Humanity cannot continue to operate with a throwaway economy. The Evergreen State College, as an environmentally conscious educational community, should be a leader in developing ecologically sound practices. In many ways it has been ahead of other organizations in doing so. In January, 1991, a DTF was appointed by President Les Purce and Vice President M. Jamil Qureshi to develop an improved plan for waste reduction and recycling. This move was stimulated by internal concerns within the Evergreen community and by the Governor's G.O.L.D. (Government Options to Landfill Disposal) plan, which mandates that all state agencies take such action.

This plan calls for a series of specific actions to be taken by various members of the College staff and administration. Some actions can be taken immediately; others call for short-term actions, such as purchasing or constructing appropriate containers; and still others will require long-term action, primarily because they require significant funding. To be successful, the program should be phased in over the next few years, accomplishing what it can as funding becomes available, as markets for recycled materials change, and as the campus demands increased recycling options. The entire plan must also be supported by a significant educational program; points specifically requiring education, which is discussed in the second part of this plan, are denoted by • However, members of the DTF have had a series of informational meetings with the staff in some areas of the campus, and it is clear that there is already excellent support for an enhanced program.

OUTLINE OF THE REPORT

Part One: A waste reduction and recycling plan for TESC

I. Implementation

II. Paper

III. Recycling

IV. Laboratories

V. Housing

VI. Food services

VII. Tacoma campus

VIII. Personnel considerations

Part Two: Education

Part Three: Budgetary considerations

PART ONE: A WASTE REDUCTION AND RECYCLING PLAN FOR TESC

I. IMPLEMENTATION

As the DTF examined many specific problems and discussed solutions, it became clear that a DTF cannot do more than outline a plan; many details will have to be worked out day by day to reduce waste and improve recycling. We therefore recommend that a small recycling task force (RTF) on recycling be established; it should report directly to the Vice President for Finance and Administration, and should consist of a few staff members who are most involved in daily operations and can evaluate technical problems, including the Recycling Coordinator and representatives from Custodial Services, Facilities, Food Services, Housing, Purchasing, and the Print Shop.

It is impossible for the DTF to anticipate all the problems, nor can it evaluate the relative costs of many operations, especially since so much is in a state of flux (such as changes in the recycling market, new recycling technologies, and Thurston County's development of a recycling program). The RTF must consider at least the following general options: Contracting with some private company to handle all recycled materials; buying our own equipment and handling materials internally; or entering into an agreement with Thurston County for handling all materials. This requires further study, and the situation will undoubtedly continue to change. In general, the DTF anticipates that some College personnel and facilities, such as dumpsters and containers, will be converted over gradually from waste disposal to recycling.

A campaign for an amplified conservation and recycling program should be developed during the summer of 1991, and the program should be formally introduced to the campus in the fall of 1991. The DTF has been accumulating plans for the campaign, including a poster design, literature, and displays.

II. PAPER

It is clear that paper is the greatest single item that is wasted by the College and not fully recycled. Waste reduction can be enhanced by establishing front-end reductions to maximize the use of the State's resources.

A. Purchasing

- 1. The College should purchase only recycled paper for all purposes, containing the largest available percentage of post-consumer recycled fibers, and not chlorine-bleached.
- 2. Computer Services should continue to investigate sources of high-quality recycled computer paper.
- 3. The College should purchase only white or off-white unbleached paper. This will facilitate recycling, since it will not be necessary to separate colored from white paper. Furthermore, white paper has much higher commercial value than colored paper.
- 4. Because many people want some color on their papers, to make them distinctive, the Print Shop should investigate methods for printing small colored areas, such as borders or headings, or unusual print fonts.
- 4. All envelopes should be made from recycled fibers, should be fully recyclable, *should contain no plastic windows*, and carry the statement "This envelope is made from recycled fibers and is fully recyclable," with the recycling logo.
- 5. All College stationery should carry the statement, "This recycled paper is recyclable."
- 6. The College should not use any self-stick labels, as these hamper the recycling process.

B. Use

- 1. General Policy: The College should work with Evergreen employees in all areas to help them to make maximum use of information in the form of computer files (and related technologies, such as microfiche), so they use an absolute minimum of paper.
- 2. The College now uses an enormous amount of paper for public announcements and memos. People now assume that every employee is interested in every occurrence on campus (every hiring process, every change in office hours, every party for someone leaving, and every public event), and that they all need their own personal copies, printed in extenso on the brightest

colored paper available. Mailboxes are stuffed with these papers every day, and almost all of it is immediately discarded. The situation will be markedly improved once the campus is computer networked (see section C. below). Until this time, we recommend the following actions:

- a. In general, there is little need for everyone to have a personal copy of each memo. In each work area, and at faculty mailboxes, there should be a place for the posting of important notices; we estimate that there are about 30 such places on campus. People who wish to disseminate information should make only enough copies for these areas, and the Print Shop should be given authority to refuse to print large runs of notices that could be distributed in this more conservative way. The system should be developed and implemented by General Services.
- b. Information Services should determine which general notices they can include in Happenings. For instance, they may be able to include a brief list of employment opportunities; those who are interested in any job should then get the information directly from Employee Relations.
- c. General Services should investigate the possibility of having a central phone number with a recording of important notices, to be updated daily.
- d. Whenever the Print Shop receives two or more memos that are appropriate for general distribution, it should combine them into one printing, at least by printing two of them back to back.
- 3. The Director of Computer Services and the Vice President for Administration (or their representatives) should consult with all managers and all offices to reduce the number of reports and other materials currently being printed out:
 - -- Customers don't realize they can get information on line.
 - -- Report requests that are still in force because of tradition or automation.
 - -- Some reports get printed just as a means of storing back-up information.
 - Redundant reports; people get copies because they are on the mailing list, not because they need one.
 - Excess historical data cluttering reports.
 - Other ways to reduce paper waste should be sought.
- 4. Computer Services should develop alternatives to reduce excess reporting, including but not limited to:
 - a. Educating users on how to find information on-line. If no on-line mechanism exists, then provide a new mechanism such as a user-oriented reporting language like INQUIZATIVE.
 - b. After the initial audit of reports is completed (section 3, above), institute procedures for questioning all new report requests and periodically reviewing old reports.
 - c. Find alternative report storage media, such as microfiche, CD ROM, and optical disk.
 - Use compressed print where acceptable.

- e. Ensure that each department has an "expert" user to help avoid redundant requests.
- f. Be especially watchful over "new manager requests."
- g. Purge excess historical data to tape.
- 5. Computer Services, Academic Deans, and Program Secretaries should work together to eliminate unnecessary paper copies of student evaluations. Computer Services should consider workshops on the more effective use of computerized information.
 - a. With a secure back-up system, there is no need for the fourth (file) copy of faculty evaluations of students; eliminating this would reduce evaluation paper use by 25%.
 - b. Program secretaries currently print out copies of student data before running off evaluations; this could be eliminated.
 - c. Many faculty members keep copies of student evaluations on computer disks. If the Academic Deans would be willing to review portions of faculty portfolios in this form, rather than on paper, most of the faculty copies of student evaluations could be eliminated.
 - d. The file copies of students' self-evaluations can probably be eliminated. Many faculty members may also be happy to keep self-evaluations in their own computer files, thus eliminating another copy of this document. (This would require some changes in the macros that print these documents.)
 - e. Computer services should develop a macro to print Individual Contract and Internship Contract forms.
- 6. All faculty and staff members should be encouraged to keep copies of their correspondence and other documents only in computer files, rather than as hard copies. Where hard copies are necessary, they should be encouraged to keep only one copy in a central file, rather than maintaining duplicate personal files.
- 7. Registration and Records has already suggested that they should obtain a reader board for announcing information that must be updated frequently. We support this suggestion and recommend it to other areas that might use this technology, instead of paper.
- All copying machines on campus should be reevaluated and, if necessary, replaced, so that
 it is easy to make double-sided copies routinely. Instructions for making two-sided copies should
 be posted.
- 9. All items sent through Campus Mail should be enclosed only in reusable envelopes, if envelopes are necessary at all. People should be encouraged to send items by merely folding them in half and putting the recipient's name on the outside.
- 10. A great deal of unnecessary paper is brought to the campus by outside organizations who post notices and distribute handbills. The RFT should be authorized to monitor these activities, to regulate and, if necessary, prohibit use of campus facilities by these organizations.
- C. Information management: Networking the campus. At present, an enormous amount of paper is consumed by memos and announcements. Faculty members and staff find their mailboxes stuffed each day with such papers, many of which are of only limited interest. Much of this paper could be eliminated if the campus were networked, so that people could quickly consult a bulletin board on their computers, note items of interest to them, and ignore the rest. A few copies of this daily bulletin board could be posted in selected central places for those who don't have access to computers.

1. The President, Vice-President for Administration, and Director of Computer Services should work together to make campus networking a very high priority item in the College's capital budget request. Since legislative support is so unsure, at the same time they should establish a small group to write grant applications for this purpose.

III. RECYCLING

A. General

- 1. General policy: "Wastebaskets" and "garbage cans" at Evergreen should be reduced to an absolute minimum. Recycling containers should take their place. All students and employees must come to think of unwanted materials not as "waste" or "garbage" but as valuable resources to be recycled appropriately. Visitors to the campus should be informed of this policy.
- The College should institute educational programs for faculty, staff, and students to assure their enthusiastic cooperation in all recycling efforts.
 - 3. The College should develop a standardized system for all recycling containers, to conform with national standards for color and form.
 - 4. At present, money from some recycling efforts goes back into the State general fund. All efforts should be made to change this policy so money comes back to the College. The President and the Vice President for Administration should investigate ways to make this return visible to employees and students, so they see a tangible result of their efforts.

B. Paper, cardboard, and compostable waste.

- 1. All large "wastebaskets" in offices and public rooms should be eliminated. Instead, employees should be given a small container for food scraps, tissues, and other potentially compostable materials that they generate. Until a composting system is developed for the campus (see section E below), the contents of these containers will have to go into the garbage system. We recommend that custodians should continue to be responsible for this material until an improved division of labor among custodians and recycling workers is developed.
- 2. Every office, classroom, studio, and lab, and every public point where paper can be generated, should be supplied with two containers: one for high-quality white paper and one for mixed paper (that is, all other recyclable paper). Users should be instructed in criteria for separating these papers.
- Central repositories for cardboard should be established in convenient places. The responsibility for breaking down cardboard boxes and placing them in depositories should remain with custodians.
- 4. To handle the additional load of recycled material, more workers should be added to the recycling operation. We recommend that students be hired, but it is important that the system be maintained during vacation times, and the College must ensure this continuity.
- 5. Paper shredders should be purchased for a few central locations, such as administrative office (Library third floor) and the Registrar's area, so sensitive documents can be turned into recyclable paper.

C. Glass, metals, and plastics

1. The number of containers marked for cans and bottles should be increased, to make these containers easily accessible throughout the campus. They should be located in areas where people congregate, not near vending machines.

- 2. Procedures for plastics will have to be developed as the recycling market improves. This should be one responsibility of the recycling task force.
- 3. Current procedures for handling metals are very effective, and they should be continued, but expanded to include places such as the Bike Shop, the laboratories, and Housing.

D. Reusable items.

- 1. The RTF should explore the establishment of a few central collection sites (Housing, CAB, Library Building) where some reusable items can be deposited, for donation to charities, Goodwill, and other such agencies.
- 2. At the same places, items such as clean paper bags can be deposited for reuse by anyone who needs them and for donation to the Food Bank or other agencies.
- 3. Facilities should investigate making a central place for good cardboard boxes, probably knocked down, for reuse on campus.
- 4. A central place should be established for good paper, used only on one side, either for reuse on campus (perhaps made into notepads, as the Print Shop now does) or for donation to schools and charities.
- 5. All employees and students should be educated regarding the use of outdated paper, printed on one side, for scratch paper, drafts, and so on. It should be College policy that employees will use paper in this way wherever possible.

E. Composting.

1. The RTF should explore the development of a composting system, in cooperation with the Organic Farm, where food items and many kinds of paper can be safely turned into fertilizer.

IV. LABORATORIES

- 1. Waste containers in labs should be designated for special purposes. (Boxes for the two types of paper should be placed in all labs, as everywhere else on campus.) Potentially compostable materials, such as paper towels, should be separated from genuine waste such as tape, used plastic items, rubber gloves, etc. Depositories for metals should be established and these items should be handled with the procedures designated above (II.D).
- 2. All students should be required to bring or purchase small cloth towels for their personal use in labs, thus reducing the consumption of paper towels.
- 3. Glass should be separated into "soft" and "hard" containers. Soft glass should be recycled along with glass bottles. Methods for recycling hard glass should be investigated.
- 4. Hazardous waste should continue to be handled according to current procedures.
- Bioremediation methods (microbial digestion, for instance) should be investigated for special lab wastes.

V: HOUSING

The DTF notes that Housing has its special problems, especially the general lack of money for recycling. These problems must be worked out by those who are most involved, and the DTF can only make rather general recommendations.

Housing now recycles some glass and aluminum. There are three drop-off sites: one for the Mods, one for Phase II-III, and one, outside A Dorm, for the original dorms. The students have been diligent in their recycling of bottles and cans. Cardboard recycling has been less than successful because of lack of information and because the recycling area is not convenient or obvious. There is no formal program for recycling or other alternative ways to dispose of waste, but there is a composting project in the Mods, organized by household; Housing supports it by approving the composting areas and supplying information, equipment, and ingredients such as worms.

Money is quite limited, but Housing has set some funds aside for the coming year and should continue to include recycling in its budget.

Storage space is limited. In consultation with the RTF, housing should plan containment areas for its three distinct zones: Dorms, Phases II and III, and the Mods. One center in the dorm courtyard, an area that is centrally located and is already established as a recycling zone, could serve the 450 residents in Dorms A, B, C, and D. The best area is next to the loading dock, since it is covered and is easily accessible to recycling vehicles. However, no good centers have been designated yet for residents of the other dorms and the Mods; these are problems to be worked out.

Education is something of a problem, but Housing personnel feel that this can be accomplished primarily through Housing meetings and the efforts of the Housing Managers.

Housing should have one staff person who is in charge of recycling and is a member of the RTF. It is estimated that this work will not take many hours each week and that it is best made part of the responsibility of some full-time person.

VI. FOOD SERVICES

Food Services is already very aware of waste reduction and recycling problems, and they have been taking appropriate steps to improve their procedures. We recommend that Food Services should eliminate the use of all disposable plates, cups, and dinnerware as soon as possible, and use only washable items. Central places for deposit of dirty items should be established in all buildings, and students should be employed to collect them regularly.

VII. TACOMA CAMPUS

Members of the Tacoma Campus community are already very aware of waste problems and have instituted recycling and waste-reducing programs of the kind we are recommending for the main campus. That is, they are doing the right things. We recommend only that, with the help of the RTF, the Tacoma Campus should seek ways to dispose of the small amount of material that is potentially recyclable but is not yet being recycled, perhaps through an expanded curbside recycling program by the City of Tacoma.

VIII. PERSONNEL CONSIDERATIONS

- A full-time coordinator of recycling and waste management should be hired. He/she should report to the Vice President for Finance and Administration Services.
- 2. For now, custodians should continue to perform their customary jobs. They should be responsible only for removing waste. The question of their performing some recycling jobs, such as removing paper and cardboard to depositories on loading docks, should be negotiated.
- 3. A crew of additional people to handle recycling should be hired. The DTF recommends that as many of these people as possible should be student employees, but the College must ensure that the work can be handled during vacation times as well as when classes are in session.

4. Language should be inserted in all hiring contracts and employee job descriptions specifying that anyone hired must participate in the campus's waste-reduction and recycling activities.

PART TWO: EDUCATION

The DTF began with the assumption that education would be a major problem and that considerable effort would be needed to convince members of the Evergreen community to cooperate. Education was addressed specifically in Part II of the charge to the DTF, and it has a prominent role in the GOLD Plan. In late April and early May, members of the DTF had several local meetings with various staff groups, to inform them of our plans and listen to their concerns. We were pleasantly surprised to find that Evergreen staff members are already enthusiastically recycling and are happy to support an improved system; they are also aware of wasteful practices, have often taken steps on their own to reduce waste, and were full of good suggestions. We therefore conclude that the plans outlined here can be instituted with a minimum of educational effort among the staff; when they are presented with an improved recycling system, we expect them to cooperate willingly.

Education among faculty members and students is another matter. In both groups, concern for waste reduction and recycling appears to vary from enthusiastic activism, among a minority, to bland unconcern among the majority. (This statement is based on impressions; we have not done surveys to gather data on this matter.) Nevertheless, the following resolution was presented to, and adopted by, the faculty on 17 April:

The Evergreen State College has been informed by environmental concerns since its inception, even though such concerns have not permeated to all segments of the community. Now, as the Earth's environmental situation approaches a crisis of unprecedented proportions, the Faculty of the College reaffirms its commitment to policies aimed at bringing humanity into ecologically sound ways of living on this planet. The Faculty recognizes that it is appropriate for Evergreen, as an educational institution that seeks to prepare its students for life in the twenty-first century, to promote an awareness of environmental problems by all members of the College community. The Members of the Faculty agree to support programs and procedures to reduce waste, increase recycling, and generally to make the College operate in more ecologically viable ways, and they agree to promote these procedures in their academic programs, among all their students, and in their own activities.

The resolution was passed unanimously, but only about 30 faculty members were present. The question now is to implement this resolution by incorporating it into the academic mission.

We believe there are two main foci for education here (aside from a program in College Housing, as discussed above): faculty self-education and education within programs. Academic programs appear to us to have the greatest potential for real education; it is here that faculty members and students who are already determined to live in appropriate ways can influence others and that social pressure can help to infuse and maintain desired behaviors. As the faculty were told at the 17 April meeting, what we are looking for here is an addition to the ethos normally developed in a program. At present, faculty members work to develop a certain ethos centering around cooperative work, collegiality, honest devotion to the program's goals, and so on; we now want to add an environmental ethic to each program. This ethic would include such things as:

- Nothing should be wasted.
- Everyone is careful to recycle extra papers.
- Everyone is aware of recycling containers in each classroom and uses them appropriately; nothing is thrown casually in wastebaskets.
- Everyone uses durable cups instead of throwaway paper cups for drinks they consume during program meetings.
- For program trips, retreats, and potlucks, plans are made to use durable, washable dishes and to buy food and materials with environmental concerns in mind.

 Program faculty members prepare the minimum number of handouts and papers, and all members of the program are careful to preserve these.

Special attention is paid to materials generated by program projects, such as lab and studio work;

waste materials are disposed of properly.

 Whenever possible, materials (such as drafts of papers) are handled in computerized form, rather than hard copy, to minimize use of paper.

Developing such an ethos and pattern of behavior should be left up to each program, but it is essential that each program attempt to foster it. One method would be for each program to have a small internal committee, made up of a few environmentally concerned students, to help develop general awareness and promote appropriate behavior. (They should not, of course, take on the character of a police force.) But the initial impetus must come from the faculty, and faculty members must model appropriate behavior in their own lives.

Student orientation is clearly an important point for education. There is already a brief handout that summarizes recycling on campus. We recommend that a representative from the recycling team should be included in all orientation sessions to explain the College's program and what cooperation is expected of students.

The DTF has considered such items as a recycling award and a recycling newsletter to promote better participation. The RTF should determine whether these would be useful (or whether they might be an unnecessary use of paper).

The DTF has also been in touch with a subcommittee of the Strategic Planning Council, which is considering the concerns of this report, and environmental concerns generally, as matters of high priority for the College. We urge this group to continue in this direction.

As an additional aspect of education, the DTF recommends that faculty members in Environmental Studies should strongly consider two kinds of programs. First, there should be more opportunities for students in Environmental Studies to learn about recycling and waste management, in general. Second, the faculty should investigate opportunities for some students to get into recycling and waste management professionally; this might best be done by expanding opportunities for internships in this field. The DTF feels that Evergreen should be an educational leader in this respect; it might be one of the few colleges where students can get appropriate training for this kind of work.

PART THREE: BUDGETARY CONSIDERATIONS

This is the most difficult matter that the DTF was asked to consider, because the methods of recycling and the economics of the process are changing so rapidly. Furthermore, we are recommending that the recycling program be expanded in stages, to be overseen by the RTF, and we cannot anticipate future costs and savings. Thus, the budgetary matters must be left primarily to those who will implement this program.

On the whole, however, we anticipate savings to the College once the recycling and waste reduction program is in place. (Examples of such savings are mentioned in the G.O.L.D. Plan.) One of the chief savings will be in the costs of landfilling, which can only rise in the future. We also anticipate potentially enormous reduction in the use of paper, in many places. There will be reduced use of plastic bags for wastebaskets and of paper towels if cloth towels are used in labs. Food Services now spends a great deal on disposable paper materials, and these costs will disappear, although they will be offset, at first, by the costs of buying more durable utensils.

The first stage of implementation has the following associated costs. Most of these should be considered estimates.

	Item	Cost
1. Personnel		
	Recycling coordinator Student workers (40 hrs/week @	\$26,000
	\$4.50/hour)	9,000
	Half-time custodian (as at present)	10,000
2. Rental and	l recycling service	
	Six paper dumpsters for campus	2,592
	Four paper dumpsters for housing (both at \$36/mo/dumpster)	1,728
3. Purchasing	g, construction, etc.	
	Eight cardboard dumpsters for campus	2,800
	Four cardboard dumpsters for housing	1,400
	30 10-gal cans for glass/cans @ \$30	300
	554 office paper boxes @ \$6	3,324
	235 Housing paper boxes @ \$6	1,410
	Two concrete pads for Housing	1,000
	Promotion of recycling program	2,000
	Total first year costs	61,554

Recently, S and A has provided some funds for recycling containers, and we anticipate that they will continue to include money for recycling in their budget. Furthermore, we expect various divisions of the College to begin considering the costs of disposing of materials they produce, or help to produce, and therefore including some funds for recycling in their budgets; these areas include Facilities, General Services, Computer Services, Housing, and the Bookstore.