

THE CASE STUDY OF THE HISTORY AND DEVELOPMENT
OF THE ECOLOGY ACTION EDUCATIONAL INSTITUTE

Prepared By

The Staff

of

The Ecology Action Educational Institute

for

The Environmental Protection Agency

February, 1972

THE CASE STUDY OF THE HISTORY AND DEVELOPMENT
OF THE ECOLOGY ACTION EDUCATIONAL INSTITUTE

TABLE OF CONTENTS

	Page
I. History	1
II. Relationships with Different Groups	10
A. THE PUBLIC	12
B. THE OTHER COMMUNITY GROUPS	13
C. LOCAL GOVERNMENT AND AGENCIES	15
D. PRIVATE BUSINESS	21
E. SCHOOLS AND COLLEGES	24
F. LIBRARIES	28
G. OTHER ENVIRONMENTAL GROUPS	30
III. Problem Areas	
A. INTERNAL	39
Financial	39
Staff	40
Level of information available	41
B. EXTERNAL	
Relationship with surrounding community	42
Identity of the Institute within the Environmental Movement	42
Relationship of the Institute's purpose and goals to the programs of the Environmental Protection Agency	43
IV. Evaluation of the Institute's Total Effect	47
Future plans	49

THE CASE STUDY OF THE HISTORY AND DEVELOPMENT
OF THE ECOLOGY ACTION EDUCATIONAL INSTITUTE

CHAPTER I

It is always difficult to know where to start when writing a history, but because the Institute is largely the work of its present director, Clifford Humphrey, the early events that lead to his decision to establish Ecology Action may be of interest.

In 1966 in San Diego, California, his step-son, William Taylor, convinced Cliff that he should hear an address on the Vietnam war by Senator Wayne Morse of Oregon. After listening to this address and reading further on the conflict in Vietnam, Cliff became active in the peace movement in San Diego. At that time he was employed by the State of California Division of Highways and currently engaged in an origin and destination transportation study. He was privately concerned that the study was totally focused on servicing existing needs and their projections without any attempt being made to manage or direct those needs. Subsequently, the decision was made to return to college. When he left San Diego for Berkeley, in the summer of 1966, he was thinking of looking into archeology at one of the campuses in the Bay Area. He could not enter U.C., Berkeley. directly because his grade point average was too low for transfer students, so he enrolled in

Merritt Junior College to bring his grade point average up. Several courses of different types were taken with the idea that through this experience an academic major and career could be more closely determined. Courses in Political Science, Anthropology, Economics, Philosophy and Spanish were taken. A synthesis of materials and ideas from three of those classes have continued to influence the writings and activities of the Institute until this day. The major concept acquired in the Economics class that that the real cost of anything is the alternatives foregone. At the same time Cliff was writing a special paper for a Political Science class on the inequitable distribution of resource location and use by the world's population centers. In the Anthropology class several different peoples and their cultures were being studied, but one was much more significant than all of the rest. The class was given an assignment to write a paper on the Ecology of the Cheyenne Indian Chief. This was Cliff Humphrey's first experience with the word "ecology". The instructor was pushing his students to try to understand a new type of relationship between a people and their natural and social environment. The key seemed to be the recognition by the people of certain absolute conditions within which they had to control their affairs.

When the high points of these three classes were synthesized in the context of searching for more understanding of the Vietnam conflict, Cliff began to realize that the peace movement was not addressing itself to the reasons responsible for that conflict. The

concept of peace began to denote much more than the absence of war or bloodshed. This feeling led directly to the first document written for Ecology Action. The initial essay, "A Unifying Theme" was written shortly before Cliff's meeting Chuck Herrick at an organizing meeting of the Peace and Freedom Party. Chuck Herrick was a Vietnam veteran and also was trained in the fields of Zoology and Architecture. He had recently left a special program in Regional Planning at the University of California at Berkeley.

Cliff Humphrey and Chuck Herrick decided to form an ecology caucus within the Peace and Freedom Party with the purpose of bringing the ecological overview, a unifying theme, forward as the central point of the Peace and Freedom Party. They decided that if this theme did not become visible within the Party's affairs that they would then leave the Peace and Freedom Party and start a group to be called "Ecology Action". While the pamphlet "What is Peace?, What is Freedom?", prepared with the help of Cliff's wife, Mary, and Chuck's friend, Betty Schwimmer, was respected and well thought of by individual people at the founding convention in Richmond, the ecological perspective never became a visible rallying point for the Party.

Ecology was then, and perhaps is now, understood too much as an environmental issue, rather than as a point of departure around which to organize the total affairs of mankind. In early 1968, Chuck and Cliff established Ecology Action outside of the Peace and

Freedom Party, but it was decided that Chuck should go to a national organization meeting of the Party in Ann Arbor, Michigan, to present the ecological perspective as a national organizing theme. Chuck Herrick was killed in an automobile accident on the way to that meeting. As a memorial to Chuck, Cliff Humphrey and friends completed Chuck's plans for a user-developed park on the corner of Dwight and Telegraph in Berkeley in the summer of 1968. A corner of a vacant lot was transformed by a small nucleus of activists and people who happened to walk by. The transformation included bulletin boards, sculpture, flowers, small shrubs and a few trees. Soup was served there several times and many people began to talk with Cliff and other members of the initial Ecology Action group. This led to the Politics of Ecology class given through the Free University. To spread the ideas further, Cliff and his wife, Mary, and Charlie Devlin, one of the workers on the Peoples' Park at the corner of Dwight and Telegraph, designed and constructed an exhibit to go on tour at various libraries and student union buildings in the Bay Area. Many contacts were made through a sign-up sheet that was left wherever the exhibits were set up. A loose working group of about 40 people was maintained throughout the remainder of 1968 and 1969. During that time many actions, events or happenings were held which established national attention. Literature at that time focused on individual action and such projects as neighborhood cooperation, recycling, etc.

National publicity led to hundreds of letters a week from all over the country--from individuals, clubs and organizations of all types--all wanting ideas on what they could do and wanting to understand the ecological perspective. This volume of mail and correspondence led us to the decision to incorporate from Ecology Action into the Ecology Action Educational Institute. The corporation was formed "to develop the methods for the creation of a balanced relationship between the needs and desires of man and the limitations of the life support system". Our experience with individual action, its success as well as its limitations, was forcing us to deal with more far reaching institutional changes and political application in addition to doing whatever we can do today, at this moment. In September, 1969, Ecology Action held its first press conference--at the Berkeley City Dump. This press conference was in direct response to the meeting of the industrialists of the Pacific Basin at the Fairmont Hotel in San Francisco. Surrounded by supporters, and dead fish from the Aquatic Park fish kill, Cliff Humphrey read an open letter to David Rockefeller and the up-dated version of the founding document of the United States, The Declaration of Interdependence.

During the fall of 1969, the stage was set for the reputation and following that the Institute has today. The series of public happenings reached a peak when the Humphreys removed their private automobile from the road through public and cooperative destruction. A demonstration was planned--not anti-pollution, but smog-free locomotion. Smog-Free Locomotion Day was a national publicity success.

At this time Cliff Humphrey began working with Bob Evans in the chore of rewriting Cliff's senior thesis from San Francisco State College into the now-popular text, "What's Ecology?". These activities led to a mail peak of over 150 letters a day late in 1969 and early 1970. Cliff further synthesized his ideas and overview by teaching a class called "The Ecological Dynamics of Social Change" at the University of California Extension in San Francisco. Out of that class evolved the lifehouse concept. By this time over 200 Ecology Action groups had formed across the country. At the same time the Humphreys were also instrumental in assisting Ray Balter in the establishment of the first Ecology Center.

In late 1969 it became increasingly obvious that many of the ideas and activities of Ecology Action were spreading only to those communities and groups which were in some way focused on what was happening in the Berkeley and larger Bay Areas. The Humphreys began to wonder if what they were doing and advocating was in any way Berkeley specific, that is, only possible in Berkeley, and only popular elsewhere because it was being done in Berkeley. At the same time it was becoming clear that the urban problems had a very interdependent nature with the problems within our agricultural areas. That is, the crowding in urban areas that leads to so many of our problems has only become possible as we have developed mono-agricultural techniques in our rural areas. From a holistic point of view, most of our urban problems were dependent on the existence of problems in our farm areas. Thus the decision was made in 1969

to undertake a survival walk through the agricultural lands of central California from Sacramento south to Los Angeles.

Beginning in March of 1970, we, being about 50 people, covered 600 miles on foot in a little over six weeks. We had vehicles with us which we had converted to propane and which were used to haul many exhibits, educational materials, films, puppet shows, etc. Evenings were spent either in a camp that we made ourselves or in the homes of supporters in towns along our route. We held about 12 one-day-long "Eco Festivals" in the major cities and towns throughout the length of the San Joaquin Valley. Many people we met on that walk are now the coordinators and founders of successful Ecology Action groups throughout the Central Valley of California. We also met many people from various agencies who have continued to keep in touch with us and tried to apply our materials within their own profession in any way they can. Lester Corn was the coordinator of the Survival Walk in Modesto, California. He joined the walk when we reached Fresno and has continued to be active with Ecology Action. Through our meeting him and our liking Modesto, we decided to move the Institute here in June, 1970. The Humphreys spent the rest of that summer living in a tent at the rear of Lester Corn's house.

Gradually support was accumulated and an office was opened. Cliff Humphrey stated both over television and directly to the City Manager, John Keefe, the Ecology Action Educational Institute was locating in Modesto to create in the Valley an example of environmental sanity.

In addition to opening an office and having information and materials available, early activities in Modesto included a smog-free locomotion parade, an Ecology Fair, and assistance in many projects such as roadside cleanups and float trips on Dry Creek, and the Stanislaus River which pinpointed pollution sources. We were able to start a rather unique recycling operation here in Modesto through the cooperation of Gallo Wineries. Gallo bottles all of its wines in Modesto and manufactures locally almost one million bottles per day. They agreed to buy clean cullet, free of labels and rings, exclusively from the Ecology Action Educational Institute, (the advantages to us: having a local market, and being able to mix the clear, the green, and the brown glass all together.) We decided to establish several pick-up points throughout the town, most of them in shopping centers that would be open 24 hours a day, and then we would service these centers as often as necessary. This program has been very successful.

Throughout this period Cliff and Mary Humphrey were speaking to various organizations, classes and clubs. Other people in Modesto were beginning to take part in a speaker program. In January 1970, in the Modesto Bee, Cliff received recognition as one of the outstanding citizens of Modesto. By July 1970, recycling volume increased, as did requests for speakers and resource persons. These activities spread from the Modesto proper area to small communities as much as 50 to 70 miles away. A Farmers' Market was started by Pat Nuzzo and a buying cooperative is being formed.

The Environmental Techniques Training Conference held in November 1971 was made possible by an Office of Education grant. Over 40 people attended, representing environmental groups from as far north as Redding and as far south as Bakersfield. That group decided to form the Central California Environmental Confederation which is now focused on trying to solve the problems of the mismanagement of agricultural lands and the poverty throughout the Central Valley region.

From the inception of Ecology Action, the term "ecology" has always implied a concern for the total household, rather than just the physical environment. During the Central Valley Environmental techniques training conference, a County Source Book was produced for Stanislaus County. This is roughly an 80-page document featuring the problems, issues, agency responsibilities and basic laws for Stanislaus County. This working draft is being perfected now for this county. It is also serving as a model for local source books being developed by several other environmental groups throughout the state.

In January 1972, our recycling activities took a new and exciting turn. Charles Link came up with the idea of offering groups in town, such as Active Conservation Tactics of Modesto High School, \$500 for supplying all the labor for the recycling activities. The project was aptly dubbed "The Link Concept". Recycling percentages are continuing to increase, more people now

are involved with the program and more resources from the recovered materials are going back into diverse community groups.

CHAPTER II

Relationships with Different Groups

Introduction:

Relationships with all other groups have always been a function of what was possible with existing resources, rather than the result of explicit advanced plans. We have always selected projects that we could do at the moment with the human, monetary, and physical resources available to us at that time. Such activity had to be carried out without any preconceived notion of what kinds of relationships with what groups those activities might result in. In other words, if we are responding to a trauma or problem that is felt by a large segment of the community or the society, those activities will be perceived as having meaning, direction, and relevancy. We have then continued to assume that many people throughout our society are bothered by the contradictions within our cultural system. By taking an ecological perspective, these contradictions come into clear focus, and the basic causes can be understood. It is our intent with all of our activities to start the people on an initial path of inquiry and re-evaluation of basic values and orientation.

A. THE PUBLIC

I. How visibility was established

I suppose many more people have read of the activities of the Ecology Action groups around the country than have actually seen any of those activities. Publicity has, without a doubt, been a key to the spread of this concept. These activities have often been described as "doing new things for new reasons". It seems that once an idea, a concept, becomes established the national media makes it much easier for local groups to spring up and their purpose will be perceived immediately by their constituencies. Addresses are always given as to where to write for more information, where to telephone, or where one can drop by. As we spawned Ecology Action groups across the country, articles about us in various newsletters and bulletins and magazine articles gave addresses and contacts where people who have heard either in the media or through a friend about the Ecology Action movement could get in touch with other people or write for information.

II. Maintaining this visibility

A transition has been made from activities and programs that warrant national publicity to participation projects such as various ecology center programs that would include gardening, recycling, consumer coops, etc. Perhaps tens of thousands of high school students and others who are involved in ecology action programs are talking about their involvement at home and with

their friends. Rather than the news stories about dramatic firsts, the Ecology Action movement is now reported in newsletters from hundreds of different types of conservation and environmental groups. Many other organizations such as the Kiwanis, Toastmasters, Association of University Women, League of Women Voters, etc., all list ideas on how to carry out ecology action. While this is certainly a sign of our success, in one small way it is also bringing about our demise. The Institute and many other original ecology action type groups have not been able to make the transition from the existing flow of early donations to a sustained financial base. While we are providing needed services and people are making good use of these services, an institutionalized channel of "payment" has not yet been established.

III. Effectiveness and Deficiencies.

There can be no doubt that environmental issues have certainly been raised and many people are involved with programs and information, but ecology as a guide for an ethical system of human behavior has not yet been established. It has become increasingly difficult to talk of proposals for action in a holistic context. For instance, with recycling, it is proposed and advocated as a place to begin, not an end in itself. But many both near and far, become enthusiastic and get started. Some do not see their activities in the same perspective that the suggestion was originally offered.

At this time Ecology is still thought of too much in a physical environmental sense, rather than a holistic consideration of man's total social, man-made, and natural setting. The word ecology itself has been used in so many different ways, the public isn't quite sure of exactly what it means. This can be both an advantage and a disadvantage. In all too many cases it is just a new label given to practices and studies in various teachings and investigations that were already going on. This is true of the advertising industry, as well as the educational community, and it is certainly true of politicians.

B. THE OTHER COMMUNITY GROUPS

I How relationships were established

In most cases relationships with other groups, both when we were in the Bay Area and here in Modesto, came about through a member of the other group with an interest in ecology informally contacting us. We would then go to a meeting explaining what we were interested in, the activities, and the materials we had to offer. The relationship then grew out of actions taken or not taken by the other group. In most cases, other groups assimilate our materials and then initiate ecology action type projects within their existing memberships. In some cases, usually with younger memberships, the group decides to go en masse over to the Ecology Center and help for one day, either on a one time only basis, or regularly, such as once a week, or once a month. In most of those cases some individual members will continue to come

around at odd times, sometimes quite often, independent from the relationship of the group. These people are continually carrying ideas and materials back to the other group, influencing the group affairs and activities.

In some cases a community group will delegate a representative to pay more formal calls on us for advice, counsel and sample materials that they then present in an official report to their group. In other cases, a program chairman will contact us for a speaker without really any idea of the applicability of our programs and direction to the members of that group--his only worry being one of providing an interesting program. This type of relationship, particularly with luncheon service clubs, has led to very little influence in the club's affairs, but there is always the possibility that several individual people attending will take a strong interest in the activities of the Institute. Such contacts have resulted in many forms of assistance from local businesses and other organizations.

II. How are these relationships maintained?

Usually the only formal activity is the exchange of newsletters and other materials. In some cases a liaison person will be designated. It appears that many other groups keep track of our activities and direction through our frequent mention in the local newspapers.

III. Effectiveness and Deficiencies

These practices and methods have not yet resulted in projects that are jointly sponsored by many community groups. While the members of many groups are taking part in such programs as recycling or frequenting the Farmers' Market, community groups have not yet joined together around a common information base, and are not yet making an overt attempt to coordinate their affairs, projects, concerns, resources, etc.

C. LOCAL GOVERNMENT AND AGENCIES

I. How relationship was established

Since our initial emphasis was on individual action that could be taken immediately, it was not until Ecology Action had been in existence for about a year that we began to work directly with official governmental agencies. A slight exception would be that of working with schools and libraries to obtain space in which to put up our early exhibit, "The Environment of Man". In other words, early contact with local government was something that we just didn't put time and energy into, rather than something we avoided. In fact, without the cooperation of Mr. Mosher of Parks and Recreation in Berkeley, and Mr. Hanley, the City Manager, we would not have been successful in the construction of the small plaza at the corner of Dwight and Telegraph. Whenever a problem did arise and we had to consult or work with city officials, it has been our experience that they will assist to the limit of their

resources and jurisdiction. In many cases staff people have been willing to work with us beyond our expectations. In many cases they have offered recommendations to City Councils and Boards of Supervisors for consideration only to see those recommendations misunderstood or denied in public meetings. They are willing to assist citizen groups trying to change the political realities so some of these essential programs can come into being. As office holders tend to get "older" and staffs tend to get "younger", more of this, I am sure, will take place.

I think the following example will illustrate very well the potential for unimagined cooperation once someone cares enough and takes the time to take the initial step.

In 1969, the city of Berkeley had undertaken a prophylactic spray program for aphids on Linden trees. On one of these application runs they were moving down the street spraying the Linden trees opposite a small garden started by Bob and Jenny Hilsman. Jenny was alarmed at the sight and smell of the spray rig, as she had recently released some beneficial insects in her small garden. She approached the operator and wanted to know what agent he was spraying and what he was spraying it on. The operator was unable to answer her queries, and a call was put in to his supervisor, Mr. Mosher. This call resulted in a meeting between Jenny Hilsman, Cliff Humphrey, Mr. Mosher of the City of Berkeley, and Dr. Donald Dahlsten of the University of California at Berkeley, Experimental

Station. This marked the first time that anyone from the entomology experimental station discussed spray techniques with anyone from the City of Berkeley. Several discussions were held on this matter--the result, a city-funded research program to locate, import, and establish a predator population for the Linden aphids. Even though this sequence is widely remarked upon as an example of citizen, scientist, and government cooperation, it has not yet resulted in any organized attempt to preempt the necessity for the citizens initiating the action, nor to give rise to more such citizen actions being taken.

This experience was qualitatively much different from another one that might be interesting to examine: the Aquatic Park fish kill, in Berkeley. Fish kills had happened several times before during summer months. The kill this year attracted much more attention because ecology was on its way out into an open and searching public discussion. The lake at Aquatic Park is rather long, narrow, and shallow. There is some circulation of salt water from San Francisco Bay through tidal gates. The shallowness of the water leads to the growth of duck weed. Proximity to an industrial area results in some firms dumping directly into Aquatic Park. Although sewer lines bypass the park, leaks are suspected and storm drains still empty directly into the lake. Several people tried to obtain information about the history of the fish kills in Aquatic Park, and the exact

nature of any possible pollutants being dumped into this small lake. Help was needed from the city: information on the location of the tidal gates, diameter of the pipes, etc. We did recover samples of some black material that apparently entered the lake through the storm drain system. After several months of rather intense effort, we were not able to accomplish anything. The biggest reason seemed to be that too many people had jurisdiction over the lake itself, its immediate environs, and perhaps even access to its waters. Along the eastern boundary were railroad tracks and behind the tracks a highly developed industrial area, with major traffic arterials to the north, south and west. In addition, the expressway on the west was scheduled for widening and the tidelands, therefore, for additional filling. Waters entering and leaving Aquatic Park had to pass under this freeway through pipes easily silted. The lake was used by water skiers, a small marina and several fishing clubs. It can be easily appreciated that this is a much different management situation from the first case with the Linden aphids. To be equally effective with Aquatic Park as we had been with the aphid program, a strong coalition of city, conservation, recreation, and perhaps industrial forces would have had to be assembled. The main difficulty was that a consensus on the optimum, or best possible use, of Aquatic Park did not exist between these diverse groups.

On another issue Ecology Action was contacted by public officials in Berkeley. People charged with Environmental Health, or Comprehensive Health Planning, have often gone to local environmental or Ecology Action type groups for assistance in planning and implementing citizen participation programs. In Berkeley, this original contact by city Public Health officials has resulted in a joint publishing and writing venture between Public Health and Berkeley Ecology Action of a leaflet on composting. Today, many environmental health agencies write to the Ecology Action Educational Institute in Modesto for our general information and advice on various matters.

II. How relationships are maintained

At this time, any maintenance of relationships with other groups is mostly through second hand sources, such as newspaper stories, speakers at various service clubs where staff or elected officials may be present, sons, daughters, or relatives or friends taking part in Ecology Action programs. Such a relationship may not appear effective, but carries some very definite advantages. Elected and staff officials are given every opportunity to implement new programs and receive full credit for them, which in some cases may result in more progress than would come from a confrontation at a City Council meeting or hearing. However, on difficult issues where there is an obvious conflict of interest between two well defined groups, public pressure is essential.

In some cases the city or town may be so large that this type of contact takes place only to a very limited extent.

III. Effectiveness and Deficiencies

Local government largeley feels that it exists to serve its resident population and the present economic realities upon which those populations are dependent. Local government does not yet feel that it has a responsibility to long-range goals or to becoming a leader in the field of short-range action. Perhaps, if more personal friendships were cultivated, and if there were more participation in City Council meetings, hearings, etc., local officials would come to understand better the direction and motivation of people in the environmental movement.

The major deficiency in this area is that staff people and elected officials on the one hand, and citizens groups on the other, are using two quite different sources of information. City officials are well steeped in what is possible or practical, but citizens' groups are quite familiar with what is needed and what is required. Local officials tend to read more literature geared to the professional planner, manager, etc., that is largely funded through the advertisements of products for those professionals, while a member of the active citizens' groups reads and concerns himself with environmental literature and issues that have no such relationship with any advertiser.

D. PRIVATE BUSINESS

I. How relationships were initiated.

In all cases in this area, private businesses have contacted us either to assist us in our very visible public projects or to try to persuade us to a more reasonable position in regards to a leaflet or a program that may in fact be hurting them. However, it should be realized by all parties concerned (the government, business, and the citizens' groups) that the environmental rethink is bigger than any one of these parties. The times are definitely changing and it cannot be said by business or the citizens' groups that the other is responsible for existing political issues and some economic problems. Through modifications in advertising campaigns and, to some extent, choice of materials, private business has indeed responded to the environmental movement. But this has not been through any direct association with groups like Ecology Action Educational Institute. So we see that this relationship is primarily established through the appropriateness of the information and issues that the environmental movement has brought to the forefront in the past four years.

We have experienced here in Modesto, as we did in Berkeley and, I'm sure, as environmental groups across the country have also experienced, that many individuals in various types of employment have approached us wanting to know how their firm or organization can help with a specific activity or resource that

they could donate to help with an existing program. In Modesto such relationships include the local U-Haul Trailer franchiser letting us use shop bound trailers, or a call from an employee within county probation department informing us of large quantities of shredded paper that results from the disposal of confidential records that he thought we might have some use for. There seems to be no way to actively solicit such relationships. These occurrences are totally dependent upon someone learning of our existence, our programs, and then creatively responding with the resources and information within his control. To a large extent these relationships are a function of adequate publicity and broad community visibility rather than our trying to identify the people most likely to help.

While it is true that many companies have tried to utilize ecological sympathies for very selfish gains, some real progress has been made. In Los Angeles a small chain of markets tries to keep their items, packages, and in-store processes in harmony with ecological perspective. This came to pass as a result of the store owner's daughter bringing home the message of ecology from some classes and programs at the University of California Davis campus. Many banks and foundations and other institutions pride themselves on their increasing use of recycled paper for inter-bank reports, checks, and so on. In some areas it looks as if the returnable bottle is at least holding its own, if not, in fact, staging some kind of comeback. As the information level of the

general public increases, they will become more able to determine which companies' positions do have blatant internal contradictions. Thus, any misuse of ecological sympathies will be very self-defeating.

II. How relationships were maintained.

At this time, many people in management positions and within private business are members or have members of various environmental groups within their own household or family. We have heard of many instances of intense pressure from wives, sons and daughters and colleagues to change position or procedures on an environmental issue. We feel that general citizen pressure for a change in business procedure is now much more widespread but less glamorous than a year or so ago. Many business conventions and association meetings are dealing more and more with environmental issues. Program chairmen who search diligently for data and speakers to support more of a company view on the situation are, in fact, decreasing credibility within the company as employees come in contact with more informed people and read more and more about the environmental issues away from the job.

III Effectiveness and deficiencies

To the extent that private business practices have come into alignment with the ecological perspective, this type of relationship has been effective, but it is certainly not sufficient. Too many people in private business still feel that

their basic security is a function of the success of the business or firm that employs them. The environmental movement has not been able to show how that type of dependent relationship can be replaced with alternatives more compatible with the ecological perspective. In terms of alternative economic institutions and businesses, entrepreneur and management people have yet to grasp the new opportunities opened up by expanding environmental consciousness. Any transition into new ways of doing business, while they may be repressive for the economy as a whole, will be a growth industry for someone. Profit alone as a prime motive may be repugnant to most people in the environmental movement, but there is no doubt that the profit motive in many cases plays a significant role in the transformation towards better practices.

E. SCHOOLS AND COLLEGES

I. How relationship was initiated

During the first six months or so of Ecology Action activity we were involved with many students and some teachers but these activities all took place after school hours. We began a much more direct relationship with schools, that is continuing to evolve, when Bob Evans, then a teacher at Moraga High School came by our office and inquired about some environmental materials for a course he was considering teaching (September 1969). He looked over Cliff Humphrey's senior thesis and made the decision that this should be rewritten to become the core material for an

environmental high school course. This rewriting was accomplished and the materials used as a text at Compolino High School. The success of this unit led to the refinement of the materials which was later published as, "What's Ecology?" by Hubbard Scientific Press. The students did many things both on campus and off campus within the community which resulted in their being the first students to receive the Bay Area award for contributing to environmental concern. The students also constructed a motorcycle powered by electricity and entered the clean air race.

About this same time many people from Ecology Action were speaking in school rooms throughout the entire Bay Area. Sometimes the class projects followed and sometimes they did not, but in any case, individual students began to do more on their own and to take more of an interest in environmental affairs. Teachers began coming by to talk to us and to get materials from us to introduce into their classes, or to put up on their bulletin boards. Mr. Humphrey and other speakers appeared at numerous college survey courses and topic seminars, sometimes returning for several semesters or quarters in a row. We now have several pieces of literature that we sell directly to teachers, or in many cases, in bulk to the school or to the school district.

II. How this relationship is being maintained

In many cases these types of relationships have now evolved to where the administrators of many schools, including department heads, etc., are now regularly purchasing materials from us. This would include our subject leaflets and bibliographies, the high school text, "What's Ecology?", and other books we handle. In many cases, contacts are continued through our participation in teacher educational conferences, either as a member of the program, or by being there with some of the Institute's literature, and by keeping in touch with some of the prime movers on high school campuses and college campuses throughout California.

In many cases teachers, science consultants, curriculum development people pass on to us materials that they are working on, developing, and things that they know of. In this way we are being equipped to pass pertinent materials on to anyone who makes inquiries. Now that we have been active with schools for some years, we find instances where a student may leave a school where he has become quite active with Ecology Action to go to another school and there introduce his classmates and instructors to the materials and services that we can offer.

III. Effectiveness and deficiencies

Our relationship with schools and colleges has not been a budget item. Therefore, we have not been able to assign anyone

to this task, but we feel we have been extremely effective within that limitation. This is primarily because our approach has left maximum latitude for people who needed information to be extremely creative and innovative. They then have rather complete local control of the relationship between the Institute and the school. That is to say, the relationship is more controlled by the person at the school or the receiving end, than it is by us, the Institute, at the sending end. It would have been impossible for us to pay someone to locate the person most likely at a particular school to institute the programs and the materials, etc.; but by being extremely visible within the educational community, and expecting people to get in touch with us, those who are concerned, active, and able to put these materials to good use have come forward, obtaining these things from us, taking them back to their schools, and applying them in the best way, given the limitations of their specific set of circumstances. The major deficiency of this kind of approach is that we are not competing on equal footing with, say, other and more commercial sources of environmental materials and services. We are very sure that many people who would like to know about us and our materials are not in touch with us simply because we have not been able to be visible in their eyes. We have not been able to place an order form or an address and phone number in front of all the people charged with curriculum development and the procurement of educational materials. Thus, our rela-

tionship with schools and colleges has been a function of someone on the receiving end, being able to do a little bit extra in terms of looking us up, getting a letter off, and finding out just exactly what we have to offer.

F. LIBRARIES

I. How the relationship was established

Ecology Action has enjoyed a very good relationship with libraries for over three years. Our first contact was with the Mill Valley Public Library where we first displayed our exhibit-- "Man's Relationship to the Environment". The exhibit contained about seventeen large hand-lettered and painted panels framed in driftwood that we had scavenged from the Bay in San Francisco. It was very strikingly done, rather sculptural, and addressed itself to man's evolving introspection in relation to the environment. During the next year this exhibit toured many libraries throughout the Bay Area. Each time the exhibit was on display we had a table with some literature on it, and a sign-up book where people would leave their name and phone number. We would then call and invite them to the next Ecology Action meeting. This is the way we built the original Ecology Action group, kept it going, and helped many other groups and concerned individuals on their way to being very environmentally active throughout the Bay Area. This exhibit, after about two and one-half years of being on tour, is now worn out and retired.

We have begun a second relationship with libraries. It started with trying to interest libraries in subscribing to our quarterly, "Ecology--the Journal of Cultural Transformation". This effort and our general visibility within the environmental movement has led to subscription services and library journals requesting our materials to review. We are listed in several such sources for use by librarians. In a few cases we have been able to suggest to teachers who were concerned with implementing our materials further that they request their local school librarians to obtain materials from the Institute, and that they make similar requests to public library purchasing committees. We have developed a literature packet for libraries which sells for \$3.00 and contains copies of our various informational papers. Requests average about 20 a week.

II. How relationship is maintained

Of all the Institute's various relationships, this is the one that is maintained most nearly automatically. That is because, in almost all cases, the libraries have purchased materials or are subscribing from us. An annual review of this relationship is a function of the library's bookkeeping systems. The only thing we do is occasionally send new materials, or a list of publications, to all of the libraries that have purchased materials or that are subscribing to the Journal. We do not intend to enter a new area here with our relationships to.

libraries. We hope to have a display at an upcoming national convention for librarians. This will be a display that we will package and ship to the convention through a pre-arranged contact who will then put our materials on display there.

III. Effectiveness and deficiencies

There are two fundamental steps involved in the library providing informational needs for a person. First of all, the library has to have the information or the materials that the person needs; and, secondly, this person has to go to the library and be able to locate those materials. Our material usually goes into pamphlet files, rather than each single piece being listed in the general card catalog. We aren't sure at this time how many reference librarians recommend to people who ask questions about environmental matters that they check the pamphlet file on Ecology. We also guess that many people who want to know more about Ecology Action do not assume that our materials may be available at their local library.

G. OTHER ENVIRONMENTAL GROUPS

I. How relationships initiated

When we started Ecology Action in early 1968, there were many active conservation groups in the Bay Area, but at that time we felt that none of these groups were taking a broad enough look at our total culture. It appeared then that no attempt was being made through the organizations' activities and the majority of

its literature to develop the implications for our total way of life from the values that the organization possessed. We felt, at that time, that the problem was of a different nature and was more serious, perhaps, than some of these groups realized; and that, in addition to being active in such areas as legislative, lobbying, and traditional political activities, there were things that could be done in response to a survival crisis in our everyday lives.

With this position we published many essays and leaflets about what the individual could do. In many cases these original lists of suggestions throughout 1968/69 found their way into the literature of many established groups, both within and without the traditional conservationists' area. This early literature and our events in the Bay Area during those two years inspired many other similarly concerned people to start groups in their areas. We have felt, from the very beginning, that Ecology Action is something you do rather than join; that the ecological perspective offers implicitly a set of ethics for human behavior. It has been our task to make this set of ethics increasingly explicit through an accurate understanding of what the ecological perspective is. As this understanding increases, there becomes a decreasing need for a relationship with some central source. Therefore, our philosophical stand has led almost to an active non-establishment of formal relationships with other environmental groups. We feel this is essential if all of the

creative abilities of individuals and groups who learn of our materials are to be applied to the common task. We have sent out newsletters for the past three years to Ecology Action groups and editors of many bulletins, informing them of our activities and successes, and many other groups have sent us their similar materials. Through this kind of sorting process each group has been able to learn from the others what has been useful and what may be useful in their respective areas. A few people have worried about the lack of organization and duplication of effort, etc., but we have always felt, and many other Ecology Action groups are in complete agreement with us, that the participation by an individual in his own community, in his own community, in his own life, is the important concern. Through such action and involvement he may then well choose to become more involved with a specific task that is more formally organized on a city, county, state or regional, or perhaps even national level. Many people who are active with Ecology Action are members of many other environmental and social action groups. At every opportunity these individuals raise the perspective and information that Ecology Action has to offer.

II. How relationships are maintained

One key phrase tends to sum it all up--"be opportunistic". Successful organizers who know how to work without a budget know exactly what we mean here. We have developed a type of alertness that enables us to take advantage of any evolving

and changing situation that will allow us to further implement our program. There is no way that this process can be described other than simply saying something like, "try as hard as you can to make it work with whatever you have use of". It is basically a creative process for which there is no handbook. The only essential thing to know is that other people and groups want to know more about this perspective and the implied programs. It seems to me that the only way adequate training for this kind of position can be obtained is through actually trying, perhaps for as long as two years, to implement and acquaint the public with various programs that we understand to be needed. Hopefully working with an experienced person. Only in this way can an accurate empathy with the task before us be established.

III. Effectiveness and deficiencies

This type of relationship is at the same time both extremely effective and extremely inadequate. On the one hand there is no master plan that anyone is obligated to follow through a period into the future. We are free to make the best use of every opportunity that comes to our attention. We can respond quickly and usually meet the needs of most groups and occasions on extremely short notice. Rather than having a formal staff relationship between people associated with the Institute, we enjoy more of a web or network relationship where everyone is originating and doing and just staying adequately in touch with coworkers. But

the lack of funds that required this kind of relationship is also partially crippling. That is to say, we don't have adequate access to some existing sources of information. For instance, if a national issue is extremely fast-moving, this Institute and perhaps the environmental movement as a whole is powerless to make an adequate and timely response. Consider the recent and continuing detergent controversy. There does exist, within the environmental movement as a whole, many documents, studies and individuals intimately familiar with all facets of the detergent question, but there was no way that this expertise and information could be assembled quickly into a holistic overview as the response of the environmental movement to this discussion.

To my knowledge, no one person or group of persons at this time is adequately monitoring the majority of the environmental information sources. But, on the other hand, there are many information retrieval services, for one reason or another, which are either unknown or out of reach of the majority of the people and groups comprising the environmental movement. There is no doubt that the movement generally does not yet understand the need for organizational back-up. At this time the bulk of information and data is not organized in such a way that it is easily accessible. This is a most serious failing. At this time many deliberative and administrative bodies are continuing to make decisions in total ignorance of data that does exist and

would be germane to decisions and concerns that they now have. It has become all too easy for such bodies to dismiss an idea seemingly without back-up as simply a person's viewpoint or personal opinion, rather than considering it as a sound and provable scientific reality.

III. Administration of Institute

a. Staff

There are three basic types of staff relationships with the Institute

1. People who are giving the Institute all of their time for some period of months.
2. Professional people who are not actually at the Institute very many hours, but who do research and the writing of essays giving quite a bit of their time and attention.
3. Occasional volunteers.

The latter category, while they may give the Institute a major portion of their time for perhaps up to a month, would still be considered temporary volunteers. Whereas in the first category people giving the Institute a majority of their time would have been with the Institute for at least a period of one year.

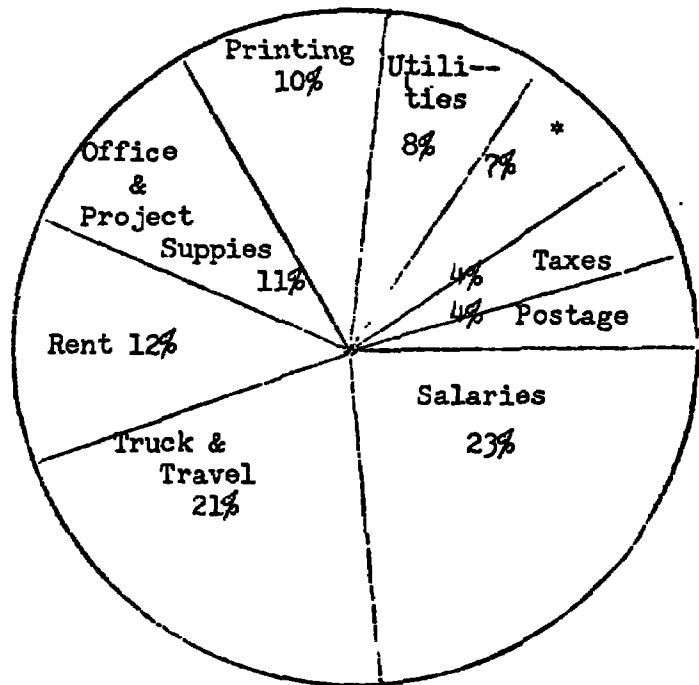
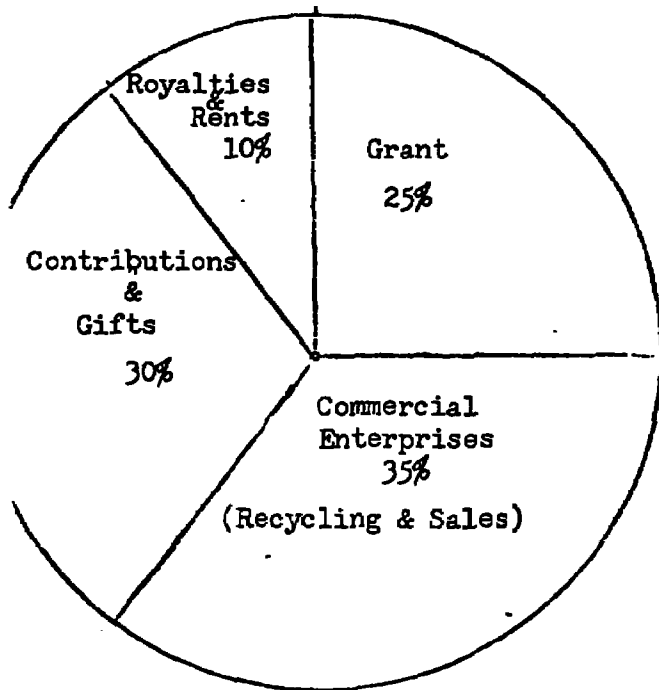
Cliff and Mary Humphrey are the only two people who have given the Institute, Ecology Action, all of their time from the inception. Many other people have had numerous

periods of activity with the Institute, but family affairs and obligations to their own job have put some limits on the time they could give to the Institute's materials and programs. The ratio of these three categories is not fixed and has been extremely fluid throughout the past three years. Sometimes a major portion of the administrative tasks including most of the typing and editing of materials, and the keeping of necessary book work, etc., has been done in homes of other professional people, or sometimes we have had an adequate volunteer staff to do most of these things in the physical facilities of the Institute. We have never been in a position to pay salaries as such. We have concentrated, instead, on springing people loose so they could give all or a portion of their time to the affairs of the Institute. Rather than impose projects upon such a staff situation we have always let project feasibility be a function of our staff capability. That is, when we had an idea for a project, program, material, exhibit, etc., this was compared against what we had to work with rather than trying to determine what we had to produce to achieve a certain goal. If we had access to the required resources, that particular task would be undertaken. Therefore, usually when anyone walked in with a particular talent, skill, or expertise, we were able to match them to some project or material that was waiting for someone of that precise capability to come along. We have received a good deal of

help also from such sources as the Juvenile Court and Neighborhood Youth Corp.

There are obvious limitations with such a staff relationship, but with careful planning much work can be accomplished in this way.

CHAPTER III
FINANCIAL REPORT FOR 1971



35,115 - 1971
12,612 1970

The Institute's total income for 1971 was \$35,115. The sources of this income can be seen in the diagram on the left, the expenses on the right.

It is obvious that very little money is spent on salaries (\$6945). ^{NOT 23%}
_{of 35,112}

For comparison, in 1970 the total income was \$12,612. Gifts and contributions were the same in both years, while commercial enterprises (recycling and sales) increased 10 fold in 1971. There were no grants in 1970.

Expenses in 1970 totaled \$16,994. No salaries were paid in 1970. Printing expenses remained the same; truck and travel increased 2½ times in 1971.

* Includes repairs, interest, commissions, insurance, equipment, advertising, and miscellaneous.

CHAPTER III
PROBLEM AREAS

A. Internal

I. Financial

There is no doubt that the basic and fundamental problem within our Institute, and perhaps many other environmental groups, is a severe lack of funds. This stems from two basic causes; first of all, people who initiate environmental groups are not entrepreneur oriented. They feel they have services and information that must get out, regardless of the cost or inconvenience to themselves. None of them are, therefore, willing to withhold services or information if funds are not forthcoming from those receiving this information or service.

The Institute and other environmental groups are offering new services, that is, they are fulfilling new needs, evolving needs, needs that are not yet structured into the institutions throughout our society and our culture; therefore, there appears to be no necessity to pay for these services and this information. People feel that they are already extending themselves just to make this information part of their concern, or to take the trouble to involve themselves with some of these new services, and usually it is the group that has gone to some trouble to reach the other person, rather than the other person having successfully ended a long search for our location. A few groups have secured grants and other groups have very active recycling

programs that do bring in some money. A few groups have community membership structures, and a very few groups are a budget item within a Chamber of Commerce, or a city or other agency. Most groups have not yet been able to institutionalize a steady source of income. We are now hoping to become better funded, primarily through an expansion of our resources relationship with schools, libraries and conferences.

II. Staff

We have conceived of many projects and programs that we are not able to carry out at this time and perhaps will not be able to carry out in the foreseeable future. We do not have an adequate staff, neither administratively nor with many essential special skills. For instance, we have not been able to undertake some of the demonstration projects we would like to become involved with. We would like to explore village technology or a technology with a different energy mix that could evolve, perhaps, into regional based industries for the manufacture of many items from scrap materials generated within a large community, or within a metropolitan region. We have not been able to acquire the people with the expertise to do this kind of work. Our financial situation would be relieved considerably if we had a person who could devote full-time to the distribution of our Journal and other materials, thereby generating more income from materials that we already have in our possession. We have not been able to ascertain in advance upcoming conventions and conferences that perhaps we could go to

in various capacities and raise funds for the Institute.

We feel quite strongly that if we had enough money to afford one or two full-time people to address themselves primarily to supervising other people, both occasional volunteers and professionals not necessarily in residence with the Institute, we could do about four or five times the volume of work we are presently able to carry out. It is a serious problem that only one or two people have had continuity with the Institute for over a year. Most mail and perhaps one-third of all phone calls must go through these people to assure their being handled adequately. Usually the occasional volunteer does not think that it is his place to take a major chunk of responsibility for a project, initiate it, and carry it through to completion.

III. Level of information available

While in almost every environmental group volunteers have some knowledge of the information available, it is not accessible in the office for people such as students writing reports, those answering the mail dealing with a specific problem area, or to the occasionally interested official of the city or county who needs some information for a report that he is working on. It seems that the public libraries do not meet this need, and, to my knowledge, nothing adequate exists for the environmental movement to make us of at this time.

B. External Problem Areas

1. Relationship with surrounding community.

Our most visible program here in Modesto is our recycling activities. Perhaps one family in ten now is taking part in this program. Many businesses of all types--auto parts stores to beauty parlors--are also taking part in various ways. The belief is commonly held that this is basically the extent of our program, and few people in the surrounding community of Modesto have knowledge of the other functions that we have mentioned in the report. Many groups and Ecology Action clubs in other parts of the country, and perhaps even groups overseas know more about the work of the Institute than many of the people here in Modesto taking part with our recycling, organic gardening, and Farmers' Market-type activities. We feel this is a major problem because there are resources such as special skills, talents, and expertise here in Modesto that could assist us in these other problem areas, but people who don't know the full scope of our work obviously can't offer to help us with these tasks. We feel that a stronger community pride about the uniqueness of the Institute could be developed if more people had a better idea of the work we are doing.

2. Identity of the Institute within the Environmental Movement

We have learned that largely because of the caliber of the work that we do and the publications that we have, many people who write us for information, help, and comment on various issues, feel that

the Institute is a very stable financial institution. They believe that we must have a budget and an official staff to do the work that we are doing. This is not the opinion of other Ecology Action or Ecology center groups, but of many on-campus groups with departmental budgets, many school department officials, curriculum consultants, science advisors, Chambers of Commerce, conveners of conferences and writers of special reports who have come across our materials by various means. So on one hand we have no desire to form a membership group, thereby being obligated to service that membership, yet, on the other hand, we have not found a way to establish a professional consulting or fee relationship with many people who seek our services, feel they are useful, and are able to pay for those services or materials.

X
Relationship of the Institute's Purpose and Goals to
the Programs of the Environmental Protection Agency

Several points need to be stressed before this relationship is developed. First of all, the Institute is not as familiar as it would like to be with the existing programs and problems that the Environmental Protection Agency has at this time. Secondly, we are not privy to internal discussions about directions and programs the Directors of the Environmental Protection Agency wishes they could implement. (It should be stressed that these comments are by Clifford Humphrey, President of the Ecology Action Educational Institute, speaking for the Institute, but these comments are not the result of extensive discussion with other

members of the Board on this particular subject. However, many discussions with the Board members and with members of other Ecology Action groups allows us to speak with some confidence that these views are widely shared.) The Environmental Protection Agency and the Ecology Action Educational Institute face two fundamental problems. The short-term problem of accumulative pollution and environmental degradation of several types. The second fundamental problem is that of establishing a sustained yield relationship with our total environment. It may be possible to get to a point where we are not polluting in the current useage of the word but we're still living totally out of balance with the earth's ability to sustain life throughout time. We feel quite stongly that if the organizational implications of the question of survival is beyond the charge of the Environmental Protection Agency, that agency should be the first to say so.

This possible inequity becomes acute when we consider specific problems; for instance, the current battle now over auto emissions timetables. In view of our fossil fuel situation and the continuing construction of urban areas with automobility dependency patterns that have followed in the wake of mass produced cars and cheap fuels, it may well be that all efforts, energies, time and resources directed at the auto emission problem have been, in fact, a total waste of time. It is possible that the approaching restrictions on the availability and use of fossil fuels does not give us the lead time to successfully implement such emission programs. It appears now that before we will

be able to implement an emissions program that will solve the auto-caused smog problems; we will be in an energy useage transition period that will render our concern with such emission programs as irrelevant. Much more serious questions await our attention. Will we have to establish priority use programs? How much gas for tractors? How much for jet passengers and military aircraft? For how long a period should we make such calculations? Should we place any petroleum in reserve to meet yet unknown needs in the next five hundred years? five thousand years? or even one million years? Governmental programs to protect the environment will only develop the required public acceptance if they are, in fact, relevant to the data that now supports our concern with the environment. This data goes way beyond pointing out that we have a pollution problem. This same point can be made in relation to our concern with water pollution. Many communities are now receiving federal assistance to install secondary and tertiary water quality control plants. There is little doubt that in the future we must concern ourselves with the recycling of water, with the recharging of aquafiers and many other re-use programs. This thrust is only visible if we look at the total long-range picture and not just the existing problems of pollution today.

As this Institute has pointed out on many occasions in the past, when the fathers of this country wrote about promoting the general welfare in perpituity they did not understand as well as we do today exactly what this task implies. Let it also be said that this Institute understands that it may take some time to formulate a unified response to the relatively

long range, sustained yield problem. In the meantime, work should be continued on all existing programs to minimize the impacts we are precipitating today. As the public becomes increasingly aware of such things as the energy crisis and forthcoming water shortages, it is increasingly obvious that concern only with clean tail water from our cities and fields and clean exhaust from our cars is not going to solve our problems. This agency, perhaps above all others, must have credibility with the public and with the scientific community. Without such credibility it will be forever frustrated. Hopefully, the work and activities that the Institute has been involved in through the years has made the work of the agency somewhat easier by altering what is politically possible. The environmental movement recognizes that the Agency was given its original charge and direction by a partisan president who, we believe, is putting matters of the economy ahead of concerns of survival. We have said on many occasions that if we cannot afford to survive then we have proven ourselves fit for extinction. While the Institute is freer, possibly, to discuss these matters in a totally unrestricted way, we would welcome any opportunity to meet and discuss the purposes and goals of the Institute and the Agency and the relationship between the two.

CHAPTER IV

EVALUATION OF THE INSTITUTES TOTAL EFFECT

Through a simple comparison of resources expended and results obtained, it is obvious that we have been extremely effective. Two points, however, must be recognized. First, our activities were extremely well received, largely because of events beyond our control. For the past 50 years and longer many people have been just as concerned as we are with the issue of environmental degradation but a movement such as that of the past three or four years did not take place. We feel that the implications for cultural transformation within the ecological perspective are universal and are apparent to anyone who concerns himself with obtaining a true state of peace through looking at basic household information; that is, by understanding the needs and abilities of its occupants and the finite nature of its physical setting and system.

Many diverse groups and many individuals have arrived at a similar outlook to ours through quite separate sets of circumstances. We feel that our early work was one of gathering up and assembling widespread information and assembling this data into a new conceptual framework. We then concerned ourselves with the dissemination of these conceptual frameworks. We made many suggestions as to what individuals could do in response to this new frame of reference. These suggestions were intended to be provocative rather than specifics. Perhaps we have not moved on to the next phase as rapidly as we should have. Perhaps as other, let us say "better heeled", groups moved into the educational

area of implementation. This will necessarily be a political and economic process. But there have been some shortcomings of our educational process that should be mentioned.

While we have been able to anticipate such problems as people and agencies, institutions, and bureaucracies becoming defensive over past actions and behavior we have not been able to discover or devise any precise strategy to overcome such problems. We are now faced with the fact that many individuals and institutions in the face of overwhelming evidence continue to insist that we are expressing a viewpoint or a value rather than stating scientific evidence that proves current and long-held procedures and policies cannot be continued. While there is a general feeling throughout the survival crisis literature that we are fast approaching a forced leveling off period of the per capita useage of energy and resources, we have not yet been able to actively engage individuals and society in the task of reducing our per capita draw upon the earth's life support system. That task will require a response of unprecedented magnitude. The only example of an adequate response that I can think of would be the response of earth to an invasion from space. As has been pointed out before, the earth is like a spaceship and we are using up our consumables quicker than they are being replaced. Our onboard supplies of irreplaceable resources, such as minerals and fossil fuels are being managed in very reckless ways. Human civilization is now dependent upon these transient inequities. The

insidious nature of our predicament is this: there is a possibility that as resources begin to run out and it becomes more pragmatically understood that we have not organized our affairs wisely there will not be enough resources to design and construct a civilization that will in fact be living within the means supplied by the surfaces and systems of our planet. We find the terms "over-population" "pollution" and "doomsday" both simplistic and devisive. Such slang must be replaced with an accurate comprehension of the problems and implicit tasks that all the people of this planet face.

FUTURE PLANS

Three areas of activity are beginning to take shape now.

1. Education

Our educational activities will become much more focussed because environmental awareness within any organized agency, group or institution can now be taken for granted. We would hope to show such groups the exact nature of the crisis and help them explore implications of response for their organization rather than themselves as individuals. For instance, perhaps a union would be interested in organizing ways and procedures by which their members might reduce costs for goods and services. This could be accomplished through increased pooling and sharing of resources and skills. We are too strict with jurisdictional and responsibility boundaries. Simply stated, if someone has left a faucet turned on, turn it off. Don't spend too much time looking for the maintenance man. We are far too prone to decry the situation

rather than explore the possibility of us, as individuals, or as an institution making an immediate response to the particular problem. How far can communities go with their own self-determined public works projects?

2. Political Involvement

We will continue to advocate individuals taking part in the political process at many different levels. We are particularly interested in participation in local politics and are working on many resource materials to orient people more toward the possibilities that could be achieved through working actively and creatively in the political process at the local level.

3. Economic Alternatives.

We hope to initiate new organizational forms for supplying some essential services and needs. The emphasis would be decentralization and a reduction of resource and energy utilization. We would also like to explore the possibility of developing more regionally oriented industries, perhaps utilizing reclaimable materials as the basic resource.

RECEIVED
E. P. A. REGION IX
FEB 23 1 33 PM '72



AP Wirephoto

GLASS SALVAGING — More than a ton of used glass, foreground, was delivered to the Gallo Glass Co. yesterday by Fred Zurilgen, left, of the Ecology Action Educational Institute, Inc. Plant foreman Phillip Katen received the material. *12-3-76*

Glass Recycling Begins

The first load of used glass, come for the nonprofit environ- amounting to a ton and a half, mental organization and a sav- tion office at 1203 Tully Road, was delivered to the Gallo Glass ings in raw materials, and at the intersection of Roseburg Co. yesterday in a huge red natural gas for the glass com- yvenge.

white and blue garbage bin

Stacked next to the cullet heap at the glass plant, in the madow of low-rise raw material towers, the first three weeks work of the Ecology Action Educational Institute, Inc., looked small.

But it represented "a lot of concern about the environ- ment," and made those asso- ciated with the collection more pleased," said Fred Zurilgen, glass project coordinator.

It also represented \$20 in in-

Cullet is the term used in glass making for broken or re- used bottles. The cullet is regu- larly blown back into the glass making process, where it is melted and reformed.

Melt And Reuse

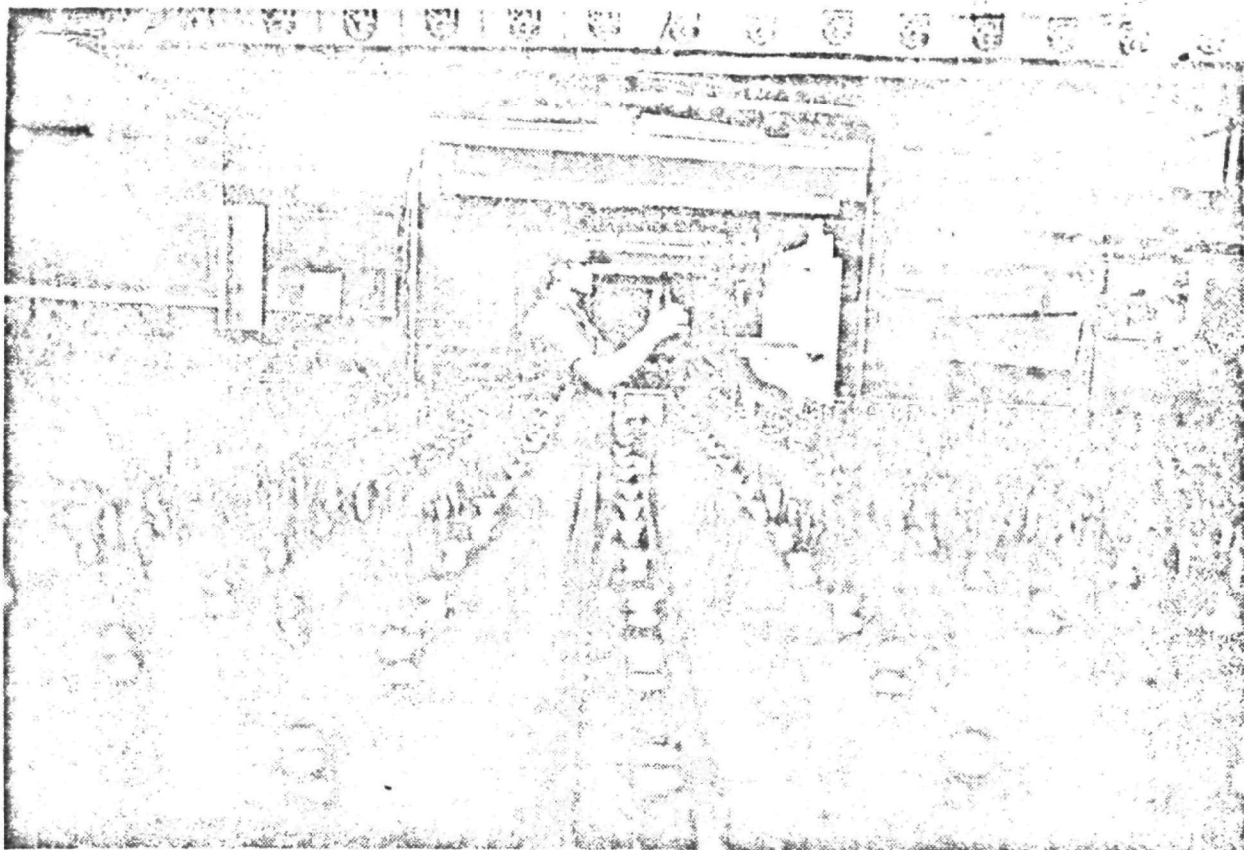
Under the arrangement with Ecology Action, the glass will melt and reuse any glass in the interest of conserving natural resources.

The program began Nov. 15, more than a year ago, and yesterday's delivery of used glass was the first.

Collection points also are located at Welfare World, 707 7th St., and at the Bonzi Sanitary and Bathing, 1203 Tully Road, west of Hatch Road, west of the Carpenter Road.

In Riverbank, Mrs. Pat Strain is in charge of a collection point at Santa Fe Avenue and second street. In Oakdale, Bob Grotzke has a collection point at 125 School Avenue.

Glass should be rinsed clean before recycling. The glass project coordinator said that the first load of used glass was delivered yesterday.



AP Photo

BOTTLE ARMY — A million bottles a day march through the Gallo Glass Plant. Most of them could be made from remelted glass if enough can be found. Here Roy Gilmore of Modesto checks the quality of the newly made bottles.

Gallo Will Reprocess Glass In Ecology Push

Collection Points

11/17/70

By Thorne Gray
 Gallo Glass Co. and the Ecology Action Educational Institute, Inc., will work together to collect and reuse as many glass bottles and jars as can be here in Stanislaus County.

The recycling effort is described as a possible answer to the no-deposit, no-return bottle controversy, by reprocessing used bottles and other glass manufacturing items are discarded for burial in a landfill.

"The goal is to give the waste a chance to save this old glass, which represents a natural resource, for the benefit of the environment," said Cliff Humphrey, director of the non-profit ecology organization.

profit ecology organization. check the glass and break it for delivery to the Gallo Glass Plant near the Modesto City-County Airport. The plant makes more than a million glass bottles each year.

Humphrey said the glass recycling effort will depend on heavily not only on housewives, but on service stations, restaurants and other places where used bottles and other glass manufacturing items are discarded for burial in a landfill.

Ecology Action volunteers, helped by Modesto Junior College and Davis High School members of the Students for a Better Environment club, will

Used glass of any sort, from beer bottles to peanut butter jars, will be accepted by the Ecology Action Educational Institute at two locations for recycling.

A large metal bin, donated by the Modesto Garbage Co., will be located in a parking lot at the Ecology Action Office, 1000 N. Main St., at Roseburg Ave.

The other collection point will be at the Bonzi Sanitary Landfill on Bush Road west of Center Road in South Modesto.

Another dozen collection points are being arranged.

Turn to page 2, col. 6

The Modesto Bee

Published since 1927

Issued afternoons Monday through Friday, and Sunday morning

Vol. 93—No. 275

Tuesday, Nov. 17, 1970



A. RAY NISH, Jr., *managing editor*

WILLIAM L. McSWAIN, Jr., *city editor*

DAVID J. CUMMEROW, *associate editor*

Editorials

11-17-70

Glass Redemption Program Is Fine Example Of Beneficial Cooperation

The newly announced partnership between the Gallo Glass Co. of Modesto and the Ecology Action Educational Institute, Inc., sets an excellent example of enlightened cooperation in the national interest.

Under the arrangement Gallo will pay the non-profit Ecology Action group \$20 a ton for all the usable glass from reclaimed bottles and jars which it can collect and deliver.

The practical strength of the plan lies in Gallo's willingness to accept reusable glass from virtually any container, not just those it produces for the E & J Gallo Winery, which amount to some 1 million bottles a day

The reuse of glass containers, most of which are now discarded, can benefit the nation and its people in several ways. First, it can help substantially to reduce unnecessary waste and to conserve the not limitless supply of natural resources.

Second, it can conserve increasingly precious disposal space. Glass only takes up room in the soil never breaks down to become part of it.

Third, it can conserve energy, which also serves to save the nation's fuel resources. Much less heat is required to recycle used glass than is needed to

make glass from raw materials.

Fourth, it offers a practical means of reducing materially a sizable element in the ugly and costly litter which clutters the nation's roadsides by providing an incentive and a means to reclaim it

Actually the Gallo-Ecology Action arrangement holds much more promise in all considerations than do the renewed efforts to achieve the same goals by requiring a deposit on all beverage containers. The costs involved in collecting, sorting and shipping returned bottles would be prohibitive, particularly with many products which now are marketed nationally

Ecology Action hopes eventually to modify the plan in such a way that returns from the recycled glass are funneled back into the community and reflected in reduced tax rates

The new plan is a good start and a splendid example of how responsible private enterprise can encourage conservation and the reduction of needless and expensive waste. Those who worked to develop this program, Robert Gallo of Gallo Glass and Cliff Humphrey of Ecology Action, are to be commended.

3 14/71 Estimation

A New Approach To Waste Disposal

Make a profit from garbage?

Ecologist Cliff Humphrey thinks the City of Modesto may be in a position to do just that by instituting a program for the recycling of solid wastes.

His proposal has been greeted with something less than enthusiasm at City Hall where the council is on the verge of extending the present conventional method of garbage collection and disposal for eight more years.

This consists largely of picking up everything everybody throws away, hauling it out in the country and burying it. This method disposes of the refuse but it does not dispose of the problem.

The problem is that the volume of refuse is multiplying while the room to dispose of it by this means is diminishing. Of even greater concern to ecologists like Humphrey and to society itself, for that matter, is that the bury-everything method is extremely wasteful.

Humphrey wants the city to get busy and salvage the things which can be used over again — glass and cans and paper, mainly. He says there are now adequate local markets for recycling these materials. And he has knowledge and experience in this area, having set up the Ecology Action Educa-

tional Institute in Modesto and initiated a recycling program with the Gallo Glass Co

His experience also indicates the people themselves are concerned with the lavish wastefulness of the throw-away society and are receptive to means of conserving and re-using materials which can be recycled.

Any such bold proposal is bound to meet resistance and a flood of reasons why it will not work. Unquestionably, there would be problems and hitches and objections to the program proposed by Humphrey

When all is said and done, however, the main point of his urging remains valid. The time has come for the city's leaders to recognize their full responsibility in this matter.

Simply extending the pickup and bury system for another eight years does not begin to meet this responsibility. The city needs to develop a solid waste management program with provisions for salvaging and recycling.

The important thing now is for the city to stay loose, not weld itself to anything which would further prolong the full assumption of that responsibility.

City Hobbles Self On Waste Program

The Modesto City Council's gesture in favor of a federally funded experimental garbage recycling program is an unsolicited pat on the head for a group which already has grown up

It comes through as a meaningless and patronizing action for two principal reasons. First, it followed as a sort of consolation prize after a majority of the council voted to commit the city to eight more years of what is essentially the present wasteful and dead end method of refuse disposal

Second, the basic experiment already has been conducted with most encouraging results by the Modesto Ecology Action Institute — the very group which was urging the council to get going on a solid waste management program

Ecology Action's experiment, it should be noted, has been conducted without a penny of federal funds and the results have been both exciting and impressive. They indicate there is a strong public sentiment for salvaging reusable materials. There is an encouraging sign to this movement against the waste and wastefulness of a throw away society. It demonstrates ruggedly can live amid affluence if given a little encouragement

In the few months since it has started, Ecology

Action is channeling 20 to 30 tons of dry paper and cardboard per week and 50,000 pounds of glass per month into recycling operations.

More recently, it has set up a program with the National Can Co. to reclaim aluminum cans. And the controller of that firm was on hand at Monday's meeting to assure the council of his company's enthusiasm for what it considers a "wonderful chance to get behind the community."

Most of Ecology Action's work has been done on a voluntary basis. The glass comes in clean and free of labels, carted over by housewives who are anxious to help in salvaging and improving the environment.

The dedicated, energetic volunteers who are attracted to the ecology action group are convinced, on the basis of their own experience and the evidence they have accumulated, that a large-scale, locally significant, could be accomplished if the council would but assert its responsibility for a solid waste management program.

The word is there and the will is there. The last thing the council can do is to hobble itself by extending the present program. It should be free to catch up with the people.

The Modesto Bee

Published since 1927

Issued afternoons Monday through Friday, and Sunday mornings

Vol. 94—No. 92

Sunday, April 18, 1971



A. RAY NISH, Jr., managing editor

WILLIAM L. McSWAIN, Jr., city editor

DAVID J. CUMBERLOW, associate editor

Editorials

Council Should Take Its Time To Explore Garbage Proposals Fully

In continuing its consideration of garbage service bids tomorrow afternoon, the Modesto City Council should move with utmost caution and allow ample time for full exploration of all the alternatives before it.

The council has wisely preserved a number of options for the means by which garbage collection service can be provided after the existing contract with the present private operators expires next January.

Still another alternative will be offered at tomorrow's meeting by Modesto ecologist Cliff Humphrey. He plans to urge the city to get directly into the solid waste management business and take control of garbage collection by subcontracting with the existing garbage companies. The idea raises interesting possibilities and deserves serious consideration.

There are other compelling reasons, however, why the council should take its time in deciding this matter.

The council has before it identical bids at the existing rate from the present private operators and from the city itself. In addition it has received two lower bids, the lowest being from an intricately or-

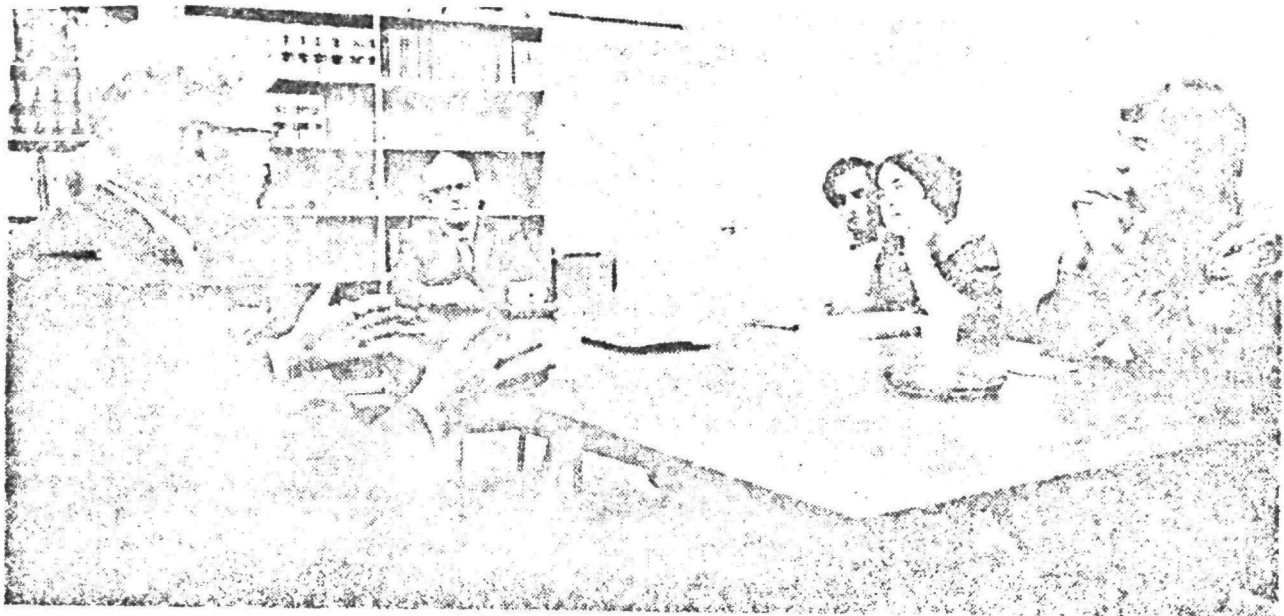
ganized Southern California conglomerate.

Any analysis of these bids, however, must also carefully weigh considerations other than the rate. The known performance of the locally owned and operated firms which now hold the contract has earned for them prime consideration as against the unknown performance of competitive bidders. Their service generally has been good and reliable and their residential collection rate has not been out of line. And, as local businesses they have been interested and helpful in community endeavors.

Most importantly, the main purpose of opening up the garbage collection question was not to take the garbage franchise away from one set of private operators and hand it to another set of private operators for what might prove to be only a short term gain.

The purpose was to explore better long term means of managing the collection, disposal and recycling of solid waste and the possibility of the city's taking a more active and direct role in this area.

Simply changing private operators would not advance this purpose. Full consideration of the Humphrey proposal could.



Councilman Smith, left, Mayor Davies talk with ecologists Nuzzo, Beth Kenworthy, Hise.

City Officials, Ecologists Discuss Plans For Garbage Recycling Study In Modesto

Ecology representatives met with city officials in Modesto City Hall yesterday afternoon to start planning an experimental garbage management project that could give rise to federal funding.

A meeting of Modesto Ecology Action Educational Institute volunteers, city staff members, garbage collectors and industrial people interested in recycling is set for 7:30 o'clock Wednesday night, also in city hall.

Ecologists Beth Kenworthy, Pat Nuzzo and Tom Hise agreed yesterday with Mayor Lee H. Davies, Councilman G. Dale Smith and City Manager John G. Keefe that:

—Written recycling capacity estimates should be obtained from valley and San Francisco Bay area industries, telling how much clean glass, crushed aluminum cans or dry newspaper

and cardboard they would purchase. —A working committee of ecologists, city staff and knowledgeable community persons willing to meet often must be formed.

—Long-range planning for solid waste management will have to involve the county Board of Supervisors and the Stanislaus Area Advisory Planning Association.

—An offer by Rudy Bonzi, owner of the landfill dump at 2650 West Hatch Road, to pick up salvageable refuse in the Northgate-Sherwood area during a two-month trial, should be explored.

—The US Solid Waste Disposal Act of 1965, which offers federal funding possibilities for recycling projects, should be studied. Hise said, "It sounds like it was written for Modesto." Answers needed as soon as possible, the ecologists and city officials agreed, are how much recyclable materials are available from the community's garbage, what can be done with it and how can it properly be prepared for use?

Davies Advice

"Once obtained," Mayor Davies said, "we can incorporate the answers in Modesto's collection ordinance.

"We need to keep track of each household involved for

Mayor Davies asked what percentage of Modesto homes are participating with Ecology Action in the voluntary separation of glass, cans and newspaper.

"Possibly 10 per cent," responded Miss Kenworthy. "You people have done a great job," the mayor told the ecologists. "You've changed a lot of attitudes. But if we're going to make this work, everyone has to participate. That means it has to get into a mandatory situation."

Recycling Provisions

Home collection of Monday's council action calling for bids on an exclusive eight-year franchise to collect residential and commercial garbage in Modesto starting Jan. 1 as assuring the community "garbage will be picked up."

The permits of present garbage collectors expire on Dec. 31.

But in the documents setting the specifications for bids, the city officials emphasized, Modesto retains the right of licensing to encourage the recycling of salvageable garbage and of insisting on contemporary standards of garbage collection.

Funds received in salvaging by the franchise holder will have to be accounted for to the city as part of the collector's gross revenues, enabling the city to profit through its franchise.

reasonable basis with local civic organizations who desire to participate in a recycling program."

Council Choices

After the exclusive franchise bids are opened by the city on April 12, the council still will have the choice of accepting what appears to be the best bid, creating the municipal collection system on the basis of a bid to be presented by the Public Works Department or negotiating with the four garbage firms now holding garbage permits in Modesto.

Hise told the city officials yesterday, "How the recycling is implemented is your headache. I hope the city wins myself."

The ecologists feel waste materials and refuse "belong" to the citizens of Modesto and only through municipal control can recycling revenue be fully realized and returned to the taxpayer as savings.



B. H. Photo

Ecology speakers, from left, are William Taylor, Pat Nuzzo, Tom Hise.

Garbage Recycling Plea Fails

The Modesto City Council has ruled last night this is not the time for a jump into garbage recycling as proposed by the Modes-to Ecology Action Institute. But the council gave its support to a program which lead to federally funded experimentation.

The bills are scheduled to take effect on the 1st of the month. The department will be open.

Ecology group pro-posed with Tom Hise, but he couldn't also called for Nuzzo and William Taylor, main speakers to the Ecology Action takeover of garbage collection. The garbage department was joined by Mayor Lee H. Davies, Vice Mayor William R. Mitchell and Councilman Phillip F. Newton, in expressing belief the garbage contract should go to bid while recycling research continues.

The department will be open. Turn to page D-1, col. 1

City Will Encourage Garbage Recycling

The right of selective licensing to encourage the recycling of salvageable garbage in Modesto will be retained by the city in the exclusive citywide contract for collecting residential and commercial refuse now being prepared by city staff and a committee of three councilmen

Potential bidders objected to selective licensing provisions in specifications being prepared for City Council consideration by the public projects committee composed of Vice Mayor William R. Mitchell, chairman and Councilmen G. Dale Smith and Phillip E. Keyton

During a discussion of the objections this morning in the city hall, the committee and city staff agreed the exclusive contractor would be in the best position to make the low bid on industrial and commercial salvage in any case.

Objections

Deputy City Manager Marvin Ray, who is preparing the specifications and garbage collection ordinance for consideration by the council as a whole, said potential bidders objected to leaving the door open for others to take off the "cream" of salvage with recycling value.

On the other hand, Mitchell reported large industrial users are asking that other salvage haulers not be excluded.

The committee also agreed the specifications and ordinance will call for a mandatory once-a-week collection from every premise in town.

Ray said changes made in the specifications will be reported by letter to the potential bidders in a week of the proposed ordinance will be on staff review next week and a rough draft of the specifications will be in the homes of councilmen late next week.

The council will decide whether to call for bids on the exclusive garbage franchise contract from potential bidders. The contract will be opened prior to the April 20 municipal election. The current four-area collection system involving four franchised private companies will be in effect

New Ecology Operation Utilizes Broken Pallets

2/27/70

Wooden pallets, those frames which fork lift trucks can pick up, are as essential as trucks or conveyor belts to the web of commerce and production in an area like the east Modesto industrial tract.

But pallets are frail compared with the heavy loads they must carry. They often break, and many cannot be repaired.

Since burning pallets has been outlawed by Stanislaus County as an air pollution control measure, broken pallets have become a mounting problem. In fact, some piles of useless pallets have mounted almost 20 feet in the air at an east Modesto repair yard.

Pallet Recycling

Jim Bender, owner of the Manteca Pallet Co., may have the answer, and it is one to make ecologists and environmentalists happy. Bender proposes to shred the old pallets and return the chips to

paper making companies. The chips can be used instead of new wood.

To this end, he has purchased a \$5,000 chipping machine from a Seattle manufacturer. Pallets will be fed into the chipper, nails and all, and the chips will be separated from the metal. Even the nails will be saved for scrap metal.

"We've got a two to three month accumulation of pallets right now, maybe 7,000 to 10,000 pallets, ready for chipping," Bender said.

Manteca Pallet Co. serves the Georgia-Pacific Corp. container division, the International Paper Co. container division and the Market Wholesale Grocery Co., all in Modesto. The paper container companies are in the industrial district, and pallets they use find their way into every industry which uses cardboard boxes.

Paper Plant In Ripon Recycles Scraps In Ecology Campaign

3/4/71

RIPON — The Simpson Lee Paper Co. plant here today joined the ecology campaign by initiating recycling of waste paper to convert it into high-grade printing and specialty stock.

As an outgrowth of the ecology movement, the San Francisco company will produce 100 per cent recycled book paper.

But the development is not meant to start a mass campaign to take old paper to the Ripon plant; only selective paper is used and this is purchased by the company on order.

Simpson Lee officials say the concern is the first in the west to salvage discarded paper and manufacture it into fine quality printing paper.

The company began experimenting with the process about four months ago at its local plant, rated by them a model of up-to-date, ecologically sound facilities. There is no smoke-stack pouring out pulp fumes.

The machinery installed when the plant was erected in 1961

has been adapted to handle the recycling process.

The company says no new employes or equipment have been added since the process fits right in with the company's present system, which produces more than 100 types of paper manufactured in the normal way.

Just what is involved?

First, Simpson Lee had to round up as much waste paper as it could. It contracted with waste paper brokers in California to supply discarded office paper such as letters, envelopes, memorandum slips, adding machine tapes and used data processing forms.

Shipped From Ripon

Once the waste paper gets to Ripon, it is carefully sorted then shredded into thin strips and packed into bales. Next, it is dumped into a large mixing beater, treated to remove whatever was printed on it previously and then fed onto the paper machine to become a quality printing paper.

It is finally ready to be

shipped from Ripon as customers of Simpson Lee call for it.

The first major customer for this new product was BankAmerica which printed more than 250,000 copies of its 1970 annual report on Simpson Lee's 100 per cent recycled paper.

Furman C. Moseley, 36-year-old chairman of the company, said Simpson Lee was "intrigued" with the idea of developing a quality book paper from recycled waste.

"Of course, for years we've used scraps, side rolls and similar waste paper from our own plant," Moseley said. "But we gradually became interested in recycling waste paper into a high quality printing paper. "After all, our entire business is based on the efficient use of wood fibers. We figured a project like that made good ecological sense.

"We think it not only contributes to the growing movement to better utilize the country's total resources, but makes good business sense, too."

Recycling Endeavor Gets Boost

2/1/71

The National Can Co. is joining a Northern California recycling effort in cooperation with the California Anti-Litter League.

Organized groups or individuals can take used steel or aluminum cans to 251 Santa Rosa Ave. Hours are 9 a.m. to 3 p.m. Mondays and Fridays.

Michael Wagner at National Can Co. said the recycling program is just getting organized and more details will be announced later.

For the moment, anyone can bring in cans if the labels are removed. Aluminum must be separated from steel.

Sold For Scrap

The cans will be weighed and sold for scrap, and the returns will go to the California Anti-Litter League. The league, in turn, will disburse the funds to groups which earn it through can collections.

Wagner said eventually he hopes to arrange a financing disbursement with a Modesto area group, keeping the money in Stanislaus County.

"I know recycling is big time here in Modesto," he said. "This community is very aware."

Local Committee

He said he plans to talk about the program with Paul Philbin, chairman of the Stanislaus County Litter Problem Action Committee, and other leaders.

Aluminum cans already are accepted at two locations in Modesto, L&M Distributors at 2300 Hoover Ave., and Delta Brands, Inc., 126 10th St. Each pays 10-cents per pound for flattened aluminum cans.

The Modesto recycling program coincides with the announcement of a Bay Area Recycling Information Center sponsored by the Northern California Can Manufacturers and the anti-litter organization. The center will coordinate efforts to recycle cans, glass and newspapers.

Engineer Lazich, right, and ecologist Tom Wise witness can crusher in action.

Turlockers Produce Ecology Machinery

2/11/71

McClatchy Newspapers Service

TURLOCK — A Turlock concern is marketing machinery to help make the nationwide ecology drive a success.

Miller Manufacturing Co. is producing a machine which company spokesmen say, will compact and shred almost any item. It was demonstrated Friday to representatives of the Ecology Action Institute of Modesto.

Retailing for about \$4,000, the unit separates aluminum from tin and other metal substances while shredding the items.

The initial shredder was purchased by the Coors Brewery and is in operation in El Paso, Tex., where a recycling station has collected more than 4,000,000 discarded cans from roadways, highways and other public areas.

May Buy

A representative of the Ecology Action Institute said the Modesto group is considering purchase of a crusher unit to handle an "overwhelming" number of cans and other items which has been collected in this area.

Cecil Gates, manager of the Miller plant in Turlock, said the grinder will compress a pickup truck load of cans so they will fit in a bushel basket.

The machine will also reduce a six-pack of beer cans to a handful of aluminum sand. Gates said the machine is capable of shredding cans to where 50 to 100 pounds of aluminum will fit in a cubic foot of area. The units will compact anywhere from 200 to 2,000 pounds of materials per hour.

The Turlock firm also has produced units which mash newsprint and other paper products and glass products. The company is also developing a garbage grinding machine which when developed, would eliminate the need for large land-fill areas.

Miller Manufacturing, primarily an agriculture machines firm, will demonstrate the environmental units to any interested groups. The company will grind to specifications 100-pound samples sent to them.

Modesto Bee - 15 Nov. 1971

Visitors See Recycling Machine At Ecology Action Open House

More than 200 persons toured Ecology Action Educational Institute, Inc., headquarters at Kansas and North Franklin Avenues yesterday.

A demonstration of glass crushing and can shredding by machine was presented for open house visitors.

The crushing equipment was provided by Miller Manufacturing Co. of Turlock, which hopes to sell a unit to the center.

The open house marked the first anniversary of glass recycling in Modesto. The Gallo Glass Co. uses all the old glass Ecology Action can provide.

More Than 500 Tons

Cliff and Mary Humphrey, founders of the center, explained they have gathered more than 500 tons of materials

for recycling since opening in July 1970. Most of that has been glass.

Volume has reached eight tons per week and is almost too much to handle without equipment. But the center does not have funds to buy a glass crushing machine immediately, Humphrey said.

Humphrey explained "Project Link," named for Humphrey's assistant Charles Link, its originator, to enlist volunteer community groups for recycling. Groups can earn \$500 for a month's work at the center.

Humphrey said groups must have a history of environmental involvement, but that covers such fields as housing, health and pollution control. They will collect materials, process them at the center, then deliver them to markets.

Ecologists Test Glass Crusher As Bottle Savers Flood Center

By Thorne Gray

Glass recycling at the Ecology Action Educational Institute, Inc., in Modesto has swelled to eight tons per week, a testimony to housewifely efforts to help the environment.

Bottles, plus cans and paper, are almost swamping the collection and handling techniques, reports Ecology Action founder Cliff Humphrey.

The institute is looking for a machine to crush bottles and separate them from labels and caps. A new plan to enlist volunteer help also is taking shape.

Open House

The entire program will be on review during a 3 to 7 p.m. open house Sunday at the center, which is located on the corner of Kansas and N. Franklin Avenues between Ninth Street and Freeway 99.

Public officials and citizens are invited for an afternoon of discussions, music, information and refreshments to mark the anniversary of the glass recycling effort.

Ecology Action came to Modesto in July 1970, in hopes of persuading the city to become a model of environmental sanity.

A year ago, the Gallo Glass Co. agreed to reuse as much old glass as the center could provide. Housewives were enlisted in the effort and collection points established all over the city.



Humphrey watches glass breaker.

Since then, Ecology Action has recycled 500 tons of materials, mostly glass, for a gross income of \$10,000. Most of the money has been cycled back into the recycling business.

Glass tonnage has grown week by week as housewives scrubbed labels off and removed metal rings and caps. "We really never thought it would catch on like this," said Humphrey.

can purchase a glass crushing machine which also shreds cans and separates aluminum from other metals. The machine leaves the glass free of metal caps and rings, but it does not solve the label removal problem.

A machine costing \$750 will crush glass alone, but again the label removal problems remain, Humphrey said.

Assuming glass and cans can be made useful for a market, Humphrey said the center will invest in a machine soon. Facts and figures on equipment will be discussed during an environmental conference sponsored by Ecology Action the weekends of Nov. 27 and Dec. 4.

A New Idea

Humphrey's young associate, Charles Link, has come up with a plan to enlist more help from students, service clubs and environmental organizations.

Humphrey said the center will offer such clubs \$500 for a month's work at recycling. Earning the money will require about one hour's work from each of 30 people per week, he said.

They will empty bins at pick-up points, wash and break bottles and make deliveries to markets. At the end of the month, they will make a report to the City Council, Humphrey said.

Meanwhile, Humphrey said the Ecology Center is balancing on the verge of having too much work to do for its own good. The same is true for centers up and down the San Joaquin Valley, some of which are collecting more than in Modesto.

11/8/71

Letters to the Editor

GARDENING TEST QUESTIONED

A much publicized organic/chemical gardening test plot at the Modesto Junior College, under the management of farm advisor, E.E. Stevenson, was conceived, installed, and maintained in an incompetent manner. Upon investigation, the Ecology Action Educational Institute has learned the broccoli test plot at the Modesto Junior College is not capable of yielding meaningful results for the following reasons: 1. Transplants were infested when planted, and came from two suppliers. 2. Only one test plot was utilized (rather than trying for replication of results) and the test plot had a compacted area in the center. 3. Management of the plot itself is questionable as sprayed and unsprayed rows are adjacent, soil tests were not taken, and no special soil amenities were added to the organic section. 4. A biological agent and a chemical agent pesticide were formulated into the same spray application.

We can only conclude that E.E. Stevenson is incompetent or purposefully designed and managed this plot to yield misleading results.

We therefore request that his superiors determine how and why this plot was established and issue a public statement about the soundness of the test plot

and the reliability of any announced conclusions. And that the agriculture department at Modesto Junior College prepare an information sheet to post for and to give to visitors and students looking at the plot a complete history of the condition of the soil, the transplants and the procedures followed after planting.

For further information contact Cliff Humphrey, 529-3784, Ecology Action Educational Institute.

* * *

Organization for Parents of Hyperkinetic Children
P.O. Box 1072

Salida, Calif. 95368

January 10, 1972

The Modesto News Bulletin
Modesto, Calif. 1/19/72

Ecology Drive^{2/11/71} Starts Feb. 27 In Newman

The Newman Junior Women will conduct an ecology drive in Newman to collect all aluminum cans, old glass and newspapers. The first pickup will be held on Feb. 27, by members.

The project was voted on by the club members after a talk on pollution by Beth Kenworthy, a volunteer worker and speaker from the Ecology Action Educational Institute of Modesto.

Miss Kenworthy's talk covered a broad spectrum of items concerning pollution including ways to fight pollution and the recycling of products such as glass, aluminum cans and newspapers. The club will take the cans and glass to the Ecology Institute in Modesto but the newspapers will be collected and sold by the club with the proceeds going for conservation projects.

A membership drive is also being conducted by the club with a new theme of "Add One In '71" for the new year. Each member is being urged to bring a new person into the club this year.

Four guests were present at the meeting held at the home of Mrs. Robert Thomas. They were Mrs. Ron Silva, Victory Perry, Louie Menezes, and Miss Jenny Lyons.

Attending the San Joaquin District meeting held in Stockton, on Saturday Jan 15, were the club president, Mrs. Charles Kidder, and first vice president, Mrs. Ray Krieger. The district meeting was conducted by Mrs. John Bell in the absence of the district president, Mrs. John Bell.

The next meeting of the local club will be held at the home of Mrs. Harold Carter on Jan 23, at 8 p.m.

Schools Ponder Waste Paper Problem ^{10/4/76}

Waste paper salvage and reuse may be an answer for elementary and high schools in Stanislaus County now that incineration has been banned because of air pollution.

The idea has possibilities as a practical lesson in resource conservation for students, says Dr. Paul Hillar, assistant county superintendent of schools.

Dr. Hillar estimates more than 20,000 pounds of waste paper and substantial amounts of cardboard are thrown away each week in the public schools.

Until this semester, the schools have destroyed most paper waste products through incineration, but now that is illegal.

Most school districts have reacted accordingly, by budgeting for and ordering increased garbage collection services. There is talk

about special compaction packers or special incinerators to handle the flood of waste paper.

Instead, Dr. Hillar said the schools might cut some costs by separating paper so that most of it could be baled and sold for reuse. The schools could not make a profit on the paper, but they might cut the costs of removing it.

Idea Discussed

Hillar met last week with Rudy Bonzi, a commercial garbage hauler, and Lester Coon of the Ecology Action Educational Institute, to discuss the idea. Ecology Action has been a catalyst in Hillar's thoughts about recycling waste papers.

The sad news is, school waste paper is of the lowest possible grade and it must be completely separated from carbon papers, milk cartons,

paper towels and a number of other "contaminants," Bonzi said.

Bonzi cannot bale school waste paper for less than \$8 per ton, and that does not include the cost of picking it up at the schools. Since the paper can be sold for no more than \$6 per ton, there is little in it for Bonzi.

Bonzi is willing to take the paper, if it is separated sufficiently, and pass on what he makes to the schools in terms of lower collection costs.

As an alternative, he offered to loan the schools a hauler for a semester, so papers could be baled at some central location in the county for direct sale to users.

Collection Zone

One problem is, Bonzi is not allowed to collect school wastes within the City of Modesto, where most of the Modesto elementary and high

schools are located. Those schools are considered commercial accounts, restricted to dealing with city franchised garbage haulers, though the "purchase" of paper may be an exception.

Burners Snuffed

Some Modesto schools began the semester by lighting up their incinerators but they have been snuffed out, one by one, by order of the county Health Department. Richard B. Eaton, assistant superintendent of business services for the schools, said garbage collection services have been ordered for the cited schools.

Ordering increased garbage collection for all the schools may cost \$25,000 per year which the Board of Education refused to budget, so Eaton said the city schools are looking at every possible alternative.

Hillar 497

Junior Women's Club Adopts Ecology Project

The Newman Junior Women's Club will conduct an ecology drive to collect aluminum cans, glass bottles and newspapers.

The first pickup will be Feb. 27. The project was adopted after club members heard a talk by Beth Kenworthy, a volunteer worker at the Ecology

Action Educational Institute of Modesto.

The cans and bottles the club members collect during their drive will be taken to the Modesto institute for recycling but the newspapers will be sold by the club with the proceeds going toward the club's conservation projects.

THE MODESTO BEE

McClatchy Newspapers Service

MODESTO, CALIFORNIA, MONDAY, NOVEMBER 8, 1971

AAA

PAGE B-1



Bee Photos

Experimental glass breaking machine is tested.

Ecology Action Will Pay Groups For Recycling

An opportunity for clubs and groups to make \$500 for a month's work recycling glass and cans will be offered by the Ecology Action Educational Institute, Inc.

Group representatives are invited to a 7:30 p.m. meeting tomorrow at the institute, Kansas and North Franklin Avenues, near the Borden Co.

Ecology Action director Mary Humphrey said the Modesto High School ecology club will undertake the first month's work, and the Alternate Ways School of Modesto will work in February.

Eight or nine other groups have expressed interest in the offer but more are welcome, she said.

Hard Work

"If they don't work hard, it'll break us," she said. "They will really have to expand our recycling volume."

Ecology Action is paid \$20 per ton for used glass by the Gallo Glass Co. and has markets for used tin and aluminum cans.

But the institute is handling all it can with present volunteer help and methods. A member, Charles Link of Modesto, conceived the plan to hire citizen groups for \$500 per month to increase volume.

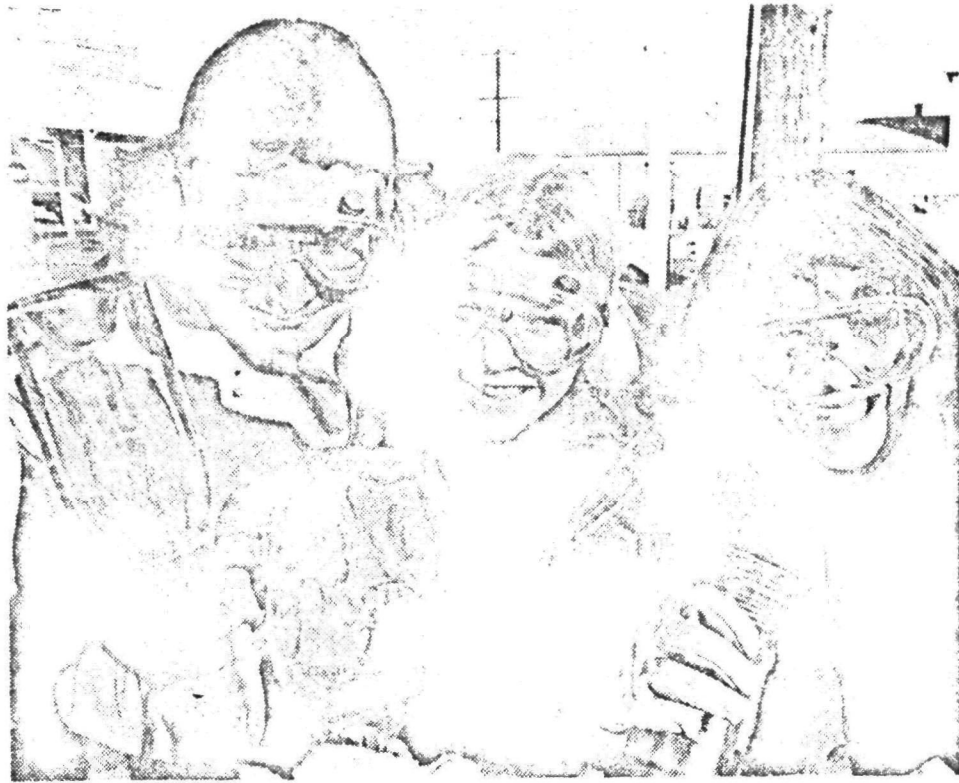
THE MODESTO BEE

McClatchy Newspapers Service

MODESTO, CALIFORNIA, TUESDAY, JANUARY 4, 1972

AAA

PAGE B-1



Bee Photo

From left, Eichel, Schultz and Goff attack bottles.

High School Students Cash In On Ecology Center Pay Offer

Members of a Modesto High School ecology club donned plastic goggles yesterday to start a month of breaking glass bottles.

They belong to ACT, Active Conservation Today, a four year old environmentally concerned campus group. They have taken up an offer from the Ecology Action Educational Institute, Inc., to earn \$500.

Ecology Action founder Mary Humphrey said the \$500 will be paid after the youths carry on recycling activities for a month. Other clubs are welcome to apply.

In fact, the program will have to expand the collections and sales of useful waste materials, or it will not pay for itself, she said.

To help, citizens can take used bottles and cans to several collection points in the city. Bottles must be clean, and

used to produce home insulation.

Broken glass is purchased by the Gallo Glass Co. from Ecology Action. Cans are sold as scrap, and newspapers are

Bought By Gallo

Broken glass is purchased by the Gallo Glass Co. from Ecology Action. Cans are sold as scrap, and newspapers are

used to produce home insulation.

The object is to reduce the drain on raw materials by using things over again. Ecology Action founder Cliff Humphrey says he hopes for a complete cultural transportation, away from throw-away packaging and resource wastefulness.

Helping launch ACT's month of work yesterday were seniors Bill Garvin, 17, and Jerry Huey, 17, and juniors Russell Wagoner, 17, Everett Schultz, 18, Fred Eichel, 16, and Ben Goff, 16, all of Modesto.

Instructors Pete Cislo, Joe Davajon and Monte Reed advise the club.