

# The Recycling Project

C-

Prepared By:

Sally Bentz  
Stacy Glum  
Krista Hanada  
Rose Montillano

## TABLE OF CONTENTS

---

Introduction.....	page 1
Problem Background and Statement.....	page 1
Goals and Objectives.....	page 2
Weighing the Alternatives.....	page 3
Implementation Strategies.....	page 4
Conclusion.....	page 6
Monitoring and Evaluation.....	page 10
Time Log.....	page 12
References.....	page 15

## Introduction

---

Recycling is not a panacea for our environmental problems. However, it is a good tool after reducing and reusing materials in reducing landfill waste. Recycling has to be a closed loop system to be most efficient. In 2001 U.S. residents, businesses, and institutions produced more than 229 million tons of municipal solid waste (U.S. EPA). This is 4.4 pounds of waste per person per day. This is up 50 percent from 1960. Of this waste recycling prevented 64 million tons of material from ending up in landfills and incineration (U.S. EPA).

### Problem Background and Statement

In 1989, California State law (AB 939), otherwise known as The Integrated Waste Management Act, was passed because of the increase in waste stream and the decrease in landfill capacity. The law required that the City of Arcata reduce its waste by 50 percent by 2000. The City of Arcata's goal is to divert at least 60 percent. The law established an integrated framework called the Source Reduction and Recycling Element (SREE) for program implementation, solid waste planning, solid waste facilities, and landfill compliance. The City follows the Source Reduction and Recycling Element; this guides the City on how to reduce its waste. The plan covers waste prevention (Source Reduction), reuse, recycling and composting. The City estimates that they are between 45-55 percent diversions. This will change when Humboldt State University ends its recycling program.

Humboldt State University was one of the first State facilities in California and the United States to begin a recycling program (Campus Recycling Program). Humboldt State is a good example and model for other State facilities. In 2002 Humboldt State diverted 300 tons of trash, approximately 59%. When Humboldt State University eliminates their recycling program on, July 1st 2004, Arcata will be in violation of State waste reduction mandate, because the City has to meet the 50 percent waste reduction and Humboldt State plays a large part in reaching this goal. The City could be fined at up to \$10,000 a day.

Multi-use family complexes along L.K. Wood Blvd. have no recycling programs available for recycling needs. The curbside program, which was created in 2001, has been inconsistent for the multi-use family complexes. Since the inception of the recycling program there have been three different entities at different times responsible for curbside pickup, thus, causing residents along L.K. Wood to become apathetic towards recycling. The City's recycling is currently open to general competition. Due to lack of funds and conflicts within city politics this program no longer exists.

Our Environmental Science practicum group wants to implement a program to meet the needs and solve the problem of the non-existent recycling program. In order to help reach the City of Arcata's recycling goals, there is a need for a recycling program to be implemented along L.K. Wood Blvd. for multi-use family complexes.

## Goal and Objectives

---

### Goal:

The project is to create and implement a recycling program that would reduce waste along L.K. Wood Blvd.

### Objectives:

The group will talk to Alec from Humboldt State University's recycling department and ask about Humboldt State University's recycling program. When the group did talk to Alec he explained to us that Humboldt State University's recycling program is a separate entity than the City of Arcata's recycling program. He recommended us to talk to Rick from Arcata garbage.

The group will contact Rick from Arcata Garbage and ask him in which locations do they offer recycling in Arcata. Also, we will discuss if they could implement a program along L.K. Wood Blvd. or should we find other alternatives.

The group will contact the City of Arcata's Recycling Center and ask them if they would be interested in doing the curbside pick up program or any other alternative solutions. When we contacted the recycling center, they explained that we needed to find other alternatives for this project because the recycling curbside program in Arcata was going to be cut.

The group will contact Humboldt Sanitation Center and ask how their models have been created and implemented. We will also visit Humboldt Sanitation's satellite recycling sites located in Big Lagoon and Trinidad.

The group will contact East Side Deli and present to the owner a workable model that could be implemented on their site. We will also show the deli the benefits they will receive from the program on their site, such as, increase traffic, zoning incentives, and generate money.

The group will contact Humboldt Sanitation or Arcata Garbage to find and buy toters if the East Side Deli decides to take on the project.

The group will make flyers, on recycled paper, and present them to the East Side Deli for them to distribute to residents and apartment complex managers along L.K. Wood Blvd., informing them of the new program.

*of these are  
all ways  
of finding out  
the situation  
and for  
int. learning  
a solution.*

*Objectives  
are targets  
you  
wish to  
achieve.  
eg: a number  
of pounds  
of newspaper  
recycled*

## Weighing Alternatives

---

In order to complete all or most of our Goals and Objectives we had to figure out what would be our best alternative given our situation. Our goal was to meet the needs and solve the problem of the non-existent recycling program along L.K Wood Boulevard.

Our first alternative was to implement a recycling program for all the apartment complexes without providing a recycling service. This alternative would require heavy involvement on the part of apartment managers. We would have to secure a set amount of Recycle Totter Bins for each apartment complex at a cost of \$70- \$100 each. The problems ~~were~~ that theft and vandalism may occur, it could become really messy, and the apartment managers didn't have the time or were not willing to take care of the recycling for their own apartment complexes.

Our second alternative was to contact the three recycling services available in the City of Arcata that would be willing to pick-up the recyclables for the apartment or multi-use complexes. The three recycling services are: Arcata Garbage Co., Humboldt Sanitation Services Co., and the Recyclist. Arcata Garbage Company said no, because they were too busy to be involved. Humboldt Sanitation Services said that it wasn't in their jurisdiction and they didn't do apartment complexes. The Recyclist offered, however, he had no set schedule for picking up recyclables around town and the apartment managers did not like the idea of having recycle bins full and not be taken care of on a regular schedule.

Our third alternative was to implement a Satellite Recycling Center for the residents along L.K. Wood Boulevard. The models that we looked at were in Big Lagoon School, the Trinidad School, and throughout the City of Eureka's neighborhood for their community recycling facilities. In order to achieve this we would have to work with the City of Arcata. The City of Arcata was too busy to get involved with our group and didn't return our phone calls, emails, and so we became reluctant to try to meet with them.

Our fourth and best alternative was to implement a satellite-recycling center at the East Side Deli located on L.K. Wood Blvd. This alternative would involve the participation of the owners and or manager of the East Side Deli, provided that they agree and no conflicts with the City of Arcata's zoning issues arise. It would also include a recycling pick-up service if the business were unwilling to take care of the disposal themselves. In order for our project to appeal to the East Deli owners we would have to generate all information needed to present to them, the many benefits that their business would achieve from this venture.

## Implementation Strategies

---

In order to complete our best alternative, we decided to collect enough information to present to the East Side Deli, so that it would require little or no effort on their part to join our efforts in solving the need for a satellite recycling facility. To accomplish our tasks we developed implementation strategies, in the form of a timeline- in order to have enough time to set a meeting with and present our project to the East Side Deli. We started over again and began our research with questions as to why the East Side Deli would be interested in our project and what are the necessary components to setting up a satellite recycling facility. And for ourselves, we looked up issues of why they wouldn't want to be involved with a recycling facility. Being able to communicate our projects efforts clearly and substantially would improve chances for an outcome in our favor.

### What is needed to set up a recycling facility?

1. Recycling Bins
2. An entity willing to pick up the recyclables
3. Designated area/s for recycling bins on property
4. Appropriate Signs
5. Zoning Issues with the City of Arcata (will the city allow small businesses to have a recycling spot)

## TIMELINE

---

### **April 3**

Research Zoning Ordinances in the City of Arcata's General Plan  
Look up Source Reduction and Recycling Element in HSU library

### **April 10**

Look up successful recycling models.

Make an appointment to speak w/person in charge of recycling at:

1. Big Lagoon School
2. Trinidad School
3. Eureka's neighborhood community recycling locations

### **April 14**

Find out whose company would be willing to pick up recyclables if project would be installed and if they provide recycling bins?

Contact and set up appointments with the following:

1. Arcata Garbage Co.
2. Humboldt Sanitation Services Co.
3. The Recyclist

**April 17**

Collect information to present to the East Side Deli owner/manager

**April 19**

Make appointment w/ East Side Deli owner/manager

Drop off letter of intent for meeting with the owner/manager

**April 20**

Prepare Monitoring and Evaluation paper after East Side Deli's decision



## Conclusion

---

To answer all of the project objectives the following is an overview of the information collected and how we accomplished our best alternative and how we came to our project's conclusion.

Sally and Rose researched the City of Arcata's zoning information and Source Reduction Recycling Element at the Humboldt Room located at the Humboldt State University Library and according to City zoning maps the East Side Deli is currently zoned as Commercial General. Under the Commercial General zone, businesses are allowed to provide a satellite recycling facility and are granted density bonuses for buildings designed to promote recycling.

Stacy spoke with both the Big Lagoon School and the Trinidad School recycling representatives and discovered that the Humboldt Sanitation Services Co. provided the recycling bins and recycling services at both locations. Stacy also found out that the City of Eureka provides their residences with the locations and the recycling bins for the communities recycling program. Establishing that Humboldt Sanitation Services provides recycling bins and recycling pick-up services, she made an appointment with them.

Sally and Stacy met with the manager at the Humboldt Sanitation Services Co. and asked questions about their Blue Lagoon School and Trinidad School recycling programs. Apparently the company's pick-up schedule for the Big Lagoon School is once during the winter and two times during the summer. The pick-up schedule for the Trinidad school is once a month or once every two months. From the Trinidad recycling program an estimated 100 tons of recyclable waste was collected through the year. Sally and Stacy then asked if they would be interested in providing the recycling bins and recycling pick up services if the proposed project was implemented. Unfortunately, Humboldt Sanitation Services Co. was reluctant to sign on with the project because they stated that it would be too small of a project for them to be involved with. The metal recycle bins they provided for their two programs come at a cost of \$500 each and apparently those two recycle bins were paid for by a school grant. However, they sell Recycle Totter Bins for a price of \$70-\$100 each which could also be used for our program.

Rose called the Arcata Garbage Co. and spoke to the manager about the proposed project they were also reluctant to provide pick-up services for the East Side Deli. Apparently, the company already has more work than their staff can handle.

Krista spoke with the Recyclist and found out that if the proposed project is successful he would be more than willing to provide pick-up services for the East Side Deli's recycling program.

Finally, we had found recycle bins at a price of \$70-100 each and a recycling pick-up service for the East Side Deli, if they were not willing to take care of disposing

the recyclables themselves. We were ready to present all of our information to the East Side Deli. Rose, Sally, and Stacy went to the East Side Deli to set up a meeting with the manager/owner. Rose then drafted a inquiry letter regarding the subject matter of the requested meeting and submitted it the following day.

Our presentation to the East Side Deli included the following information including the inquiry letter submitted:

EAST SIDE DELI  
Things to talk to them about

Good Things

1. Attract people to business/laundromat (recycle & do laundry at the same time)
2. Collect revenues from recyclables
3. Give an environmentally friendly representation of your business
4. Business opportunity allowed by the City of Arcata zoning ordinances
5. Implementation of density bonuses for buildings designed to promote recycling
6. Your business may be used as a model for other small businesses surrounded by multi-use apartment complexes.

Things that may not be so good

1. You have to purchase the Recycle Totter Bins for \$70-\$100 each
2. Deal with choreographing the schedule for recycling between
  - Your staff
  - Or the recycler (he is willing to)
3. Vandalism may occur
4. Theft of recyclables may occur
5. Recycle bins may be used as a garbage can

H.S.U. Environmental Science Practicum Group  
2820 L.K. Wood Blvd. Apt. B  
Arcata CA 95521  
(707) 822-6974 Rose Montillano

East Side Deli  
420 East California  
Arcata CA 95521

To Whom It May Concern:

We are a group of Environmental Science Students at Humboldt State working on our Senior Project, and wish to set up a meeting with you regarding a plan we have developed for a recycling effort located at your market. Specifically this plan would create a satellite recycling area adjacent to your market and laundromat.

Currently residents of the apartment buildings and townhouses along L.K. Wood Blvd. have no recycling receptacles in their complexes creating a situation that sends large amounts of unnecessary waste to landfills outside of our County. As part of our plans development we investigated the potential for placing recycling areas in a number of these complexes only to be stymied by complex problems with the many entities involved in such an effort.

It was with recognition of your new ownership of the property that we saw a potential opportunity for an excellent solution to this problem. The many improvements you have already made throughout the property and your sites favorable Commercial General Zoning have led us to believe that your location would be ideal. This communities already impressive history of recycling alongside the convenience of your property's location creates a great potential for this endeavors success.

Our group would like to meet with you and explain all of our proposals details, including the many positive side effects we see it creating for your business as well as the little effort it would require on your part. We look forward to hearing from you and thank you for your time.

H.S.U Environmental Science Practicum  
Rosemarie Montillano, Stacy Glum, Sally Bentz

Our Recycling Project's conclusion is as follows:

At this point, the owner of the East Side Deli has been in contact with both our group and the Recyclist. He has stated that he would like to get this program off and running. The Recyclist is very enthusiastic to begin work with the East Side Deli, and is hoping to set in motion the recycling program as soon as possible. It will be up to the two parties to work out their schedule, however as a group we are willing to facilitate in anyway possible to see the success of the recycling program. The completion of this project to help the residents along L.K. Wood Blvd., adopt a new attitude towards recycling and to have them participate in the satellite program has benefited us in that it we feel that we have contributed to helping our community. We hope that the people who do participate will share with their friends, co-workers and property managers about the program, and share with them the community benefits associated with this type of program. We want to get people to look at how easy it is to setup a satellite recycling center, and to set up more around the community.

With inadequate and sometimes inaccessible recycling for residents on and off campus, we hope the idea of a small community satellite recycling station will renew enthusiasm towards recycling. And, hope that the residents along L.K. Wood Blvd., will take positive steps either personally or through others to rejuvenate recycling in the community.

## Monitoring and Evaluation

---

At this point in our recycling project, we know that the owner of the East Side Deli is enthusiastic about starting the recycling program. However, at this point we are not sure which of the two proposed plans he will actually implement.

If the owner of the East Side Deli chooses to take on the recycling himself, he will of course take on the responsibility for all monitoring and evaluation of the program. Monitoring of the program would include any benefits, and all problems that may occur with the implementation of the program. Benefits that he will monitor will include; increased foot traffic to store/deli, and laundromat, and all profits that have been made by increased recycling. He will also look at any new problems that might be caused by the implementation of the satellite recycling program, such as; increased foot and automotive traffic, that do not increase sales at the deli and laundromat, vandalism, increase in inappropriate garbage dumping, e.g. furniture, electronics, and use of their trash bins, not properly utilizing the recycling bins, and that people are not actually recycling. Evaluation, which will also be done by the owner of the deli, will determine the success and progression of the future of this recycling program. He will determine if word of mouth and fliers are doing enough to get the word out about the new satellite recycling, if not he will have need to take steps to get the word out. If he finds that cons out way the pros it is our hope that some of the incentives that he receives from the city will encourage him to seek solutions to the problems and keep it going.

However, if the deli owner chooses to go with the Recyclist on the implementation of the project then it will be up to both parties to monitor and evaluate the success of the recycling program. In terms of the actual recycling station most of the monitoring will be left to Shane, the Recyclist. Some of the ways in which Shane will monitor will be through waste audits. These audits will include going through the properties garbage bins and determine how much of the current waste could be recycled. He will be responsible to monitor the satellite to determine how frequently he will need to do pick-ups. He will monitor the area where the bins are located for increased inappropriate dumping, and vandalism that is occurring in the bin storage area. Another way that the Recyclist monitors his progress is with a bi-monthly news letter that he sends out to his clients, in the case of the deli he will post his letter outside the bin location. Some of the things that he addresses in his news letter are; how is he doing, what he can do to improve and increase recycling, what can he do to help you with your recycling needs, and what the tenant can do to improve the program, a list of hard to recycle items with an informative piece on how to purchase items that are easier to recycle. The deli will monitor those things that have to do directly with the deli/store and laundromat.

As stated before, it will be mainly up to the East side Deli to evaluate and determine the success of the program. However, if the Recyclist is part of the program, he too will need to evaluate how the current program is working. From the audits and from current recycling that is being done, he will determine how successful the program is. He will need to evaluate current bins and determine if more are needed, and if increased types of recycling would be appropriate and successful. If so, work with the deli owner to provide those services. If the program is not a success than Shane will help

the deli owner in problem solving and creating solutions to make the project successful. It will be up to the deli owner to evaluate the Recyclist, and determine if he is doing a successful job, and if his services are needed. The owner of the deli may decide that he wants to take over the program, or perhaps the problems associate with the satellite station are not worth then the incentive and bonus gained, thus stopping the program all together. However, we hope the satellite station is successful, and will serve as a model for other businesses.

Did you try to work with the  
Arcata Recycling Center?

↳ This ~~was~~ <sup>was</sup> effort you put  
in for this project  
would have been  
reasonable for one  
person for a month.

## Time Log for Satellite Recycling Program

---

### February

February 9<sup>th</sup>-20 minutes:

Went to HSU Housing Department to find out information on recycling program. Housing Department referred Sally, Rose, and Stacy to go speak to Alec about the recycling program on campus.

February 9<sup>th</sup>-30 minutes:

Sally, Rose, and Stacy talked to Alec about the recycling program on campus. Alec explained that HSU was a separate entity from the City of Arcata and referred us to contact Rick from Arcata garage

February 28<sup>th</sup>-4 hours

Group meeting at Krista's house. We accomplished getting the problem and background statement with also goals and objectives finished.

Total time worked on project in February=4 hours and 50 minutes

### March

March 1<sup>st</sup>-2 hours and 30 minutes:

Group meeting at Rose's house, started organizing information and calling recycling centers to receive a better understanding of where we should create our project and how it should be implemented.

March 15<sup>th</sup>-1 hour

Group meeting, we fixed our goal and objective assignment.

March 24<sup>th</sup>-2 hours

Group meeting at Rose's house, we collaborated together to write our alternative methods.

Total time worked on project in March=5 hours and 30 minutes

### April

April 8<sup>th</sup>-30 minutes

Rose went to the library and looked up information on ordinances pertaining to the City of Arcata.

April 9<sup>th</sup>-2 hours

Group meeting, we re-evaluated where we are in the project and what still needs to be done to get the project implemented.

April 11<sup>th</sup>-2 hours

Krista talks to the Recyclist about his recycling project and if he would be willing to become involved with the project.

April 12<sup>th</sup>-30 minutes

Sally looked up Green Plan for the City of Arcata; she found out that the City of Arcata does not have a Green Plan. Sally found only state regulations with the regards to recycling in the City of Arcata.

April 16<sup>th</sup>-60 minutes

Group meeting at the library, collaborated on finishing monitoring and evaluation.

April 17<sup>th</sup>-60 minutes

Group drove to Big Lagoon to observe and talk to someone about their recycling program.

April 17<sup>th</sup>-30 minutes

Sally and Stacy drove to Trinidad to talk and observe their recycling program.

April 20<sup>th</sup>-60 minutes

Sally and Stacy talk to Brian at the Humboldt Sanitation and Recycling Center about how the satellite centers have been created and implemented.

April 20<sup>th</sup>-2 hours

Sally, Stacy, and Rose discuss when the group should present information to the East Side Deli, we also focused on preparing for power point presentation.

April 20<sup>th</sup>-60 minutes

Sally and Rose brush up and re-write the monitoring and evaluation assignment.

Page

April 22<sup>nd</sup>-3 hours



Group meeting at Rose's, group decided which part to present for the power point presentation. Started writing what the group should focus on.

April 28<sup>th</sup>-2 hours

Sally, Stacy, and Rose go to computer lab and start creating the power point presentation.

April 30<sup>th</sup>-60 minutes

Rose takes digital pictures for power point presentation.

April 30<sup>th</sup>-2 hours

Sally and Krista drive around taking pictures for the power point presentation.

Total time worked on project in April=18 hours

## May

May 1<sup>st</sup>-45 minutes

Sally works on power point presentation

May 1<sup>st</sup>-2 hours

Rose works on power point presentation.

May 1<sup>st</sup>-1 hour and 30 minutes

Sally and Krista work together to make power point presentation.

May 1<sup>st</sup>-2 hours

Group meeting at Rose's house, all 4 of us collaborate together to finish power point presentation.

May 3<sup>rd</sup>-40 minutes

Group presents power point presentation to the class.

Total time worked on the project in May=6 hours and 55 minutes

Total time on the project=35 hours and 15 minutes!

## References

---

Campus Recycling Program. Humboldt State University. 2004.  
<<http://www.humboldt.edu/~recycle/>>.

U.S EPA. Municipal Solid Waste. 2003.  
<<http://www.epa.gov/epaoswer/non-hw/muncpl/index.htm>>.