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International Specialists in the Environment

MEMORANDUM

TO: All Subcommittee Members

FROM: Susan Bloss

DATE: 7/2/92

SUBJECT: June 18, 1992 Draft Stewardship Indicator Subcommittee Meeting Minutes

Enclosed are the draft minutes from the June 18, 1992 Stewardship Subcommittee meeting. Please note the post-meeting addendum and the next meeting date of August 13, 1992, at the Airways Hotel.

Please bring your comments to the next meeting.

MEETING SUMMARY**EOWG Stewardship Indicators Technical Subcommittee**

**Airways Hotel
Buffalo, New York
June 18, 1992**

Participants: Joel O'Connor, Jennifer Rae, Sally Lerner, Robert Boice, George Werezak, Lester Milbrath, Adam Eagle, Sam Sage, Michael Washburn

Status of Indicators in Progress:

Joel O'Connor - Indicator of Ecosystem Effects from Manufacturing

Jennifer Rae - Perception of Health Risk and Social Attitudes

Sally Lerner - Environmental Volunteerism Indicator

The indicator will measure the number of volunteer days/years as a measure of stewardship. The limitation to the indicator is if volunteerism declines, it will be necessary to determine if volunteers are merely suffering burnout or if situations have truly improved.

Robert Boice - Public Access/Land Use Indicator & Population Density Indicator

The public access indicator will measure the availability of areas for recreation and the quantity of land classified as public access/greenspace.

The population density indicator will measure the density of urban areas. The density of people is related to the amount of toxins, sewage, etc. generated in a given area. Stewardship will be measured as a increase or decrease of carrying capacity for the area around the lake. Information necessary to generate this indicator is readily available and is easily understood by the public.

George Werezak - Corporate Volunteerism Indicator

The corporate volunteerism indicator will measure several aspects of an industry's behavior. Internal indicators, policy statements, capital dollars spent per year in environmental areas, and a decrease in emissions per year. The indicator will apply to not only the chemical industry but to manufacturers such as steel, auto, etc.

Lester Milbrath - Public Opinion Indicator

The current data on public opinion is approximately six to seven years old and is no longer appropriate. For \$100,000, a new mail survey can be performed to assess the opinions of business leaders, public officials, environmental leaders, and the general public. With mail

surveys there is always the risk of inference. Talking with people directly can help reduce the possibility of inference.

Adam Eagle - Water Flux Indicator

This indicator is being developed in cooperation with Joel O'Connor. Since water quantity usage data is minimal for Lake Ontario, the indicator will measure fluxes in water level and flow over a given time period. Comparison of fluxes over time, including proposals for future diversions, will indicate stewardship. A decrease in fluctuations over time will indicate good stewardship. Contributions from rainfall must be accounted for in order for the indicator to be useful.

Michael Washburn - Three Sector Interaction Indicator

This measurement of the degree of access to government by industry, public interest groups, and agencies will not directly show stewardship, but rather the potential for stewardship. If more opportunities for access exist, there is a greater chance for stewardship. A survey might be a means of measuring access.

Stewardship Subcommittee/Great Lakes United (GLU) Workshop on Indicators:

Since the indicators are intended to be useful to the public, this workshop will be important for educating the public, and for determining:

- o Which of the indicators does the public perceive as the most important?
- o What purpose should the indicators serve?
- o Which component of the public should the indicators be geared toward?
- o In the public's opinion, what level of detail is necessary?

GLU has gathered some materials on two purposes for the indicators, guiding the public and guiding agencies.

Members of the subcommittee will need to develop clear, concise presentations on their individual indicators to present at the workshop.

The workshop will consist of approximately 25 active individuals from various sectors of the environmental area. November has been proposed as possible workshop date since the subcommittee needs to present its indicators at the December meeting of EOWG.

Several problems could result from this proposed schedule. The public may view a workshop in November as too close to the December EOWG meeting for them to have any real input into the report. They may perceive that all the real decisions have already been made. The schedule may also not leave sufficient time for the subcommittee to make alterations to its recommendations before the December meeting. Another problem may be that the public does not understand the relationship of the subcommittee's work to other Lake Ontario work

since it has been such a long time since any other Lake Ontario group has met. Another way to speed up the recommendation preparation process would be to have subcommittee members send draft recommendations to their peers for feedback prior to the workshop. The subcommittee could also hire an indicator expert like Dan Tunstel to review the indicators prior to submission to EOWG.

It may be more efficient to ask the other subcommittees to participate in the workshop and present their proposed indicators as well so the public can see that all the issues have been covered.

A suggested workshop format is to have a two-day workshop where on the first day the subcommittees could coordinate their proposed indicators to ensure that all issues have been covered. The invited public would be invited to be observers at this session. The second day would be a working session on the stewardship indicators with the invited public. The other subcommittee members would be invited to stay as observers for this session. The media should also be invited to the workshop since they are potential users of the indicators.

Recommendations:

Descriptions of the proposed indicators should be sent to peer groups and the EOWG subcommittees for their input.

In late August or early September, the invitations for the workshop should go out to announce the workshop in late September.

Louise Knox will serve as workshop coordinator with assistance from GLU and Sam Sage. GLU will provide workshop facilitators.

Joel O'Connor, Louise Knox, Phil Weller, and Sam Sage will serve as the steering committee, and the committee will select the meeting date. September 25-26, 1992 is a tentative workshop date. Buffalo or Toronto will be the site for the workshop.

Phil Weller will develop a generalized budget to present to Louise Knox.

Joel O'Connor will contact the other subcommittees to organize their involvement and suggest that they develop a proposed indicator package.

Draft, proposed stewardship indicator materials will be circulated to the subcommittee prior to peer review distribution.

Proposed Peer Review/Public Questions:

1. Have we covered those things you consider most important?
2. Are there any indicators not listed that your group would find especially useful?
3. Do you disagree with any of the indicators that we've listed? Why or why not?
4. How would you use these indicators?

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5. Do you agree or disagree with our proposal for their use?
6. Which indicators do you consider most useful?
7. Do you agree with our definition of stewardship?
8. Are there inputs concerning the other areas of indicators that you could provide to us?

Review of Indicators, Suggested Improvements:

Joel O'Connor - Indicator of Ecosystem Effects from Manufacturing

The indicator identifies 12 sub-basins around the lake and considers the value added by Standard Industrial Category (SIC) industry code for raw materials purchased. This figure is weighted by the toxics used in the manufacturing process. The index is expressed in 1986 dollars of value added by contaminating industries in the basin. The index is useful because information on toxicant leakages from manufacturing are very imprecise relative to economic statistics for the industries.

Limitations to the indicator are that pollution by an industry might not take place in the same sub-basin where manufacturing occurs, and some toxics may be bound up in a manufactured product, e.g. benzene in polystyrene, and would not be part of the pollution potential. Improved stewardship could be indicated by a decrease in toxics use over time, however, a recession could result in a false indication of stewardship. The goal would be to maintain or increase value added and at the same time reduce the levels of toxics used in manufacturing.

Other limitations are that the indicator as proposed:

- o Does not include non-manufacturing industries, nor all toxics used in manufacturing
- o Does not address non-toxic impacts, such as habitat destruction
- o Only addresses toxics in a broad manner
- o Does not address airborne loadings from outside the basin.

SIC information for this indicator is available back to 1970. Before that date, the SIC classifications are different. Older information is available back to the 1920s.

The toxics included in the indicator come from "Human Activity and the Environment", a Canadian list.

Forthcoming MISA data and Toxics Release Inventory data might be helpful in making this indicator more complete.

Lester Milbrath - Public Opinion Indicator

A survey to gauge public opinion should involve interviewing leaders, the public, agencies, etc. to get their sense of stewardship for Lake Ontario. Questions should cover topics such as:

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- o Their use of the lake
- o Actions of stewardship that they are involved in
- o The types of laws they desire to see in place regarding Lake Ontario
- o Their knowledge of about interactions and fates of behavior, e.g. do they know where their water comes from and where their sewage goes?

An increase in awareness and concern over time would be an indicator of stewardship. The survey could also include questions regarding other stewardship indicators such as volunteerism.

Jennifer Rae - Perception of Health Risk and Social Attitudes

Public opinion polls on environmental issues show that from 1988 to 1991 concern over environmental pollution increased. Concern over human health issues also increased. Surveys have also showed that Canadians are now much more concerned over air pollution issues.

Questions can be added to the survey for approximately \$5,000 apiece. Hopefully there will be other parties who are interested in adding questions, and or the results, and will help pay for the survey.

The survey should be directed toward all groups, the public, interest groups, industry, and public officials. The survey will allow us to show trends over time.

Mike Washburn - Three Sector Interaction Indicator

The indicator gauges the quality and ability of those surveyed to interact with other sectors. For example, if the public requests a document from an agency and they get the run around or the material does not come in a timely fashion, the interaction would be of poor quality.

Interaction is the same as access for the purposes of this indicator. Questions regarding interaction could be included in the survey.

The limitations to this indicator are:

1. There is no measure of interaction within a sector.
2. It will take several years of data before trend assessment can take place.
3. If the trend shows an increase in frequency and quality of interaction overall, it may mask a decrease in interaction between two individual sectors.

The cost of the survey will depend on the firm hired to conduct it.

Survey participants will be selected from directories, etc., but the rationale for selecting individual groups, industries, and agencies has not yet been determined.

Sally Lerner - Environmental Volunteerism Indicator

Canadian environmental groups are working on putting together information for this indicator. They will be providing information on:

1. The group's activities.
2. The extent of their interaction with government agencies.
3. An estimate of the group's longevity.
4. An estimate of the person hours per year for various activities.

Adam Eagle - Water Flux Indicator

There is very little information available on outflow or fluxes of the lake levels. There is however, IJC data on diversions and consumptive uses.

If the fluctuations decrease over time, that will be an indicator of increased stability in the lake system.

More information is needed on how specific diversions affect water levels.

Information on precipitation is available to factor into the indicator, but no information is available on degree days.

Evaporation rates will also affect the indicator.

Adam also agreed to investigate information for developing an environmental education indicator.

Next Meeting:

The next meeting of the Stewardship Indicators Subcommittee will be August 13, 1992, at the Airways Hotel in Buffalo.

Post-Meeting Addendum

The Chair requests draft versions of all indicators which can be provided by July 10, for distribution to our Subcommittee members and to other EOWG Subcommittees. Please mail copies to Joel O'Connor and Susan Bloss, for receipt by July 10. Indicator authors satisfied with the drafts they provided at the last meeting need not respond.