment encroaches upon the natural environment, the natural environment rarely improves.

ENVIRONMENTAL SUBJECTIVISM: A BETTER METHOD?

The subjective or environmental method emphasizes concern for land as guarantor of human survival. The subjective method is predicated on the concept of land as belonging to those as yet to be born as well as those now living. The present owners, according to this view, only have the land in trust (or stewardship) both for all the living who are dependent on it now, and for the unborn who will be dependent on it in the future.

According to this view, the public has the responsibility, not only for the protection of wildlife areas, but also and more importantly for their ENHANCEMENT. Thus, positive programs such as reforestation, prohibition of motorized vehicles, severe peaching penalties, pesticide bans and elk management would become the essence of public policy.

This view defines land values, not in terms of immediate future uses, but rather according to its POTENTIAL value for posterity. Thus, the southern portion of the Pigeon River Country State Forest can be seen as the potential salvation and nesting area for the Northern Bald Eagle, the Red-Shouldered Hawk, the Kirtland's Warbler or the Barred Owl. If this secluded wilderness area is viewed as potential breeding ground and potential --- although perhaps not actual --- habitat of the Gray Fox, the Wood Turtle and many other rare or threatened animal species, then its value to future generations would be enhanced by public protection.

The major difference between the subjective method and the scientific method is predicting impact is that the subjective method tells the worst thing that CAN happen, whereas the scientific method tells the worst thing that WILL PROBABLY happen. While the subjective method emphasizes the risks or POSSIBILITIES, the scientific method emphasizes the PROBABILITIES. The subjective method would analyse hydrocarbon development in the PRCSF in terms of possible oil spills, gas leaks, ground and surface water contamination, animal extinctions and irreversible destruction of the environment. The subjective method thinks the unthinkable and asks, "What if?"

Many of the same skills required for writing an Environmental Impact Statement are needed for being a competent mother of a mischievous 15-month old child. The mother must be able to predict the worst --- imagine or anticipate potentially dangerous situations which the normal non-professional would never assess as threatening, such as open doors, sharp edges, and small objects. The best qualifications for the job are experience, intelligence, but mostly love for the child.

The same is true for the author of an EIS. To make accurate predictions --- to anticipate the danger of potential threats --- it is necessary to have training and intelligence. But the most important factor in gauging one's perception is the degree of concern. If the author does not have a deep love or genuine concern for the environment, he will have a tendency to minimize or underestimate the potential risks and he will not accurately or reliably predict negative impacts on the environment.

Despite legal restrictions, miraculous technological safe-guards and heroic efforts by the DNR and oil companies to avoid oil spills, they continue to occur by the hundreds every year all over the state. In sensitive wilderness areas, small accidents make for enormous disasters --- even when they are not planned by officials.

The scientific method imposes upon the scientist the de-humanizing task of total objectivity or removing from his consciousness and his conscience --- and therefore from his conclusions --- the natural concern for the land. In this way the scientist comes to think of the land as space rather than life, as places rather than habitats and eco-systems. Impartiality and objectivity make us all enemies of Nature; if we are not biased in favor of Nature, we are against Nature.

Despite all our trips to the moon, Science is unable to (1) predict the future accurately, (2) make elk or swamps in a laboratory, or (3) reduce to a computer print-out the infinitely complex interrelationships of the organic and inorganic forces and the plant and animal ecosystems of the Pigeon River Country State Forest. Ecology --- like Life itself --- defies quantitative analysis and artificial reproduction.

DRILLING AS AN ETHICAL QUESTION

Two widespread ethical myths dominate the controversy over the DNR's proposal. I would like to dispel both myths and demonstrate the ways in which opposition to hydrocarbon development in Michigan's Pigeon River Country State Forest is neither: (1) selfish, or (2) unpatriotic.

My opposition to drilling is predicated on the belief that Michigan can save, through strong statewide conservation efforts and creative exercise of energy options, as much gas and oil as would be developed in the PRCSF over a 25 year period.

I believe that, far from patriotic, Project Independence can be seen as a treasonous plan to (1) deplete our rapidly dwindling supply of fossil fuels, (2) drill and dig up our precious lands, (3) create monumental problems of disposal of radioactive wastes, and (4) distract us from the real solution to our problem which is not dependence on conventional domestic supplies, but total independence from supplies and suppliers by the rapid development of useful techniques to exploit the ultimate source of all energy, the sun.

The protest to drilling is a call to sacrifice, not selfishness. It is a plea for a radical change in our habits of consumption and waste, our luxurious tastes, our profligate standard of living, our artificial values and our frivolous use of energy. It is a call for a new order of harmony with Nature rather than conquest of Nature.

Most of us would not steal food or clothes from our children. Is it not equally reprehensible to steal precious wilderness from future generations?

The beneficiaries of our unselfish decision to conserve energy and develop our natural energy sources will be the other 94% of humankind and the generations of the unborn.

It is our peculiar definition of ethics --- how we define altruism and patriotism --- and not our lack of ethics which has put homo sapiens on the list of endangered species. The road to hell is paved, not only with good intentions, but also with the views of educated fools and the decisions of misguided paliticians.

DRILLING AS A PRACTICAL QUESTION

Drilling in the Pigeon River Country is not the cure for our energy problems. It is a symptom of the disease. The treatment is not the quackery of breeder reactors or stripmining fertile farmlands. Since the disease is diagnosed as an inability to find --- or perhaps even a fear of looking for --- natural, inexhaustible and non-polluting energy sources, the cure requires both effort and will. If no cure is found, the disease will be fatal.

I offer this disease metaphor to illustrate my view that short-term solutions often create more problems than they solve when the long-term goals are not clearly understood. I believe

this principle to be at the heart of the practicality issue in the Pigeon River Country drilling debate.

Practicality begins and ends with money. The practical question is "Can we afford it?" The answer is we can't afford not to afford it. Economics, profits, GNP and money take priority over the environment only if collective suicide is practical and realistic.

The question is often raised that, since these are difficult and uncertain times, can't we wait until the economy recovers or until the technology improves. The answer is that delay compounds crisis. Problems delayed are problems which threaten to become insoluble. I believe, further, that these times would be less difficult and less uncertain if we were to attack our problems courageously and at once.

Many public officials talk lately about the need for tradeoffs. They tell us that trade-offs are practical. It is important to remember, however, that Nature does not respond to tradeoffs. Oil companies can buy off environmentalists, but nobody can buy off the environment. Nature understands neither money nor tradeoffs.

ALTERNATIVES TO MADNESS

So the pro-drilling people are sitting there menacingly, just waiting for any sign of vulnerability, waiting to ridicule any concrete and constructive idea that I may put forward as an alternative to drilling in the Pigeon River Country State Forest. If I criticized the project, without making any proposals to replace drilling, they would say, "Well, all that talk about the environment is fine, but how can we protect the environment if we don't have any program? No ideas! Just Criticism!" Then, if I offered ideas, they would scoff at them. So I'm damned if I don't.

Therefore, at the risk of appearing to be a fuzzy-brained visionary, I would like to share with idealists and cynics alike a couple of my own ideas. Iwant to emphasize my lack of credentials as spokesperson for the environmental movement. I include these ideas, not because of any special expertise, but rather because of my belief that it is incumbent upon all opponents of drilling to offer energy alternatives.

"We've come a long way," say the old-timers at the D.N.R. Fifteen years ago, most people didn't know what "ecology" meant. Oil companies could drill anywhere, and there were few modern safeguards in hydrocarbon technology. But the most revolutionary change in environmental policy in Michigan has been the Environmental Impact Statement.

The EIS began as a victory for environmentalists. It may now be used as the official instrument for legalizing destruction of the environment. The institution best equipped to regulate the standards of the EIS and to articulate publicly its warnings is the Michigan Environmental Review Board. This institution also threatens to become the rubber stamp of environmental vandalism. Ideally, ecological advisors to the Governor serve to provide him with accurate information. In particular, they should be able to filter out the scientific and economic assumptions (discussed earlier) implicit in most state projects and present the Governor with the unadulterated environmental truth.

It would be naive, however, to expect a committee of politicians to make recommendations with no political intent. I would like to show the political advantages, therefore, of a strong pro-ecology, no-drill commitment on the part of the MERB members.

First and foremost, Michigan's natural environment (Great Lakes shoreline; Inland lakes, rivers and wetlands; and its forests and wildland areas) givies it a stake in preservation politics in a way not understood by the less endowed states. Michigan would benefit disproportionately from federal environmental protection laws and energy conservation measures because Michigan has more to protect than most states.

Institutionally, Michigan's Department of Natural Resources is one of the best among its equivalents in the nation. It has a reputation for high professional standards and, despite its tendency to embrace oil companies like part of the family, the tendency to relatively free from political influence.

Academically, the state has two of the leading schools in the country for natural resources management and ecology. Both U. of M. and M.S.U. have trained nationally known ecodogical scholars.

Politically, Michigan has a governor who has shown his willingness to cooperate with the conservationists. The state boasts one senator and three congressmen who have been awarded the coveted 100% rating from the League of Conservation Voters. And finally, the citizens of this state --- perhaps more than those of any other state --- have access to and an influence on Gerald Ford, the most powerful environmental decision-maker in the world today.

Legally, Michigan's Environmental Protection Law has already become a model for other states. In addition, we now have the opportunity to set a national example in environmental politics. We can surpass mediocre federal standards for the environment as we surpassed them for hot dogs.

The moment of truth is here. We need what money cannot buy: leaders who will have the wisdom to understand what we need and the courage to work for it. The great difficulty of the no-drill policy is that, unlike the recommendation of the EIS, it requires additional work, unusual ideas, strong commitment and political courage. The no-drill policy is less simple, but infinitely better.

It has become commonplace to hear people of great power and influence complain of a lack of power or a feeling of helplessness. It is easy to blame the system, the corporations, other leaders or the voters. It is more difficult to resign oneself to the amount of pwoer one does have --- whether as a simple voter, director of a department or governor --- and to work as effectively, as courageously and as hard as possible for the principles one believes in.

It may be reassuring for decision-makers to be reminded that the average citizen-environmentalist in this state has a far deeper sense of frustration and helplessness than do the leaders. My own experiences last spring with the Michigan Environmental Review Board may help to illustrate this point.

At the May meeting, I observed the members of M.E.R.B. solemnly voting on whether or not to approve environmental impact statements for projects which had already been started. At the April meeting, I was subjected to a one-hour commercial by a Dow Chemical Company adman for a new energy product which consists of digging up the state for big profits. When the environmentalist, who I had come to hear, rose to speak about the danger of the pesticide Sevin, Chairperson William Cooper advised the distinguished professor to express his views either in the form of questions to USDA and MDA pro-pesticide "experts" or through written statements. Finally, I wrote the chairperson two lengthy and thoughtful letters about these concerns (May 6 and June 5). Neither letter was ever answered or acknowledged.

The decision on oil and gas drilling at the PRCSF by the MERB, the Natural Resources Commission or the Governor is an awesome decision. To be elected or appointed to make such a decision is like being asked to play God. The 40 square miles of unique Pigeon River

Country wilderness --- the largest block of public land in the Lower Peninsula --- is at the mercy of Michigan environmental experts. The decision involving the habitats of 45 different kinds of animals and 86 different kinds of birds has the most enduring repercussions for future generations.

The men and women who make the ultimate decision on the fate of Pigeon River Country State Forest will need all of the advice and inspiration that they can get. I have tried to give some inspiration and a few ideas.

Now I would like to give my advice to the Michigan Environmental Review Board: (1) Approve the body of the EIS, (2) Reject its biased economic and political assumptions; as well as its unscientific conclusions, (3) Recommend a no-drill policy to Governor Milliken, and (4) Advise the Governor that bold energy alternatives be promoted to support this policy.