



STREAM OF CONSCIOUSNESS

A NEWSLETTER OF THE ALLIANCE FOR ACID RAIN MONITORING (ALLARM)
Edited by Kelly Wark

May 1991

BUSH'S NIGHTMARE: THE (NES)

by Christy White

The National Energy Strategy (NES) has been hotly debated since its conception in 1989. Since then it has been stated that the "loudest single concern" voiced was for increased energy efficiency in all sectors of the economy. Unfortunately however, the NES concentrates not on energy efficiency, but rather on increasing energy use and production. It is expected that Congress will receive a proposed NES which encourages the petroleum, coal, and nuclear industries, but does little to advocate energy efficiency or bolster conservation efforts.

Oil production receives substantial attention, including the removal of administrative barriers to oil exportation. The plan also calls for opening the coastal plain of the Arctic National Wildlife Refuge in Alaska, as well as other sensitive areas, to exploration and possible drilling.

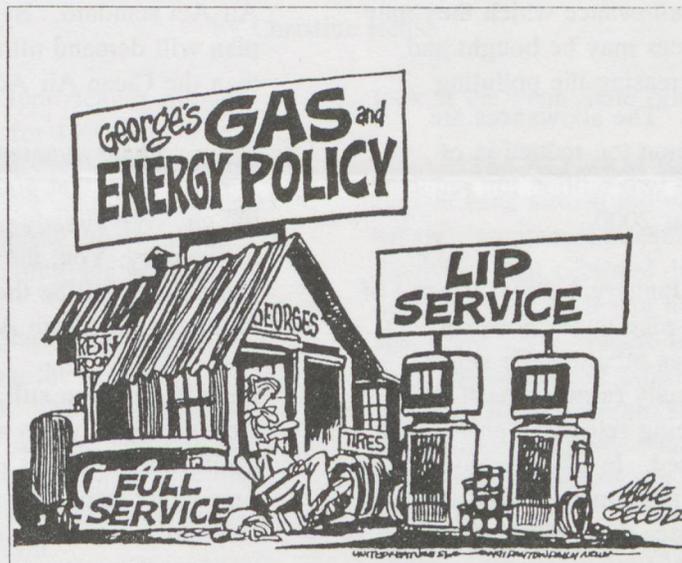
Further proposals in the NES include:

- X Weakening current nuclear power law by limiting public participation in power plant licensing and generally accelerating the licensing of nuclear power plants

- X Weakening the current auto fuel efficiency law. Under the guise of encouraging alternate fuels, the bill would create a massive loophole for auto companies which would gut the current program

- X Weakening current waste disposal law by eliminating states' rights to comment on siting decisions and extending temporary siting of nuclear power plant wastes.

There are several bills currently being debated that reflect the proposals of the NES. One of these is the "Energy Security Act" (Wallop/Johnston Bill S.341). It is an energy policy package which concerns the oil and nuclear priorities from the NES. This is where the proposal to open the Arctic Refuge for drilling can be found. This also contains plans for promoting nuclear power with federal funds.



Courtesy Mike Peters, Dayton Daily News (United Media)

On the other hand, there is alternative legislation that addresses the issue of efficiency in the area of transportation. Since
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BEYOND THE CLEAN AIR ACT

by Matt Franke

The Clean Air Act is an important legislative step and was a difficult one to get passed. But what have we really gained with the new Clean Air Act? And how can we, as concerned citizens and environmental activists, assure that more stringent measures will be passed in the future?

The single largest polluter of air is the automobile. And yet the new Clean Air Act will do little to reduce the amount of pollutants released to the atmosphere from autos. The real "news" is that 40% of the current U.S. auto fleet already meet the Clean air Act standards. Furthermore, as the number of vehicle miles traveled (VMT) increases 2% annually in Pennsylvania, the hydrocarbon and nitrogen oxide emission controls provided for in the Clean Air Act will soon be inconsequential or nonexistent. The reductions made by individual autos will be overcome by an overall increase in total emissions due to the increase in VMT. This has important implications for our work at ALLARM as air pollution is the leading source of water pollution and nitrogen oxides are among the known components of acid rain.

The other major target of the Clean Air Act is industry, specifically power utilities. Each industrial producer will be granted an allowance which they may legally emit. These allowances may be bought and sold between companies, increasing the polluting capacity of some companies. The allowances are tailored to achieve a ten million ton reduction of airborne sulfur dioxide and a two million ton reduction in nitrogen oxides by the year 2000.

In Pennsylvania, by January 1 1994, Phase I of the Clean Air Act will force nine major power plants to install continuous emissions monitors for sulfur dioxide, nitrogen oxides, opacity (a measure of how much particulate matter is being released), and for the total volume of gasses released. In addition, by January 1, 1995, all utilities must use nitrogen oxide reducing technology and reduce their sulfur dioxide emissions to 2.5 lbs. per BTU (a unit of heat energy).

Phase II of the Act stipulates that all utilities must comply with the 1.2 lbs. per BTU sulfur dioxide emissions goal. Utilities must submit their plans for meeting this goal by January 1, 1996 and be in compliance with the goal by January 1, 2000.

According to DER, implementation of the Act in Pennsylvania will result in an estimated 6000 new air pollution sources requiring permits to operate, 4600 more compliance monitoring inspections per year by DER employees, and 600 more enforcement actions per year. A minimum of 250 new DER employees will be needed over the next five years to sufficiently handle this increased responsibility. And yet amazingly, DER workers were recently laid off, reducing the Department of Environmental Resources manpower when it needs it the most! The Pennsylvania DER simply does not have the ability with to deal with these lay-offs as Pennsylvania already has the fewest state employees per capita of any state in the U.S.

Nationwide, the Clean Air Act is virtually obsolete in some states. In California, little of the Clean Air Act will have any impact because California is already in the process of implementing their own stricter standards. Focusing on the automobile, the California plan will require a reduction in hydrocarbon emissions 25% lower than the Clean Air Act. With time, this standard will change to become 75% lower than the Clean Air Act standard. Similarly, nitrogen oxide emissions are being cut to 15% below the Clean Air Act standard. By the year 2000, the California plan will demand nitrogen oxide reductions 75% lower than the Clean Air Act standards.

Pennsylvanians have a lot to lose if the Clean Air Act is all that governs what pollutants will enter the air. We already receive the most acidic rainfall in the country. You; the monitors of our streams, lakes, and ponds, will be the first to witness the eventual failure of the Clean Air Act.

Luckily, you can still work to better this situation. Governor Casey has already voiced his support of the California emissions plan. Urge him to continue his support by implementing the plan in Pennsylvania. Hopefully, citizen response will sway Governor Casey to adopt these standards, joining Massachusetts, New York, and potentially Maine.

Begin this process by writing Governor Casey or your state legislator at the addresses listed on the next page. It is never too late to make a difference!◆

Governor Robert P. Casey
225 Main Capitol Building
Harrisburg, PA 17120

Your State Legislator
House of Representatives
Post Office
Main Capitol Building
Harrisburg, PA 17120

Nightmare

(continued from front page)

transportation uses the largest share of oil, it follows that decreasing oil dependence will involve increasing the efficiency of transportation dependent on fossil fuel. A bill entitled "Corporate Average Fuel Economy Standards" (CAFE-Bryan Bill S.279, Boxer Bill HR.446) is a legislative means of increasing U.S. automobile efficiency. Raising the efficiency standards 60% to an average of 45 mpg for cars and a 35 mpg for trucks is technologically feasible today without decreasing safety. This 60% increase by the year 2010 would decrease daily oil consumption by over 3 million barrels a day, more than is currently imported from the Gulf region every day.

In conclusion, the current form of the National Energy Strategy does not foster U.S. long term economic or environmental well being or sustainability. The policies shaping the NES appear to be short term; looking more closely at four years than at the overall pattern of U.S. overdependence on finite energy supplies. We must urge Congress to vote against the Wallop/Johnston bill as well as the oil and nuclear interests. We also must urge them to adopt an energy plan based on efficient transportation and conservation, with the CAFE Bill as the first important step. ♦

ALLARM NEWS & NOTES

CLOSING OUT 1990

by Christine Reuss

Summer 1991 is rapidly approaching and as most of you know so is the time for 1990 data analysis. This year the ALLARM staff is busy trying to get ahead of the game. We have somehow managed to stay on top of the traditional spring "thaw" of kit requests and data reports and are plugging well ahead.

From an initial examination of the graphs, many of them seem to be showing the seasonal patterns we would expect to find. The streams show patterns of high alkalinity in the summer and fall due to decreased water flows, and low alkalinity in winter and spring due to sudden inputs of acid, known as acid shocks, from thawing snow and rain.

Currently, we have no streams in the 1990 compilation that appear to be too acidified or too buffered not to register any type of response to acid deposition. We are waiting to make predictions regarding stream response to rainfall events until we

look at the Penn State rainfall data from 1990.

The ALLARM staff is already gearing up to look at each stream individually in order to do each monitor's personal stream analysis. You should be receiving your personal data analysis by mail in the next few months if you have sent us your final data sheets for 1990. Please feel free to let us know if you have any additional information which should be included in your stream file. And be sure to contact us if you do not receive your data analysis during the summer or you have any questions.

For those of you out there who are hanging on to your 1990 data for old time's sake, let us have it! We are ready and willing to process your data and find out just how your stream is doing. Thank you for all of your hard work, and lets hang on to the momentum through 1991. ♦

NOTES FROM THE OFFICE

by Kelly Wark

- ✓ We'd like to welcome two new members to our staff- freshmen Christy White and Carmen Irizzary. They are helping to represent ALLARM at various conferences and assist in general office work. We're very excited to have their help!!
- ✓ Those of you who are monitoring with an organization, school, or scout group be sure to write the organization's name, as well as your own, on the data sheets!
- ✓ Please don't forget to send a site map for every site you are monitoring. And be sure to notify us if you change sites!
- ✓ We ask that if you monitor more than one site, please only put one site per data sheet. But please be sure to use both the front and the back of the sheet to cut down on paper waste.
- ✓ Be sure when you are adding the drops of alkalinity Reagent #2 that you are not tilting the bottle. Tilting results in smaller drops and therefore more drops than really needed.
- ✓ Don't forget to use the data you work so hard to collect. Talk to people about your data and ALLARM. Write elected officials and let them know you care and you're informed!
- ✓ We're soon going to be getting our regional coordinator network up and running. If you'd like to be involved please let us know. We can always use your help!!
- ✓ ALLARM had a great workshop last month! Over 25 monitors showed up, it was a beautiful day, we went out into the field and learned some new skills, and had the perfect opportunity to learn more about each other! If you missed this one don't worry. Our fall workshop will be here before you know it! Thanks to all who came (especially you 200 milers!) and made it such a success!!◆

WE DID IT!

by Jen Litton

ALLARM's fundraising challenge period ended April 1st and what a success it was! Since six months ago, when a generous volunteer proposed to match donations up to \$1,000, we have not only reached our goal, but it has been surpassed! We have raised \$1,500 which makes a matched total of \$2,500. Due to such tremendous support, we are now able to purchase a new computer to replace our old broken one. We will keep you updated on our progress. We are entirely grateful to you, our volunteers, for such tremendous support. The number of donations was most impressive! Every bit counted and is greatly appreciated. Congratulations and thank you!◆

VOLUNTEER SPOTLIGHT: TROUT UNLIMITED

by Christine Reuss

Since ALLARM's founding in 1987 many organizations have taken an active part in our project. We work with schools, civic organizations, and sports groups. By far, one of strongest supporters both in terms of manpower and enthusiasm are the volunteers representing sixteen Pennsylvania chapters of Trout Unlimited.

The dedication of these volunteers to the waterways they frequent is exactly the type of stewardship ALLARM tries to foster among all of our volunteers. Their use of the streams for recreational purposes as well as monitoring enable them to notice even the smallest changes in the character of the stream.

The Trout Unlimited chapters in Pennsylvania are among the many organizations with strong ties to our threatened water ways. By becoming members of ALLARM, the Trout Unlimited organizations take an important step in protecting these precious water ways. Each volunteer can take an active part in monitoring water quality at his or her favorite fishing spot for a few weeks; or one member can be responsible for monitoring for the year. If your Trout Unlimited chapter would like to begin a monitoring program or restart an abandoned project, please contact us at the office. We will be happy to help. Thank you Trout Unlimited for your hard work and dedication!!◆

ALLARM ON THE GO

by Jen Litton

The ALLARM staff has been busy recently, attending conferences, ceremonies and lectures. And our agenda is going to be even busier in the weeks to come! We attended a meeting held by DER concerning the implementation of the Clean Air Act in Harrisburg and a Conservation Network Meeting in March. We also traveled to Shippensburg for the Pennsylvania Wetlands Conference sponsored by DER and King's Gap. These meetings and conferences not only give ALLARM the chance to learn what is happening in the environmental field, but also to inform more people about what we're doing.

April, because of the celebration of Earth Day, will be a very full month for ALLARM. During "Earth Day weekend", we will divide our forces to attend quite a few events: the Pennsylvania Academy of Science Conference to present our research on the

1989 data; the Environmental Studies Workshop for High School Teachers, College Faculty and Students where we will give a presentation; and the Fort Hunter Earth Day Celebration to staff an ALLARM exhibit. ALLARM is also having another workshop on April 27th. We look forward to seeing you there.

And lastly we'd like to congratulate our director, Dr. Candie Wilderman. She was recently presented two awards directly related to her work at ALLARM. The Limestoner Award was given to her by the Cumberland Valley chapter of Trout Unlimited in recognition of her contribution, leadership and teaching in the environmental field. Dr. Wilderman was also awarded the "Pennsylvania Conservation Educator of the Year" by the Pennsylvania Wildlife Federation. We congratulate her and are excited that her hard work, both as a professor and with ALLARM, is being recognized!!!◆

ALLARM REQUEST FORM

ALLARM T-SHIRTS - A fun and comfortable way to spread the word.

ALLARM t-shirts are white with kelly green logo (see below), 100% cotton. Choose from small, medium, large, and extra large. Fill out the form below and return it to the ALLARM office with \$10.00 per shirt.◆

Please send me _____ t-shirts. T-shirt sizes _____ S, _____ M, _____ L, _____ XL

DONATIONS

I would like to make a donation to ALLARM in the amount listed below.

_____ \$50, _____ \$30, _____ \$20, _____ \$10, _____ other (\$ _____)

MONITORING MANUAL

Please send me the ALLARM monitoring manual.

NAME _____

ADDRESS _____

PHONE NUMBER (_____) _____

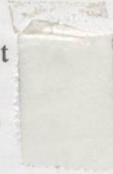


ONWARD AND UPWARD!

by Kelly Wark

This last year has been a time of "solidification" for ALLARM. The organization is firmly established in the PA environmental community, our database has reached significant proportions, and many of the logistical details have been worked out. What all this means is that now is a very exciting time for ALLARM. We're reaching outward- looking for more ways to use our data and influence decisions and policies concerning acid deposition.

One of the most exciting recent occurrences is that ALLARM was named as a recipient of a CAPHE grant!! This is going to provide valuable funds to expand not only our staff, but also the scientific component of our monitoring.



In the process of applying for the grant, ALLARM reaffirmed and coalesced the various goals we had recognized over the years. Thank you for helping us to reach these goals! They are:

- 1) to collect long term baseline data to assess the scope of the effects of acid deposition.
- 2) to provide early warning of problems.
- 3) to provide public education through participation.
- 4) to promote environmental stewardship.
- 5) to provide an opportunity and training for college students in the practical application of learned skills.◆

Stream of Consciousness

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