

**DEL NORTE SOLID WASTE MANAGEMENT AUTHORITY
CITY OF CRESCENT CITY
COUNTY OF DEL NORTE
STATE OF CALIFORNIA**

**Board of Supervisors Chambers
Flynn Center 981 H Street
Crescent City, CA**

Regular Session

Tuesday July 18, 2017

3:30 PM

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The Solid Waste Management Authority of the City of Crescent City and the County of Del Norte, State of California, is now meeting in Special Session. Only those items that indicate a specific time will be heard at the assigned time. All items may be taken out of sequence to accommodate public and staff availability.

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All documents referred to in this agenda are available at the Office of the Del Norte Solid Waste Management Authority at 1700 State Street in Crescent City, between the hours of 8 A.M. and 5 P.M. Monday through Friday OR online at www.recycledelnorte.ca.gov
For more information call 465-1100 or email dnswwma@recycledelnorte.ca.gov

**3:30 PM CALL MEETING TO ORDER / ROLL CALL
PLEDGE OF ALLEGIANCE**

PUBLIC COMMENTS:

3:30 PM ANY MEMBER OF THE PUBLIC MAY ADDRESS THE SOLID WASTE MANAGEMENT AUTHORITY ON ANY MATTER ON OR OFF THE AGENDA. After receiving recognition from the Chair, please give your name and address for the record. Comments will be limited to three minutes.

OPEN SESSION ITEMS:

1. CONSENT AGENDA

- 1.1 Approve minutes, Regular Session, Tuesday June 20, 2017. **
- 1.2 Vacation requests for the Authority Director. **
- 1.3 Approve payment of an inter-departmental transfer to Del Norte County for the lease of the Del Norte County Transfer Station in the amount of \$161,657.39
**
- 1.4 Approve payment of a claim to the Rural Counties Environmental Services Joint Powers Authority in the amount of \$6,000.00 for membership dues 2017-2018. **

END CONSENT AGENDA

2. DIRECTOR'S & TREASURER'S REPORTS

Agenda items 2.1 through 2.5 are provided for information only

- 2.1 Director's Report **
- 2.2 Treasurer/Controller Reports for May 2017 **
- 2.3 Claims approved by Director for June 2017 **
- 2.4 Monthly Cash and Charge Reports for June 2017**
- 2.5 Earned Revenue Comparisons between FY15/16 and FY16/17 **

DISCUSSION/ACTION ITEMS

3. LANDFILL POSTCLOSURE – No Items

4. COLLECTIONS FRANCHISE - No Items

5. TRANSFER STATION – No Items

6. OTHER GENERAL SOLID WASTE AUTHORITY MATTERS

- 6.1 Discussion and possible action regarding submitting a letter of support for Del Norte County's grant application to CalRecycle's Illegal Dumpsite Abatement Site Grant program. **
- 6.2 Status report regarding the history of activities associated with the Authority-owned commercially-zoned property adjacent to the Del Norte County Transfer Station. **
- 6.3 Status report regarding the potential for working with the lab for the Crescent City Wastewater Treatment Plant to do some of the lab analysis associated with water samples collected at the Crescent City Landfill. **

7. ABANDONED VEHICLE ABATEMENT SERVICE AUTHORITY

- 7.1 Discussion and possible action regarding submitting a letter of support for Del Norte County's grant application to CalRecycle's Illegal Dumpsite Abatement Site Grant program. **

8. ADJOURNMENT

Adjourn to the next Regular Meeting of the Del Norte Solid Waste Management Authority scheduled for 3:30 P.M. Tuesday August 15, 2017 at the Del Norte County Board of Supervisors' Chambers, 981 H Street, Suite 100 in Crescent City.

**** Asterisks next to Agenda Item indicates an associated attachment**

**DEL NORTE SOLID WASTE MANAGEMENT AUTHORITY
CITY OF CRESCENT CITY
COUNTY OF DEL NORTE
STATE OF CALIFORNIA
MINUTES**

Tuesday June,20th, 2017, 3:30 PM

PRESENT: Commissioner Chris Howard, Vice Chair
Commissioner Blake Inscore, Chair
Commissioner Jason Greenough
Commissioner Eli Naffah
Director Tedd Ward
Legal Counsel Robert Black
Authority Clerk Katherine Brewer
Clerk in training Kyra Seymour
Authority Treasurer/Controller Rich Taylor

ABSENT: Commissioner Lori Cowan

ALSO PRESENT: Joel Wallen, Hambro Waste Solutions Group
Jeremy Herber, Recology Del Norte
Heidi Kunstal, Director of Community Development

**3:30 PM CALL MEETING TO ORDER / ROLL CALL
PLEDGE OF ALLEGIANCE**

PLEDGE OF ALLEGIANCE: The pledge was led by Chair Inscore.

PUBLIC COMMENTS: At 3:31 PM, Chair Inscore called for public comments. There were none.

OPEN SESSION ITEMS:

1. CONSENT AGENDA:

- 1.1 Approve minutes, Special Session, Tuesday May 23, 2017.
- 1.2 Approve a FY 16/17 budget transfer in the amount of \$10,125.00

On a motion by Commissioner Vice Chair Howard, seconded by Commissioner Greenough, and unanimously carried on a polled vote, the Del Norte Solid Waste Management Authority approved and adopted the consent agenda.

2. DIRECTOR'S & TREASURER'S REPORTS

1.1

Agenda items 2.1 through 2.5 are provided for information only

- 2.1 Director's Report **231501**
- 2.2 Treasurer/Controller Reports for April 2017 **201803**
- 2.3 Claims approved by Director for May 2017 **031202**
- 2.4 Monthly Cash and Charge Reports for May 2017
- 2.5 Earned Revenue Comparisons between FY15/16 and FY16/17

Director Ward presented informational items 2.1 through 2.5.

At 3:43 PM, Chair Inscore temporarily adjourned the meeting of Del Norte Solid Waste Management Authority Board and reconvened as the Del Norte Abandoned Vehicle Abatement Service Authority to address agenda item 7.

7. ABANDONED VEHICLE ABATEMENT SERVICE AUTHORITY

- 7.1 Public hearing and discussion and possible action regarding the budget proposed for FY 2017/2018 for the Abandoned Vehicle Service Abatement Authority. **010203**

Del Norte County Community Development Director Heidi Kunstal presented the FY 17/18 budget for this agency. Discussion continued regarding the backlog of abandoned motor homes and trailers, which are expensive to remove and process, and it is often challenging to find the perpetrators.

On a motion by Commissioner Howard, and seconded by Commissioner Naffah, the Board unanimously approved the FY 17/18 budget as presented on a polled vote.

At 3:51 PM, Chair Inscore adjourned the meeting as Del Norte Abandoned Vehicle Abatement Service Authority and reconvened as the Del Norte Solid Waste Management Authority.

3. LANDFILL POSTCLOSURE – No items

4. COLLECTIONS FRANCHISE

- 4.1 Discussion and possible action regarding Collections Change Order 12, making changes to recycling services and processing subcontract requirements. **180510**

On a motion by Commissioner Howard, seconded by Commissioner Greenough, and unanimously carried on a polled vote, the Del Norte Solid Waste Management approved Collections Change Order 12. Recology Del Norte General Manager

Jeremy Herber announced that Recology was in escrow to purchase Eel River Disposal, which includes a recycling processing facility in Samoa. Recology intends to process recyclable materials collected in Del Norte at this new facility after the purchase and renovations are completed.

5. TRANSFER STATION

- 5.1 Discussion and possible action regarding Draft Plans and Engineer's estimate for repair of the floor at the Del Norte County Transfer Station. **80104**

Director Ward presented the initial plans and engineer's cost estimate for this floor repair project, indicating that the next step would be to confirm with the Del Norte County Auditor that this expense could be covered using the Authority's available assets.

6. OTHER GENERAL SOLID WASTE AUTHORITY MATTERS

- 6.1 Public hearing and discussion and possible adoption regarding the proposed Del Norte Solid Waste Authority budget for FY 2017/2018. **022102**

Director Ward presented the proposed Authority budget for FY 17/18, and reported regarding presentations of this budget to the Crescent City Council and the Del Norte County Board of Supervisors. On a motion by Commissioner Greenough, and seconded by Commissioner Naffah, and unanimously carried on a polled vote, the Board approved the budget for fiscal year 2017/2018 as presented.

- 6.2 Discussion and possible action regarding the Authority Work Plan for FY 2017/2018. **231501**

Director Ward presented the Authority Work Plan for FY 17/18. In discussions that followed, Commissioner Naffah requested that Authority staff present a brief history of activities associated with the Authority-owned commercially-zoned property adjacent to the Del Norte County Transfer Station at a future meeting. Chair Inscore requested that staff investigate the potential for having the lab associated with the Crescent City Wastewater Treatment Plant conduct some of the analyses associated with monitoring water quality at the Crescent City Landfill.

7. ADJOURNMENT

Adjourn to the next Regular Meeting of the Del Norte Solid Waste Management Authority scheduled for 3:30 P.M. Tuesday July 18, 2017 at the Del Norte County Board of Supervisors' Chambers, 981 H Street, Suite 100 in Crescent City.

There being no further business to come before the Authority, Chair Inscore adjourned the meeting at 4:24 P.M., until the Regular Meeting scheduled for July 18, 2017.

Blake Inscore, Chair
Del Norte Solid Waste Management Authority

Date / /

ATTEST:

Eli Naffah, Secretary
Del Norte Solid Waste Management Authority

Date / /

Submitted:

Katherine Brewer, Clerk
Del Norte Solid Waste Management Authority

Date / /



Del Norte Solid Waste Management Authority

1700 State Street, Crescent City, CA 95531
 Phone (707) 465-1100 Fax (707) 465-1300
 www.recycledelnorte.ca.gov

The Authority's mission is the management of Del Norte County solid waste and recyclable material in an environmentally sound, cost effective, efficient and safe manner while ensuring 100% regulatory compliance with law.

Leave Request Form

Employee Name : TEDD WARD

Type of Absence Requested (Please choose the relevant reason)

✓	Vacation	Hours : 32
	Medical	Hours :
	Bereavement	Hours :
	Maternity/Paternity	Hours :
	Compensatory Time	Hours :
	Administrative Day	Hours :
	Float Day	Hours :
	Union Business	Hours :
	FMLA : See County of Del Norte Paperwork	
	Other:	Hours :

Dates of Absence From : 8/30/17 To : 9/5/17

Reasons for Absence : Vacation

You must seek approvals for leave, other than sick leave, 15 days prior to the month it occurs in.

<u>Tedd Ward</u>	13 JULY 2017
Employee's Signature	Date

Supervisor Approval

Approved :	Rejected :
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Comments:

Supervisor's Signature	Date



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Leave Request Form

Employee Name : TEDD WARD

Type of Absence Requested (Please choose the relevant reason)

<input checked="" type="checkbox"/>	Vacation	Hours : <u>40</u>
<input type="checkbox"/>	Medical	Hours :
<input type="checkbox"/>	Bereavement	Hours :
<input type="checkbox"/>	Maternity/Paternity	Hours :
<input type="checkbox"/>	Compensatory Time	Hours :
<input type="checkbox"/>	Administrative Day	Hours :
<input type="checkbox"/>	Float Day	Hours :
<input type="checkbox"/>	Union Business	Hours :
<input type="checkbox"/>	FMLA : See County of Del Norte Paperwork	
<input type="checkbox"/>	Other:	Hours :

Dates of Absence From : 9/21/17 To : 9/27/17

Reasons for Absence : Vacation

You must seek approvals for leave, other than sick leave, 15 days prior to the month it occurs in.

<u>Tedd Ward</u>	<u>13 JULY 2017</u>
Employee's Signature	Date

Supervisor Approval

Approved :	Rejected :
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Comments:

Supervisor's Signature	Date
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Type of Absence Requested (Please choose the relevant reason)

✓	Vacation	Hours :
	Medical	Hours :
	Bereavement	Hours :
	Maternity/Paternity	Hours :
	Compensatory Time	Hours :
	Administrative Day	Hours :
	Float Day	Hours :
	Union Business	Hours :
	FMLA : See County of Del Norte Paperwork	
	Other:	Hours :

Dates of Absence **From :** 21 OCT 2017 **To :** 05 NOV 2017

Reasons for Absence : Vacation

You must seek approvals for leave, other than sick leave, 15 days prior to the month it occurs in.

<u>Tedd Ward</u>	13 JULY 2017
Employee's Signature	Date

Supervisor Approval

Approved :		Rejected :
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Comments:

Supervisor's Signature	Date

Sub Lease
 Authority pays to County
EXHIBIT F

BASE RENTAL PAYMENTS

NOTE: The Base Rental Payments below shall conform to the following guidelines:

This schedule is based on an interest rate of 3.32% per annum and indicates what the Base Rental Payments will be over the course of the Facility Sublease. Base Rental Payments shall have an interest only component through July 31, 2006.

The interest component of each Base Rental Payment shall be calculated on the basis of a 360-day year of twelve 30-day months. Any installment of a principal component or an interest component of a Base Rental Payment that is not paid when due shall continue to accrue interest at the lesser of twelve percent (12%) per annum or the maximum rate permitted by law from and including the Base Rental Payment date with respect to which such principal component or interest component is payable to but not including the date of actual payment.

Payment billing statements will be mailed to the Sublessee reflecting the actual amount owed prior to each Base Rental Payment due date. With the exception of the annual fee, any Additional Rental Payments will be billed separately as the cost is incurred.

Payment Date	Principal Component	Interest Component	Base Rental Payment	Additional Rental Payment	Total Payment
1-Aug-04		\$0.00	\$0.00	\$0.00	\$0.00
1-Feb-05		\$58,681.00	\$58,681.00		\$58,681.00
1-Aug-05		\$58,681.00	\$58,681.00	\$10,605.00	\$69,286.00
1-Feb-06		\$58,681.00	\$58,681.00		\$58,681.00
1-Aug-06	\$78,475.09	\$58,681.00	\$137,156.09	\$10,605.00	\$147,761.09
1-Feb-07		\$57,378.31	\$57,378.31		\$57,378.31
1-Aug-07	\$81,080.46	\$57,378.31	\$138,458.77	\$10,369.57	\$148,828.35
1-Feb-08		\$56,032.38	\$56,032.38		\$56,032.38
1-Aug-08	\$83,772.33	\$56,032.38	\$139,804.71	\$10,126.33	\$149,931.04
1-Feb-09		\$54,641.76	\$54,641.76		\$54,641.76
1-Aug-09	\$86,553.57	\$54,641.76	\$141,195.33	\$9,875.02	\$151,070.35
1-Feb-10		\$53,204.97	\$53,204.97		\$53,204.97
1-Aug-10	\$89,427.15	\$53,204.97	\$142,632.12	\$9,615.36	\$152,247.48
1-Feb-11		\$51,720.48	\$51,720.48		\$51,720.48
1-Aug-11	\$92,396.13	\$51,720.48	\$144,116.61	\$9,347.07	\$153,463.69
1-Feb-12		\$50,186.70	\$50,186.70		\$50,186.70
1-Aug-12	\$95,463.69	\$50,186.70	\$145,650.39	\$9,069.89	\$154,720.27
1-Feb-13		\$48,602.00	\$48,602.00		\$48,602.00
1-Aug-13	\$98,633.08	\$48,602.00	\$147,235.08	\$8,783.49	\$156,018.58
1-Feb-14		\$46,964.69	\$46,964.69		\$46,964.69
1-Aug-14	\$101,907.70	\$46,964.69	\$148,872.39	\$8,487.60	\$157,359.99
1-Feb-15		\$45,273.03	\$45,273.03		\$45,273.03
1-Aug-15	\$105,291.03	\$45,273.03	\$150,564.06	\$8,181.87	\$158,745.93
1-Feb-16		\$43,525.20	\$43,525.20		\$43,525.20
1-Aug-16	\$108,786.70	\$43,525.20	\$152,311.89	\$7,866.00	\$160,177.89
1-Feb-17		\$41,719.34	\$41,719.34		\$41,719.34

Balance Due
 5,187,469

4,171,033

1-Aug-17	\$112,398.41	\$41,719.34	\$154,117.75	\$7,539.64	\$161,657.39
1-Feb-18		\$39,853.52	\$39,853.52		\$39,853.52
1-Aug-18	\$116,130.04	\$39,853.52	\$155,983.57	\$7,202.44	\$163,186.01
1-Feb-19		\$37,925.76	\$37,925.76		\$37,925.76
1-Aug-19	\$119,985.56	\$37,925.76	\$157,911.32	\$6,854.05	\$164,765.38
1-Feb-20		\$35,934.00	\$35,934.00		\$35,934.00
1-Aug-20	\$123,969.08	\$35,934.00	\$159,903.08	\$6,494.10	\$166,397.18
1-Feb-21		\$33,876.12	\$33,876.12		\$33,876.12
1-Aug-21	\$128,084.85	\$33,876.12	\$161,960.97	\$6,122.19	\$168,083.16
1-Feb-22		\$31,749.91	\$31,749.91		\$31,749.91
1-Aug-22	\$132,337.27	\$31,749.91	\$164,087.18	\$5,737.94	\$169,825.11
1-Feb-23		\$29,553.11	\$29,553.11		\$29,553.11
1-Aug-23	\$136,730.87	\$29,553.11	\$166,283.98	\$5,340.92	\$171,624.90
1-Feb-24		\$27,283.38	\$27,283.38		\$27,283.38
1-Aug-24	\$141,270.33	\$27,283.38	\$168,553.71	\$4,930.73	\$173,484.44
1-Feb-25		\$24,938.29	\$24,938.29		\$24,938.29
1-Aug-25	\$145,960.51	\$24,938.29	\$170,898.80	\$4,506.92	\$175,405.72
1-Feb-26		\$22,515.35	\$22,515.35		\$22,515.35
1-Aug-26	\$150,806.40	\$22,515.35	\$173,321.74	\$4,069.04	\$177,390.78
1-Feb-27		\$20,011.96	\$20,011.96		\$20,011.96
1-Aug-27	\$155,813.17	\$20,011.96	\$175,825.13	\$3,616.62	\$179,441.75
1-Feb-28		\$17,425.46	\$17,425.46		\$17,425.46
1-Aug-28	\$160,986.17	\$17,425.46	\$178,411.63	\$3,149.18	\$181,560.81
1-Feb-29		\$14,753.09	\$14,753.09		\$14,753.09
1-Aug-29	\$166,330.91	\$14,753.09	\$181,084.00	\$2,666.22	\$183,750.22
1-Feb-30		\$11,992.00	\$11,992.00		\$11,992.00
1-Aug-30	\$171,853.09	\$11,992.00	\$183,845.09	\$2,167.23	\$186,012.32
1-Feb-31		\$9,139.24	\$9,139.24		\$9,139.24
1-Aug-31	\$177,558.62	\$9,139.24	\$186,697.85	\$1,651.67	\$188,349.52
1-Feb-32		\$6,191.76	\$6,191.76		\$6,191.76
1-Aug-32	\$183,453.56	\$6,191.76	\$189,645.33	\$1,118.99	\$190,764.32
1-Feb-33		\$3,146.43	\$3,146.43		\$3,146.43
1-Aug-33	\$189,544.22	\$3,146.43	\$192,690.65	\$568.63	\$193,259.29
Total Payments:	\$3,535,000.00	\$2,065,800.48	\$5,600,800.48	\$186,668.72	\$5,787,469.19

Vendor RCRC Environmental
Services JPA

1215 K Street, Ste. 1650

Sacramento

CA

95814

Vendor ID:

12194

PBSP Expense

Change of Address

Special
Warrant
Routing

Claim ID: 7936

Page 1 of 1

AUDITOR COPY



Fund Dept Line Proj Amount Description

422 421 20200 INV 0000033-IN ESJPA Member Dues 2017-18

Total Claim: \$6,000.00

1.4

I HEREBY CERTIFY THE ARTICLES OR SERVICES DESCRIBED ON THE ATTACHED INVOICES WERE NECESSARY FOR USE BY THE DEPARTMENT AND HAVE BEEN RECEIVED, AND THAT NO PRIOR CLAIM FOR SAME HAS BEEN

X

7/12/2017

Signature of Department Head/Authorized Deputy

Claim Date



Environmental Services JPA
1215 K Street, Suite 1650
Sacramento, CA 95814
(916) 447-4806

Invoice Number: 0000033-IN
Invoice Date: 7/1/2017
Due Date: Upon Receipt

Bill To:

Del Norte County
Solid Waste Authority
1700 State Street
Crescent City, CA 95531

Contact: Chris Howard
Email: choward@co.del-norte.ca.us

Description	Quantity	Price	Amount
ESJPA Member Dues 2017-2018			6,000.00

Net Invoice: 6,000.00
Sales Tax: 0.00
Invoice Total: \$ 6,000.00



ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA
DEL NORTE, EL DORADO, GLENN, IMPERIAL, INYO, LASSEN

MADERA, MARIPOSA, MODOC, MONO, NEVADA, PLUMAS,
SHASTA, SIERRA, SISKIYOU, TEHAMA, TRINITY, TUOLUMNE

CHAIR – MICHAEL KOBSEFF, SISKIYOU COUNTY
VICE CHAIR – MICHAEL RANALLI, EL DORADO COUNTY
EXECUTIVE DIRECTOR – GREG NORTON

TECHNICAL ADVISORY GROUP (TAG)
TAG CHAIR – JIM MCHARGUE, AMADOR COUNTY
TAG VICE CHAIR – RACHEL ROSS, TEHAMA COUNTY
PROGRAM MANAGER – MARY PITTO

MEMORANDUM

To: ESJPA Members
From: Mary Pitto, Program Manager
Date: June 28, 2017
Re: ESJPA 2017-18 Dues

Attached please find the annual dues invoice for participation in the Rural Counties' Environmental Services Joint Powers Authority (ESJPA) for the 2017-18 fiscal year. The annual dues have remained the same since 2005.

The ESJPA provides a forum for its 23 member counties' solid waste managers to share ideas and work collectively to resolve issues relevant to rural counties. During the year, the ESJPA conducts Board meetings and trainings to provide program support on solid waste related issues and opportunities that benefit the membership. The Board meetings also provide the members the valuable opportunity for direct contact with the Department of Resources Recycling and Recovery (CalRecycle) staff members, as well as other relevant regulatory agency staff and industry resources. Each of our members brings to the table unique perspectives, experience, and expertise that is valuable to the others.

The ESJPA meeting format includes morning speakers and review of current solid waste related legislation and regulatory issues and the afternoon Technical Advisor Group breakout sessions or workshops. These sessions provide a more interactive forum for the solid waste managers to get into more technical detail of important topics. The ESJPA's presentations and topics over this past 2016-17 year included:

- Presentations and discussions by state and federal agency staff: from CalRecycle regarding CalRecycle's Contaminated Oil Claims, Used Oil Filter Compliance, AB 901 Recycling and Disposal Facility Reporting Regulations, Electronics Waste Designated Approved Collectors Emergency Regulations and a second one on the Future of Electronic Waste Management in California, Bottle Bill Reform, Senate Bill 1383 (Lara, 2016), the Short-Lived Climate Pollutant Bill and a separate workshop on development of the regulations for SB 1383 Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions, and 2016 AB 1826 and AB 876 Annual Organics Reporting for Rural Jurisdictions; from the State Water Resources Control Board on the new Industrial Storm Water General Permit Level 1 Compliance and a second one on the Industrial Storm Water General Permit Level 2 Compliance; from the Department of Toxic Substance Control regarding

Treated Wood Waste Handling at Solid Waste Facilities; from the US Department of Agriculture Rural Development, California Water and Environmental Grant and Loan Programs; and from US EPA Region IX, Managing and Transforming Waste Streams – A Tool for Communities.

- Special presentations and discussions from private industry and other organizations include Federal and California Landfill Emission Regulatory Update given by SCS Engineers, Drone Mapping at Solid Waste Facilities given by Blue Ridge Services Inc, and Battery Recycling and Product Stewardship: Opportunities for Rural Communities by Call2Recycle. In addition, representatives from the California Product Stewardship Council, the Carpet America Recycle Effort (CARE), PaintCare, and the Mattress Recycling Council regularly attend and give updates on their respective efforts.
- Presentations by ESJPA colleagues regarding Tehama County's Landfill, Diversion and Outreach Programs, Madera County's Upgrades and Expansions of the Landfill Gas System at the Fairmead Landfill and Paying for Improvements – the Madera County Experience given by their consultants, Butte County's Neal Road Recycling and Waste Facility, and a special presentation by Amador's franchise hauler, Six Decades in Solid Waste. These presentations were particularly useful to the other member counties and we especially thank the presenters.

This year included a field trip to visit the North State Rendering Anaerobic Digester in Oroville, the Earthworm Soil Factory in Chico, the Neal Road Recycling and Waste Facility in Paradise to observe the use of falconry for gull abatement, and the Sierra Nevada Brewery Sustainability Tour in Chico.

In addition to the ESJPA Board meetings, the ESJPA staff works actively on behalf of its member counties in the legislative and regulatory arenas on solid waste management issues of importance to our membership. Staff solicits feedback from and reports on the status to the ESJPA Board at its meetings.

- The ESJPA continues to identify and coordinate with RCRC legislative staff on legislation dealing with solid waste issues. RCRC legislative staff remains particularly active in several issue areas, especially dealing with extended producer responsibility, the bottle bill, organic composting requirements, landfill issues, and tip fee increase/generator fees.
- The ESJPA staff monitors and participates in various regulatory activities. This past year included the following:
 - ARB: Cap and Trade Proceeds, Draft Short-Lived Climate Pollutant Reduction Strategy, and the 2030 Target Scoping Plan;
 - CalRecycle: Monthly CalRecycle Meeting, AB 341 Mandatory Commercial Recycling, AB 1826 Mandatory Commercial Recycling, AB 876 Organics Reporting Requirement, Beverage Container Recycling Program Reform and Certified Recycling Centers/Convenience Zones, AB 901 Reporting, Emergency Regulations for Glass Processors, and E-Waste Updates;
 - SWRCB: Development of Performance Measures for Implementation of the Compost General Order, Stormwater Industrial General Permit Updates, and Waste Discharge Fees;
 - Department of Toxic Substances Control: Used Oil Filter Management Issues, Retail Waste Workgroup Aquatic Toxicity Testing, Proposed Regulations for Photovoltaic Modules, Emergency Regulations for CRT Glass, and Hazardous Waste Reduction Initiative.

The ESJPA consultant continually provides his insight and assistance to member counties on all solid waste issues, particularly with his expertise in household hazardous waste. The ESJPA also provides technical assistance to its member counties by conducting surveys, providing specialty information and advice, responding to requests for assistance during the annual review process, participating in local meetings, and with regulatory and operational issues.

Looking ahead toward the upcoming year, we plan to continue to provide Board meeting presentations, discussions, and training opportunities on issues as they arise or as requested by our members. We expect the mandatory organics recycling, bottle bill reform, and tip fee/generator fees to be priority issues. We will continue to assist with the implementation of the paint, carpet, and mattress stewardship programs. We will also be responding to the many ongoing challenges regarding regulatory compliance that will inevitably arise. We anticipate this coming year to be active in the legislative arena. With support from RCRC, the ESJPA will continue to monitor and actively take positions on legislative and regulatory items of interest.

Your continued membership and active participation in the ESJPA is appreciated. It is through our collective efforts that we are able to be an effective organization. Please let me know if you have any suggestions that may help improve our organizational effectiveness or suggested topics for future meetings to enable the ESJPA to be fully responsive to your needs and expectations.



Del Norte Solid Waste Management Authority

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Phone (707) 465-1100 Fax (707) 465-1300

www.recycledelnorte.ca.gov

The Authority's mission is the management of Del Norte County solid waste and recyclable material in an environmentally sound, cost effective, efficient and safe manner while ensuring 100% regulatory compliance with law.

Director's Report

Date: 12 July 2017
To: Commissioners of the Del Norte Solid Waste Management Authority
From: Tedd Ward, M.S. – Director 
Reporting Period: 15 June 2017 – 12 July 2017
Attachments: July 10 letter from Fourth of July Festival 2017
Recology Del Norte's reports regarding recyclables processing

File Number: **231501 – Authority Work Plans**

Summary: The Del Norte Solid Waste Management Authority continues to operate the Klamath, Gasquet and Del Norte County Transfer Stations and to provide required monitoring, accounting and reports to overseeing agencies. Authority staff provide these services without any financial support from the City of Crescent City or the County of Del Norte, and without receiving a penny of taxes. The rates charged at Authority-managed facilities continue to be lower than any comparable facilities in Humboldt or Curry Counties.

This coming month, the Del Norte Solid Waste Management Authority will continue our tradition of sponsoring the Del Norte County Fair. All are invited to come visit Authority staff at our Fair booth August 3-6.

Consent Agenda Items:

Item 1.2 includes vacation requests from the Director.

Item 1.3 is essentially the bulk of the annual payment for the I-Bank loan for the construction of the Del Norte County Transfer Station. Because of the complicated sub-lease arrangements associated with this low-interest loan, the Authority pays the County, who then pays the I-Bank.

Item 1.4 is the annual membership dues to the Rural Counties Environmental Services Joint Powers Authority.

Landfill Postclosure: During the past month, staff conducted quarterly gas monitoring and accompanied Gina Morrison of the North Coast Regional Water Quality Control Board during her annual inspection of the Crescent City Landfill.

2.1



The erosion damage at the landfill has not yet been repaired. Staff have submitted photos of the damaged areas, the repair plans and the proposal from Hemmingsen construction. Staff are currently providing additional information as requested by staff from the State Office of Emergency Services, and hope to begin repairs in August.

Collections and Processing: At the June meeting, Recology Del Norte announced that Recology was in escrow to purchase Eel River Disposal, including a processing facility on the Samoa peninsula in Humboldt that would have capacity to process recyclable materials collected by Recology Del Norte. Jeremy Herber, manager of Recology Del Norte, has said that while it is good news that this facility will be available to process Del Norte's recyclables, additional steps will need to be taken to reduce recycling contamination to 10% or less.

Finances and Audits: On June 30th, Authority Treasurer/Controller Richard D. Taylor and staff from the Del Norte County Auditor's office conducted a surprise cash count. Once again, this exercise confirmed that the Authority's bookkeeping records accurately reflect the Authority's assets and deposits *to the penny*.

Administrative Assistant Katherine Brewer is working closely with the County Auditor's office to provide all summary sheets and supporting information to close out the prior fiscal year.

Facilities: Staff discussions with the County Auditor's office in June confirmed that the amounts for the landfill repairs and repair of the transfer station floor, even if done in the same fiscal year, will not require any special financing and can be paid from existing Authority assets. That is good news.

This past month staff discussed the potential for collaborative efforts to establish a small-volume transfer station to provide staffed drop-off recycling and disposal services one or two days per week in the northern region of Del Norte County with Meg Van Pelt of the Tolowa Dee-ni' Nation. She requested that Authority staff submit a memo describing some potential benefits to the tribe's participation in developing such a facility, which would then be presented for the consideration and possible action by the Tribal Council of the Tolowa Dee-ni' Nation.

Personnel / Staffing: Later this week, Authority staff will hire a part-time/temporary a refuse site attendant to replace Haley Smith, who was hired as Authority Account Clerk. At this meeting, Kyra Seymour will continue cross-training to serve as Clerk.

Fourth of July Festival 2017

Crescent City – Del Norte County Chamber of Commerce

1001 Front Street Crescent City, CA 95531

Tel. (707) 464-3174 | 800-343-8300 | Fax. (707) 464-9676

www.delnorte.org



July 10, 2017

Del Norte Solid Waste Management Authority
Board of Directors
1700 State Street
Crescent City, CA 95531

Dear Board of Directors,

On behalf of the Crescent City – Del Norte County Chamber of Commerce, we would like to thank you for being an In-Kind Sponsor and for your generous gift of free dumpster disposal for the Fourth of July celebration. Your commitment to helping in our community is sincerely appreciated.

The weather this year was pleasant, both for the Deck Party and for the Fourth. Attendees had an enjoyable time at the parade with the theme of “Honoring Movies Filmed in Del Norte County”. The activities in Beachfront Park were enjoyed by all. The fireworks show had cloudy skies and were beautiful in an eerie way. Thank you so much for being a part of this great community event. We appreciate your continued dedication to helping to put on this celebration and hope you took time out from your day to participate.

Each year Crescent City – Del Norte Chamber of Commerce continues to advance its mission to support, develop and advocate for an environment that fosters sustainable community health and economic development, while maintaining our unique quality of life and giving opportunities to our members and youth to grow and prosper.

With the help of donations from supporters like you we will continue to have successful events that benefit the entire community.

Thank you again for your generous support of the July Fourth Celebration.

Sincerely,

Handwritten signature of Jeff Parmer

Jeff Parmer

Executive Director

Crescent City - Del Norte Chamber of Commerce

t. (707) 464-3174 | f. (707) 464-9676

www.delnorte.org

Tedd Ward

From: Jeremy Herber <JHerber@recology.com>
Sent: Monday, July 10, 2017 8:09 AM
To: Tedd Ward
Subject: FW: Recology Recycling Weekly Update for July 2 - July 8th 2017

Tedd,

We are continuing to collect and screen approximately 65% - 70% of the recyclable volume in Del Norte. Recycling stream continues to remain in the area of 18%-25% contamination depending on the locations serviced during the week.

The Community bins remain at a high contamination level around 30%-45% depending on location.

The routes that are consistently being processed are the following:

131 Residential Curbside Recycling
132 Residential Curbside Recycling
133 Commercial Recycling

Gasquet and Klamath transfer stations are being processed when full.
Last week we also processed both recycling bins from the transfer station on State street.

Recology continues to spot check community bins weekly to see if we notice any changes in contamination levels. The community bins still providing high levels of contamination include both Smith River bins and the Fort Dick location.

Of the volume of materials being processed, approximately 18% - 25% of each load is removed as trash. Our trailer has the ability

To carry 136 Yards of recyclables. We average 30 – 40 yards of trash removed from each load. Our average weight of material being loaded

On the truck as recyclables is approximately 9 to 9.5 tons each load.

last week we had 2 loads delivered to Humboldt Waste Authority.

Material is being sorted by one temp and one Recology employee. Our load percentage was in the 5-7 percent contamination rate when

Delivered to Humboldt Waste Management.

The clean cardboard from our commercial route is being picked up separately and delivered to Julindra's for processing as time allows.

Best Regards,

Jeremy Herber

General Manager

Recology Del Norte™ | P.O. Box 1933 | Crescent City, CA 95531

T: 707.464.4181 | Jherber@recology.com



Please consider the environment before you print this email.

Tedd Ward

From: Jeremy Herber <JHerber@recology.com>
Sent: Thursday, July 06, 2017 11:19 AM
To: Tedd Ward
Subject: FW: Recology Recycling Weekly Update for June 25th- July 1st, 2017

Tedd,

We are continuing to collect and screen approximately 65% - 70% of the recyclable volume in Del Norte. Recycling stream continues to remain in the area of 18%-25% contamination depending on the locations serviced during the week.

The Community bins remain at a high contamination level around 30%-45% depending on location.

The routes that are consistently being processed are the following:

131 Residential Curbside Recycling
132 Residential Curbside Recycling
133 Commercial Recycling

Gasquet and Klamath transfer stations are being processed when full.
Last week we also processed both recycling bins from the transfer station on State street.

Recology continues to spot check community bins weekly to see if we notice any changes in contamination levels. The community bins still providing high levels of contamination include both Smith River bins and the Fort Dick location.

Of the volume of materials being processed, approximately 18% - 25% of each load is removed as trash. Our trailer has the ability

To carry 136 Yards of recyclables. We average 30 – 40 yards of trash removed from each load. Our average weight of material being loaded

On the truck as recyclables is approximately 9 to 9.5 tons each load.

last week we had 2 loads delivered to Humboldt Waste Authority.

Material is being sorted by one temp and one Recology employee. Our load percentage was in the 5-7 percent contamination rate when

Delivered to Humboldt Waste Management.

The clean cardboard from our commercial route is being picked up separately and delivered to Julindra's for processing as time allows.

Best Regards,

Jeremy Herber

General Manager

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Please consider the environment before you print this email.

Tedd Ward

From: Jeremy Herber <JHerber@recology.com>
Sent: Wednesday, June 28, 2017 7:47 AM
To: Tedd Ward
Subject: FW: Recology Recycling Weekly Update for June 18th- June 24th, 2017

Tedd,

We are continuing to collect and screen approximately 65% - 70% of the recyclable volume in Del Norte. Recycling stream continues to remain in the area of 18%-25% contamination depending on the locations serviced during the week.

The Community bins remain at a high contamination level around 30%-45% depending on location.

The routes that are consistently being processed are the following:

131 Residential Curbside Recycling
132 Residential Curbside Recycling
133 Commercial Recycling

Gasquet and Klamath transfer stations are being processed when full.
Last week we also processed both recycling bins from the transfer station on State street.

Recology continues to spot check community bins weekly to see if we notice any changes in contamination levels. The community bins still providing high levels of contamination include both Smith River bins and the Fort Dick location.

Of the volume of materials being processed, approximately 18% - 25% of each load is removed as trash. Our trailer has the ability

To carry 136 Yards of recyclables. We average 30 – 40 yards of trash removed from each load. Our average weight of material being loaded

On the truck as recyclables is approximately 9 to 9.5 tons each load.

last week we had 2 loads delivered to Humboldt Waste Authority.

Material is being sorted by one temp and one Recology employee. Our load percentage was in the 5-7 percent contamination rate when

Delivered to Humboldt Waste Management.

The clean cardboard from our commercial route is being picked up separately and delivered to Julindra's for processing as time allows.

Best Regards,

Jeremy Herber

General Manager

Recology Del Norte™ | P.O. Box 1933 | Crescent City, CA 95531

T: 707.464.4181 | jherber@recology.com



Please consider the environment before you print this email.

Tedd Ward

From: Jeremy Herber <JHerber@recology.com>
Sent: Monday, June 19, 2017 9:44 AM
To: Tedd Ward
Subject: FW: Recology Recycling Weekly Update for June 11th- June 17th, 2017

Tedd,

We are continuing to collect and screen approximately 65% - 70% of the recyclable volume in Del Norte. Recycling stream continues to remain in the area of 18%-25% contamination depending on the locations serviced during the week.

The Community bins remain at a high contamination level around 30%-45% depending on location.

The routes that are consistently being processed are the following:

131 Residential Curbside Recycling
132 Residential Curbside Recycling
133 Commercial Recycling

Gasquet and Klamath transfer stations are being processed when full.
Last week we also processed both recycling bins from the transfer station on State street.

Recology continues to spot check community bins weekly to see if we notice any changes in contamination levels. The community bins still providing high levels of contamination include both Smith River bins and the Fort Dick location.

Of the volume of materials being processed, approximately 18% - 25% of each load is removed as trash. Our trailer has the ability

To carry 136 Yards of recyclables. We average 30 – 40 yards of trash removed from each load. Our average weight of material being loaded

On the truck as recyclables is approximately 9 to 9.5 tons each load.

last week we had 3 loads delivered to Humboldt Waste Authority.

Material is being sorted by one temp and one Recology employee. Our load percentage was in the 5-7 percent contamination rate when

Delivered to Humboldt Waste Management.

The clean cardboard from our commercial route is being picked up separately and delivered to Julindra's for processing as time allows.

Best Regards,

Jeremy Herber

General Manager

Recology Del Norte™ | P.O. Box 1933 | Crescent City, CA 95531

T: 707.464.4181 | Jherber@recology.com



Please consider the environment before you print this email.

Solid Waste
Balance Sheet
May 31, 2017

Unaudited

ASSETS

422 010 00000	Cash Solid Waste	1,106,680.12
422 010 00300	Imprest Cash	3,500.00
422 010 00500	I Bank Loan Deposit Held by County	198,177.17
422 010 03200	Land	493,000.00
422 010 03300	Transfer Station	3,266,990.64
422 010 03400	Equipment	158,443.55
422 010 03410	Buildings & Improvements	141,638.89
422 010 03440	Accum Depr Equipment	(157,814.00)
422 010 03450	Accum Depr Bldg & Improv	(113,204.00)
422 010 03460	Accum Depr Transfer Station	(918,877.00)
	Total Assets	<u><u>4,178,535.37</u></u>

LIABILITIES AND FUND EQUITY

422 010 05105	Sales Tax Payable	162.75
422 010 05210	Sublease Payable	2,727,290.50
422 010 05300	Compensated Absences Payable	45,281.00
422 010 05500	Post Closure Liability	2,061,342.00
422 010 05600	Net OPEB Obligation	273,578.00
422 010 07100	Fund Balance	(1,839,805.20)
422 010 09600	Investment in Capital Assets net of related debt	578,198.00
	Revenue	2,789,274.07
	Expenditure	(2,456,785.75)
	Total Liabilities and Fund Equity	<u><u>4,178,535.37</u></u>

Del Norte Solid Waste Management Authority

A/R Aging Summary

As of July 1, 2017

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Affordable Home & Rental Rep.	31.93	82.29	0.00	0.00	0.00	114.22
Agricultural Commission(solid waste only)	33.66	11.52	0.00	0.00	0.00	45.18
Aladdin Realty	0.00	0.00	7.20	0.00	0.00	7.20
Alexandre EcoDairy Farms	200.33	1,771.14	0.00	0.00	0.00	1,971.47
Atlas Field Services, Inc.	15.84	0.00	0.00	0.00	0.00	15.84
AWI Management Corp	105.82	0.00	0.00	0.00	0.00	105.82
Babich Construction	129.70	0.00	0.00	0.00	0.00	129.70
Bayside Excavation	108.03	0.00	0.00	0.00	0.00	108.03
Benner Mini Storage	180.05	0.00	0.00	0.00	0.00	180.05
Borges Dairy	177.17	314.01	0.00	0.00	0.00	491.18
Brown, Hector	1,059.35	0.00	0.00	0.00	0.00	1,059.35
Cal-Ore LIFE FLIGHT	11.52	34.32	69.06	0.00	0.00	114.90
Cal-Trans	0.00	7.20	0.00	0.00	0.00	7.20
California Auto Image	397.55	354.34	0.00	0.00	0.00	751.89
California Dept. Parks & Rec.	1,773.11	845.91	0.00	0.00	0.00	2,619.02
Castlerock Countertop's	47.53	0.00	0.00	0.00	0.00	47.53
Certified Construction *CLOSED*	0.00	0.00	0.00	0.00	6.90	6.90
Certified Plumbing Co.*CLOSED*	0.00	0.00	0.00	0.00	12.76	12.76
Cetnar Construction Inc.	1.44	93.63	5.84	14.36	0.00	115.27
City of Crescent City.	228.93	47.50	0.00	0.00	0.00	276.43
Cornerstone Assembly of God	56.56	127.35	0.00	0.00	0.00	183.91
Crescent Ace Hardware.	933.20	0.00	0.00	0.00	0.00	933.20
Crescent City KOA	512.78	0.00	0.00	0.00	0.00	512.78
Crescent Fire Protection Dist.	0.00	15.04	0.00	0.00	0.00	15.04
Crescent Senior Estates	48.15	14.04	0.00	0.00	0.00	62.19
Del Norte Ambulance	41.77	0.00	0.00	0.00	0.00	41.77
Del Norte Realty	152.37	421.80	0.00	0.00	0.00	574.17
Del Norte Roofing	945.83	666.91	0.00	0.00	0.00	1,612.74
DN Unified School District	1,234.22	0.00	0.00	0.00	0.00	1,234.22
DNC Code Enforcement - Blight	0.00	1,335.34	0.00	0.00	0.00	1,335.34
Driftwood Apartments LLC	255.76	0.00	0.00	0.00	0.00	255.76
Elk Valley Casino	0.00	5.76	0.00	0.00	0.00	5.76
Elk Valley Storage	0.00	21.61	0.00	0.00	0.00	21.61
Fashion Blacksmith	131.39	0.00	0.00	0.00	0.00	131.39
Frank's Refrigeration	12.96	0.00	0.00	0.00	0.00	12.96
G. H. Outreach	467.74	536.41	0.00	0.00	0.00	1,004.15
Golden State Construction	92.18	0.00	0.00	0.00	0.00	92.18
GR Construction	171.49	244.86	0.00	0.00	0.00	416.35
Green Scapes	432.82	339.19	0.00	0.00	0.00	772.01
Griffin's Furniture Outlet	105.68	101.29	0.00	0.00	0.00	206.97
Hambro/Waste Solutions Group	27.87	0.00	0.00	0.00	0.00	27.87
Hank's Hauling	1,386.39	0.00	0.00	0.00	0.00	1,386.39
Hartley Construction	97.95	216.07	0.00	0.00	0.00	314.02
HASP / Jordan Recovery Centers	60.48	160.71	0.00	0.00	0.00	221.19
Hemmingsen Contracting Company	345.68	0.00	0.00	0.00	0.00	345.68
Hiouchi Community Fellowship	7.20	0.00	0.00	0.00	0.00	7.20
Humboldt Moving & Storage	189.64	0.00	0.00	0.00	0.00	189.64
Investment Realty	348.07	0.00	0.00	0.00	0.00	348.07
Kays Yard Service	0.63	0.00	0.00	0.00	0.00	0.63
Kirkland's Lawn & Yard Service	420.25	0.00	0.00	0.00	0.00	420.25
Kraft, Tom & Patti	93.62	0.00	0.00	0.00	0.00	93.62
Larson Services	0.00	0.00	50.41	0.00	0.00	50.41
LNL Design and Construction	174.28	0.00	0.00	0.00	0.00	174.28
Lucky 7 Casino	70.58	0.00	0.00	0.00	0.00	70.58
Madrone Court	28.81	0.00	0.00	0.00	0.00	28.81
Malloroy Construction	14.40	106.11	0.00	0.00	0.00	120.51
Mastaloudis Homes Inc.	76.05	230.24	0.00	0.00	0.00	306.29
McCullough Construction, Inc.	113.79	158.44	0.00	0.00	0.00	272.23
Miller Construction	159.58	0.00	0.00	0.00	0.00	159.58
Mountain Power Tree Co	0.00	32.62	0.00	0.00	0.00	32.62
Mow Blow and Go	94.20	135.78	0.00	0.00	0.00	229.98
Murray Construction	227.41	0.00	0.00	0.00	0.00	227.41
New Dawn Support Services	424.36	0.00	0.00	0.00	0.00	424.36
North Coast Properties	31.68	0.00	0.00	0.00	0.00	31.68
North Woods Realty	36.83	0.00	0.00	0.00	0.00	36.83
Northridge Electric	286.60	0.00	0.00	0.00	0.00	286.60

Del Norte Solid Waste Management Authority
A/R Aging Summary
As of July 1, 2017

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
PALM Industries, Inc.	66.26	56.18	0.00	0.00	0.00	122.44
Pappas Dry Wall	124.32	131.06	0.00	0.00	0.00	255.38
Parkway Feed	59.06	0.00	0.00	0.00	0.00	59.06
Peasley's Property Mang.	0.00	28.81	0.00	0.00	0.00	28.81
Pebble Beach Apartments	142.36	0.00	0.00	0.00	0.00	142.36
Pelican Bay Roofing Co.	601.06	507.02	0.00	0.00	0.00	1,108.08
Pierson Company	338.50	0.00	0.00	0.00	0.00	338.50
Plunkett's Family Painting	50.42	0.00	0.00	0.00	0.00	50.42
Porter's Trucking *CLOSED*	0.00	0.00	0.00	0.00	2,033.84	2,033.84
Ray's Mobile Home Service	271.30	352.89	0.00	0.00	0.00	624.19
Recology Del Norte (Franchise)	128,059.51	-0.11	0.00	0.00	0.00	128,059.40
Recology Del Norte (Prison)	9,971.89	0.00	0.00	0.00	0.00	9,971.89
Red Sky Roofing	20,725.56	13,231.96	0.00	0.00	0.00	33,957.52
Redwood National Park	2,540.22	0.00	0.00	0.00	0.00	2,540.22
Reservation Ranch	488.29	303.92	0.00	0.00	0.00	792.21
Richard Brown Construction	8.64	0.00	0.00	0.00	0.00	8.64
Richterich & Jones Const	903.13	221.82	0.00	0.00	0.00	1,124.95
Rick Parker Construction	72.02	0.00	0.00	0.00	0.00	72.02
Ritchie Homes	670.75	0.00	0.00	0.00	0.00	670.75
Rogers, Luu T.	0.00	18.73	0.00	0.00	0.00	18.73
Roy Rook Construction	96.51	0.00	0.00	0.00	0.00	96.51
Rumiano Cheese Company	10.08	14.53	0.00	0.00	0.00	24.61
S.O.S. Construction	110.91	239.11	239.11	0.00	0.00	589.13
Schnacker's General Hauling	463.34	0.00	0.00	0.00	0.00	463.34
Seawood Village	2,407.75	2,728.94	0.00	0.00	0.00	5,136.69
Smith River Equipment	73.46	30.25	0.00	0.00	0.00	103.71
Smith River Fire Prot. Dist.	8.64	29.09	0.00	25.93	0.00	63.66
Sprint Courier Service	189.22	0.00	0.00	0.00	0.00	189.22
Stephen F White Gen.Cont. Inc.	89.68	23.05	0.00	0.00	0.00	112.73
Stone Roofing	5,921.48	4,196.74	0.00	0.00	0.00	10,118.22
Swanson, Ray C. Construction	21.61	0.00	0.00	0.00	0.00	21.61
Tab & Associates	228.26	0.00	0.00	0.00	0.00	228.26
Thomas Gavin Construction	15.84	0.00	0.00	0.00	0.00	15.84
Thrifty Supply	10.08	0.00	0.00	0.00	0.00	10.08
Tim Haban Construction	315.45	0.00	0.00	0.00	0.00	315.45
Tolowa Dee-Ni' Nation	333.45	1,773.31	0.00	0.00	0.00	2,106.76
U.S. Forest Service-Gasquet CA	0.00	87.86	0.00	0.00	0.00	87.86
Van Arsdale Construction	1,429.41	3,317.99	0.00	0.00	0.00	4,747.40
Van Nocker's Cleaning	7.20	0.00	0.00	0.00	0.00	7.20
Wigley Contracting	12.12	0.00	0.00	0.00	0.00	12.12
Yurok Economic Dev Corp	0.00	116.04	0.00	0.00	0.00	116.04
Yurok Indian Housing Authority	54.74	0.00	0.00	0.00	0.00	54.74
Yurok Tribe	618.37	769.59	0.00	0.00	0.00	1,387.96
TOTAL	192,324.10	36,610.21	371.62	40.29	2,053.50	231,399.72

CLAIMS APPROVED BY THE DIRECTOR

Del Norte Solid Waste Management Authority

Claims for June 2017

Date Paid	Paid to:	Budget	Amt. Paid	Description	Claim #
6/5/2017	Smith, Bonnie	20290	\$ 22.46	Mileage reimb 08/08-08/20/2016	7902
6/6/2017	Canon Financial Services, Inc.	20221	\$ 36.31	INV 17340642 Printing charges Apr 2017	7903
	Canon Financial Services, Inc.	20250	\$ 142.02	INV 17340642 Contract rental charges May 2017	
6/6/2017	Recology Del Norte	20283	\$ 455.26	BILL 05079355 500 Cooper Ave.-County Yard	7904
	Recology Del Norte	20288	\$ 251.20	BILL 05079363 Tenth St.-City Yard	
	Recology Del Norte	20288	\$ 802.89	BILL 05079330 1001 Front St.-Cultural Center	
6/6/2017	DNC Community Development Dept.	20285	\$ 78.00	INV 2017-23 CSA Sewer User Fees, FY 16/17	Interdepartmental
	DNC Community Development Dept.	20285	\$ 802.91	INV 2017-23 CSA Sewer Assessment, FY 16/17	
6/7/2017	DNC Information Technology	20230	\$ 31.35	INV 21383 IT Labor Charge, Board Meeting 05/23/17	Interdepartmental
6/7/2017	Crescent Ace Hardware	20140	\$ 2.14	INV 661850 Identifier Key CD/4 Neon	7905
	Crescent Ace Hardware	20140	\$ 2.57	INV 661850 Key Schlage SC1-ACE250PK	
	Crescent Ace Hardware	20140	\$ 2.78	INV 661850 Key Schlage SC4-ACE	
6/7/2017	Fleshman, Ronald	20290	\$ 287.30	Mileage reimb 03/25-05/28/2017	7906
6/7/2017	Mission Linen Supply	20140	\$ 30.86	INV 504975687 linen service 05/23/17	7907
	Mission Linen Supply	20140	\$ 30.86	INV 504872959 linen service 05/09/17	
6/7/2017	Curry Transfer Roto-Rooter	20140	\$ 160.18	INV 65815698 KTS PortaPotty May 2017	7908
	Curry Transfer Roto-Rooter	20140	\$ 160.18	INV 65815697 GTS PortaPotty May 2017	
6/7/2017	Taylor, Richard D.	20235	\$ 200.00	STMT 05/17 Treasurer/Controller Services	7909
6/7/2017	Recology Del Norte	20238	\$ 1,675.44	INV 1827 Klamath Beach Rd 05/17 bin pull	7910
	Recology Del Norte	20238	\$ 1,116.96	INV 1826 Old Gasquet Toll Rd 05/17 bin pull	
6/8/2017	Creative Information Systems	20232-002	\$ 2,521.00	INV SMSQ11672 Sup. & Maint. SMS 7/1/17-6/30/18	7911
6/8/2017	U S Bank Corp P S	20171	\$ 4.29	INV 415343 oil for 4-Runner	7912
	U S Bank Corp P S	20290-066	\$ 195.32	ITN 15564B5349691 1st night Paradise Pt. Resort	
	U S Bank Corp P S	20290-066	\$ 549.90	ITN 7266437147502 Airfare Crescent City-San Diego	
	U S Bank Corp P S	20290-066	\$ 5.60	ITN 7266437147502 Expedia Booking Fee	
	U S Bank Corp P S	20290-079	\$ 33.40	ITN 7266437147502 Expedia Booking Fee	
	U S Bank Corp P S	20290-079	\$ 485.00	INV 05258 CRRA 41st Conference Registration	
	U S Bank Corp P S	20285-079	\$ 200.00	INV 05205 CRRA Member Renewal to 05/29/18	
6/8/2017	Bi-Coastal Media	20240-063	\$ 425.00	INV 3908-2 KPOD-FM Oil Recycling ads 5/12-5/31/17	7913
	Bi-Coastal Media	20240-063	\$ 425.00	INV 3908-1 KCRE-FM Oil Recycling ads 5/12-5/31/17	
	Bi-Coastal Media	20240	\$ 336.00	INV 3869-2 KPOD-FM Town Hall ads 5/4-5/11/17	
	Bi-Coastal Media	20240	\$ 336.00	INV 3869-1 KCRE-FM Town Hall ads 5/4-5/11/17	
6/9/2017	Crescent Hay & Feed	20140	\$ 9.68	RECT 208137 straw for con-ex	7914
6/9/2017	G.H. Outreach	20285	\$ 200.00	INV 434600 May 2017 Recycling Services	7915
6/15/2017	Butcher, Andrew	20231	\$ 750.00	INV 2271 IT Services June 2017	7916
6/19/2017	Western Communications	20240-063	\$ 720.00	INV 2383022 REF 7-96024 Map 05/30	7917
	Western Communications	20240	\$ 107.80	INV 2383022 REF 7-97490 Clean Sweep ad 05/27	
	Western Communications	20240	\$ 107.80	INV 2383022 REF 7-97490 Clean Sweep ad 05/25	
	Western Communications	20240	\$ 107.80	INV 2383022 REF 7-97490 Clean Sweep ad 05/23	
	Western Communications	20240	\$ 63.60	INV 2383022 REF 7-96058 Town Hall ad 05/09	
	Western Communications	20240	\$ 79.20	INV 2383022 REF 7-96058 Town Hall ad 05/06	
6/19/2017	Hambro/Waste Solutions Group	20239	\$ 195,636.23	INV 2017-05 Material Management May 2017	7918
6/19/2017	Lawrence & Associates	20231	\$ 677.50	INV 24389 PRO 015063.00 April 2017	7919
6/19/2017	Davis, Darren	20290	\$ 361.13	Mileage reimb 03/22-06/18/17	7920
6/19/2017	Quill	20224	\$ 16.11	INV 7475807 Calc spool 6pk blk/red	7921
	Quill	20224	\$ 85.98	INV 7475807 Casio 2 color printing calculator, 2	
	Quill	20224	\$ 9.45	INV 7475807 Bic brite liner, green, doz.	
6/19/2017	Hi-Tech Security	20236	\$ 72.00	INV 17-06087 Comm Security Monitoring 07-09/17	7922
6/19/2017	United States Cellular	20121	\$ 93.12	INV 0195273691 - 06/04-07/03/17 Cell Service	7923
6/19/2017	Canon Financial Services, Inc.	20221	\$ 48.90	INV 17447078 Printing charges May 2017	7924
	Canon Financial Services, Inc.	20250	\$ 142.02	INV 17447078 Contract rental charges June 2017	
6/30/2017	Community Development Department	20230	\$ 3,474.82	INV 2017-35 Reimbursable Time for Landfill 7/1/16-5/31/17	Interdepartmental
6/20/2017	Mission Linen Supply	20140	\$ 30.86	INV 505159080 linen service 06/20/17	7925
	Mission Linen Supply	20140	\$ 30.86	INV 505059694 linen service 06/06/17	
6/26/2017	Crescent Ace Hardware	20140	\$ 48.36	INV 666128 Cord Extn 14.3 SJTW 100'	7926
	Crescent Ace Hardware	20140	\$ 18.26	INV 665925 Brooder Lamp 18/2SJTW 8'	
	Crescent Ace Hardware	20140	\$ 8.59	INV 665925 Softlens250W Clrheat 2pk	
6/27/2017	Floyd L. Clemann	20239-001	\$ 570.00	INV 301875 Vegetation Control, Landfill	7927
6/27/2017	Recology Del Norte	20288	\$ 251.20	BILL 05088687 900 Tenth St.-City Yard	7928

2.3

	Recology Del Norte	20283	\$ 455.26	BILL 05088679 500 Cooper Ave.-County Yard	
	Recology Del Norte	20288	\$ 802.89	BILL 05088653 1001 Front St.-Cultural Center	
6/28/2017	Davis, Darren	20290	\$ 24.08	Mileage reimb 06/25/17	7929
6/28/2017	Brewer, Katherine	20290	\$ 33.22	Mileage reimb 01/03-06/20/17	7930
6/28/2017	Fleshman, Ronald	20290	\$ 131.61	Mileage reimb 06/03-06/28/17	7931
6/28/2017	Smith, Haley	20290	\$ 16.59	Mileage reimb 04/17-06/08-17	7932
	TOTAL		\$ 216,993.10		

DNSWMA			
GRAND TOTALS			
June 2017			
	Amount to 422-421 91003	Amount to 422-421 91004	TOTAL AMOUNT
	66.53%	33.47%	
DNCTS Cash Total	38,638.12	19,438.12	58,076.24
DNCTS Charge Total	135,165.23	67,999.10	203,164.33
DNCTS Credit/Debit	27,251.37	13,709.65	40,961.02
DNCTS Adjustment	-1,994.01	1,994.01	0.00
DNCTS Totals	199,060.71	103,140.88	302,201.59
Klamath Cash Total		4,409.82	4,409.82
Klamath Charge Total		121.75	121.75
Klamath Adjustment			
Klamath Totals		4,531.57	4,531.57
Gasquet Cash Total		1,576.46	1,576.46
Gasquet Charge Total		0.00	0.00
Gasquet Adjustment			
Gasquet Totals		1,576.46	1,576.46
GRAND TOTALS	199,060.71	109,248.91	308,309.62

2.4

DAILY TICKET REPORT				
DNSWMA TRANSFER STATION				
MONTH: June 2017				
Date	BEGIN	END	VOIDED TICKETS	TICKET COUNT
1	942236	942432	1	196
2	942433	942669	1	236
3	942670	942905		236
4	942906	943158	1	252
5	943159	943416	1	257
6	943417	943627		211
7	943628	943829		202
8	943830	943971	1	141
9	943972	944155		184
10	944156	944331	3	173
11	944332	944536		205
12	944537	944749		213
13	944750	944945		196
14	944946	945138		193
15	945139	945291	2	151
16	945292	945445		154
17	945446	945641		196
18	945642	945828		187
19	945829	946043		215
20	946044	946270		227
21	946271	946475	2	203
22	946476	946693		218
23	946694	946915		222
24	946916	947161		246
25	947162	947405		244
26	947406	947632		227
27	947633	947879		247
28	947880	948096	1	216
29	948097	948311	1	214
30	948312	948568		257
TOTAL			14	6319

High

257

Low

141

Daily Ave.

211

DNSWMA KLAMATH TRANSFER STATION - DEPOSITS									
June-2017									
Date	Cash	Checks	TOTAL Deposit	Over / Short	Sales	TOTAL Sales	Charges	Tickets	
June 4, 2017	59.02	456.51	515.53	(0.86)	516.39	515.53		37	
June 7, 2017	301.32	110.00	411.32	(2.95)	414.27	411.32		25	
June 11, 2017	582.30	17.76	600.06	2.43	597.63	600.06		44	
June 14, 2017	232.03	205.90	437.93	(0.85)	438.78	437.93	121.75	24	
June 18, 2017	376.14	32.51	408.65	(1.02)	409.67	408.65		31	
June 21, 2017	517.32	168.29	685.61	(2.06)	687.67	685.61		29	
June 25, 2017	585.87	280.15	866.02	(6.80)	872.82	866.02		48	
June 28, 2017	472.95	11.75	484.70	4.61	480.09	484.70		25	
			0.00			0.00			
			0.00			0.00			
			0.00			0.00			
			0.00			0.00			
			0.00			0.00			
			0.00			0.00			
			0.00			0.00			
			0.00			0.00			
			0.00			0.00			
TOTAL	\$ 3,126.95	\$ 1,282.87	\$ 4,409.82	(7.50)	\$ 4,417.32	\$ 4,409.82	\$ 121.75	263	
TOTAL SALES									
Date	Wednesday	Friday	Sunday						
June 4 2017			515.53						
June 7, 2017	411.32								
June 11, 2017			600.06						
June 14, 2017	437.93								
June 18, 2017			408.65						
June 21, 2017	685.61								
June 25, 2017			866.02						
June 28, 2017	484.70								
TOTALS	\$2,019.56	\$0.00	\$2,390.26						
DAILY AVERAGE	\$504.89			\$597.57					

**DNSWMA
GASQUET TRANSFER STATION - DEPOSITS
June-2017**

Date	Cash	Checks	TOTAL Deposit	Over / Short	Sales	TOTAL Sales	Charges	Tickets
June 3rd 2017	346.60	96.76	443.36	0.53	442.83	443.36		35
June 10th, 2017	304.70	104.03	408.73	-0.10	408.83	408.73		36
June 17th, 2017	172.81	40.27	213.08	0.45	212.63	213.08		19
June 24th, 2017	347.34	163.95	511.29	-1.25	512.54	511.29		39
			0.00			0.00		
			0.00			0.00		
			0.00			0.00		
			0.00			0.00		
			0.00			0.00		
			0.00			0.00		
TOTAL	\$ 1,171.45	\$ 405.01	\$ 1,576.46	\$ (0.37)	\$ 1,576.83	\$ 1,576.46	\$ -	129

TOTAL SALES

Date	Thursday	Saturday
June 3 2017		443.36
June 10th, 2017		408.73
June 17th, 2017		213.08
June 24th, 2017		511.29
TOTALS	\$0.00	\$1,576.46

DAILY AVERAGE \$394.12

AUTHORITY REVENUE REPORT April 2017

Source		2015/2016		2016/2017	
Authority		Actual Annual		Budget/Month	
Service Fees		Actual/Month	Comparison FY15/16	Actual/Month	Over Budget
		\$ 1,030,898.99		\$ 84,940.92	\$ 1,019,291.00
July	\$ 94,614.42	\$ (1,219.41)	\$ 93,395.01	\$ 8,454.09	
August	\$ 92,156.03	\$ 8,128.42	\$ 100,284.45	\$ 15,343.53	
September	\$ 91,983.20	\$ 5,866.38	\$ 97,849.58	\$ 12,908.66	
October	\$ 90,405.08	\$ (6,188.04)	\$ 84,217.04	\$ (723.88)	
November	\$ 74,641.65	\$ 13,298.22	\$ 87,939.87	\$ 2,998.95	
December	\$ 73,083.00	\$ 11,336.61	\$ 84,419.61	\$ (521.31)	
January	\$ 75,830.23	\$ 12,238.53	\$ 88,068.76	\$ 3,127.84	
February	\$ 83,078.53	\$ (5,056.70)	\$ 78,021.83	\$ (6,919.09)	
March	\$ 82,737.50	\$ 9,736.34	\$ 92,473.84	\$ 7,532.92	
April	\$ 86,370.22	\$ 5,334.30	\$ 91,704.52	\$ 6,763.60	
May	\$ 90,954.13	\$ 15,931.57	\$ 106,885.70	\$ 21,944.78	
June	\$ 95,045.00	\$ 14,203.91	\$ 109,248.91	\$ 24,307.99	
Total	\$ 1,030,898.99	\$ 83,610.13	\$ 1,114,509.12	\$ 95,218.12	
		Over last year	\$ 83,610.13	\$ 8.11%	
		Over budget	\$ 95,218.12	\$ 9.34%	

2.5

AUTHORITY REVENUE REPORT April 2017

Source 2015/2016 **2016/2017**
Franchise Fee Actual Annual Budget/Month Budget/Year
 \$ 22,796.67 \$ 273,560.00

	Comparison		Actual/Month	Over/Under Budget
	Actual/Month	FY 15/16		
July	\$ 19,500.00	\$ 5,094.00	\$ 24,594.00	\$ 1,797.33
August	\$ 24,126.00	\$ (1,498.00)	\$ 22,628.00	\$ (168.67)
September	\$ 25,288.00	\$ (1,285.00)	\$ 24,003.00	\$ 1,206.33
October	\$ 22,618.00	\$ 81.00	\$ 22,699.00	\$ (97.67)
November	\$ 21,387.00	\$ 534.00	\$ 21,921.00	\$ (875.67)
December	\$ 20,803.00	\$ 1,763.00	\$ 22,566.00	\$ (230.67)
January	\$ 20,780.00	\$ (189.00)	\$ 20,591.00	\$ (2,205.67)
February	\$ 20,827.00	\$ 1,203.00	\$ 22,030.00	\$ (766.67)
March	\$ 21,438.00	\$ (241.00)	\$ 21,197.00	\$ (1,599.67)
April	\$ 21,799.00	\$ 1,124.00	\$ 22,923.00	\$ 126.33
May	\$ 23,342.00	\$ (302.00)	\$ 23,040.00	\$ 243.33
June	\$ 24,400.00	\$ (814.00)	\$ 23,586.00	\$ 789.33
Total	\$ 266,308.00	\$ 5,470.00	\$ 271,778.00	\$ (1,782.00)

Over last year 5,470.00 2.05%
 Over budget (1,782.00) -0.65%



Del Norte Solid Waste Management Authority

1700 State Street, Crescent City, CA 95531

Phone (707) 465-1100 Fax (707) 465-1300

www.recycledelnorte.ca.gov

The Authority's mission is the management of Del Norte County solid waste and recyclable material in an environmentally sound, cost effective, efficient and safe manner while ensuring 100% regulatory compliance with law.

Staff Report

Date: 13 July, 2017
To: The Commissioners of Del Norte Solid Waste Management Authority
From: Kyra Seymour Facilities and Programs Coordinator
Attachment: Letter of Support
File Number: Outgoing Correspondence **031506**
Topic: Illegal Disposal Site Abatement Grant Program

Summary/Recommendation: Staff Recommend that the Commissioners of Del Norte Solid Waste Management Authority Board approve the submittal of letters of support from The Del Norte Solid Waste Management Authority. For Del Norte County's application to CalRecycle's Illegal Disposal Site Abatement Grant program. Staff also recommend that the AVA adopt a similar letter of support for the reasons described in this report.

Background: During the June 20th meeting, the Authority Board asked if staff planned to apply for any competitive grants soon. Though staff currently are managing 3 block grants and the Facilities and Programs Coordinator Kyra Seymour is learning to navigate those requirements, staff noticed a competitive grant that could be quite helpful for our community. We realized this grant would most appropriately support the activities of our County Code Enforcement Officer.

Analysis: Letters of support from DNSWMA and the AVA will increase the competitiveness of the county's grant application by expanding the population served by this program as well as demonstrating regional coordination among local agencies, creating a better chance of receiving much needed funds to abate abandoned motor homes, trailers, and dumpsites. Part of this grant application would include resources to clean up a small illegal dumpsite on the landfill property, and resources to inhibit future access to this location.

6.1

This Grant and our interagency collaboration will also address two of the grand jury recommendations from the FY 16/17 Grand Jury report, namely:

R3 - Increase community education about proper trash disposal through radio, newspaper, and outreach;

For the outreach portion, the authority has offered as a complement to the removal and disposal of abandoned trailers and motor homes, the Del Norte County's Code Enforcement Officer will work with staff of the Del Norte Solid Waste Management Authority to develop a brochure and other appropriate outreach tools to provide information regarding proper disposal of trailers and motor homes at end of life. Authority staff will hand-deliver these brochures to all motor home and trailer parks in the County, and will also provide them to businesses providing trailer and motor home repairs. This information will also be incorporated into the Del Norte Solid Waste Management Authority's website.

R7 - Establish an agreement between DNSWMA and Code Enforcement for a set amount of financial assistance.

DNSWMA Staff assistance with this grant application could result in significant additional financial support to code enforcement over the next two fiscal years.

Alternatives: The board could decline to support the County's application, but that would decrease the likelihood of this grant being awarded.

Fiscal Impacts: Award of this grant would augment code enforcement resources, which are especially needed for the remediation of abandoned trailers and RV's.

Related Issues: Reduction of blight helps increase our community quality of life and increases our value as a tourist destination.



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July 13, 2017

Attn: Stephanie Young,
Department of Resources Recycling and Recovery (CalRecycle)
1001 I Street--P.O. Box 4025, Mail Stop 10-18
Sacramento, CA 95812-4025

RE: Support for Del Norte County's application to CalRecycle's Illegal Disposal Site Abatement Grant program

Dear Ms. Young:

The Del Norte Solid Waste Management Authority, a Joint Powers Authority of the County of Del Norte and the City of Crescent City, supports Del Norte County's application to CalRecycle's Illegal Disposal Site Abatement Grant program. If awarded this grant would remediate unsightly abandoned illegal dump sites, several of which are adjacent to watercourses. This grant would also address the high cost to abate the many motorhomes, trailers, and campers, abandoned throughout Del Norte County. These can adversely impact areas with tainted runoff windblown trash, vermin, and vectors. These sites have a damaging effect on the health of the environment and the surrounding community.

The Del Norte Solid Waste Management Authority is confident in the abilities of the Code Enforcement Officer Dominic Mello, to manage this project. We are willing to help achieve the success of these projects by offering our services in assisting with, outreach, site characterization, documentation, and strategy as needs arise. Our agencies have a history of collaboration, and this grant project will be an excellent opportunity for our complementary skill sets to be utilized.

This grant will aid with the shared goal of improving quality of life for our community, enhancing environmental health, and removing threats to health produced by biohazardous material, rodent and disease vectors, and other varieties of hazardous materials. This county consists of 75% public land including old growth redwoods, wetlands, rivers, and coastal lands, so the removal of blight is quite impactful and improves economic prosperity, with opportunities for an increase in ecotourism, increasing the overall health, and wealth of the community.

Sincerely,

Blake Inscore, Chair
Del Norte Solid Waste Authority

A Joint Powers Authority of
the City of Crescent City and County of Del Norte

Printed on minimum
30% post-consumer



100% recycled paper

Area Reserved
for Resource
Recovery Park

6.2



**RESOURCE RECOVERY PARK
FEASIBILITY STUDY**

FOR

**DEL NORTE
SOLID WASTE MANAGEMENT AUTHORITY**

Prepared by

**Gary Liss & Associates
Richard Anthony & Associates
Urban Ore Design Associates
John Douglas Moore, Esq.
Waste Not Consulting
Gainer & Associates
Stover Engineering**

MARCH 2001

**DEL NORTE RESOURCE RECOVERY PARK
FEASIBILITY STUDY
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RESOURCE RECOVERY PARK FEASIBILITY STUDY RECOMMENDATIONS

Based on the cluster analysis performed by Gary Liss & Associates (GLA), the initial anchor activities of the Resource Recovery (RR) Park at the Transfer Station/Materials Recovery Facility (TS/MRF) are recommended to be:

- ◆ Phase 1 – Integrate RR Park design with TS./MRF design and RFP for TS/MRF Operator; Provide Areas for Reuse, Recycling, Organics, Inerts and HHW on-site; paving and infrastructure for full build-out; and incentives and rules for TS/MRF Operator to maximize recovery.
- ◆ Phase 2 – Develop Reuse and Repair, and Household Hazardous Waste (HHW) buildings, preferably funded in part by grants.
- ◆ Phase 3 – Establish Chipped Organics, Inert Materials and possibly Recyclables processing on-site.
- ◆ Phase 4 – Transfer Chipped Organics to Organics Processing Facility for composting.

The Reuse and Repair area would include a public drop-off of furniture, appliances and household goods for reuse and repair, and retail sales of refurbished items. Once enough business develops at the TS/MRF site, then a downtown retail location should be pursued as a location for these reuse and repair activities, and retail sales for all products from the RR Park.

The HHW area would include a free public drop-off of batteries, oil and paint for reuse and recycling, and a “swap” table for other Park clients to obtain those materials for free or at a nominal cost. The HHW area would also include appropriate secure storage facilities for materials that must be sent to hazardous waste processing or disposal facilities.

Locating the RR Park at the TS/MRF will be the best way for it to support, and not compete with, the TS/MRF. The public would be able to donate items directly to RR Park businesses before paying their gate fees at the TS/MRF. However, RR Park businesses would not receive any gate fees directly from the public. All discarded materials requiring a gate fee to dispose of them would go through the TS/MRF gate. Lower fees would be charged for clean, source-separated materials.

It will then be up to the TS/MRF Operator to decide where to direct materials. If the materials were not reusable, recyclable, repairable, compostable or salvageable, the TS/MRF Operator would direct them to the transfer trailers for transport to a distant landfill. To better coordinate the TS/MRF project with the RR Park project, GLA recommends that **the RFP require the TS/MRF Operator to donate or pay for materials to be reused, recycled or composted if it**

would cost them less than or equal to the cost of transfer and disposal. The Authority is the only entity that can shift those costs to leverage other private investment. It is critical for the Authority to get these signals right, or the TS/MRF Operator may have little incentive to decrease the amount of its own business in the future.

With the savings of transfer and disposal costs, the TS/MRF Operator could afford to pay a fee to the appropriate RR Park business to pay for the necessary processing costs to upgrade the materials into the most marketable product. Alternatively, the TS/MRF Operator would have the option to work with other reuse, recycling and composting businesses off-site to market these materials.

The RR Park needs to be developed in partnership with existing reuse, repair, recycling and composting businesses and nonprofit organizations, so that it complements and expands their capacity to handle discarded materials, and does not undermine existing activities. The RR Park would initially build upon business relationships between the TS /MRF Operator and reuse, recycling and composting businesses in the area. Space would be provided at the TS/MRF site for containers to collect recyclables for these different businesses. The RR Park businesses would transport these materials to their existing reuse, recycling and/or composting activities in Del Norte County for processing and sale to markets.

While the Resource Recovery Park will be located adjacent to the TS/MRF, and could ultimately include the Reuse & Repair, HHW, Recyclables, Inert Material, and Organic clusters, the latter three clusters could be located elsewhere in Del Norte and still be successful.

The Recyclables cluster consists of commingled containers, paper and plastic. These materials can be taken to the TS/MRF for sorting and processing for market.

The Organic cluster consists of yard trimmings, food discards, food contaminated paper and sewage sludge. Much of this material should be composted at a permitted composting facility. Yard trimmings and wood wastes dropped off at the TS/MRF site could be chipped then sold as biomass fuel to Hambro's, as bulk mulch products, or to a nursery to mix with other soil conditioning materials. In the future, the fines from the RR Park Organics stream might also be sent to an Organics Processing Facility offsite for composting and upgrading with other organic materials (e.g., food discards, food paper and sewage sludge). The costs of an Organics Processing Facility are detailed in Appendix A, but not included as part of the costs of developing and operating the RR Park, as these materials can be sold for lower value products without composting. Inert materials from construction and demolition projects might also be processed there.

If transfer and disposal costs rise to an anticipated \$75 per ton, implementation of the RR Park could yield over \$900,000 in annual avoided transfer and disposal cost savings. This strategy would also result in almost \$600,000 in material sales revenue annually. At current disposal costs of approximately \$65 per ton, this system would still yield an impressive \$815,023 in annual avoided disposal cost savings annually.

The RR Park land, structures, equipment, and fixtures for recovering reusables, and recyclables at the TS/MRF are estimated to cost \$2.4 million. This should be easily financed from the savings in avoided disposal costs and revenues from material sales.

As shown in Figure 1, based on Expenses and Sales/Savings there is a \$37 return on each ton captured for recovery by the Reuse and Repair cluster, the Recycling cluster shows a \$47 ton benefit, and the Organics processing at the RR Park will save about \$51 per ton. The overall benefit per ton for the RR Park is \$48 per ton.

Figure 1 – Cost/Benefit Analysis of Resource Recovery Park by Cluster

Cluster	Capital \$/Year*	O&M \$/Year	Annual Costs	Trans/Disp. ** Savings	Sales \$/Year	Tons/Year Captured	Benefits/ (Costs) \$/Ton
Reuse	34,817	432,311	467,128	106,425	413,700	1,419	+\$37
Recycling	58,475	169,928	228,403	323,925	108,410	4,319	+\$47
RRP Organics	79,113	158,928	238,041	509,000	74,040	6,796	+\$51
Total	172,405	761,167	933,572	940,050	596,150	12,534	+\$48

*Amortization; 20 years land and structures, 6 years equipment and fixtures

** \$75 dollar per ton savings from avoided transfer and disposal.

In addition, the RR Park could decrease the costs of developing the TS/MRF by making the total facility eligible for grants to assist in preliminary siting, design, permitting and construction activities from sources that would not otherwise be available for this project.

The Board of the Authority directed that the TS/MRF should "offer the same types of services as the landfill now offers County residents." Those services include:

Phase 1: Before 2004

On-site:

- Scale / Scale house
- Self-haul refuse drop-off
- Wood & brush drop-off
- Animal drop-off / storage
- Sludge processing & storage
(Skimmings, screenings, & sludge)
- White goods, refrigerators,
bulky item processing
- Administration offices
- Tires drop-off / storage
- HHW (oil, batteries, paint, anti-freeze)
- Facility for transfer trucks

On-site Private Options:

- HHW Facility
- Salvage

Other Phase I facilities:

- Composting
- Auto wrecking
- Oil buyback/ resale

Phase 2: After 2004

Operator recovery
Processing recyclables
Potential Private, location uncertain:
Dropoff / buyback
Construction Mat'l recovery & resale
Textiles recovery
Paper shredding
Composting
Baling & grinding

Sorting Line

Volume Reduction

Additional On-site, if not done

in Phase 1:

HHW Facility

Salvage / resale

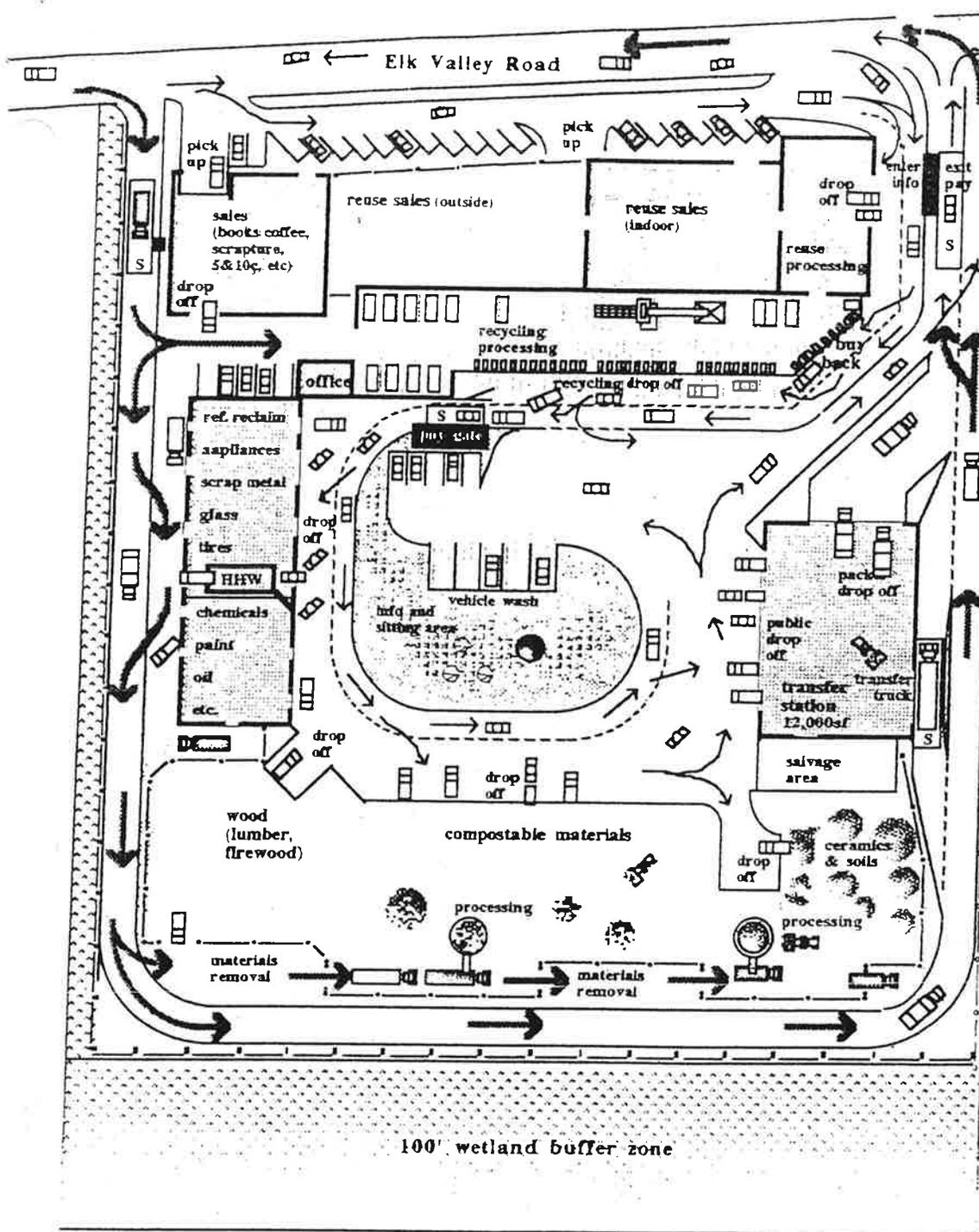
The RR Park is designed to organize and provide space for these Board-directed activities into a framework that will maximize the diversion of wastes from transfer and disposal. Figure 2 provides a proposed Site Plan for the RR Park that highlights how all these pieces should best fit together on the site of the TS/MRF, once all Phases of development are completed. The TS/MRF should be designed based on this Site Plan.

Appendix D highlights the first three phases anticipated for the development of the RR Park.

The first phase is the addition of the basic infrastructure of the RR Park to plans for the TS/MRF site. This requires the addition of additional internal roads and changes in the traffic patterns on the site, and the paving of reuse, recycling and organics processing areas to maximize the recovery of materials from these areas. During the first phase of the RR Park, the TS/MRF is designed to include the following components:

- ◆ Recyclables drop-off area (no processing)
- ◆ Scrap Metals drop-off area
- ◆ Household Hazardous Wastes drop-off area
- ◆ Organics (wood and brush) area
- ◆ Inerts area

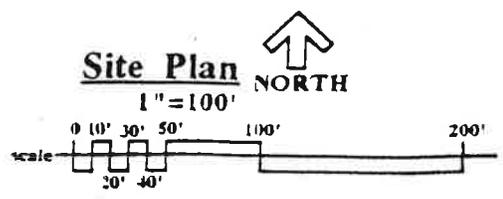
The second phase adds a Reuse building and a Household Hazardous Wastes (HHW) building, both funded from grant resources. The third phase adds on-site processing of Recyclables, Inerts and/or chipping of Organics, and expands the Reuse building and HHW building to include related and expanded activities. A fourth phase would add a transfer of chipped Organics to a new Organics Processing Facility to be built off-site for composting.



- legend
- entry/exit scales/pay gates/information
 - vehicle scales
 - commercial & service vehicle traffic
 - public vehicle traffic
 - enclosed building
 - roof or canopy above

100' wetland buffer zone

wetland zone



ban Ore Design Group
 rkeley, California
 McCorrell, Architect

Del Norte Solid Waste Management Authority
Resource Recovery Park
 Site Plan • Phase III • 13 March 2001

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RESOURCE RECOVERY PARK

FEASIBILITY STUDY

STUDY GOALS AND OBJECTIVES

This study provides a description, conceptual design, estimated cost, potential diversion and a summary of the opportunities and potential barriers to establishing a Resource Recovery Park (RR Park) located in Del Norte County California. The goal of the project is evaluate the feasibility of planning, siting, permitting, financing, building and operating a successful RR Park that will divert discarded materials away from transfer and disposal options and make recommendations.

One of the keys for project success includes siting the facility in an area convenient to the discarding public and located in an appropriately zoned area in the community. Another key is that the facility is designed with appropriate technologies that can cost effectively use the existing and developing market transportation systems. A third key is to incorporate into the business and facility plan, the basic concepts of reuse, repair and dismantle for recycle and reuse.

PROJECT NEED

Materials that are no longer wanted are called discards. People who have these materials are sources and generators. The key to zero waste is to have the generator separate the discards at the source of generation. According to systems designed by Urban Ore of Berkeley CA, reusables come in scrap categories called the "Clean Dozen". Discards for Del Norte County disposed of at the landfill in 1999 are shown separated into the "Clean Dozen" Categories in Figure 3.

Figure 3 also highlights what is expected to be "captured" for recovery from the materials stream in the near-term. Once the RR Park is established, it is expected that many of these recovery rates can be increased to achieve Zero Waste. Most of the materials are assumed to achieve an 80% capture rate in the near-term, with the following exceptions. Reusables are expected to achieve a 100% capture rate, due to the high value of the materials, and the fact that all reusables that show up at the transfer station/materials recovery facility (TS/MRF) are likely to be donated to the reuse businesses and nonprofits before residents pay for disposal of their other discards at the TS/MRF gate, to decrease the residents' costs of disposal. Sewage sludge is already captured completely through a single system. The sludge just needs to be directed to an alternate treatment process for it to be recovered. Paper is assumed to achieve a low capture rate, as many of the composite materials are expected to be difficult to capture for recovery, at least initially. Plastics are assumed to achieve the lowest capture rate (24%), based on the current statewide average rate of plastic recovery, and the bleak prospect for any improved plastics recycling systems in the near future.

The RR Park is proposed to handle the full amount of materials currently disposed of in the Del Norte County waste stream (17,817 tons/year or 50 tons/day).

Figure 3 - Materials Discarded* and Potential Capture Rates

Categories	Discarded Tons/Year	Discarded %	Discarded Tons/Day**	Captured Tons/Year	Capture Rate (%)
1. Reusables	1014	5.7	2.8	1,014	100
2. Paper	3780	21.2	10.5	2,000	53
3. Plant Debris	472	2.6	1.3	378	80
4. Putrescibles					
Sludge	876	4.9	2.4	876	100
Other	3781	21.2	10.5	3025	80
5. Wood	328	1.8	0.9	263	80
6. Ceramics	1772	9.9	4.9	1,418	80
7. Soils	1045	5.9	2.9	836	80
8. Metals	1662	9.3	4.6	1,330	80
9. Glass	673	3.8	1.9	538	80
10. Polymers	1671	9.4	4.6	401	24
11. Textiles	507	2.8	1.4	405	80
12. Chemicals	236	1.3	0.7	188	80
Total	17,817	100	49.5	12,672	71

* Source: Based on data from 1999 Del Norte County Discard Generation Study and Urban Ore "Clean Dozen" scrap categories.

** 360 days/year

Discards are generated in clusters. Using a cluster analysis to evaluate resource recovery feasibility the current recycling behavior was observed. Generators cluster discards at the source to serve storage and transportation concerns. Reusables and chemicals are taken to drop off locations. Paper and containers are taken to buy back or drop off centers, and organics are composted on the property. The common clusters for Del Norte County are as follows:

- ◆ **Recyclables** (e.g., papers, plastic, glass and metal containers)
- ◆ **Organics** (e.g., food, vegetative debris, and food paper, other putrescibles, untreated wood and sheetrock)
- ◆ **Reuse & Repair** (e.g., reuse, repair, dismantling, reconditioning, re-manufacturing and resale of furniture, large and small appliances, electronics, textiles, toys, tools, metal and ceramic plumbing fixtures, lighting, lumber and other used building materials)
- ◆ **Metals** (e.g., scrap metals and auto bodies)
- ◆ **Inerts** (e.g., rock, soils, concrete, asphalt, brick, landclearing debris, and mixed construction and demolition materials)
- ◆ **Household Hazardous Wastes** (e.g., used motor oil, paint, pesticides, cleaners, and other chemicals)

Reuse & Repair

This cluster includes reuse, repair, dismantling, re-manufacturing and resale of furniture, large and small appliances, electronics, textiles, toys, tools, metal and ceramic plumbing fixtures, lighting, lumber and other used building materials. Figure 4 estimates the amount of reusables in Del Norte County disposed of at landfill. The capture rate includes bulky discards and textiles and is based on zero waste of all reusables that arrive at the TS/MRF.

Figure 4 - Reusables in Del Norte County

Categories	Tons Per Day	Tons per Year	%	Captured
Reusables	2.8	1,014	5.5	1,014
Textiles	1.4	507	2.8	405
Total	4.2	1,521	8.3	1,419

Household Hazardous Wastes (HHW)

This cluster includes used motor oil, paint, pesticides, cleaners, and other chemicals discarded in Del Norte County. Figure 5 estimates chemicals that ended up at the landfill in 1999. Current California law requires that the Household Hazardous Waste Element part of the County Integrated Waste Management Plan include programs to divert these materials from land disposal.

Figure 5 - Chemicals in Del Norte County

Categories	Tons Per Day	Tons per Year	%	Captured
Chemicals	0.7	236	1.3	188

Recycling

This cluster includes papers, plastic, glass and metal containers, and scrap metals. Metals which could be reused or recycled are: steel cans; cars; white goods (e.g. refrigerators, washing machines); non-ferrous; industrial scrap (e.g. steel beams); dismantled structures; pipe; fencing; metal sinks and bath tubs; tires (5 pounds of each tire is steel belt); couches and mattresses (springs and frames); small appliances; and Freon. Figure 6 estimates the amount of recyclable material by scrap category discarded in the landfill in 1999. Once separated into scrap categories these materials are recyclable.

Figure 6 - Recyclables in Del Norte County

Categories	Tons Per Day	Tons per Year	%	Captured
Paper	10.5	3,780	21.2	2,000
Glass	1.9	673	3.8	538
Polymers	4.6	1,671	9.4	401
Metals	4.6	1,662	9.3	1,330
Total	21.6	7,786	43.7	4,269

Organics

This cluster includes food, vegetative debris, and food paper, other putrescibles, untreated wood and gypsum sheet-rock. These materials have value as mulch and soil amendment. Untreated wood can be used for building and/or fuel. Sheet rock and dry wall gypsum is a soil additive. Figure 7 estimates the amount of organics discarded in Del Norte County. Sales figures of organics products shown in Figure 12 are smaller than the incoming and captured material tonnage due to water loss and decomposition during processing.

Figure 7 - Organics in Del Norte County

Categories	Tons Per Day	Tons per Year	%	Captured
Plant Debris	1.3	472	2.6	378
Putrescibles	13.0	4,663	25.3	3,901
Wood	0.9	328	1.8	263
Total	15.2	5,463	29.7	4,542

Inert Material

This cluster includes rock, soils, concrete, asphalt, brick, land clearing debris, and mixed construction and demolition materials. Special projects like home or commercial construction and demolition happen periodically. These materials can be separated out and reused as building materials. Figure 8 estimates soils and ceramics discards in Del Norte County.

Figure 8 - Inert Material in Del Norte County

Categories	Tons Per Day	Tons per Year	%	Captured
Soils	2.9	1,045	5.9	836
Ceramics	4.9	1,772	9.9	1,418
Total	7.8	2,817	15.8	2,254

In the remaining sections of this report, the **Organics Cluster and Inerts Cluster** are considered together, as they have similar space requirements and equipment needs. The combination of tonnages to be captured for these two clusters is **6,796 tons/year**.

Transfer Station/Materials Recovery Facility (TS/MRF)

The current landfill will reach capacity soon at today's discard rates. The Authority is planning to build a facility that can aggregate all the discards and have the capability of transferring mixed discards in road limit loads to another landfill (a "transfer station").

Because of the cost of transfer and disposal is likely to be more than existing close-in landfill costs, separation for reuse, recycling and composting will increasingly make economic and environmental sense. The Authority has planned to incorporate such activities into the transfer station as a Materials Recovery Facility (MRF). This will save on transfer and disposal costs and is common throughout California and the nation.

The Transfer Station/Material Recovery Facility (TS/MRF) will be designed to handle the transfer of all mixed discards generated daily in the County. However, additional facilities can be added to the structure to increase the recovery of resources and minimize disposal. The coordinated development of all these activities is proposed as a "Resource Recovery Park" (RR Park).

Based on the cluster analysis performed by Gary Liss & Associates (GLA), the initial anchor activities of the RR Park at the TS/MRF site would be:

- ◆ Phase 1 would include Reuse and Repair and Household Hazardous Waste.
- ◆ Phase 2 would initiate Recyclable, Chipped Organics and Inert Material processing.
- ◆ Phase 3 would transfer Chipped Organics to the Organics Processing Facility to mix with other Organics (e.g., food discards, food paper and sewage sludge) for composting.

The current design of the TS/MRF would provide some space, resources and/or equipment for use by multiple reuse, repair and HHW tenants. In addition, the initial RR Park could consolidate organics, inert material; and other discards for processing at other local facilities.

Currently there are rules requiring separation of chemicals, dead animals, appliances, and bulky goods discarded at the landfill. The separation of all discards into clusters could be encouraged by the structure of gate fees at the TS/MRF, and/or required in the Solid Waste Ordinance, which specifies how discards are stored, collected and disposed of at Authority Facilities.

RESOURCE RECOVERY PARK DESCRIPTION

The conceptual design and cost estimates provide in this report are based on "*Generic Design and Projected Performance for Two Sizes of Integrated Resource Recovery Facilities*" A Report to the West Virginia Solid Waste Management Board written by Urban Ore, Inc. in 1995. Dan Knapp and Mark Gorrell of Urban Ore are members of the GLA Del Norte RR Park project Team.

The RR Park is envisioned to be a location that is designed to most efficiently handle the flow of materials and associated traffic and environmental impacts. While the RR Park will be located adjacent to the TS/MRF, and could ultimately include the Reuse & Repair, HHW, Recyclable Material, Inert Material, and Organics clusters; the latter three clusters could be located elsewhere in Del Norte and still be successful. The RR Park needs to be developed in partnership with existing reuse, repair, recycling and composting businesses, so that it complements and expands their capacity to handle discarded materials, and does not undermine existing activities.

Locating the RR Park at the TS/MRF will be the best way for it to support, and not compete with, the TS/MRF. The public would be able to donate items directly to RR Park businesses before paying their gate fees at the TS/MRF. However, RR Park businesses would not receive any gate fees directly from the public. All discarded materials requiring a gate fee to dispose of them

would go through the TS/MRF gate. Lower fees could be charged for clean, source-separated materials.

It will then be up to the TS/MRF Operator to decide where to direct those materials. If the materials were not reusable, recyclable, repairable, compostable or salvageable, the TS/MRF Operator would direct them to the transfer trailers for transport to a distant landfill. If the RR Park is at the TS/MRF, the TS/MRF Operator could easily direct materials to the RR Park for reuse, repair, recycling and/or composting, and save the costs of transfer and disposal.

The HHW activities are envisioned to be permitted as part of the TS/MRF and to be considered as part of the responsibilities of the TS/MRF Operator.

It is proposed that the first phase of the RR Park add reuse and repair activities at the TS/MRF site. This would include public drop-off of appliances for reuse and repair, and retail sales of refurbished items. Once enough business develops at the TS/MRF site, then a downtown retail location should be pursued as an additional location for these reuse and repair activities, and retail sales for all products from the RR Park.

The Recyclables stream consists of commingled containers, miscellaneous metals, paper and plastic. These materials can be taken to the TS/MRF for sorting and processing for market. This facility should have state-of-the-art scales and balers. The Solid Waste Authority could contract out containers and paper processing with the operation of the TS/MRF.

The Organics stream consists of yard trimmings, food discards, food paper and sewage sludge. Much of this material should be composted at a permitted composting facility. This facility does not exist today in Del Norte County. Yard trimmings and wood wastes dropped off at the TS/MRF site would be chipped then sold as biomass fuel to Hambro's, as bulk mulch products, or to a nursery to mix with other soil conditioning materials.

In the future, the fines from the RR Park Organics stream might also be sent to an Organics Processing Facility offsite for composting of other organic materials and upgrading. The costs of an Organics Processing Facility are detailed in Appendix A, but not included as part of the costs of developing and operating the RR Park, as these materials can be sold for lower value products without composting. The Organics Processing Facility could start out as a public project and once proven, be privatized at a later date. Inert materials from construction and demolition projects could also be processed there, as they have similar space and equipment requirements.

RESOURCE RECOVERY PARK CONCEPTUAL DESIGN

The specific processes recommended for Del Norte County involve an appropriate technology match. Processing will occur through a RR Park and an Organics Processing Facility. For purposes of this analysis, the clusters detailed above will be assumed to converge at the RR Park and Organics Processing Facility. The Reuse, Recycling and Organics components are the critical elements of the RR Park conceptual design.

The RR Park will include a state of the art repair and dismantling facility working in concert with the demands of current local and regional markets, possibly sharing baling and marketing of recovered recyclables with the TS/MRF. The Reuse and Repair area will provide an industrially zoned working environment for reuse, repair and dismantling businesses and nonprofit organizations.

System description

The Del Norte RR Park will be conveniently located in one of three possible locations, co-located with the Transfer Station/Material Recovery Facility (TS/MRF). The Del Norte Solid Waste Management Authority (Authority) Board has indicated that the current preferred location for the TS/MRF is east of Crescent City on Elk Valley Road immediately adjacent to the Hambro wood products company and Eco-Nutrients, local composter of fish wastes. The GLA Project Team concurs that this is an excellent location for the RR Park as well. Of highest priority to the GLA Team is that the RR Park be developed on the same site as the TS/MRF.

The TS/MRF building is designed to handle approximately 200 tons of discards per day, with enough surge capacity for up to 600 tons over a three-day period. Current discard generation is about 50 tons per day at the Del Norte landfill, which suggests the new TS/MRF may be sufficient to accommodate population growth for 20 to 30 years. The RR Park has been designed to accommodate the actual 17,817 tons per year (50 tons per day) that were documented in detail in the 1999 Del Norte Discard Generation Study. It is expected that portions of the TS/MRF facility may shift incrementally over time to provide for additional reuse and recycling activities at the RR Park.

The following is a description of the RR Park at full build-out. Customers who recycle the most will be able to reduce their net disposal cost significantly. People will be able to sell, donate, or drop off reusable goods and recyclables such as paper, plastics, glass, textiles, and metals. Specialized fee-for-service recovery stations will handle appliances, household hazardous materials, paints, used oil, and compostables such as soils, plant debris, and wood. Another station will handle crushable ceramic materials like concrete, tile, china, and window glass. Putrescible material such as sewage sludge, septage, fish trimmings, and food may be handled by a special processing center, also on a fee-for service basis.

Depending on funding, there may be one or more facilities on the site where small business enterprises based on repair, art or craft, and/or remanufacturing may be incubated. These may be located in a building or outdoor areas, and may also involve retail sales.

Over two-thirds of incoming traffic (170 of 200 loads per day) will be self-haul vehicles driven by landscapers, construction crews, homeowners and renters, commercial businesses, and small private haulers. These loads are generally composed of only a few materials, most of which will be reusable or recyclable within the site. Over time, drivers will learn to take full advantage of opportunities to recycle by stratifying their loads for sequential dropoff. The sequence will be: reuse, and then free recycling, then fee-for-service recycling and composting, then wasting.

Wasting will not only be last in the unloading sequence, it will also be the most expensive disposal option. Notwithstanding this, the steel waste transfer station building and tipping floor will be large enough at 12,000 square feet to handle a three day surge of 600 tons of unrecyclable waste. The waste transfer building will have a peak height of approximately 36 feet to allow large end dump trucks to unload safely. The pitch of the roof will be low, 1:12', with the high side over where the largest commercial vehicles dump.

Full design capacity for wastes is unlikely ever to be reached because almost all material recovery options will be available ahead of the waste transfer facility at all hours it is open in a convenient configuration that is easy and cheaper to use. In the event of storms or natural disasters, these facilities will remain open for business, and may even have to run extra shifts to accommodate demand.

Self-haul and heavy commercial traffic will be separated from each other for safety and efficiency. Almost all self-haul vehicles will drop off materials around the inside perimeter of the site. These materials will generally move to the outer edges of the site as they are processed and upgraded. A road around the outside perimeter will give large trucks easy access to loadout areas so they can take away cleaned up resource streams as well as residual municipal solid waste that must be hauled to distant landfill.

The material recovery operations will incrementally and progressively reduce both the amount and toxicity of the residual waste stream. With proper management, the residual waste stream may in time nearly be eliminated, allowing Del Norte County to come ever closer to fulfilling its goal of zero waste.

Environmental impacts to be minimized or mitigated

Large paved areas are essential for efficient site operation both from the customer's and the operator's perspective. Paving such a high-use site will reduce mud and erosion during the winter, and control dust and particulates during dry periods. Paved sites are easier to clean and better for efficient materials handling, reducing fuel use and labor. Paving also eliminates the risk of groundwater contamination in the event of minor spills of liquids like fuel, oil, or paint. Some parts of the site will have special connections to treatment facilities for runoff of liquids. Paving's negative effect on drainage will be mitigated by special attention given to constructing natural offsite drainage channels and to maximizing water absorption, retention, and cleansing of site runoff by appropriate vegetation growing in the wetland to the south.

Since the large majority of the site plan shows multiple materials recovery operations that will divert substantial tonnages from landfilling, the entire site will serve as mitigation for landfilling that would occur in the absence of this facility. The less landfilling, the more mitigation.

On-site recycling operations will have few impacts. Blowing paper and plastics will be controlled by site fencing and by walls that keep the wind out of collection and processing areas. Paint chips containing lead may be shed from doors and windows more than 30 years old that are processed and sold in the reuse site, but these amounts will be very small and easily controlled.

Dusts arising from shredding and crushing will be controlled by water mists and by regular sweeping and site cleanup. If and when putrescibles such as septage and/or food are handled onsite, sending them to the onsite septage or the offsite sewage treatment plant will control liquids from spills, washing equipment, and the like.

In the station where "special wastes" are handled, batteries will be stored in impervious EPA-approved bins and boxes. Paints that are liquid will either be sold or given away as-is, remixed, or when nearly empty allowed to dry out. Paint containers will be stored under roof. Some chemicals such as household cleansers will be sold or given away. Others such as solvents will be identified and either cleaned up or disposed of using best industrial practices. Oils will be stored in approved containers and periodically picked up by used oil reclaiming companies. Freon and other refrigerants will be removed from air conditioners and refrigerators and resold. The appliances will be sent offsite for further processing by metals reclaimers.

At the transfer station, a specially hardened and reinforced concrete slab will seal off the tipping floor from groundwater supplies. The floor will be sloped slightly to drain any liquids that fall on it into an oil/water separator, which will connect either to a septic system or to Crescent City's sewer system.

The truck washing station will have a concrete pad that will drain to an oil/water separator and then to a septic system or to the sewage treatment system. This station will also be used for cleaning heavy equipment used onsite such as loaders, shredders, and forklifts.

Municipal solid waste will be hauled from the facility to a permitted landfill on a daily basis. The transfer trucks are likely to travel north, on Highways 101 and 199. Recyclable materials will be hauled offsite on an as-needed basis whenever sufficient materials are collected and processed to make transport economical.

Besides a septage or sewage system, the site will require electricity, telephone, and water.

The entire facility will comply with all local codes and zoning as well as federal and state regulatory requirements governing air and water resource management. An Environmental Impact Report (EIR) will be prepared that identifies the preferred site as well as alternatives, and will include the "no project" alternative. The EIR will further evaluate the potential impacts sketched above and all of the proposed mitigation measures. Potential impacts are those commonly included in a California Environmental Quality Act (CEQA) checklist, including:

- Land use
- Public utilities and services
- Geology and soils
- Hydrology and water quality
- Biological resources
- Transportation
- Energy use
- Air quality
- Noise
- Health hazards
- Aesthetics
- Cultural and historic resources

These potential impacts, the selection criteria listed above, and additional criteria were used in evaluating the seven potential sites that made it through the preliminary screening process and will be used in evaluating the three sites during the EIR process.

Phased construction

The project will be developed in phases. The first phase will establish the infrastructure needed to support all subsequent phases: paving, power, lighting, telecommunications; the TS/MRF building, one or more other buildings or sheds; the septage processing center or at least the connections to the offsite sewage treatment plant. The future reuse area will be paved and fenced; a bare-bones recycling dropoff center will be set up under a shed so recyclables can be collected and transported offsite for upgrading and processing. Tires, used oil, batteries and other special wastes will be collected at the site in designated areas, but buildings will be minimal. The area used for wood and plant debris processing will be paved, and the ceramics and soils processing area established.

In the second phase, the reuse building will be constructed and the "special wastes" area upgraded in a building and expanded to take in more material. Both of these efforts will be grant funded. If sufficient funding can be secured, this phase may be combined with phase 1.

In a third phase, the Reuse building will be further expanded, the retail incubator building will be constructed, processing equipment such as a baler and sorting machinery may be installed in the Recyclables and Inerts areas, organics received on site (wood and brush) will be chipped, and more buildings constructed as needed and as funding permits. A fourth phase would add the transfer of chipped Organics to a new Organics Processing Facility to be built off-site for composting.

A "guided tour" of the RR Park at full buildout is attached as Appendix E.

Opportunities

The RR Park provides an opportunity to recover materials that would be otherwise lost to the economy by burying them in a landfill. These discards can be recovered as reusable products, and recyclable materials. The RR Park processing efficiencies and shared equipment should help offset the difficulties recycling businesses have in Del Norte County of being spread out, facing marginal economics due to huge marketing distances, and lack of sufficient quantities of materials.

The Reuse and Repair Cluster can process 8.3% of the total discard stream. There is the potential to recover an additional 1,419 tons of materials through the Reuse and Repair Cluster each year.

There is an opportunity for savings for the community by minimizing the cost of transfer and disposal of mixed discards by maximizing diversion. Figure 9 shows that at \$75 per ton for transfer and disposal, a maximum annual avoided cost savings of \$106,425 per year will be realized if a source separation program for reusables is institutionalized.

Figure 9 - Annual Avoided Transfer and Disposal Costs For Reuse

Transfer and Disposal \$ 75 Ton	X RR Park 1,419 Tons / year	= Avoided Transfer/Disposal Costs = \$106,425
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The creation of new jobs and additional wealth in the community based on the new added value of the reclaimed discards is another economic benefit. It is estimated that the Reuse and Repair Cluster of the RR Park working at full capacity could generate: 4 new jobs, 4 new businesses (or expansion of existing ones), and \$413,700 in new revenue within the County annually.

The Recycling Cluster of the RR Park can process 43.7% of the total discard stream. There is the potential to recover an additional 4,269 tons of materials through this portion of the RR Park each year. This includes miscellaneous metals that end up at landfill.

There is an opportunity for savings for the community by minimizing the cost of transfer and disposal of wastes by maximizing diversion. Figure 10 shows that at \$75 per ton for transfer and disposal, an annual avoided cost savings of \$323,925 per year will be realized if the Recycling Cluster and associated source separation collection systems are implemented.

Figure 10 - Annual Avoided Transfer and Disposal Costs For Recycling

Transfer and Disposal \$ 75 Ton	X RR Park 4,319 Tons / year	= Avoided Transfer/Disposal Costs = \$323,925
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It is estimated that the Recycling Cluster of the RR Park working at full capacity could generate 2 new jobs, 2 new businesses (or expansion of existing ones), and add \$108,410 in new revenue within the County annually.

Organics would be processed at the RR Park, and sold as biomass fuel to Hambro's or bulk mulch products or to mix with other materials as soil conditioners by a local nursery. In the future, "fines" would be sent to an Organics Processing Facility to be composted along with sewage sludge, food discards and food paper. The Organics Cluster of the RR Park can process 29.7% of the total discard stream. The Inerts Cluster of the RR Park can process another 15.8% of the total discard stream. Together, the diversion of Organic and Inert Material from transfer and disposal would be more than 6,796 tons a year.

Figure 11 shows that at \$75 per ton for transfer, rail and disposal, an annual avoided cost savings of \$ 509,700 per year will be realized if all the organics and inerts are recovered.

Figure 11 - Annual Avoided Transfer/Disposal Costs For Organics and Inerts

Transfer and Disposal \$ 75 Ton	X RR Park 6,796 Tons / year	= Avoided Transfer/Disposal Costs = \$509,700
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It is estimated that the Organics Cluster of the RR Park working at full capacity could generate 2 new jobs, 2 new businesses, and an additional \$74,040 in new revenue within the County annually. The labor and business estimates assume that there is shared labor and equipment.

BARRIERS

The barriers to the RR Park are institutional and financial.

The community needs to adopt economic incentives, policies and new rules for separating materials into clusters of materials for maximum recovery. This could mean the political decision to require mandatory separation and provide convenient collection systems.

The community needs to designate appropriately zoned property to site the processing systems for each of the collection streams. It is important at this stage to permit the TS/MRF site for the full buildout of the RR Park Site Plan. In addition, the Organics Processing Facility needs to be permitted for all organics, including biosolids. This will simplify things later on.

The community needs to leverage its investment in the TS/MRF in a way that enables the rest of the reuse, recycling and composting activities to expand over time. Once the basic economic structure is adopted that is recommended in this report, the Reuse, Recycling and Organics facilities should be able to justify themselves economically when compared to the alternative costs of long-haul transfer and disposal.

CONCEPTUAL FINANCING OPTIONS

Although the concepts involved in the zero waste strategy are proven individually throughout the world, the active workings of a complete zero waste system have not been proven as a system here in California. Del Norte County has to overcome the barriers noted above to achieve its zero waste goal. The Authority is in the best position to develop the RR Park at this time, as it can use its rate setting ability to adjust the economics at the gate to the TS/MRF. The availability of Department of Agriculture, HUD, and EPA funds would help underwrite this state of the art demonstration of proven technology put together in one system to reduce resource use, energy use, global warming and landfill dependency.

The full recovery of the "Clean Dozen could yield over \$900,000 in annual avoided cost savings and almost \$600,000 in sales revenue. While these dollar figures may not accrue to the Authority's budgets, they will certainly benefit the community. Figure 12 shows Estimated Sales Revenue.

Figure 12 - Estimated Sales Revenue*

Revenue	Est. \$/ton	Tons	Annual Revenue (\$)
Reusables			
Textiles	\$20	405	\$8,100
Other Reusables	\$400	1,014	\$405,600
Recycling			
Glass	\$20	538	\$10,760
Metals	\$20	1,330	\$26,600
Paper	\$25	2,000	\$50,000
Plastics	\$50	401	\$20,050
Wood (lumber)	\$20	50	\$1,000
Organic and Inerts**			
Animal bedding***	\$30	568	\$17,040
Mulch	\$10	2,613	\$26,130
Gravel and sand****	\$15	1,916	\$28,740
Wood (ground)	\$10	213	\$2,130
Est. Annual Sales		11,048	\$596,150

* Does not include costs of Chemicals (HHW)

** Assumes a loss of tonnage for organics processing from total tonnage captured and processed of 22% due to moisture loss and decomposition. As a result, total tonnage for organics and inerts sales is 5,310 tons, 22% less than the 6,796 total tons captured and processed, which is the basis for calculating avoided transfer and disposal savings.

*** Made primarily from discarded paper.

**** Made primarily from soils and ceramics. Assumes 85% of the captured material is processed into salable product.

System description

The Authority should use the disposal fee at the Crescent City Landfill and the TS/MRF to cover the costs of ownership and operation of the Resource Recovery Park. The companies using the RR Park will be required to pay some rent to help pay back the loans. The tipping fee at the landfill and TS/MRF should be used to underwrite some of the initial costs of the Park development and operation.

Some of the financing of the RR Park can come from Federal and State funds using grants and loans to purchase, permit, renovate and operate the RR Park. The unique jobs creation potential of the Park is a major attraction for many current grant programs.

Opportunities

Using the tipping fee now to begin to raise funds for deferral of eventual transfer costs is one way to finance the RR Park. The RR Park land, structures, equipment, and fixtures for recovering reusables, and recyclables at the TS/MRF and a separate organic processing facility are estimated to cost \$ 2.4 million as shown in Figure 13.

Figure 13 - Capital and Equipment

Cluster	Land and Structures	Equipment and Fixtures	Total
Reuse	\$550,000	\$43,900	\$593,900
Recycling	\$729,000	\$132,150	\$861,150
RRP Organics	\$697,250	\$265,500	\$962,750
Total	\$1,976,250	\$441,550	\$2,417,800

The annual operating and maintenance costs for the RR Park and the Organic Processing Facility are estimated to be about \$760,167 per year as shown in Figure 14.

Figure 14 - Annual O&M Costs*

Cluster	Total O&M Costs
Reuse	\$432,311
Recycling	169,928
RRP Organics	158,928
Total Annual Expenses	\$761,167

*Includes amortization of capital and equipment

Figure 15 shows that there is a \$37 return on each ton for the reusable cluster, the Materials Recovery cluster shows a \$46 profit, and the Organics and Inerts processing at the RR Park will save about \$51 per ton. In each case the \$75 transfer and disposal costs savings are included in the analysis. The overall benefit per ton for the RR Park and Organic Cluster is \$48 per ton. This savings includes the over \$900,000 savings from avoiding transfer and disposal expenses.

Figure 15 – Cost/Benefit Analysis of Resource Recovery Park by Cluster

Cluster	Cap. \$/Yr *	O&M \$/Year	Annual Costs	Trans/Disp. ** Savings	Sales \$/year	Tons/year	Benefits/(Cost) \$/Ton
Reuse	34,817	432,311	467,128	106,425	413,700	1,419	+\$37
Recycling	58,475	169,928	228,403	323,925	108,410	4,319	+\$47
RRP Organics	79,113	158,928	238,041	509,700	74,040	6,796	+\$51
Total	172,405	761,167	933,572	940,050	596,150	12,534	+\$48

*Amortization; 20 years land and structures, 6 years equipment and fixtures

** \$75 dollar per ton saving from avoided transfer and disposal.

If the transfer and disposal cost will be \$75 in 2002, the Authority can borrow off of future anticipated revenues and adjust the fee accordingly. Every ton diverted will be a \$75 per ton savings in avoided costs.

A commitment to provide the back up financing will open up other avenues of supplemental funding from both Federal and State environmental funds that have goals to demonstrate these types of projects. The grant funding could reduce the tipping fee increase. In the future if the

Authority wishes to privatize the RR Park, the financing and development cost can be added to the price of the facility.

Barriers

Development of the RR Park will require commitment from the Authority Board and staff, and institutions and businesses that are more accustomed to solid waste disposal facilities without recovery may become a barrier to RR Park development.

There will be some competition for grant and loan funds.

Developing new markets for some materials will be barriers in the first few years.

CONCEPTUAL BUSINESS PLAN

The Authority will manage the RR Park in the developmental and start up phase. At such a time that the Authority feels that the Park can be contracted out to a management firm, that option is available.

1. System description

A staff person will provide managerial and development leadership under the direction of the Authority. The Authority would meet regularly to consider issues regarding the Park. The Authority will review and approve leases, improvements, expenditures and charges. The Authority will be responsible for creating the annual budget and for setting the rents based on the revenue and financing costs.

2. Opportunities

The advantage of the Authority managing the Park is that the Authority will establish the Zero Waste Policy and maintain a program commitment to the goals. Thus the annual budget will include the administrative and program development tasks needed to grow the RR Park.

The Authority can use its rate charging authority to cover expenditures of the program and the RR Park. When the Park can operate in a cost effective manner the Authority can consider privatizing the operation and ownership of the Park.

3. Barriers

II. Using the Authority to develop the Resource Recovery Park may be a concern, but well within the responsibility of the Authority.

III. IMMEDIATE NEXT STEP ACTIONS

IV. Immediate Next Step Actions include:

- Authority decision to own and develop the RR Park
- Authority decision on the location of the TS/MRF and RR Park
- Authority decision to structure the TS/MRF RFP to direct the TS/MRF Operator to reuse and recycle anything that costs less than transfer and disposal
- Permitting and design for RR Park concurrent with TS/MRF

V. APPENDIX A- PRIORITY TECHNOLOGIES

The following are the detailed estimates of each cluster of priority technologies.

VI. 1. Reuse & Repair Area

Land and Structures (Total and Annual)

Item	Size/#	\$/ Square ft.	Total \$
Land	1 acre	30,000	*
Building	5,000	50	\$250,000
Paved Area	30,000	10	\$300,000
Total			\$550,000
Annual Cost (Amortized over 20 years)			\$27,500

*Included in Transfer Station/Materials Recovery Facility Cost

Equipment and Fixtures (Total and Annual)

Item	#	Unit Cost \$	Total Cost \$
Alligator shear	1	3,500	3,500
Benches	4	100	400
Carts	10	100	1,000
Cash Register	1	2,000	2,000
Ceramic Bins	3	1,000	3,000
Computer with printer	1	2,500	2,500
Door racks	15	150	2,250
Forklift (used)	1	7,500	7,500
Metal Bins	2	1,000	2,000
Miscellaneous Tools	50	15	750
Phone and Fax	1	1,000	1,000
Pipe racks	3	500	1,500
Radios	4	500	2,000
Sheds	1	1,000	1,000
Truck used	1	7,500	7,500
Window racks	10	400	4,000
Wood bins	2	1,000	2,000
Total			\$43,900
Annual Cost (Amortized over 6 years)			\$7,317

Annual Reuse Material Sales & Savings

Reuse Revenue	Tons	\$
Reusables	1,419	\$413,700
Transfer/Disposal Savings	1,419	\$106,425
Total Sales & Savings		\$520,125

Annual Reuse Operating Expenses

Reuse Expenses	\$
Purchases	75,000
Labor	290,311
Operations	40,000
Administration	27,000
Annual expenses	\$432,311

Annual Reuse Cost Summary

Item	Annual Cost \$
Land and Structures (20 years)	\$27,500
Equipment and Rolling stock (6 Years)	\$7,317
Operations	\$40,000
Labor	\$290,311
Admin	\$27,000
Purchases	\$75,000
Total Expense	\$467,128
Total Sales & Savings Revenue	\$520,125

VII.

VIII. 2. Recycling Area

Land and Structures (Total and Annual)

Item	Size/#	\$/Square Ft.	Total \$
Land	1 acre	*	*
Paving	25,000 square ft	10	\$250,000
Trailer	1		\$4,000
Haz Mat			\$125,000
Pole shed w/K-rail	10,000 sq. Ft.	35	\$350,000
Total			\$729,000
Annual Costs (Amortized over 20 Years)			\$34,450

* Assumed as covered in the TS/MRF costs

Equipment and Fixtures (Total and Annual)

Item	#	Unit Cost \$	Total Cost \$
Baler (down stroke) (1new, 2 used)	3	OK 5,000	15,000
Barrels	10	25	250
Bins-3 yd	50	300	15,000
Cash Register	1	2,000	2,000
Computer and Printer	1	2,500	2,500
Debris boxes, various sizes	12	2,000	24000
Forklift with rotating head	1	23,000	23,000
Glass crusher (used)	1	500	500
Low speed shredder	1	20,000	20,000
Paper chopper	1	8,000	8,000
Phone and fax	1	900	900
Radios	4	500	2,000
Roll off truck (used)	1	15,000	15,000
Scales (used)	1	4,000	4,000
Total			\$132,150
Annual Costs (Amortized over 6 years)			\$22,025

Annual Recycling Operating Expenses

Item	\$
Labor	\$109,928
Operations	\$42,000
Administration	\$18,000
Annual expenses	\$169,928

Annual Recycling Material Sales & Savings

Revenue	Tons	Annual \$
Glass	538	\$10,760
Metals	1,330	\$26,600
Paper	2,000	\$50,000
Plastics	401	\$20,050
Wood	50	1,000
Est. Annual Sales	4,319	\$108,410
Trans./Disp. Savings	4,319	\$323,925
Total Sales & Savings		\$432,335

Annual Recycling Cost Summary

Item	Cost \$
Land and Structures (20 years)	\$34,450
Equipment and Rolling stock (6 Years)	\$19,558
Operations	\$42,000
Labor	109,928
Admin	18,000
Total annual Costs	\$223,936
Total Sales & Savings Revenue	\$432,335

3. Organics

Resource Recovery Park Organics Processing

Land and Structures (Total and Annual)

Item	Size/#	\$/Square Ft.	Total
Access road	12,800	\$10	\$128,000
Bare Land	2 acres	RR Park	*
Hardened pad	22,500	\$12	\$270,000
Paved area	18,675	\$10	\$186,750
Ramped tipping area	7,500	\$15	\$112,500
Total			\$697,250
Annual Costs (Amortized over 20 years)			\$34,863

*Included in TS/MRF Costs;

Fixtures and Equipment (Total and Annual)

Item	#	Unit Cost \$	Total Cost \$
Bunkers for bulk products	4	20	20,000
Chainsaws	1	500	500
Cone crusher (used)	1	50,000	50,000
Covered bins for Putrescibles	4	4,000	16,000
Hammer mill	1	90,000	90,000
Mixer/batch plant (used)	1	10,000	10,000
Roll off bins for trash	2	1,500	3,000
Roll off truck (used)	1	15,000	15,000
Screen	1	25,000	25,000
Splitter	1	1,000	1,000
Trailer, tandem axle dump	1	5,000	5,000
Wheel Loader 2 (used)	2	15,000	30,000
Total			\$265,500
Annual Costs (Amortized over 6 years)			\$44,250

Annual RR Park Organics Operating Expenses

Expenses	\$
Purchases	N/A
Labor	\$109,928
Operations	\$34,000
Administration	\$15,000
Annual expenses	\$158,928

Annual RR Park Organics Material Sales

Revenue	Tons	\$
Animal bedding	568	\$17,040
Mulch	2,613	\$26,130
Gravel and sand	1,916	\$28,740
Wood	213	\$2,130
Est. Annual Sales	5,310	\$74,040
Est. Transfer and Disposal Savings	6,796	\$509,700
Total Sales and Savings		\$583,740

Annual RR Park Organics Cost

Annual Costs	Cost (\$)
Land and Structures (20 years)	\$34,863
Equipment and Rolling stock (6 Years)	\$44,250
Operations,.	\$34,000
Labor	\$109,928
Admin	\$15,000
Total Costs	\$238,048
Annual Sales and Savings Revenue	\$583,740

Organics Processing Facility (Composting Off-site from RR Park)

Land and Structures (Total and Annual)

Item	Size/#	\$/Square Ft.	Total
Access road	12,800	\$10	\$128,000
Bare Land	8 acres	\$10,000 /acre	\$80,000
Hardened pad	22,500	\$12	\$270,000
Office area	950	\$35	\$33,250
Paved area	18,675	\$10	\$186,750
Ramped tipping area	7,500	\$15	\$112,500
Total			\$810,500
Annual Costs (Amortized over 20 years)			\$40,500

Fixtures and Equipment (Total and Annual)

Item	#	Unit Cost \$	Total Cost \$
Bagging equipment	1	2,500	2,500
Bunkers for bulk products	4	20	20,000
Conveyor/stacker (used)	1	20,000	20,000
Delivery truck (used)	1	5,000	5,000
Roll off truck (used)	1	15,000	15,000
Screen	1	25,000	25,000
Tractor (used)	1	8,000	8,000
Trailer, tandem axle dump	1	5,000	5,000
Wheel Loader 2 (used)	2	15,000	30,000
Windrow turner	1	15,000	15,000
Total			\$145,500
Annual Costs (Amortized over 6 years)			\$24,250

Annual Composting Operating Expenses

Expenses	\$
Purchases	N/A
Labor	\$109,928
Operations	\$34,000
Administration	\$15,000
Annual expenses	\$158,928

Annual Organic and Inerts Material Sales Revenue & Savings

Revenue	Tons	\$
Compost and soil	3,000	\$105,000
Est. Annual Sales	3,000	\$105,000
Trans/Disp. Savings		Not applicable
Total Sales & Savings		\$105,000

Annual Composting Cost

Annual Costs	Cost (\$)
Land and Structures (20 years)	\$40,500
Equipment and Rolling stock (6 Years)	\$24,250
Operations,.	\$34,000
Labor	\$109,928
Admin	\$15,000
Total Costs	\$223,678
Compost Sales & Savings Revenues	\$105,000

A. APPENDIX B - POTENTIAL BUSINESSES

Several commercial enterprises have expressed interest in the Reuse and Repair Cluster of a RR Park to date, including:

1. St. Vincent de Paul of Eureka (SVDP Eureka): They would like to establish a facility for testing, repairing, salvaging, and re-manufacturing washers, dryers, refrigerators, mattresses and box springs. Specifically, they requested an OSHA-approved paint booth for the appliance re-manufacturing functions. Repaired or re-manufactured units would be re-sold at the retail portion of the RRP. Non-operational units would be placed into consolidated loads for parts and/or recycling.
2. St. Vincent de Paul of Crescent City (SVDP CC): They would like to move their reuse / resale operation to a RR Park, and are willing to administer the consignment sales of other tenants or affiliates of the RR Park. They would also provide any collection services supplying the RR Park tenants.
3. Rural Human Services: They have expressed interest in repair/ remanufacturing of computers, peripherals, and consumer electronics. These items would be sold in the retail portion of the facility.
4. Warren Webb: This contractor is already active salvaging doors, windows, lumber and other potentially saleable items from buildings that are being demolished. He would be very interested in selling (and possibly storing and processing) such items through a RR Park.

APPENDIX C - TARGETED MARKETS

Figure 16 - Target Markets and Products

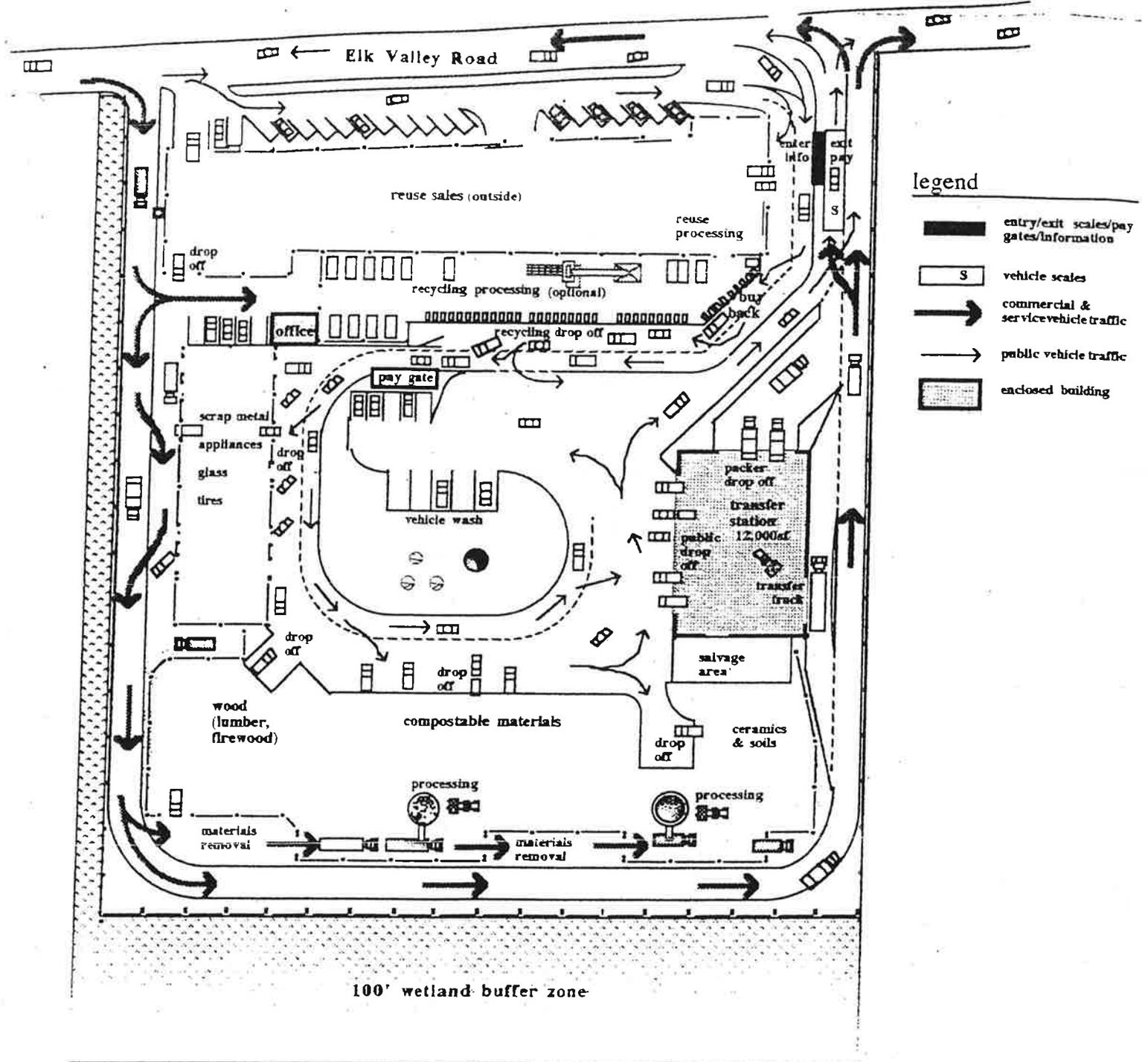
Materials	Products
1. Reusables	Furniture, large and small appliances, electronics, textiles (clothing and linens), toys, tools, metal and ceramic plumbing fixtures, lighting, lumber, aggregates, windows, doors, and other used building materials
2. Recyclables	
a. Glass	Containers and windows
b. Metals	Steel Cans; Cars; White Goods (e.g., refrigerators, washing machines); Non-ferrous; Industrial scrap (e.g., steel beams); Dismantled Structures; Pipe; Fencing; Metal sinks and bath tubs; Tires (5 pounds of each tire is steel belt); Couches and Mattresses (springs and frames); Small Appliances; and Freon.
c. Paper	Newspaper, corrugated paper, mixed paper, food contaminated paper.
d. Plastics	Containers, packaging, durables, furniture and toys.
e. Wood	Lumber and pallets.
3. Organic and Inerts	
a. Animal bedding	From shredded mixed paper.
b. Compost and soil	From food, food paper, vegetative debris, other putrescibles (including sewage sludge), and sheetrock
c. Gravel and sand	Rock, soils, concrete, asphalt, brick, land clearing debris, and mixed construction and demolition materials (from soils and ceramics categories of discards).
d. Wood (ground)	Untreated wood from yard trimmings and dismantling.
4. Chemicals	
	Free paints and household pesticides and cleaners from HHW collections.

List of Other Potential Businesses

Included below is a list of other possible businesses that could be located within the Del Norte RR Park:

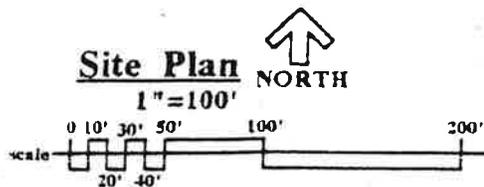
- Biomass to existing co-generation plant at Hambro's
- Custom soil blending and bagging
- Confidential document destruction
- Wood/plastic rubber composites
- Recycled rubber products
- Vermicomposting
- Construction and demolition materials recycling
- Mini Paper manufacturing plant.
- Recycled bottle glassware or other ornamental, art or tile glass products
- Second-hand store
- Lumber and used building materials outlet
- Compatible light manufacturing (e.g., Plastics and Rubber Molding)
- Cinder block manufacturer (using ash from Hambro and other C&D aggregates)

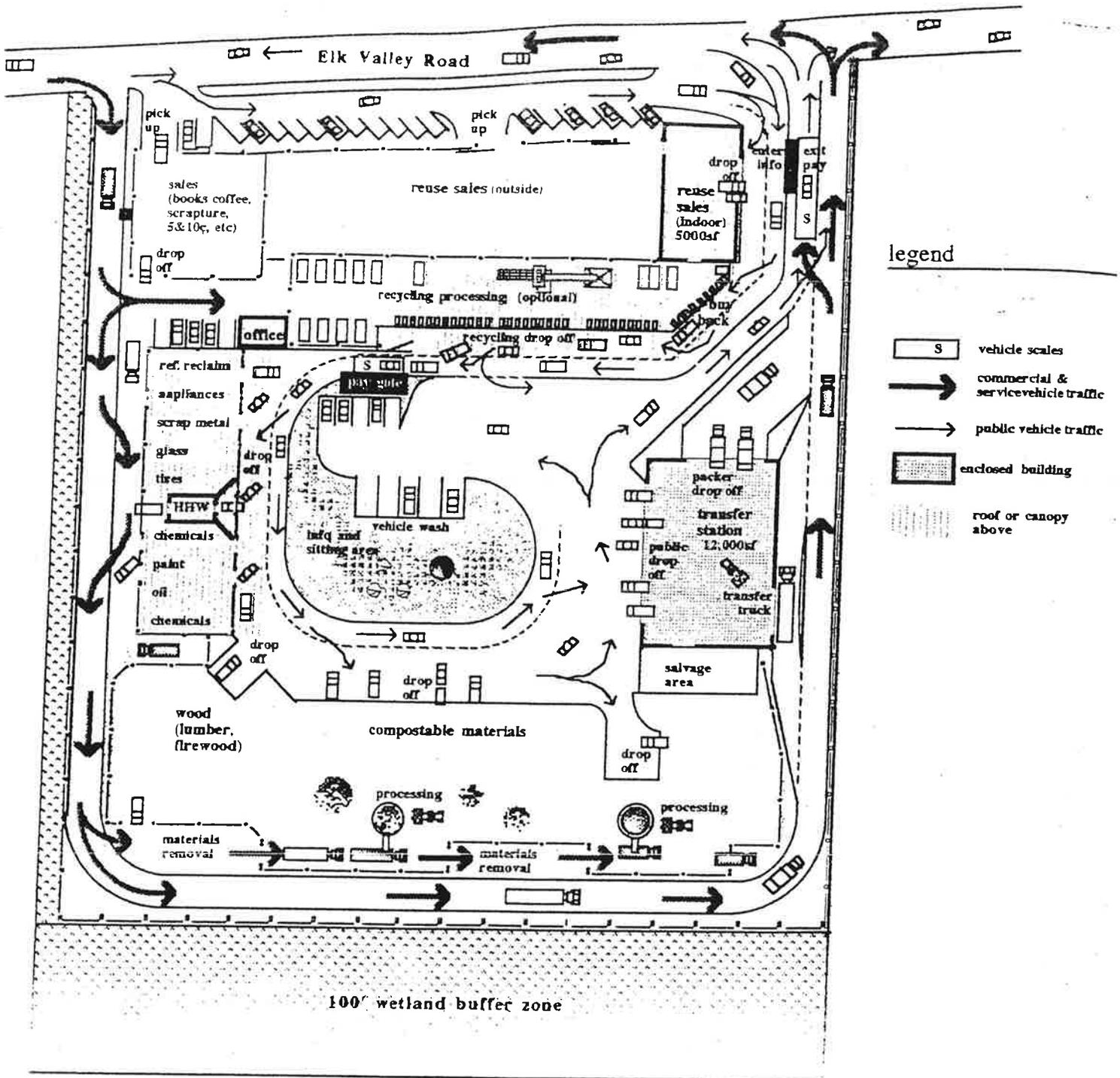
APPENDIX D – PHASED SITE PLANS OF RR PARK



100' wetland buffer zone

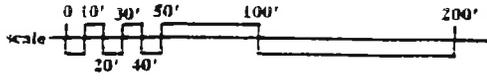
wetland zone

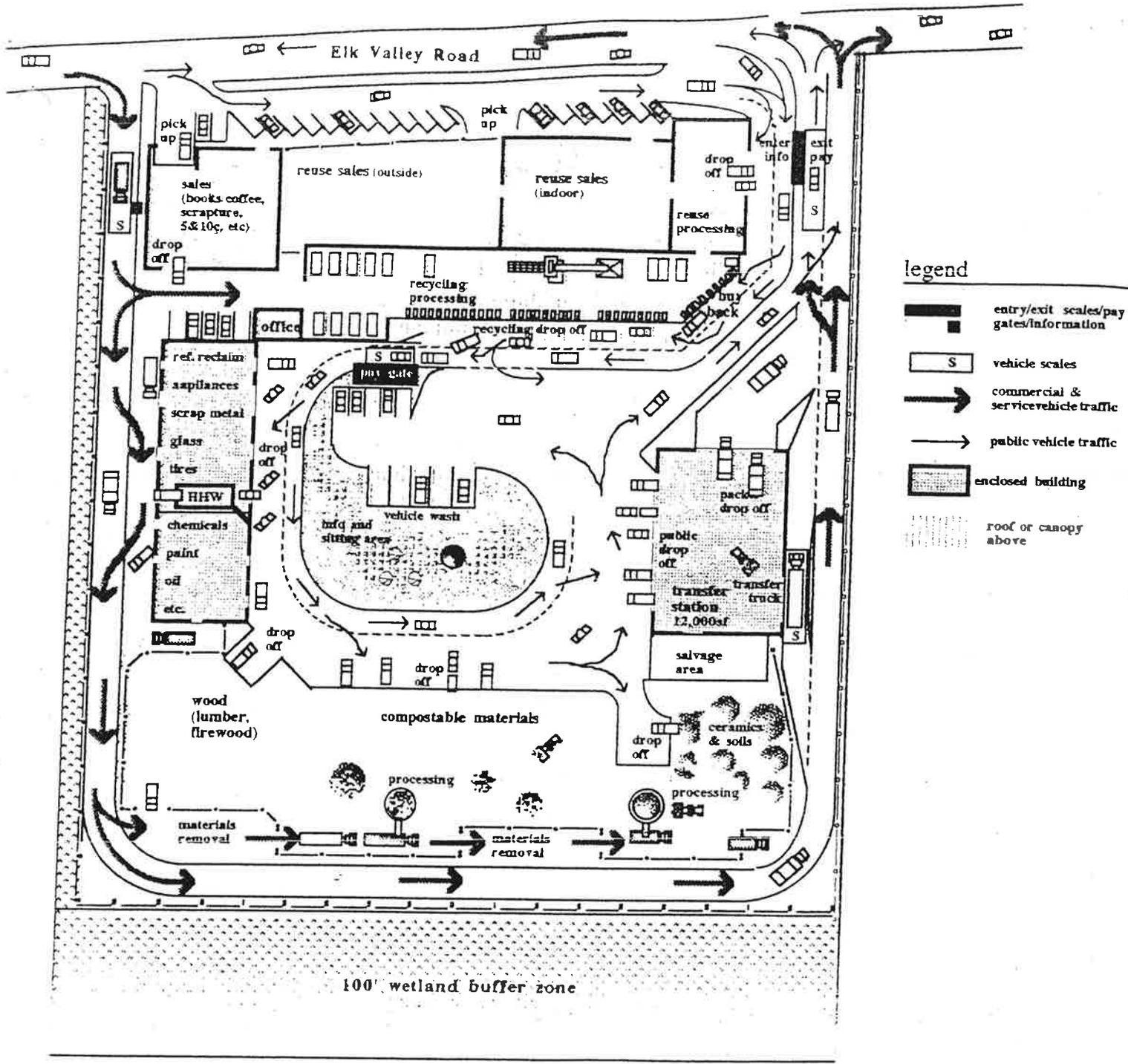




- legend
- S vehicle scales
 - ➔ commercial & service vehicle traffic
 - ➔ public vehicle traffic
 - enclosed building
 - roof or canopy above

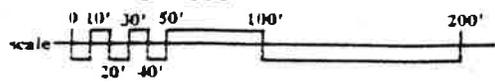
Site Plan NORTH
 1" = 100'





Site Plan NORTH

1" = 100'



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APPENDIX E - GUIDED TOUR OF RR PARK¹

The Del Norte County RR Park is conveniently located east of Highway 101 on a major arterial road bisecting the eastern half of Crescent City and taking traffic out of town to the forested rural part of the county.

How the customers will use the facility to minimize their disposal cost while maximizing materials conservation

Potential customers driving east on Elk Valley Road will be invited by signage to park and shop for salvaged reusable goods and for recycled-content products made onsite. The first shop will be at the northwest corner, and will feature art and craft items such as furniture, sculpture, jewelry, wall art; and manufactured goods such as bagged composts and mulches, various grades of sand and gravel, decorative tiles, and countertops. The second shop will feature outdoor and indoor sales areas and a large bay for unloading just inside the entrance to the resource recovery park. Furniture, household goods, hardware, lighting, and other goods will be available indoors for sale. Outdoors will be building materials such as doors and windows, lumber, plate glass, bricks, stone, bathtubs, sinks, lumber, and the like.

Customers using the reuse dropoff bay will soon learn from staff to stratify their loads by putting reusables on top. This practice facilitates unloading and minimizes breakage and contamination. Some suppliers of high-value material will be rewarded with a tax write-off slip (if the reuse operator is a nonprofit) or with cash (if the operator is a for-profit). Another potential reward is trade credits, which allows otherwise unmonetized trades to be recorded as cash sales for sales tax purposes. At the option of the operator, some recyclables may be taken at this location, usually in order to clear a truck so the driver can leave without spending any more time. The reuse site operator may also choose to accept low-value reusables for no payment (dropoff) or to charge a handling fee for nonreusable items such as appliances and large or hard to handle objects.

Customers with recyclables either get rid of their reusables first or elect to bypass the reuse area and approach the buyback location. At the buyback they will be able to sell items with high present value such as nonferrous metals, redemption containers, and certain paper grades. Materials coming here will be weighed and paid for by the pound. A turnout lane is provided where customers can park while unloading. Further down is a much larger "donation area" for recyclables with an equally long turnout lane. Along this interface customers may unload a wider variety of discarded resources, including textiles, paper grades, polymers, metal, and glass containers.

Moving on, customers will rejoin incoming traffic and drive onto a truck scale located next to a fee gate. A load spotter will assess and inspect the load, ask whatever questions are necessary, and decide whether to charge a fee, how much the fee should be, whether the load should be weighed or charged by the cubic yard, and where it should go next. A charge account database

¹ by Daniel Knapp, Ph.D., General Manager, Urban Ore, Inc., March 7, 2001

will be accessible on a computer in the scalehouse to speed customers' transit through the facility.

Turning left, the customer will see a number of unloading bays to his or her right which will have signage identifying which materials each one is specialized to handle. These will include scrap metals, non-container glass, and chemicals, including household hazardous wastes, batteries, tires, and paints. Turning out of traffic, the customer will park and unload at the appropriate bays. The operator will provide assistance. Additional disposal fees may be charged for some materials.

Turning left again, customers will be able to unload construction and landscape materials at specified locations along the entire southern edge of the facility. Three tipping areas are provided: one for wood, especially dimension lumber, one for plant materials, and one for ceramics and soils.

Selected putrescibles could also be taken at this location. If this were done, the facility would be capable of receiving all at least parts of all twelve master commodities that when mixed together make up the "solid waste stream" in any community. This would be a powerful statement as to how Del Norte County intends to reach its long-term goal of zero waste to landfill.

Lastly, the customers who are hauling very mixed, contaminated, or unrecyclable materials or who still have a residue after recycling everything else (or who simply are too rushed to stop anywhere else) will be able to enter a flat-floor transfer station and unload whatever else they may have. When finished they will have the option to stay onsite a little longer by washing their vehicle or by parking and entering the education and sitting area. This area could probably support a food and drink vendor in a portable kitchen.

After the customer has an empty and clean truck, he or she may exit the site back onto Elk Valley Road. If they turn right they go out into the country; if they turn left they have a second chance to stop and shop either for reusables or for recycled-content products such as those listed above.

How materials will be processed

The RR Park separates user traffic into two major streams. The first stream is supplier traffic composed largely of self-haul vehicles carrying smaller loads. The second stream is larger collection and takeaway transfer vehicles including compactors, rolloffs, end dumps, and long-haul highway trucks. The streams are kept separate to maximize site safety and to facilitate efficient materials movement.

In general, the materials will move from the inner to the outer edge of the site, where they will be picked up and transported elsewhere for immediate use, for further processing and beneficiation, for manufacturing, for agricultural application, or for export. Along the way they will be sorted, upgraded, and densified by baling, stacking, or containerizing.

Reusables will be unloaded at the dropoff bays. Boxes with mixed reusables will be sorted inside on a belt or table. Doors will have hardware removed. Minor repairs, cleaning and polishing, assembly, or disassembly will be done as needed. Scrap will be accumulated for transport to recycling and other downstream locations. After items are processed, they will be transported via carts out into the sales departments. Household and office items will be kept indoors; building materials will be displayed and sold in an outside yard. Portable racks and sheds will protect some building materials from wet weather. Some large loads of reuse items may be transported to other retail facilities elsewhere in Crescent City.

Some of the customers purchasing materials at the reuse shop are likely to be owners and operators of other more specialized second-hand stores. Others will be artists and artisans, real estate professionals, and tradesmen such as carpenters, landscapers, cabinetmakers, plumbers, decorators, tilesetters, and remodelers.

Recyclables will be processed into high-quality feedstocks within a shed-type building whose southern wall will be a long row of collection bins. As these bins fill, a site employee will pull them using a rotating-head forklift and replace them with empties. Then the full bins will be taken to processing areas either for aggregation with similar grades of source-separated materials, or for additional upgrading. Picking lines and/or sorting tables may be used. Materials will be densified by running them through a baler capable of producing export bales. Densified materials will be picked up at the west end of the recycling building and transported to offsite markets by large trucks.

At the next collection and processing section, specialized technicians will process larger scrap metals and chemicals. The scrap metal area will feature refrigerant removal for freezers, air conditioners, and other refrigerated appliances. Some metals such as railings, staircases, screen doors, and fence sections will be sold to the reuse operator. In another bay, a worker will separate plate glass from aluminum, steel, and wood. Plate glass will be sent to the reuse area. Broken glass will be sent to the crusher to be made into sand. Tires will be loaded into trailers for transport to tire processing facilities. Aluminum and steel will be sold to metals brokers. Painted wood and vinyl will be sent to landfill. Freon will be sold to chemical companies. Lead-acid batteries will be stored for pickup in EPA-approved containers. Paint will be classified into reusable, remixable, and unrecoverable. Reusable paint (in good containers with good labels) will be sold at the reuse shop. Remixable paint will be combined and repackaged as generic low-cost coatings using best practices. Unrecoverable paint will be allowed to dry out, then sent to landfill or metals reclaimers. Other chemicals may be reused (cleansers) or cleaned (motor oil, solvents), usually by offsite companies.

The last specialized recycling cluster will handle very large tonnages using bulk-handling procedures primarily, although some labor-intensive methods will be used where appropriate. Wood will be separated into reusable, recyclable, and landfillable categories. Reusable wood will be processed and sold at the reuse yard. Recyclable wood will be ground up and aggregated for various end-users, including composters. Unrecyclable wood will be landfilled. Plant debris will be separated for firewood and shredding. Firewood will be split onsite and trucked elsewhere for sale. Everything else will be shredded. The shredded material will be loaded

directly into transfer trailers for transport to the compost windrow area. At the end of the line, soils and ceramics will be received. Ceramic material such as stone or concrete will be crushed and screened into sands and gravels. Soils will be aggregated for transport to the compost area, where they will be used to produce heavier, more mineralized topsoils. Any soils containing hazardous or unsightly material will be sent to appropriate facilities for treatment or landfilling.

The TS/MRF will be a shed-type building with a hardened concrete floor. Private haulers in small vehicles will back in from the west and unload. At least one licensed scavenger will help owners unload and will collect reusable and recyclable materials that were not taken off at upstream diversion stations. These materials will be transported to the reuse and recycling areas as appropriate. We recommend that the reuse operator, who will be licensed by the overall site operating authority, employ this worker or workers.

Waste collection companies with larger packer trucks or debris box trucks will unload on the east side of the transfer station in special bays.

After reusable and easily removable recyclables have been set aside, the transfer station operator will push and pile the unrecyclable material from both sources preparatory to transport offsite. At intervals, a transport truck/trailer combination will be loaded at the north end of the transfer station through a chute. The transport trailer bay will be equipped with a truck scale so that weights to landfill can be recorded.

Other amenities

Buildings will be equipped with an extensive array of photovoltaic panels to generate at least some of the power needed by the site. The photovoltaic panels are shown as small squares on south-facing roofs. The truckwash building will have large solar water preheaters. Skylights along the peak of the recyclables processing building will maximize naturally available light inside buildings, keeping electricity costs down for the operator. The reuse building will feature some large greenhouse windows for both light and heat.

As an inducement and reward for using the facility to dispose of unwanted things, customers will be able to clean up their vehicles at a truckwash. A landscaped rest and picnic area is provided behind the truckwash for people who need a restroom or who simply want to watch a near-zero waste discard management system in action.

DEL NORTE RESOURCE RECOVERY PARK

CLUSTER ANALYSIS

For

Del Norte Solid Waste Management Authority

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DEL NORTE RESOURCE RECOVERY PARK CLUSTER ANALYSIS

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DEL NORTE RESOURCE RECOVERY PARK

CLUSTER ANALYSIS

Executive Summary

This Resource Recovery Cluster Analysis describes and evaluates how to recover the discarded materials ending up at the landfill in Del Norte County. Where people make the conscious effort to recycle, there is a natural clustering of similarly processed materials. People, who recycle, cluster materials to simplify transportation and timeliness requirements. Currently there is an underdeveloped, under-funded and under-organized infrastructure in Del Norte County not prepared to handle a community wide effort to divert wasted resources from the landfill. The savings in avoided transportation and disposal costs for the wasted resources once the landfill closes, could be used to fund this effort.

Based on clusters of similarly processed materials, the most promising technologies for recovering and processing for market, materials discarded in Del Norte County include a:

- ◆ Reuse and Repair Cluster,
- ◆ Organics Processing Center
- ◆ Recyclables Cluster (Co-Mingled Paper And Container Recovery)
- ◆ Metals Cluster
- ◆ Inerts Cluster
- ◆ Household Hazardous Wastes Facility.

An analysis of the range of services and products associated with these technologies is also provided.

A key policy issue underscoring this method of handling discards and conserving resources is the required separation of discarded materials into destination clusters. The Authority has the power in the Solid Waste Ordinance to require separation, or could foster such separation in the way it structures tipping fees at its facilities and other incentives.

Once the separation is made, current collection technologies can be used to send the material to the correct processing center for preparation for market. Two of the natural separation clusters would be collected regularly (recyclables, and organics), and the other four clusters would be collected periodically.

For Del Norte County in 1999, the Service Voids Analysis of the Zero Waste Plan identified the following target recovery programs, in order of priority:

1. Land Application of Sewage Sludge,
2. Establishing drop-off areas for Ferrous Metals, Mattresses Box Springs, and Furniture, and Non-ferrous metals,
3. Recovery of recyclables from Commercial loads both through commercial recyclables collection programs and through picking recyclable materials from targeted commercial loads delivered to the Transfer Station / Materials Recovery Facility (TS/MRF);
4. Establishment and promotion of mechanisms to expand recovery of metal appliances and textiles from thrift stores;

5. After demonstrating the viability of a local market for the finished product, establishment of a facility capable of composting yard debris, food, and paper;
6. Establishing a salvage, reuse, and resale facility for construction materials and;
7. Establishing periodic collection events or a drop-off mechanism for collecting electronic equipment.

Cluster Analysis

The following is an analysis of priority materials, technologies, products that could be produced, and businesses that would be attracted, to an organized facility based on collection and destination clusters.

Priority Materials

The Zero Waste Plan analysis was based in large part on Urban Ore's "Clean Dozen" set of twelve master categories of discarded material that are of paramount importance to the reuse and recycling industry.

Figure 1 - Twelve Master Categories Of Discarded Material

Reusable Goods	Soils
Paper	Metals
Plant Debris	Glass
Putrescibles	Polymers
Wood	Textiles
Ceramics	Chemicals

Each master category may be divided into hundreds of subcategories by various cleaning and refining processes. But each material ultimately relates to a particular industry that uses it, and the master categories do not overlap significantly, except for reuse. The other eleven categories are all recycling categories.

Each has characteristics that require processing and generate a different constellation of costs, income opportunities, products, and potential for sharing equipment and labor. However all discards will fit into one or more of six clusters:

- ◆ Reuse and Repair Cluster,
- ◆ Organics Processing Center
- ◆ Recyclables Cluster (Co-Mingled Paper And Container Recovery)
- ◆ Metals Cluster
- ◆ Inerts Cluster
- ◆ Household Hazardous Wastes Facility.

The following is a description of the different materials being discarded in Del Norte County, and the amount of these materials being wasted. Table 1 summarizes that information:

1. Reusable Goods

Reusable goods can overlap most of the other categories and often produce the highest value materials and products recovered from discards. Any given discarded item is a candidate for reuse depending on its condition and utility. Nearly everything reusable can be scrapped for recycling, but once it has been scrapped, it is no longer reusable.

Reusable goods are discarded items that are useful to a buyer in their present condition, most often for their functional rather than material value. For example, used wrought-iron gates can be sold individually and as-is for hundreds of dollars, but their value is reduced to pennies on the dollar by treating them as scrap. Reuse operators are business people who specialize in attracting, receiving, organizing, and selling discarded reusable goods. Reuse operators upgrade their materials by cleaning, sorting, organizing, and in some cases repairing them.

It is estimated that there are 2.4 tons per day or 883 tons per year of reusables discarded in Del Norte County each year.

2. Paper

Paper is the largest quantity of organic material typically discarded for landfilling. When separated into paper stock grades, paper has a value as recyclable fiber for papermaking. Currently 7.5 tons per day or 2,739 tons of paper are buried at the landfill a year.

3. Plant debris

There is 2.5 tons per day or 912 tons per year of vegetative debris (yard and public) generated in the County. This material can easily be composted

4. Putrescibles

Currently more than half of the material disposed of at the Del Norte Solid Waste Management Authority landfill is biodegradable or compostable, including paper, plant debris and putrescibles. There are 9.6 tons per day or 3,509 tons per year of organic materials (including food discards, food paper and sewage sludge), all of which could be composted. Food paper includes food in wrappers, paper cups, waxed boxes, and molded paper and pizza boxes.

5. Wood

There is 1.8 tons per day of wood (dry) generated in the County, or 652 tons per year. Some of this wood may be salvaged for reuse as lumber or pallets. The rest of the wood is damaged and can only be used for composting, mulching or as a "biomass" fuel.

6. Ceramics

There are 2.5 tons per day or 912 tons of ceramics disposed of each year in the County. These include concrete, asphalt paving, asphalt roofing, gypsum board, composite C&D, reusable sinks, bathtubs and toilets. Non-repairable ceramics can be crushed and used in a variety of aggregate base mixes.

7. Soils

There are 0.4 tons per day or 142 tons of soils discarded to the landfill in Del Norte County each year.

8. Metals

There are 3.4 tons per day or 1,225 tons of metals per year discarded in the Del Norte landfill. Sorting of different types of non-ferrous metals to segregate materials for their highest and best use sale should be profitable.

9. Glass

There are 1.5 tons per day or 542 tons of glass buried at the landfill each year.

10. Polymers

Tires are probably the single most visible item that is illegally dumped in Del Norte County. Although there is five pounds of metal in each tire, the value of tire recovery may be an additive for road base and overlays. Over 35 tons of tires are discarded every year in the County.

About four tons a day of plastics are discarded each day in Del Norte County. This makes about 1,200 tons per year. A total of 3.9 tons per day or 1,439 tons per year of all polymers are disposed of in the landfill.

11. Textiles

There are 0.1 tons per day or 432 tons each year of textiles discarded in landfills in Del Norte County.

12. Chemicals

It is estimated that there are 1.4 tons per day or 500 tons of chemicals (Household Hazardous Waste) discarded each year that are not currently being recovered for proper disposal.

Table 1 Categories of Material Discarded by Generators

Categories	Tons Per Day *	Tons per Year	%
1. Reusables	2.4	883	6
2. Paper	7.5	2,739	20
3. Plant Debris	2.5	912	7
4. Putrescibles	9.6	3,509	25
5. Wood	1.8	652	5
6. Ceramics	2.5	912	6
7. Soils	0.4	142	1
8. Metals	3.4	1,225	9
9. Glass	1.5	542	4
10. Polymers	3.9	1,439	10
11. Textiles	0.1	432	3
12. Chemicals	1.4	500	4
TOTAL	37.0	13,887	100

1997 Del Norte Discard Generation Study,
Urban Ore "Clean Dozen" scrap categories
* 365 days per year

Technologies

The categories of technologies of Integrated Waste Management are defined in a conservation hierarchy in California law (AB939, the California Integrated Waste Management Act of 1989). They are: Source reduction (reduce, reuse, and repair), Recycling, Composting (source separated), Transformation (composting mixed discards, distillation, pyrolysis, waste to energy, incineration), and Landfill.

Source reduction is also known as waste prevention. Preventing waste at the source, like most forms of conservation, is often the least cost alternative for a waste generator. Waste is a manifestation of inefficiencies in production processes. Many commercial waste generators have saved significant amounts of money by redesigning their unit processes, products and/or packaging to decrease the amount of waste created. In addition, there are many households in the Del Norte County that actively participate in the culture of reuse and thrift stores – saving large amounts of monies by buying items from garbage sales and thrift stores that would otherwise be landfilled.

In addition, there is increasing interest in re-establishing viable repair programs so that products do not have to be thrown away when they are broken. Radio Shack and Sears are both examples of companies that will take back any major manufacturer's products at their stores, and repair them. Manufacturers are increasingly asked to take greater responsibility for their products through Extended Producer Responsibility (EPR) laws (particularly in Europe). In Ottawa, Canada, over 300 businesses are voluntarily participating in a program to takeback over 80 products. Manufacturers that takeback products often set up repair systems to reuse the products they take back. In fact, Xerox Corporation was one of the first companies to adopt Zero Waste as a goal, because they needed to find ways to reduce their costs from taking back copiers leased to their customers. Zero Waste programs at Xerox focused them on redesigning products to waste lease, and to have parts that were easily replaced and repaired. Copiers returned to them from leases were either repaired and refurbished to lease to others, or dismantled to use parts for other machines that were returned. What couldn't be reused, were then dismantled for recycling.

Source Separation is a critical first step to reuse and recycling: keeping materials separated at the source of generation. Almost any material can be reused or recycled if kept free of contaminants. If generators keep their materials separate, they are also able to obtain greater value for their materials, and realize savings off their garbage bills. Residential variable rate structures encourage this activity. Similar lower prices for "clean" materials at the Crescent City Landfill encourage such source separation from self-haulers and the commercial sector.

Once materials are collected, hand sorting of collected materials for recovery at the highest value possible is the dominant technology. The technology of using people to sort discards is known as low technology. In some larger locations than Del Norte County, communities have also mechanized some of the sorting activities, in order to sort through the larger quantities of materials in the waste stream. These systems are known as "high technology" systems. For Del Norte County, given the scale and size of the waste stream, low technology systems are the most appropriate way to sort most materials collected. The Del Norte Zero Waste Plan clearly outlines many detailed recommendations for reuse, recycling and composting technologies to be adopted

in Del Norte County.¹ One of the most critical missing facilities in the Del Norte County area is an organics processing facility. A facility is needed to compost biosolids, yard waste, food waste, food contaminated paper (food paper), manures and gypsum (wallboard). A facility that could process all of these materials would include an enclosed "digester" to contain the odors and maintain correct temperatures, oxygen levels and moisture content of materials as they are being processed. There has been some interest expressed on the part of the Del Norte County Fairgrounds in providing a site for such a facility, to process their manures and other organic materials.

After establishing an organics composting facility, which is publicly available and reliable, not accepting such materials for landfill disposal could direct recoverable materials to the appropriate facilities. This would be a low cost way to keep both materials and the related jobs in the local economy. This would be similar to current rules that do not allow for the acceptance of liquid and hazardous materials at the landfill. Such rules are particularly helpful if the composting facility will rely on user fees to cover their processing, transport and marketing expenses.

Another major facility need for recycling in the Del Norte County area is a recycling facility for construction and demolition debris, including rock and soils, concrete, asphalt paving, asphalt roofing, bricks, and broken ceramics (e.g., tubs and sinks)

Whether by ordinance, incentives or free will and choice, currently a generator can divert discards from the landfill by separating at the source the discarded material into one of the 12 categories. In the current self-hauled system discards are typically clustered into destination points.

Currently an individual in Del Norte County wanting not to waste would separate papers and containers (paper, metal, polymers, glass) and load them in the pick up truck and take them to a buy back or drop off recycling center. Scrap metals are often brought with aluminum cans to scrap metal dealers, as they pay the highest prices for these materials. Food, vegetative debris, and food-contaminated paper (food paper) may be separated and composted in a composting area in their backyard. Old broken furniture, appliances and other reusable products may be donated to a church, thrift store or charity, or sold at a garage sale. Construction and demolition debris are loaded in their pick-up trucks and taken to the landfill, where they are used for internal roads and pads. Latex paint, drain oil, oil filters, car batteries and antifreeze may be recycled at the landfill, and other chemicals, may be stored in preparation for the annual Household Hazardous Waste Roundup.

Clearly this natural clustering of materials is based on the existing collection and processing destinations in Del Norte County. Building on these existing natural clusters, An organized countywide diversion program will establish additional processing centers and collection systems based on these clusters that could significantly enhance existing businesses and nonprofits that reuse and recycle materials, and divert large quantities of other materials not currently being recycled in the County. These are clusters of similarly processed materials, and also correspond to the combinations of the most promising technologies for processing materials discarded in Del

¹ Chapters VII, IX and X of the Del Norte Zero Waste Plan, January 2000.

Norte County. These collection and processing clusters are recommended to be encouraged by the Authority through policies and programs:

- ◆ **Recyclables** (e.g., papers, plastic, glass and metal containers)
- ◆ **Organics** (e.g., food, vegetative debris, and food paper, other putrescibles, untreated wood and sheetrock)
- ◆ **Reuse & Repair** (e.g., reuse, repair, dismantling, reconditioning, re-manufacturing and resale of furniture, large and small appliances, electronics, textiles, toys, tools, metal and ceramic plumbing fixtures, lighting, lumber and other used building materials)
- ◆ **Metals** (e.g., scrap metals and auto bodies)
- ◆ **Inerts** (e.g., rock, soils, concrete, asphalt, brick, landclearing debris, and mixed construction and demolition materials)
- ◆ **Household Hazardous Wastes** (e.g., used motor oil, paint, pesticides, cleaners, and other chemicals)

Figure 2 – Proposed Destination Clusters

- ◆ **Resource Recovery Park at TS/MRF**
 - Phase 1 - **Reuse and Repair**, and **Household Hazardous Waste**
 - Phase 2 - **Recyclables**, **Inerts**, and **Organics** chipping (then transferred to the Organics Processing Facility for composting)
- ◆ **Organics Processing Facility**
- ◆ **Metals Cluster**

Range, Type Of Products And Businesses By Technology Clusters

The Del Norte Zero Waste Plan is one of the first examples of local governments applying the Twelve Master Categories for planning purposes. Based on the variety of priorities identified in the Zero Waste Plan, the technologies clusters are identified and/or unit processes that are shared by the most likely of these businesses to actually locate in the RR Park. Key local service providers (e.g., Del Norte Disposal, Julindra, Hambro, and St. Vincent dePaul) have been contacted to determine if they have any plans to acquire those technologies as part of their current or future operations. These service providers were asked if they are interested in locating some or all of their operations in a RR Park that may be developed.

1. Recyclables Cluster

Co-mingled paper and containers clusters would be best processed separated from other discards. The residential and commercial mix will differ in composition but the collection and processing technologies are similar. Standard collection trucks can haul separated co-mingled paper and containers from homes, businesses, and drop off areas to a processing facility located at the RR Park, the transfer station or separate facility. The processing technology includes: scales, tipping pad, conveyors, magnets, sorting tables, forklift, balers, and administrative and sorting staff.

The generator separates dry paper and cardboard, metal, glass, and #1 & #2 polymer containers. The additional value of deposits on beverage containers makes the sorting and bulk marketing (road limit) of these materials cost effective.

The processing area should be designed, built and operated to provide incentives for keeping source separated materials clean and provided with separation as much as possible to facilitate the highest and best use of the materials. An essential piece of many modern transfer stations is a commingled container and paper sorting area equipped with conveyors, magnets and sorters. The objective is to separate paper, metal, glass and plastic and bale them into dense volumes that meet highway load limitations. Balers that meet market specifications for bales are key technology.

This type of Cluster could be included as part of a RR Park that receives source separated recyclables, organics, construction and demolition debris and reusable goods to process, reuse, recycle and sell. Sorting lines at the RR Park could be designed flexibly to make many different separations for different materials. The RR Park could even rent time on sorting lines or processing equipment to different operators for different purposes. Collection points for the Organics Processing Facility, Household Hazardous Waste materials, and inert materials could also be located at the RR Park. The following are types of businesses that will use products connected to a processing center for paper and containers: drop-off, buyback, curbside collection and manufacturing facilities for source-separated or lightly mixed recyclable materials including containers (glass, plastic and metal), paper and textiles. Products include; steel cans, aluminum, glass containers, newspaper, cardboard, writing papers, magazines, and #1 and #2 plastics.

2. Organics Cluster

The Organics Cluster would be designed to handle vegetative debris, biosolids, food, food paper, gypsum and manures. The Organics Processing Center could be located at the closed Crescent City Landfill or at another site (e.g., the Fairgrounds).

Organics processing will involve:

- ◆ Inspection and removal of entrained plastics, metals, and other non-compostable material,
- ◆ Grinding or chipping clean organics into small particles,
- ◆ Separation of large and small particles using a trommel and screen,
- ◆ Transporting dense wood materials to mulch markets or fuel users,
- ◆ Spreading compostable material into windrows after grinding, or placing in an enclosed digester
- ◆ Turning and wetting the windrows or materials in the digester,
- ◆ Screening finished compost for sale,
- ◆ Monitoring environmental impacts, and
- ◆ Testing of the final products.

Ideally the biosolids, and commercially generated food waste and food paper would be transported to the Organics Processing Center directly. All other organic materials would be hauled to the RR Park or container sites, to minimize self-haul vehicle traffic to the Organics Processing Center. Organic materials received at the RR Park would be inspected, then chipped and screened. Materials for composting would be transferred to the Organics Processing Center, and other materials would be shipped to mulch markets or biomass fuel users.

Businesses clustered around organics include collection and processing services for yard trimmings, food scraps, food paper, wood, soils, and other putrescibles. Products include; soil amendments, composts, mulches and biomass fuels.

3. Reuse and Repair Cluster

The Reuse and Repair Cluster would be designed for reuse, repair, dismantling, reconditioning, re-manufacturing and resale of furniture, large and small appliances, electronics, textiles, toys, tools, metal and ceramic plumbing fixtures, lighting, lumber and other used building materials. In addition, advertising those that are available, and helping to train the next generation of repair staff could foster repair services. A program could be instituted with one or more local repair shops, or negotiated with the Prison Industry Authority, as a project that they could undertake.

At a Reuse Innovators Forum in the Fall of 2000, the former Square Deal building in downtown Crescent City was identified by reuse businesses as a potentially attractive retail space for a Reuse and Repair Cluster. However, there are significant hurdles that would need to be overcome to use that building for this purpose. Those include: bringing it up to Uniform Building Code standards, and figuring out if manufacturing-related activities, and storage of hazardous materials (e.g. Freon removal) could be allowed either as non-conforming uses for this commercially-zoned property or by some other modification of the definitions of allowable activities in this zoning to accommodate this activity.

Given these uncertainties, GLA proposes that the first phase of the RR Park add reuse and repair activities to the TS/MRF site, instead of proceeding with the Square Deal building at this time. This would include public drop-off of appliances for reuse and repair, and retail sales of refurbished items. Once enough business develops at the TS/MRF site, then a downtown retail location could be pursued as a location for these reuse and repair activities, and retail sales for all products from the RR Park. In addition to retail sales at the RR Park, the downtown store would provide another opportunity for people who are just out shopping to avail themselves of the bounty of reused and recycled products from the Authority's resource recovery activities.

Types of businesses: drop-off or buyback center, and retail sales for reuse items, including white goods (washers, dryers, refrigerators), brown goods (e.g., computers, TVs, electronics, and other small appliances), furniture, clothing, and latex paint, vintage clothing, consignment shop, household item thrift shop, stove and porcelain refinisher, an antique restoration firm, eco-artist, black smith, and glass blower.

Types of products: pipe, conduit, grills, gates, appliances, fasteners, patio furniture, tools, computer casings, toys, furniture, planter pots, discard collection receptacles, doors, fencing, dimensional lumber, furniture, cabinets, dishes, windows, lenses, glass blocks, lamps, toilets, sinks, dishes, plant pots, brick, block, stone, car parts, white goods, industrial scrap, dismantled structures, couches and mattresses, small appliances, equipment parts, metal fencing, metal building parts and steel beams. Major potential end-uses for tires include producing crumb rubber for use in molded rubber products or rubberized asphalt.

4. Metals Cluster

Metals represent one of the immediate challenges for Del Norte County. Due to dramatic decreases in the prices for metals sold by scrap processors in the County, metals recyclers require assistance in marketing their materials and improving the efficiency of their processing. Metals which could be reused or recycled are: Cars; White Goods (e.g. refrigerators, washing machines); Non-ferrous; Industrial scrap (e.g. steel beams); Dismantled Structures; Pipe; Fencing; Metal sinks and bath tubs; Tires (5 pounds of each tire is steel belt); Couches and Mattresses (springs and frames); Small Appliances; and Freon.

Most of these materials could be recycled more if there were improvements to the collection, processing, hauling and/or markets for these materials. **Cars** Scrap auto bodies are being stored on private property and littered throughout the County illegally, causing a serious blight on the landscape. Cars are being collected by the Authority Abatement Program, and brought to A1 Wrecking Yard, where they are being compacted for shipment and sale to markets.

A1 needs to obtain a high-powered baler to compact the metals received, or a baler could be installed at the RR Park for this purpose.

White goods usually refer to refrigerators, washing machines and similar large appliances that do not usually fit into garbage cans for easy disposal and are costly to self-haul to the landfill. These items are some of the items most frequently found illegally dumped in this area. Del Norte County needs to have an enclosed drop-off system in place for these products when people are moving in/out of their homes and businesses. This service needs to be very accessible and responsive to the needs of people in a hurry.

White goods are also being collected under the Authority's Abatement Program. In addition to drop-boxes and reuse sheds at rural transfer sites, these should be accepted at the RR Park.

The Authority or the TS/MRF Operator could contract with one or more Reuse and/or Repair businesses to accept white goods from the public, for a fee. The markets for these white goods would be enhanced by the processing improvements recommended for A-1 Auto Wreckers. Nonrepairable white goods could be included in the larger bales that such equipment would make, and sold together with the scrap auto bodies.

Throughout Del Norte County there are many piles of metals on industrial properties, which include such things as: equipment parts, metal fencing, metal building parts and steel beams). In addition, there are dismantled structures and pipe, fencing, metal sinks and metal bath tubs that need better processing. The backlog of these materials is being addressed now as part of the Abatement Program, but needs a better system on an ongoing basis.

Once the baler improvements at A-1 Auto Wreckers are accomplished, the Authority could encourage or contract with A-1 to offer a “free dump” day on a monthly basis for businesses to bring their industrial scrap metals.

Businesses include businesses collecting and processing scrap metals and automobile and truck bodies for recycling.

Products would include: baled scrap metals shipped to markets for use in making higher value metal products.

5. Inerts Cluster

Construction and Demolition materials (C&D) are generated by planned events, or disasters. These materials can be separated at the source and brought to a materials yard and processed for resale.

Businesses include businesses collecting and processing construction and demolition (C&D) debris for deconstruction or dismantling.

Products would include: used building materials (e.g., local redwood, scrap lumber, doors, windows, plumbing fixtures, and ceramics), concrete and asphalt recycling, and processors of roofing materials, bricks, and mixed demolition debris.

6. Household Hazardous Wastes Cluster

Household Hazardous Waste (HHW) discards are also generated either in small amounts or at a specific time or event. The need to dispose of these discards is periodic.

The most effective way to handle chemical discards is to reduce the quantity and/or toxicity of materials used, then to look at how those materials are stored and managed as discards. It is estimated that there are 175 tons of chemicals (HHW) discarded each year that are not currently being recovered for proper disposal. There is a need for a reuse and storage area for HHW materials. There are funds at the State level that will help pay for areas for material exchanges and long term HHW storage.

Products and materials include used motor oil, left over paint, batteries, household cleaners, pool acids, fertilizers, pesticides, solvents and other household chemicals.

Businesses include: HHW materials transporters and converters.

Figure 3 - Generation, Collection and Processing System Clusters

Twelve Master Categories Of Discarded Materials	Collection And Processing Clusters	Processing Centers
<ol style="list-style-type: none"> 1. Reusable Goods 2. Paper 3. Plant Debris 4. Putrescibles 5. Wood 6. Ceramics 7. Soils 8. Metals 9. Glass 10. Polymers 11. Textiles 12. chemicals 	<ol style="list-style-type: none"> 1. Recyclables (Paper and Paper, Metal, Glass, and Plastic Containers) 2. Organics (Plant Debris, Food Waste & Food Paper, Biosolids, Gypsum) 3. Reusables 4. Metals (Scrap metals and auto bodies) 5. Inerts (Rock, soils, Construction and demolition debris) 6. Household Hazardous Wastes 	<ol style="list-style-type: none"> 1. Resource Recovery Park Recyclables (Paper and containers). Reusables (furniture, appliances, clothing, toys, tools) Inerts Organics (Plant Debris, Gypsum, and Residential Food Waste & Food Paper) Household Hazardous Wastes 2. Organics Processing Facility. Biosolids, Commercial Food Waste & Food Paper, and fines from chipped Organics from RR Park 3. Metals Processing Facility

CASE STUDIES

Two case studies are presented. They are: the RR Park with a Reuse and Repair Center, Recycling, Inerts and Household Hazardous Waste area as well, and the Organics Processing Facility.

Resource Recovery Park

In managing the RR Park, it is important to let the market determine the details of where, how, and to whom materials move. Source separation principles should govern, along with convenience, cleanliness, and satisfying the customer.

Description and scale of process

The RR Park is conceptualized as a central area where the public drops off discarded materials. The facility will have the capability and technology to:

1. Sort discards for reuse, repair and/or dismantle for recycling,
2. Process separately collected commingled paper and containers,
3. Store, and possibly process, inert materials
4. Chip yard waste and residential food waste and food paper, then load into storage bins for organics to be transferred to the Organics Processing facility and,
5. Store separated HHW materials for reuse and disposal, and collect separated construction and demolition materials and transport if necessary.

Process And The Approximate Scale Of Each Process (Tons/Year For Feedstock And/Or Product)			
Process	Tons/Year	Feedstock	Products
Sort discards for reuse, repair and/or dismantle for recycling (reusables and textiles discard categories)	1,315	Discards	Materials Commodities
Process separately collected commingled paper and containers (paper, glass and polymers discard categories)	4,720	Paper, Glass, Metal & Plastic Containers	Newspaper, cardboard, ledgers, glass, steel, HDPE, PET Aluminum
Collect, store, and possibly process, inert materials (ceramics and soils discard categories)	1,054	Rock, soils, C&D debris	Aggregate and base rock for roads, soils
Chip organics and load into storage bins to be transferred to Organics Processing facility (plant debris, putrescibles & wood discard categories)	5,073	, Yard wastes, food waste, food paper, clean wood	Mulch Biomass fuel Compost Wood
Store separated HHW materials for reuse and disposal	500	HHW	Reusable chemicals and paint, HHW,

Description of the Services and the Potential Products Associated With Each Process

Types of services connected with businesses located in a RR Park include:

Reuse and repair businesses: drop-off or buyback recycling centers, repair services and retail store for resale for reuse items. Repair and reuse services include white goods (washers, dryers, refrigerators), brown goods (e.g., computers, TVs, electronics, and other small appliances), furniture, clothing, and latex paint, vintage clothing, consignment, household item thrift shop, stove and porcelain refinisher, an antique restoration firm, Eco-artist, black smith, and glass blower. Products include: pipe, conduit, grills, gates, appliances, fasteners, patio furniture, tools, computer casings, toys, furniture, planter pots, discard collection receptacles, doors, fencing, dimensional lumber, furniture, cabinets, dishes, windows, lenses, glass blocks, lamps, toilets, sinks, dishes, plant pots, brick, block, stone, car parts, white goods, industrial scrap, dismantled structures, couches and mattresses, small appliances, equipment parts, metal fencing, metal building parts and steel beams.

Recycling Businesses: Businesses include: drop-off, buyback, curbside collection and manufacturing facilities for source-separated or lightly mixed recyclable materials including containers (glass, plastic and metal), paper and textiles). Products include; steel cans, aluminum, glass containers, newspaper, cardboard, writing papers, magazines, and #1 and #2 plastics.

Inerts Businesses: Businesses include businesses collecting and processing construction and demolition (C&D) debris for deconstruction or dismantling. Products would include: used building materials (e.g., local redwood, scrap lumber, doors, windows, plumbing fixtures, and ceramics), concrete and asphalt recycling, and processors of roofing materials, bricks, and mixed demolition debris.

Organics Businesses: Businesses clustered around organics include collection and processing services for yard trimmings, food scraps, food paper, wood, and other putrescibles. Products include; Soil Amendments, composts, mulches and biomass fuels.

HHW Businesses: Businesses include: HHW materials transporters and converters. Products and materials include used motor oil, left over paint, batteries, household cleaners, pool acids, fertilizers, pesticides, solvents and other household chemicals.

Environmental Impacts

If a RR Park is sited at an existing industrial zoned location in Del Norte County, it is likely that this project would be consistent with planning and zoning requirements. Whatever site or sites are ultimately selected, all environmental impacts must be considered so that compliance and permitting costs can be projected for the full range of anticipated project businesses. In addition to the General Plan, specific plans, zoning, and CEQA compliance, there may be a variety of ordinances that impose additional development requirements for building, dedication, impact fees, and offsite improvements. Generally the scope of the project needs to be detailed,

then the permitting authorities will indicate what is allowed to be built and what they will make you do to build it.

The primary issues for a RR Park relate to air quality and traffic. Issues of less significance would be water usage, water quality protection, and the presence and transportation of hazardous wastes and hazardous commodities such as fuels and chemicals that would be public health and safety issues.

Other potential environmental impacts from those businesses include:

- Noise
- Water supply
- Wastewater treatment
- Storm water run-off
- Geology and seismology
- Public health and safety
- Utilities
- Vegetation and wildlife
- Archaeological, historic and cultural resources
- Visual and aesthetic
- Environmental justice

These environmental issues must be identified and initially reviewed with staff of the Authority and then any other reviewing jurisdictions (local, state or federal). At the same time, siting issues relating to current level of on site improvements and off site, ingress and egress must be reviewed and considered with the Authority and other permitting agencies.

The development of the RR Park concept should result in a more centralized effort for coordinating the enforcement of current and future regulations governing the environment and operations for a wide variety of reuse, recycling and composting businesses. By co-locating all these businesses together, some of the environmental controls that will be required may be shared by the different activities, enhancing the likelihood of compliance with all foreseeable regulations. In addition, the RR Park may provide new financing mechanisms for environmental and regulatory controls, and other financing tools that currently exist but may not be well understood by existing businesses.

Over time, the RR Park could develop a Master Environmental Impact Report to cover most anticipated Park activities. Getting this approved in advance would simplify the expansion or start of subsequent new recycling services in the Park dramatically.

All of this should result in greater compliance with regulatory requirements.

Facility Needs

There are six clusters of activities that should be encouraged:

- ◆ Reuse & Repair Cluster
- ◆ Recycling Cluster
- ◆ Organics Cluster
- ◆ Inerts Cluster
- ◆ Metals Cluster
- ◆ Household Hazardous Wastes Cluster

These are natural combinations of related business activities that could benefit immediately from co-location. The loudest and/or most industrial equipment of the Reuse & Repair Cluster could include a baler, forklift, planer, band saw, and other woodworking power tools. Freon removal may also be part of the refrigerator repair operations. Storage of hazardous materials in addition to the Freon would be minimal, though parts washing may result in some paint, sludges, and solvents being stored on site, as well as some vehicle lubricants. No on-site fuel tanks are envisioned. A HHW storage area could be located on site.

Permitting Issues

The loudest and/or most industrial equipment of the Reuse & Repair Cluster could include: a baler, forklift, planer, band saw, and other woodworking power tools. Freon removal may also be part of the refrigerator repair operations. Storage of hazardous materials in addition to the Freon would be minimal, though parts washing may result in some paint, sludges, and solvents being stored on site, as well as some vehicle lubricants. No on-site fuel tanks are envisioned.

These environmental issues must be identified and initially reviewed with staff of the Authority and then any other reviewing jurisdictions (local, state or federal). At the same time, siting issues relating to current level of on site improvements and off site, ingress and egress must be reviewed and considered with the Authority and other permitting agencies.

The County Economic Development Office can also help identify environmental permits and how to obtain compliance with the CA Environmental Quality Act (CEQA) and other local, state and federal permits (including land use permits and OSHA) for identified facilities.

A Master Environmental Assessment will cover all anticipated uses of the RR Park. The RR Park developer and project management team (agency, staff and consultants) must produce an Environmental Assessment and Business plan that will identify infrastructure needs, sources of discarded materials needed for designated business facilities, impacts these materials will have on the zoning and neighborhood, and how to attract those materials to the RR Park.

Potential Facilities, Functions or Services Which Could Be Shared

A RR Park enables the participating businesses to share:

- Space (including warehousing)
- Operating equipment (e.g., forklifts, balers, shredders, wheel loaders and trucks)
- Preventive maintenance and repair services
- Pollution control equipment and services
- Facilities (e.g., Maintenance yard, truck washing area, conference rooms, kitchen/break room, showers and bathrooms)
- Management and technical expertise
- Accounting, legal and insurance services
- Promotions and advertising costs
- Government affairs and permitting services
- Administrative and clerical support services
- Communications equipment and services (e.g., copiers, computers, internet access, websites, fax, radios, and phones)
- Staff recruitment and job training services
- Restaurant/snack bar for Park businesses and customers.

- Educational facilities and services (e.g., a nature trail, demonstrations of the use of different compost products in gardens and landscaping, on-site composting bins for residents and businesses, demonstrations of recycled building products in use and/or an environmental education display/museum as an additional attraction for residents to come.

Participating businesses in RR Park are also helped by matching wastes from one company to be used by another as a resource. Companies will become suppliers to one another to:

- Decrease their disposal costs
- Increase their cash flow
- Build friendly networks in anticipation of beneficial trades to come.

Information will pass readily among businesses, and all will enjoy new opportunities to learn from one another the latest and most advantageous techniques. As the combined operation attracts more trade, the presence of so many people will create new niches for support businesses. A business ecosystem will gradually emerge that feeds on resource flows from the larger economy, adjusts to surges and droughts, and dries up waste before it has a chance to happen. Captures discarded resources before they are wasted.

In addition, reuse and recycling businesses in the RR Park could share:

- Knowledge and technology (networking among Park tenants on how to address technical problems)
- Showrooms for retail and consignment sales and temporary staffing support (including training area for new staff and for tours).

In addition to reuse and recycling businesses, the RR Park will provide administrative support (e.g. computers, phones, bookkeeping, accounting and legal services) on a shared basis for a fee, shared equipment (e.g. fork lift, balers, wheel loaders, trucks), shared knowledge and technology (facilitated networking among Park tenants on how to address technical problems), shared showroom for retail sales and temporary staffing support (including training area for new staff and for tours). Once the basic operations are underway, such a RR Park should be able to attract retail stores and consignment stores for materials and products recovered and a restaurant/snack bar for Park businesses and customers.

Recruitment Strategies and/or Training Requirements for Private Partners Interested in Started or Managing Such Businesses

Recruitment tasks include:

- Identify types of facilities and businesses that could be developed in the RR Park,
- Review existing reuse, recycling and composting businesses and nonprofit organizations in the area, and other interested parties.
- Develop short list of types of designated facilities to be pursued by local businesses, nonprofits or other interested parties.
- Develop outreach material to attract facility developers.
- Work with local businesses and nonprofits to apply for grant funds and establish facilities.

An incubator for new recycling businesses could provide a lower cost location for such businesses to grow and prosper. Businesses are provided with resources shared among other businesses. Small business incubators typically provide small sized commercial or manufacturing space, lower end of market rents, pooled administrative services, free or low cost technical assistance to qualifying tenants. These services could include conference rooms, copiers and faxes, receptionists, bookkeeping, and business technical assistance (e.g., review of business and marketing plans).

Different types of incubators could be developed, depending on local needs and resources, including:

- Graduating Incubator - The goal of the graduating incubator is to support businesses until they are strong enough to move to their own location.
- Non-graduating Incubator - The non-graduating incubator supports businesses until they are strong enough financially to become fully independent. In this model, a single business or administrative entity could be the incubator or several businesses could pool their resources to jointly own the facility. Successful businesses could stay in the Park, with new businesses beyond the original ones being accommodated in locations adjacent to the initial incubator facility, or by moving some of the shared services (e.g. restaurant, showroom) to adjacent buildings.

How Process Complements Existing Infrastructure

The RR Park is intended to complement, not duplicate, existing Del Norte County reuse, recycling and composting businesses and nonprofit organizations. This project contacted many of those businesses to determine their interest in participating in the RR Park. Interested groups have been identified above, to participate in the first phase of the RR Park, as the Reuse and Repair Cluster. These groups thought that the RR Park could expand and enhance the current amount of business they have, and add new services that the community wants. By attracting additional traffic to a centralized facility, these groups feel that they should be able to conduct more business than they do today.

The Recycling and Metals Clusters are probably the largest potentially conflicting activities. It is possible that the existing Julindra recycling programs might be combined with the plans for the RR Park, to serve the needs of the Recycling Cluster identified above. Similarly, the Metals Cluster might be performed by A1 Metals, with help from the Authority to enhance their processing capabilities.

The Inerts and Organics activities are operating to a limited degree currently at the Crescent City Landfill. The Authority Board adopted a policy for the development of the TS/MRF that directed staff to include all those activities and functions currently being provided at the Landfill. GLA proposes to transfer most of those activities and functions to the RR Park and the TS/MRF, and to enhance them with additional processing capabilities at a separate Organics Processing Facility.

There should be room in such a RR Park for many small operators. As a customer draw, clustering small with large operators is a well-proven commercial principle, as any visit to a mall will attest. There, specialized vendors of all sizes meet to offer wares and services to crowds of

customers, many of them out just to explore the environment and spend a little money. If they were run as isolated businesses, most of these enterprises would fail. But within the managed competition and cooperation of the mall environment, they thrive.

For the Authority, this will be an opportunity to decrease the self-haul traffic to the current landfill, directing people to the Resource Recovery Park first with all their discards clusters, and encouraging the public through the rate structure at the Landfill/Central Transfer Station, to keep their materials separated for reuse, recycling and composting, rather than paying increasingly costly disposal fees.

The relationship between the proposed Transfer Station /Material Recovery Facility (TS/MRF) and the RR Park is one of the largest issues that needs to be resolved. If they are not located in the same area, they could compete for receiving materials salvaged or dropped-off by self-haulers. It would be best to avoid such segmentation given the small scale of the project already. Instead, consolidation and concentration of resource recovery activities in Del Norte County should be encouraged to enhance the overall efficiency and economics of waste diversion in the County. As a result, identification of appropriate locations for a nearby RR Park should be considered as part of the criteria in the siting of the TS/MRF. Conversely, the siting of a comprehensive RR Park should be done after the TS/MRF location has been selected.

Skills and/or Training Requirements for Employees

The Small Business Development Center (SBDC) should work with designated facilities to identify their training needs. This will vary depending on the exact businesses that join in the RR Park. The SBDC should arrange for business support training services that are identified as needed by designated facilities. The Authority should arrange for reuse, recycling, and/or composting market development training. The designated facilities should be responsible to train their own employees.

Organics Processing Facility

Currently more than half of the material disposed of at the Del Norte Solid Waste Management Authority landfill is biodegradable or compostable. Biosolids and Paper are the largest quantities of organic material typically discarded for land filling. Mixed paper when separated into paper stock grades has a value as recyclable fiber for papermaking. The recovery of paper for recycling is discussed above. However paper contaminated by food (food paper) is best processed in a composting program, such as proposed for the Organics Processing Facility. Food paper includes food in wrappers, paper cups, waxed boxes, and molded paper and pizza boxes.

Ideally the biosolids, and commercially generated food waste and food paper would be transported to the Organics Processing Center directly. All other organic materials would be hauled to the RR Park or container sites, to minimize self-haul vehicle traffic to the Organics Processing Center. Organic materials received at the RR Park would be inspected, then chipped and screened. Materials for composting would be transferred to the Organics Processing Center, and other materials would be shipped to mulch markets or biomass fuel users.

Description of Process and Scale

Self-hauled organic material will be taken to the Authority transfer station or the Resource Recovery Park. There will be a large container at the Resource Recovery Park for organic material collection. This container will be transferred to the Organic Processing Center.

**Figure 4 - Process And The Approximate Scale Of Each Process
(Tons/Year For Feedstock)**

Process	Tons/Year	Feedstock	Products
Mulching at RR Park	619	¾ Wood, & ½ Plant Debris	Mulch
Composting produced at Organics Processing Facility	3,509	Biosolids, Food Waste, Food Paper, Manures	Composts and soil conditioners
Biomass Fuels produced at RR Park	945	¼ Wood, & ½ Plant Debris	Fuel

Services And Potential Products Associated With Each Process

Businesses clustered around organic include collection and processing services for yard trimmings, food scraps, food-contaminated paper, wood, soils, and other putrescibles.

Products include; Soil Amendment, If aggregated, all these organics could be processed into a mulch. The mulch could be composted by itself or with other organic nutrients into a high quality soil amendment.

There are several levels of markets for organic material: lumber and wood recovery for reuse; live plants for reuse; mulched leafy green material for roadsides and garden beds and erosion control; mulched dense woody material for bio-mass based fuel burners; clean green and food compost; clean green and bio-solid mixed compost; and vermicompost, or worm castings, as a high grade potting soil.

Reusable lumber and furniture could be recovered and sold at the Resource Recovery Park.

Hambro's Forest Products will take all burnable material for less than the landfill fee. Mulched material can be used for roadside erosion control, or used as landfill cover. Clean green organic compost has a value for commercial farming and landscaping. Nitrogen enhanced organic compost has more value. There are local agriculture and nursery uses for soil amendment.

Construction and Demolition materials (C&D) can be separated at the source and brought to a materials yard and processed for resale.

Businesses include businesses collecting and processing construction and demolition (C&D) debris, deconstruction or dismantling,

Products would include ceramics, concrete and asphalt, roofing materials, bricks, and mixed demolition debris.

Major potential end-uses for tires include producing crumb rubber for use in molded rubber products or rubberized asphalt.

Environmental Impacts

An environmental assessment will be needed to determine if the selected site needs an Environmental Impact Report. On agriculturally zoned land and using a source separated organic cluster, only a focused EIR may be required. Typical environmental concerns for the facility include:

- Odors
- Traffic
- Ground water
- Air emissions
- Product quality

Restrictions on backyard burning should be explored as another incentive for composting materials in the future. This would be best pursued once yard waste collection or chipping services was readily available to residents as an alternative. This would enhance the evaluation of the environmental impacts for this project if there is a likelihood of this facility enabling that change in current practices for yard wastes.

The organic processing center could be at the Crescent City Landfill or at another site (e.g., the Fairgrounds). If most organics are hauled to the RR Park or container sites, the self-haul vehicle traffic to the organic processing center will be minimized.

Facility Needs

Processing will involve:

- Inspection and removal of entrained plastics, metals, and other non-compostable material;
- Grinding or shredding clean organics into small particles;
- Separation of large and small particles using a trommel and screen;
- Transporting dense wood materials to the fuel user;
- Spreading compostable materials into windrows after grinding;
- Turning and wetting the windrows;
- Screening finished compost for sale;
- Monitoring environmental impact;
- Testing final products

The grinding equipment should be able to grind 2 tons an hour to handle all the materials in one shift. Trommels and screens are relatively inexpensive. A windrow turner could be attached to a tractor or forklift. The windrows could be moistened with a water truck in the summer. A pole barn may be needed to protect the windrows from the rain and prevent blowing paper. An enclosed digester will be necessary if biosolids are included.

Permitting Issues

A feasibility, financing and business plan is needed to identify sites, processes, costs and critical milestones. This study will select the processing system for a organic composting demonstration program. Once identified the site needs to be permitted. Other feasibility reports from vermicompost system vendors can also be solicited.

A pilot program for composting at the landfill (as backup if plans with private industry do not work out) should be permitted immediately. The LEA approval for the pilot and then permit full-scale operations should begin.

Potential Facilities, Functions or Services Which Could Be Shared Between Two or More Businesses in the Processing Facility

In addition to the types of general sharing of benefits noted above for the RR park, there is a natural synergy that a composting facility has with a C&D processing facility. Aside from the fact that both facilities grind material into smaller particles, these are products that builders need. Products produced at the site include compost for landscaping, aggregate to be used for the foundations, wood for structures and tire crumb for road mixes. Hence several contracting types of businesses could share the facility. This would work best if both of these operations continued at the Crescent City Landfill.

Recruitment Strategies and/or Training Requirements for Private Partners Interested in Started a Managing Such Businesses

Recruitment tasks include:

- Identify types of facilities and businesses that could be developed in the Processing Facility,
- Review existing composting, construction and demolition businesses in the area, and other interested parties.
- Develop short list of types of designated facilities to be pursued by local businesses, nonprofits or other interested parties.
- Develop outreach material to attract facility developers.
- Work with local businesses and nonprofits to apply for grant funds and establish facilities.

How Process Would Complement, Not Duplicate, Existing Infrastructure

In many areas of the world vegetative debris is mixed with the bio-solids from wastewater plants and made into soil amendment that has significant nitrogen content. The current bio-solids from the wastewater treatment plant and the septic collection system from outside the city could be incorporated into the compost to add moisture and nitrogen sources.

Alternatively, these materials can be shredded and put into a vermicomposting system. State of the art open bed and enclosed systems are commercially available, where worms are used to produce a high grade potting soil.

The Authority can be a catalyst for enhancement and development of markets for organic materials. The best market for composted organic materials will most likely be for local agricultural and nursery products. The Authority and the local farm bureau could work together and identify the current supply and demand for soil amendment. The Agriculture Commissioner and the Lily Bulb Growers Association should look for grant funds to test the impact of organic soil amendments on growing lily bulbs.

The Authority should experiment with local agricultural and horticultural industries about the use of or cooperative marketing of compost/mulch products from the Organics Processing Center. The Authority should also work with local universities from Humboldt County to southern Oregon to test organic products and their effects on soils in different applications. This will provide long-term baseline data needed to improve markets for materials.

A project could be funded that involves soil scientists and agriculture engineers to test various organic mixtures to provide a positive growing medium for local crops. The University of California Agricultural Extension Program or a similar program could be asked to test and

suggest recipes for growing lily bulbs, pine trees and other local products. The local nursery association or garden club could be enlisted to start a master-composting program.

Skills and/or Training Requirements for Potential Employees

The Small Business Development Center (SBDC) should work with designated facilities to identify their training needs. This will vary depending on the exact businesses that join in the RR Park. The SBDC should arrange for business support training services that are identified as needed by designated facilities. The Authority should arrange for reuse, recycling, and/or composting market development training. The designated facilities should be responsible to train their own employees.

DEL NORTE RESOURCE RECOVERY PARK

ADMINISTRATIVE HANDBOOK

For

Del Norte Solid Waste Management Authority

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DEL NORTE RESOURCE RECOVERY PARK ADMINISTRATIVE HANDBOOK

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DEL NORTE RESOURCE RECOVERY PARK ADMINISTRATIVE HANDBOOK

OVERVIEW

This Handbook is designed to describe the legal, financial, monitoring and reporting mechanisms that could define the relationships among partners potentially developing a Resource Recovery Park (RR Park) in Del Norte County.

A RR Park is the co-location of reuse, recycling and compost processing, manufacturing and retail businesses (and/or nonprofits) in a central facility to which the public can bring all their discards and recoverable materials at one time.¹ In Del Norte County, the RR Park is conceptualized as an incubator for businesses that reuse, repair, recycle and compost materials diverted from the waste stream. These businesses would prepare feedstock for manufacturers, produce saleable products (including organic products), and/or repair durable goods and sell them retail or in bulk to the public at the Park.

There are a number of ways that RR Parks are developing in California:

- ◆ Master planning and zoning available land for a RR Park as part of a comprehensive economic development strategy (e.g., Cabazon RR Park near Palm Springs, CA)
- ◆ Siting of multiple reuse, recycling and composting businesses around a landfill or transfer station (e.g., Monterey Regional Environmental Park and Davis Street Transfer Station in San Leandro)
- ◆ Renovating abandoned buildings (e.g., Urban Ore in Berkeley and proposed for Del Norte County)
- ◆ Co-promoting of nearby reuse, recycling and composting businesses (e.g., Berkeley "Serial MRF")

In addition, there are several other configurations that are possible:

- ◆ Rebuilding of "brownfield" sites
- ◆ Zoning of areas or districts within a community specifically for these types of businesses
- ◆ Development as part of "eco-industrial parks" being developed in response to general community-wide efforts to advance "sustainable development."

¹ This definition and following description excerpted from case study "Resource Recovery Parks" prepared by Gary Liss & Associates for the CA Integrated Waste Management Board, August 2000.

A RR Park provides the community the opportunity to put reuse, repair, recycling, and composting as a priority to wasting. The more effectively residents are informed on how to use the new system and the more convenient the system, the less waste there will be to handle at the end of the process.

In managing a RR Park, it is important to let the market determine the details of where, how, and to whom materials move. Source separation should be economically rewarded. Priority should also be given to designing and operating facilities to maximize convenience, cleanliness, and satisfaction of the customers. The more materials are upgraded and separated into discrete sub flows, the more value there is in the system. As the RR Park succeeds in its mission to attract and nurture businesses that add value to discarded materials, the number and variety of such businesses can and will grow.

There should be room in RR Parks for many small operators. As noted in the Del Norte Zero Waste Plan, clustering small with large operators is a well-proven commercial principle. Any mall has specialized vendors of all sizes offering wares and services to crowds of customers, many of them out just to explore the environment and find what they need. There is a synergetic effect within the managed competition and cooperation of the mall environment. The same forces are at work in RR Parks.

Initial Project

The initial phase of the Del Norte RR Park is envisioned to complement and expand upon material recovery activities proposed by the Transfer Station/Material Recovery Facility (TS/MRF) Operator. The RR Park could decrease the costs of permitting the TS/MRF by making the total facility eligible for grants to assist in preliminary siting, design and permitting activities from sources that would not otherwise be available for this project, including:

- ◆ Reuse Assistance Grants from the CA Integrated Waste Management Board (CIWMB)
- ◆ CA Pollution Control Financing Authority financing
- ◆ Used Oil Recycling Grants from the CIWMB
- ◆ Household Hazardous Waste Grants from the CIWMB
- ◆ Household Hazardous Waste Grants from the CA Department of Toxic Substances Control
- ◆ Small Business Innovative Research Grants from the US Environmental Protection Agency, US Department of Energy and US Department of Agriculture
- ◆ Community Services Discretionary Grants for urban and rural economic development and rural community facility development from the US Department of Health and Human Services
- ◆ Environmental Education Grants from the US Environmental Protection Agency
- ◆ Environmental Regulatory Enhancement Grants from the Administration for Native Americans (ANA) of the US Department of Health and Human Services

- ◆ Environmental Loan Fund from the Environmental Support Center
- ◆ Renewable Bioproducts and Biobased Industry Grants from the Office of Industrial Technology of the US Department of Energy
- ◆ Glass Industry of the Future Program of the US Department of Energy
- ◆ Rural Cooperative Development Grants of the U.S. Department of Agriculture
- ◆ Corporate Environmental Performance Grants from the US Environmental Protection Agency and the National Institute of Justice
- ◆ Grants for Cellulosic Ethanol from the Agriculture Sector from the Western Regional Biomass Energy Program

The RR Park would be designed initially to use a limited amount of space in the TS/MRF building to direct discarded materials to RR Park businesses. The RR Park would also require about 3-4 acres of the TS/MRF site for the expansion and growth of RR Park businesses.

Clustering Resources for Recovery

People naturally separate their discards according to their destination. A dedicated recycler in Del Norte would separate papers and containers (paper, metal, plastics, glass) and load them in the pick up truck and take them to a buy back or drop off recycling center. Food, vegetative debris, and food-contaminated paper (food paper) may be separated and composted in a composting area in their backyard. Old broken furniture, appliances and other reusable products may be donated to a church, thrift store or charity, or sold at a garage sale. Latex paint, drain oil, oil filters, car batteries and antifreeze may be recycled at the landfill, and other chemicals, may be stored in preparation for the annual Household Hazardous Waste roundup.

Clearly this natural clustering of materials is based on the existing collection and processing destinations in Del Norte County. Building on these existing natural clusters, An organized countywide diversion program will establish additional processing centers and collection systems based on these clusters that could significantly enhance existing businesses and nonprofits that reuse and recycle materials, and divert large quantities of other materials not currently being recycled in the County. These are clusters of similarly processed materials, and also correspond to the combinations of the most promising technologies for processing materials discarded in Del Norte County. These collection and processing clusters are recommended to be encouraged by the Authority through policies and programs:

- ◆ **Recyclables** (e.g., papers, plastic, glass and metal containers)
- ◆ **Organics** (e.g., food, vegetative debris, and food paper, other putrescibles, untreated wood and sheetrock)
- ◆ **Reuse & Repair** (e.g., reuse, repair, dismantling, reconditioning, re-manufacturing and resale of furniture, large and small appliances, electronics, textiles, toys, tools, metal and ceramic plumbing fixtures, lighting, lumber and other used building materials)
- ◆ **Metals** (e.g., scrap metals and auto bodies)
- ◆ **Inerts** (e.g., rock, soils, concrete, asphalt, brick, landclearing debris, and mixed construction and demolition materials)
- ◆ **Household Hazardous Wastes** (e.g., used motor oil, paint, pesticides, cleaners, and other chemicals)

Figure 1 - Generation, Collection and Processing System Clusters

Categories of Material Discarded by Generators

- ◆ Reusable Goods
- ◆ Paper
- ◆ Plant Debris
- ◆ Putrescibles (Food)
- ◆ Wood
- ◆ Ceramics
- ◆ Soils
- ◆ Metals
- ◆ Glass
- ◆ Polymers (Plastics)
- ◆ Textiles
- ◆ Chemicals

Collection And Processing Clusters

- ◆ **Recyclables** (e.g., papers, plastic, glass and metal containers, scrap metals)
- ◆ **Organics** (e.g., food, vegetative debris, and food paper, other putrescibles, untreated wood, sheetrock and biosolids)
- ◆ **Reuse & Repair** (e.g., reuse, repair, dismantling, reconditioning, re-manufacturing and resale of furniture, large and small appliances, electronics, textiles, toys, tools, metal and ceramic plumbing fixtures, lighting, lumber, doors, windows, architectural details and other used building materials)
- ◆ **Metals** (e.g., scrap metals and auto bodies)
- ◆ **Inerts** (e.g., rock, soils, concrete, asphalt, brick, landclearing debris, and mixed construction and demolition materials)
- ◆ **Household Hazardous Wastes** (e.g., used motor oil, paint, pesticides, cleaners, and other chemicals)

Proposed Destination Clusters

- ◆ **Resource Recovery Park at TS/MRF**
 - Phase 1 - **Reuse and Repair**, and **Household Hazardous Waste**
 - Phase 2 - **Recyclables, Metals, Inerts, and Organics** chipping (then transferred to the Organics Processing Facility for composting)
- ◆ **Organics Processing Facility**
- ◆ **Metals Cluster**

Based on a cluster analysis performed by Gary Liss & Associates (GLA), the initial anchor activities of the RR Park at the TS/MRF would be a:

- ◆ Household Hazardous Wastes (HHW) Cluster
- ◆ Reuse and Repair Cluster

This would provide some space, resources and/or equipment for use by multiple reuse, repair and HHW tenants. In addition, the initial RR Park could promote the aggregation of organics, scrap metals, inerts and other discards for processing at other facilities.

The RR Park is envisioned to be a location that is designed to most efficiently handle the flow of materials and associated traffic and environmental impacts. While the Resource Recovery Park will be located adjacent to the TS/MRF, and could ultimately include the Reuse & repair, HHW, Recyclables, Inerts, and Organics clusters, the latter three clusters could be located elsewhere in Del Norte and still be successful. The RR Park needs to be developed in partnership with existing reuse, repair, recycling and composting businesses and nonprofit organizations, so that it complements and expands their capacity to handle discarded materials, and does not undermine existing activities.

Similarly, locating the RR Park at the TS/MRF will be the best way for it to support, and not compete with, the TS/MRF. The public would be able to donate items directly to RR Park businesses before paying their gate fees at the TS/MRF. However, RR Park businesses would not receive any gate fees directly from the public. All discarded materials requiring a gate fee to dispose of them would go through the TS/MRF gate. Lower fees would be charged for clean, source-separated materials.

It will then be up to the TS/MRF Operator to decide where to direct those materials. If the materials are not reusable, recyclable, repairable, compostable or salvageable, the TS/MRF Operator would direct them to the transfer trailers for transport to a distant landfill. If the RR Park is at the TS/MRF, the TS/MRF Operator could easily direct materials to the RR Park for reuse, repair, recycling and/or composting, and save the costs of transfer and disposal. With these savings, the TS/MRF could afford to pay a fee to the appropriate RR Park business to pay for the necessary processing costs to upgrade the materials into the most marketable product. Alternatively, the TS/MRF Operator would have the option to work with other reuse, recycling and composting businesses off-site to market these materials.

The RR Park would initially build upon business relationships between the TS /MRF Operator and reuse, recycling and composting businesses in the area. Space would be provided at the TS/MRF site for containers to collect recyclables for these different businesses. The RR Park businesses would transport these materials to their existing reuse, recycling and/or composting activities in Del Norte County for processing and sale to markets.

Over time, these initial activities at the RR Park would define the amounts of materials that could reasonably be diverted for RR Park businesses. Those businesses that were most successful in obtaining large amounts of materials would then be encouraged to lease space on the TS/MRF site to eliminate the haul costs and double handling of these materials. These hauling savings would be used to justify the lease payments in the RR Park.

As the RR Park businesses grow and thrive, the amount of space required for these activities will grow. Subsequent phases of development may be to develop new sites in other locations for designated clusters of reuse, recycling and/or composting businesses. The Authority could help develop these clusters and establish contractual relationships with developers of these projects. In these contracts, the Authority would offer its assistance in directing materials under its control to the cluster, and assistance in siting, permitting, and financing the cluster. In return, the cluster would commit to performing specific functions, using any equipment purchased for these activities (or giving it back to the Authority upon default), and providing the Authority with fees to support administrative costs of developing and overseeing the clusters.

There are several potential locations for these clusters that have been identified to date. The exact locations will depend on a variety of factors, not the least of which is the timing for all these expanded activities to develop.

The HHW activities are envisioned to be permitted as part of the TS/MRF and to be considered as part of the responsibilities of the TS/MRF Operator.

Several commercial enterprises have expressed interest in the Reuse and Repair Cluster of a RR Park to date, including:

1. St. Vincent de Paul of Eureka (SVDP Eureka): They would like to establish a facility for testing, repairing, salvaging, and re-manufacturing washers, dryers, refrigerators, mattresses and box springs. Specifically, they requested an OSHA-approved paint booth for the appliance re-manufacturing functions. Repaired or re-manufactured units would be re-sold at the retail portion of the RRP. Non-operational units would be placed into consolidated loads for parts and/or recycling.
2. St. Vincent de Paul of Crescent City (SVDP CC): They would like to move their reuse / resale operation to a RR Park, and are willing to administer the consignment sales of other tenants or affiliates of the RR Park. They would also provide any collection services supplying the RR Park tenants.
3. Rural Human Services: They have expressed interest in repair/remanufacturing of computers, peripherals, and consumer electronics. These items would be sold in the retail portion of the facility.
4. Warren Webb: This contractor is already actively salvaging doors, windows, lumber

and other potentially saleable items from buildings that are being demolished. He would be very interested in selling (and possibly storing and processing) such items through a RR Park.

Ideally, a single facility that could house all these functions, would be permitted for both retail and manufacturing activities, and would have a site plan that would allow for customers to drop off items for repair and/or salvage. While the Reuse and Repair Cluster was initially conceived to be in an industrial zone, subsequent discussions with potential businesses and nonprofits indicated that there was much stronger support for a shared retail area than there was in a shared processing / manufacturing area.

It is proposed that the first phase of the RR Park be to add reuse and repair activities at the TS/MRF site. This would include public drop-off of appliances for reuse and repair, and retail sales of refurbished items. Once enough business develops at the TS/MRF site, then a downtown retail location should be pursued as a location for these reuse and repair activities, and retail sales for all products from the RR Park.

ADMINISTRATIVE & FINANCING RECOMMENDATIONS

A RR Park will provide the public with a unique opportunity to **drop and shop**, to deliver all their discarded materials for reuse, recycling and composting, and to purchase innovative reused, recycled or compost products. If the RR Park is co-located with the Transfer Station/Materials Recovery Facility, it will be a convenient stop to find a home for all materials needing to be discarded.

A RR Park enables the public to:

- ◆ Decrease the amount of wastes requiring payment for disposal
- ◆ Recover some value from the sale of valuable materials in a “one- stop service center” for reuse, repair, recycling and composting
- ◆ Buy other items of value from reused, repaired, recycled, or compost products.

There are a variety of ways that a RR Park could be established, with different roles for the public and private sectors, and nonprofit agencies. The public sector could:

- ◆ Buy land and construct a building for the Park, obtain permits for the Park and lease space to tenants.
- ◆ Arrange access to land and a building under a long-term lease (possibly with an option to buy).
- ◆ Adopt policy and encourage private investor or nonprofit to develop Park.
- ◆ Establish a new nonprofit to develop and manage the Park (e.g., with the Board of Directors possibly including all businesses in the Park).
- ◆ Establish a cooperative to develop and manage Park.
- ◆ Pursue a combination of the above, as a public/private partnership.

There are a large number of tasks that need to be completed to establish and manage a RR Park. A project of this magnitude will require clear, continuous leadership over at least a 5-10 year horizon. The administering entity will also need to apply for a variety of grants and be capable of legally leasing space and contracting for services. The administering entity will also need to have a long-term public interest in the development of this project for it to obtain the resources needed to succeed.

It is possible that a non-profit agency or a private developer might be able to assume some or all of these responsibilities in the future. That would happen best as the result of a solicitation process that clearly outlined responsibilities, services and opportunities for someone to respond. In that case, the nonprofit or private firm could assume the lead responsibility for continuing to develop the Park, its facilities, and to act as landlord. The Authority could dedicate land at the TS/MRF and guarantee some of the waste stream for the Park as part of the solicitation process, and help the designated group to finance the project. The Authority and County Economic Development Department could also provide permit assistance, cooperative economic incentives, and work with the developers on grants and loans and public participation in financing.

Until such time as the logistics of that are worked out, the Del Norte Solid Waste Management Authority (Authority) is the entity best positioned to undertake a RR Park at this time and accomplish the tasks assigned below. The Authority could assume the role of RR Park developer and already has assembled a suitable project management team for this project.

The following are recommendations from GLA's Team of how best to proceed to establish and manage a RR Park in Del Norte County (summarized in Figure 2).

Planning & Siting

1. The Authority should work with the County Economic Development Office, Small Business Development Center and interested local businesses and nonprofits to add reuse and repair activities at the TS/MRF site as the first phase of the RR Park. This would include public drop-off of appliances for reuse and repair, and retail sales of refurbished items. Once enough business develops at the TS/MRF site, then a downtown retail location should be pursued as a location for these reuse and repair activities, and retail sales for all products from the RR Park.
2. The design and permits for the TS/MRF should include a full build-out of the RR Park on that site. The Authority should retain a part-time staff person or consultant as the most effective and efficient method to facilitate the many roles identified for the Authority.
3. The Authority should work with the Crescent City Planning Department to facilitate the location of dismantling, repair, and reconditioning businesses in the designated Reuse and Repair Cluster area.
4. The Authority should use the Site Plan diagram and project description being developed for this RR Park as part of this feasibility study to include designated facilities in the TS/MRF design, and other appropriate City and County plans, grant applications and permit applications.

Business Recruitment

1. GLA has prepared a "Recovery Cluster Analysis," a preliminary assessment of the types of facilities and businesses that could be developed in the RR Park. The Authority should review the Cluster Analysis with existing reuse, recycling and composting businesses and nonprofit organizations in the area, and other interested parties, to see if any other groups are interested in participating in the RR Park in the near term as an occupant or a market.
2. The Authority should adopt the short list of designated facilities to be pursued by local businesses, nonprofits or other interested parties described above as the Reuse and Repair Cluster at the TS/MRF and the HHW facility as the initial RR Park project description.
3. GLA will prepare initial outreach materials for the RR Park to attract facility developers and participants. The Authority should publicize the availability of these materials in outreach to local and regional businesses, and in regional

Figure 2 – Del Norte Resource Recovery Park Administration

Task	Del Norte SW Mgt. Authority	Property Owner	Small Bus. Dev.Ctr.	Del Norte County (Ec.Dev.)	St. Vincent DePaul, Eureka	St. Vincent DePaul, Crescent City	Rural Human Services (computers)	Warren Webb (used bldg.matls.)
Planning & Siting								
ID site(s)	X			X	X	X		X
Designate developer	X							
Business Recruitment								
Recruit tenants	X		X					
Permitting								
ID & get envt. permits				X	X			X
Land use permit				X	X			X
Comply with OSHA					X			X
Financing & Incentives								
Work w/grant recipient	X			X				
Administer grant				X				
Training								
Business training			X					
Mkt. development trng,	X							
Train employees					X	X		X
Administration								
Park master plan	X							
Park promotions	X							
Product promotions	X							
Park incentives	X							
Help access materials	X							
Prime leaseholder			X					
Lease improvements		X						
Administer leases			X					
Get shared equipment					X			
Administer amenities					X			
Administer insurance			X					
Payroll, taxes, acctng.			X		X	X	X	X
Operations								
Facilities management					X			
Shared equipment maintenance					X			
Pricing						X	X	X
Consignment payments						X		X
Collections						X		X
Process donations						X		X
Warehouse						X		X
Shipping						X		X
Hire/fire employees					X	X	X	X

- market development activities. The Authority should also publicize these materials via electronic listserves and trade publications, to develop the maximum potential for attracting additional business and developer participation.
4. The Authority and County Economic Development Office should work with designated local businesses and nonprofits to apply for grant funds to help establish facilities.
 5. The Authority should work with designated facilities to identify infrastructure needed for them to commit to project participation. The Authority should work with designated facilities to identify sources of materials needed for them, and how to attract those materials to the RR Park.

Permitting

1. The County Economic Development Office should assist proposed facility developers to identify the permits and environmental compliance requirements for identified facilities.
2. The Authority should use the information in these GLA reports as input to the TS/MRF Environmental Impact Report and other associated projects and documents. The Authority should seek outside funding to develop a Master Environmental Assessment to cover all anticipated uses of the RR Park as a key incentive for designated facilities.
3. The Authority should incorporate information from these GLA reports into the TS/MRF project description, impact evaluation, and mitigation, provided the net costs of such incorporation does not otherwise increase the expense of the EIR preparation (after considering the benefits of additional funding attracted to this project as a result of the RR Park design).
4. The County Economic Development Office should assist designated facilities to identify and obtain environmental permits and compliance with the CA Environmental Quality Act (CEQA).
5. The County Economic Development Office should assist designated facilities to obtain other local, state and federal permits (including land use permits and OSHA).

Facility Development & Construction

1. The Authority should work with the County Engineer and Building Department to develop standards and practices in construction with salvaged and recovered materials to encourage the use of products from RR Park businesses, to complement and support those RR Park businesses.

Financing & Incentives

1. The Authority should identify any special needs for financing for designated facilities and businesses.
2. The Authority should continue to work with community partners interested in launching a RR Park in Del Norte County. The County Economic Development Office is working with St. Vincent DePaul of Crescent City and Eureka, Warren

Webb and other community partners to participate in applying for Community Development Block Grant (CDBG) funding in 2001.

3. The County Economic Development Office will be the grant administrator for CDBG funds.
4. The Authority should identify existing governmental incentives that can be used to help develop the RR Park.
5. The Authority should work with the County Economic Development Office and designated facilities to identify and develop new governmental incentives to help develop Park, including procurement preferences for local reused, recycled or compost products.

Training

1. The Small Business Development Center (SBDC) should work with designated facilities to identify their training needs.
2. The RR PARK Administrator should arrange for business support training services identified as needed by designated facilities.
3. The Authority should arrange training for potential RR Park tenants.
4. The designated facilities should be responsible to train their own employees.

Administration

1. The Authority should acquire control of the site by a long-term lease.
2. The RR Park Administrator should develop lease agreements with RR Park tenants.
3. The RR Park Administrator should negotiate lease agreements with RR Park tenants for designated facilities.
4. The property owner should make leasehold improvements on the site for designated facilities.
5. The Authority should implement a marketing strategy and outreach for the RR Park.
6. The Authority should draft a joint marketing strategy with RR Park tenants for products of RR Park tenants.
7. The Authority should identify other RR Park amenities to be pursued as initial priorities.
8. The RR Park Administrator should take the lead in developing additional RR Park amenities.
9. The Authority should identify and procure equipment and services to be shared by RR Park tenants.
10. The RR Park Administrator should arrange for RR Park and tenant insurance.
11. The RR Park Administrator should assist RR Park tenants to arrange for payroll, taxes, bookkeeping, accounting and legal services.

Operations

1. The anchor tenant(s) should arrange for custodial, repair and maintenance services for the facilities.

2. The Authority and St. Vincent dePaul of Eureka should identify and procure equipment to be shared by Park tenants.
3. The Authority and St. Vincent dePaul of Eureka should repair and maintain RR Park facilities and shared equipment.
4. RR Park tenants should be responsible for all aspects of their retail sales (including pricing and payment for consignment items). Leases may provide a percentage of sales as one of the revenue streams to consider in establishing the fair market value of space in the RR Park.
5. St. Vincent dePaul of Eureka should receive and process all donations to RR Park tenants.
6. St. Vincent dePaul of Eureka should warehouse the inventory of supplies and materials.
7. RR Park tenants should be solely responsible for their own shipping of their products.
8. RR Park tenants should be solely responsible for their own hiring and firing of employees.

BENEFITS TO TARGET AUDIENCES

Highlights of the benefits of this approach are noted for the following groups to emphasize how a RR Park could benefit them.

Government and permitting agencies

The development of the RR Park concept should result in a more centralized effort for coordinating the enforcement of current and future regulations governing the environment and operations for a wide variety of reuse, recycling and composting businesses. By co-locating all these businesses together, some of the environmental controls that will be required may be shared by the different activities, enhancing the likelihood of compliance with all foreseeable regulations. In addition, the RR Park may provide new financing mechanisms for environmental and regulatory controls, and other financing tools that currently exist but may not be well understood by existing businesses.

Over time, the RR Park could develop a Master Environmental Impact Report to cover most anticipated Park activities. Getting this approved in advance would simplify the expansion or start of subsequent new recycling services in the Park dramatically.

All of this should result in greater compliance with regulatory requirements.

Landowners

The development of the RR Park concept should provide a positive, alternative use for properties in Del Norte County that have been closed or underutilized due to changes in the local economy.

For the initial project downtown, the RR Park project will bring together a number of smaller activities from the region, to form a larger effort together. Just the co-location of these activities should attract more customers, and result in a positive use of a location that is not currently being used.

For the larger RR Park concept, the added benefits of a project of this magnitude may encourage residents to support the Park. This would help overcome local community concerns about individual activities, due to the greater credibility of the Park and the fact that many groups will be involved to ensure that everything is done of the highest quality.

Administering entity - DNSWMA

The development of the RR Park concept could assist the Authority to make the collection, processing and marketing of reused, recycled and composted materials in Del Norte County more efficient.

The co-location of these activities will enable the public to more easily find the types of reuse, recycling and compost services they are looking for. The Authority will also be able to promote all these services together, providing a simpler message to include in printed materials, advertisements and radio and TV public service messages. The shared

services provided to tenants of the Park will make the individual businesses more cost effective, so they should be able to accept and market a wider range of materials than they could afford to do on their own. The shared expertise will also enhance all of these businesses efficiency, which should make them more profitable, contributing more to the local tax base and economy.

By making these activities more efficient, the Authority should be able to decrease the amount of wastes it is responsible to transfer to a distant landfill site, once the Transfer Station/Material Recovery Facility is operating. This will also enhance the overall waste diversion level in the County.

Potential RR Park tenants

The shared services provided to tenants of the Park will make the individual businesses more cost effective. Of particular interest in the initial phase of the project will be the potential for greater marketing of this larger facility and the products available than currently is being done for any of the local operations. Shared expertise of the Park tenants will also enhance the profitability of all of these businesses.

A RR Park enables the participating businesses to share:

- ◆ Space (including warehousing)
- ◆ Operating equipment (e.g., forklifts, balers, shredders, wheel loaders and trucks)
- ◆ Preventive maintenance and repair services
- ◆ Pollution control equipment and services
- ◆ Facilities (e.g., Maintenance yard, truck washing area, conference rooms, kitchen/break room, showers and bathrooms)
- ◆ Management and technical expertise
- ◆ Accounting, legal and insurance services
- ◆ Promotions and advertising costs
- ◆ Government affairs and permitting services
- ◆ Administrative and clerical support services
- ◆ Communications equipment and services (e.g., copiers, computers, internet access, websites, fax, radios, and phones)
- ◆ Staff recruitment and job training services
- ◆ Restaurant/snack bar for Park businesses and customers.
- ◆ Educational facilities and services (e.g., a nature trail, demonstrations of the use of different compost products in gardens and landscaping, on-site composting bins for residents and businesses, demonstrations of recycled building products in use and/or an environmental education display/museum as an additional attraction for residents to come).

A RR Park also helps participating businesses by matching wastes from one company to be used by another as a resource. A RR Park is an innovative, supportive and fertile ground for new ideas on how to expand reuse, recycling and composting in an area.

Companies will become suppliers to one another to:

- ◆ Decrease their disposal costs
- ◆ Increase their cash flow
- ◆ Build friendly networks in anticipation of beneficial trades to come.

Information will pass readily among businesses, and all will enjoy new opportunities to learn from one another the latest and most advantageous techniques. As the combined operation attracts more trade, the presence of so many people will create new niches for support businesses. A business ecosystem will gradually emerge that feeds on resource flows from the larger economy, adjusts to surges and droughts, and dries up waste before it has a chance to happen. This industrial ecology captures discarded resources before they are wasted.

In addition, reuse and recycling businesses in the RR Park could share:

- ◆ Knowledge and technology (networking among Park tenants on how to address technical problems)
- ◆ Showrooms for retail and consignment sales and temporary staffing support (including training area for new staff and for tours).

Alternative work forces

By designing the RR Park in a comprehensive way, there are many possibilities to use alternative work forces to meet the needs of the Park tenants (e.g., dislocated forestry workers, welfare to work clients, and the underemployed). The Small Business Development Center will support Park tenants with training on a wide variety of business problems and opportunities, to enable them to work smarter and more efficiently. Park tenants will also have many jobs that lend themselves to alternative work forces.

General public

Probably the group that will be the most interested in the success of the RR Park ultimately will be the general public. The RR Park will provide them with a unique opportunity to drop and shop, to deliver all their discarded materials for reuse, recycling and composting, and to purchase innovative reused, recycled or compost products. If the RR Park is co-located with the Transfer Station/Materials Recovery Facility, it will also be a convenient stop for all remaining discarded materials to be disposed of as waste.

A RR Park enables the public to:

- ◆ Decrease the amount of wastes requiring payment for disposal
- ◆ Recover some value from the sale of valuable materials in a “one- stop service center” for reuse, recycling and composting
- ◆ Buy other items of value from reuse, recycling, compost and recycled content retail stores.

ADMINISTRATIVE ISSUES

As noted in the Del Norte Zero Waste Plan, there are a variety of ways that RR Parks could be established, with different roles for the public and private sectors, and nonprofit agencies. The public sector could:

- ◆ Buy land and building for the Park, obtain permits for the Park and lease space to tenants.
- ◆ Arrange access to land and building under a long-term lease (possibly with option to buy), obtain permits for the Park and lease space to tenants.
- ◆ Adopt policy and encourage private investor or nonprofit to develop Park.
- ◆ Establish a new Nonprofit to develop and manage the Park, with the Board of Directors possibly including all businesses in the Park
- ◆ Establish a cooperative to develop and manage Park.
- ◆ Pursue a combination of the above, as a public/private partnership.

There are a variety of things a public agency could do to play an active role in the development of a RR Park, including:

Planning & Siting:

- ◆ Identify sites for a RR Park,
- ◆ Provide technical assistance in the form of business and marketing plan review
- ◆ Fast track permitting processes. Preparing a master development plan for the entire project. Preparing a complete environmental assessment of the entire project pursuant to the California Environmental Quality Act (CEQA). Hiring a permit coordinator to assist developers through the development review process. Fast-track plan check and permit process through engineering departments.

Management:

- ◆ Contract with someone to run the RR Park. For the RR Park, skills in marketing, management, real estate leases, recruitment of businesses and community relations will all be essential for the project's success.
- ◆ Participate in operations functions such as: scalehouse/gatekeeper, Park Manager, Retail Stores and Administration.
- ◆ Provide management services and act as a central point for business attraction
- ◆ Assist in marketing for the Park.
- ◆ Organize promotional events and Fairs at the Park to introduce the Park to the community.

Financing & Incentives:

- ◆ Provide grants and loans and other financing assistance. Educate lending institutions and other financing sources to business development opportunities and the needs of recycling-related businesses. Utilize Community Reinvestment Act policies to encourage investment in these projects.
- ◆ Provide public lands (e.g., former military bases and brownfields).
- ◆ Provide initial rent supports
- ◆ Provide bookkeeping and tax advice (possibly through a contract with a CPA or Small Business consultant).
- ◆ Subsidize the cost of collection and disposal of garbage illegally dumped at the gates of the Park after it's closed.
- ◆ Waive permit and development fees.
- ◆ Assist in obtaining long-term commitments of feedstocks.
- ◆ Rent and a portion of the sales tax revenue derived from the sale of items at the Park could be used to cover the costs of managing the Park.

The analysis below will review these issues and make recommendations for Del Norte County on how to address them locally.

Tasks for Establishment and Management of RR Park

The following is a listing of the key tasks necessary to establish and manage a RR Park.

Ownership

1. Determine who will own the facilities.
2. Determine who will guarantee the initial financing of the facilities
3. Determine who will administrate the facilities

Planning & Siting

1. Identify the project site(s) for RR Park or recovery clusters.
2. Designate RR Park developer and project management team (agency, staff and consultants).
3. Identify infrastructure needs for designated facilities.
4. Identify sources of discarded materials needed for designated business facilities and what impact these materials will have on the zoning and neighborhood and how to attract those materials to the RR Park.
5. Revise zoning, if necessary, to facilitate the co-location of RR Park businesses in designated areas.
6. Develop Master Plan for the RR Park, including designated facilities.

Business Recruitment

1. Prepare "Cluster Analysis" preliminary assessment of types of facilities and businesses that could be developed in the RR Park
2. Review Cluster Analysis with existing reuse, recycling and composting businesses and nonprofit organizations in the area, and other interested parties.

3. Develop short list of types of designated facilities to be pursued by local businesses, nonprofits or other interested parties.
4. Develop outreach material to attract facility developers.
5. Work with local businesses and nonprofits to apply for grant funds and establish facilities.

Permitting

1. Identify permits and environmental compliance requirements for identified facilities.
2. Develop Master Environmental Impact Assessment to cover all anticipated uses of RR Park.
3. Assist designated facilities to obtain environmental permits and compliance with CA Environmental Quality Act (CEQA).
4. Assist designated facilities to obtain other local, state and federal permits (including land use permits and OSHA).

Financing & Incentives

1. Identify special needs for financing for designated facilities and businesses.
2. Identify grants and financing sources available to the project for future reference.
3. Identify interested grant recipients.
4. Identify grant administrator.
5. Identify existing governmental incentives that can be used to help develop Park.
6. Develop new governmental incentives to help develop Park, including procurement preferences for local reused, recycled or compost products.
7. Developing financing plan and method to select financing agency.

Training

1. Identify training needs and responsibilities for designated facilities.
2. Arrange for business support training services.
3. Arrange for reuse, recycling, and/or composting market development training.
4. Train Park tenant employees.

Administration

1. Acquire control of site (i.e., ownership or long-term lease).
2. Develop lease agreements for RR Park tenants.
3. Negotiate lease agreements with RR Park tenants for designated facilities.
4. Make leasehold improvements on site for designated facilities.
5. Implement marketing strategy and outreach for Park.
6. Draft joint marketing strategy with Park tenants for products of Park tenants.
7. Identify other RR Park amenities to be pursued as initial priorities.
8. Identify and procure equipment and services to be shared by Park tenants
9. Arrange for Park and tenant insurance.
10. Arrange for payroll, taxes, bookkeeping, accounting and legal services for Park tenants.

Operations

1. Provide facilities custodial, repairs and maintenance services.
2. Identify and procure equipment to be shared by Park tenants.
3. Repair and maintain Park facilities and shared equipment.
4. Retail sales (including pricing and payment for consignment items) from Park tenants.
5. Receive and process donations to Park tenants.
6. Warehouse inventory of supplies and materials.
7. Shipping of Park tenant products.
8. Hiring/firing of Park tenant employees.

Legal Issues

Legal issues include: respective responsibilities and liabilities of the parties involved; how to structure rents or leases; how to allocate shared costs for services, equipment, and supplies; insurance requirements; termination provisions and how to address initial investments made if the partnership dissolves.

GLA has been advised that the Authority would prefer a privately owned and operated RR Park as it limits risk to the Authority. Authority staff has indicated that it is the lead permitting agency. GLA understands that the construction of a RR Park will likely be on Authority land under long term lease which may be co-located to an existing and operating facility and that all anticipated improvements and business operations on the site for the RR Park are currently permitted by applicable planning and zoning regulations which are unlikely to be changed. GLA understands that the siting and operation of a RR Park is also consistent with the County's Integrated Waste Management Plan.

The feasibility of a RR Park as a private venture depends entirely on whether the projected rental income from the project operation (plus business profit if the operator / developer also maintains a business on site) significantly exceeds the amortized hard and soft costs of the development and build-out process plus the ongoing overhead of the property. The projected rental income and business profit not only depends upon ordinary business and market factors but also is affected by any regulatory impairment to material access such as flow control. It is anticipated that the feasibility of this project for private ownership and operation will require some level of government subsidy whether in grants or loans, improvements upon or long term lease of government owned property at favorable terms, permit leniency or fee waivers and the like. In this context, it may be necessary or attractive to have the private owner / operator include, by a joint venture or other joint ownership, a non-profit "partner" which has access to funding not available to full profit enterprises.

Aside from considerations of price and suitability of the land for its intended purpose, the feasibility of any land development is most affected by the level of support by the government agencies with permitting authority; secondly by the level of support from such agency's staff in implementation and recommendations to the governing boards

which issue the permits; and thirdly, the surrounding community. Lack of support from the governing boards is generally fatal to the project, as overcoming the lack of support is often cost prohibitive. Likewise, lack of support from staff or the surrounding community directly correlates to increased project costs. Conversely, support from government agencies as catalysts and organizers of a RR Park could make it much more attractive for private investment.

Siting Issues

The relationship between the proposed Transfer Station /Material Recovery Facility (TS/MRF) and the RR Park is one of the largest issues that needs to be resolved. One of the strong recommendations from the GLA Team is to locate the RR Park at or very near the TS / MRF. If they are not located in the same area, they could compete for receiving materials salvaged or dropped-off by self-haulers. It would be best to avoid such segmentation given the small scale of the project already. Instead, consolidation and concentration of resource recovery activities in Del Norte County should be encouraged to enhance the overall efficiency and economics of waste diversion in the County. As a result, identification of appropriate locations for a nearby RR Park should be considered as part of the criteria in the siting of the TS/MRF. Conversely, the siting of a comprehensive RR Park should be done after the TS/MRF location has been selected.

However, to start down the path towards a RR Park, the Recovery Cluster Analysis highlighted that there were six clusters of recovery activities that should be encouraged:

- ◆ Reuse & Repair Cluster
- ◆ Recyclables Cluster
- ◆ Organics Recycling Cluster
- ◆ Metals Cluster
- ◆ Inerts Cluster
- ◆ Household Hazardous Wastes (HHW) Cluster

These are natural combinations of related business activities that could benefit immediately from co-location. In the event that a single site is not available immediately for a single RR Park, the establishment of these six clusters could still enhance waste diversion in Del Norte County.

If a RR Park is sited at an existing industrial location in Del Norte County, it is likely that this project would be consistent with planning and zoning requirements. It is likely that compliance with the California Environmental Quality Act (CEQA) can be met by a mitigated negative declaration.

Although this is better from a siting perspective, reuse businesses have noted from a sales perspective, it might be better to site the Reuse and Repair Cluster in, or close to, a commercial zone. At a Reuse Innovators Forum in the Fall of 2000, the former Square

Deal building in downtown Crescent City was identified by reuse businesses as a potentially attractive retail space for this venture. Authority staff met with Diane Mutchie and Dave Brewer of the City of Crescent City in December 2000 to walk through the Square Deal building to assess its feasibility for this use.

As this building has been vacant for some time, it would need to be brought up to Uniform Building Code standards, which would include creating handicap access, installing 2 downstairs bathrooms, installing an approved heating and ventilation system, and constructing an approved staircase, among other things. More significantly, City staff also indicated that the drop-off of items for reuse, and all manufacturing-related activities, and storage of hazardous materials (e.g. Freon removal) would not be conforming uses for the commercially-zoned property, and would require a CEQA review and some acceptance of the proposed non-conforming use by the City Planning Commission and/or the City Council.

In addition, CDBG funds are targeted for equipment purchases that foster the creation of low-income jobs, and these jobs are intimately linked to manufacturing. As manufacturing is not allowed within the City's commercial zoning, to use the Square Deal building for the Reuse and Repair Cluster would require some special allowances by Crescent City, or jeopardize significant CDBG funding. The City Planning Commission and/or City Council might be willing to allow acceptance of the proposed non-conforming use, or some modification of the definitions of allowable activities in this zoning to accommodate this activity. The Authority could approach the City to re-define the permitted uses of the commercial zone in a manner that allow such repair and manufacturing uses in this zoning, or combine that allowance with an overlay that limits this use to a specific geographical area for zoning purposes. This would facilitate other similar businesses locating in this area in the future

It is proposed that the first phase of the RR Park be to add reuse and repair activities at the TS/MRF site instead of proceeding with the Square Deal building at this time. This would include public drop-off of appliances for reuse and repair, and retail sales of refurbished items. Once enough business develops at the TS/MRF site, then a downtown retail location could be pursued as a location for these reuse and repair activities, and retail sales for all products from the RR Park. In addition to retail sales at the RR Park, the downtown store would provide another opportunity for people who are just out shopping to avail themselves of the bounty of reused and recycled products from the Authority's resource recovery activities.

Whichever site or sites are ultimately selected, all environmental impacts must be considered so that compliance and permitting costs can be projected for the full range of anticipated project businesses. In addition to the General Plan, specific plans, zoning, and CEQA compliance, there may be a variety of ordinances that impose additional development requirements for building, dedication, impact fees, and offsite improvements, some of which are not obvious to find. Generally the scope of the project

needs to be detailed, then the permitting authorities will indicate what is allowed to be built and what they will make the businesses do to build it.

It is also recommended that the Authority develop a complete environmental assessment of the entire project that describes the scope, types and operational details of projects and facilities that are planned, and an analysis of the potential impacts that may result from those projects. The Recovery Cluster analysis provides a summary of the types of businesses that may be likely in Del Norte County. The benefit of this approach is that the potential environmental issues, their impacts and mitigations need not be examined again if a project is proposed that fits in all respects within the envelope of coverage of the general environmental document.

This should be viewed as a medium term task that would be an additional benefit for potential businesses to participate in a second phase of the RR Park development. It should not hold up the first phase activities of siting and developing the Reuse & Repair Cluster at the TS/MRF. However, by developing this comprehensive environmental assessment, the Authority will enable any of the anticipated businesses to be developed in much less time than would otherwise be required for permitting processes.

The Authority should assign responsibilities to a staff member or consultant to seek outside funding to develop this environmental assessment, and to assist developers through the development review process. This staff should also assist with conducting plan checks and permit compliance processes on a fast-track basis through engineering departments during the construction phase as well.

The primary issues for a RR Park relate to air quality and traffic. Issues of less significance would be water usage, water quality protection, and the presence and transportation of hazardous wastes and hazardous commodities such as fuels and chemicals that would be public health and safety issues.

Other potential environmental impacts from those businesses include:

- ◆ Noise
- ◆ Water supply
- ◆ Wastewater treatment
- ◆ Storm water run-off
- ◆ Geology and seismology
- ◆ Public health and safety
- ◆ Utilities
- ◆ Vegetation and wildlife
- ◆ Archaeological, historic and cultural resources
- ◆ Visual and aesthetic
- ◆ Environmental justice

The loudest and/or most industrial equipment of the Reuse & Repair Cluster could include: a baler, forklift, planer, band saw, and other woodworking power tools. Freon

removal may also be part of the refrigerator repair operations. Storage of hazardous materials in addition to the Freon would be minimal, though parts washing may result in some paint, sludges, and solvents being stored on site, as well as some vehicle lubricants. No on-site fuel tanks are envisioned.

These environmental issues must be identified and initially reviewed with staff of the Authority and then any other reviewing jurisdictions (local, state or federal). At the same time, siting issues relating to current level of on site improvements and off site, ingress and egress must be reviewed and considered with the Authority and other permitting agencies.

Tenant Management Issues

In a typical private development model, the project developer either sells the improved property to an entity which will manage and operate the RR Park or the developer serves as, or contracts with, a management company and continues to own the Park. It is possible in either circumstance that the developer may take some space within the Park to operate a consistent business directly or through an affiliated company.

In virtually any multi-tenant operation there needs to be a management structure where the common areas of the project are managed and maintained by a site manager which passes on these expenses to the tenants (usually pro rata based upon relative square footage) and where the tenant's operations must fit within a common set of rules and regulations governing the Park. In the end, these tenants not only must adhere to their respective subleases but also to the common rules which can set hours of operation, designate parking areas, regulate signage and other displays, and the like. In essence, the RR Park is run and functions much like a shopping mall (see description of shopping mall model in "Administrative Models" below).

In the initial phase where prospective tenants are identified, ideally there would be preliminary negotiations so that individual tenant's building improvement needs are identified and factored into the construction, and the cost of construction is later passed on to the tenants via rent. It is also possible that the tenants may directly contribute certain building improvement costs for their own space. If these tenants are non-profit enterprises or have access to non-profit funding, the funding source for the non-profit is an additional means to fund or finance some of the project costs.

Among the many issues to be addressed in the tenant negotiation and the drafting of leases and park rules are:

- ◆ Complete identification of all operating expenses to be passed through to tenants inclusive of management soft costs and all taxes and assessments against the park realty. A net lease passes through one or more items of operating expenses to tenants. A triple net lease passes through taxes, operating expenses and insurance on leased

premises. The lease developed for the Park needs to clearly detail whether it is a net, or triple net lease.

- ◆ Calculation of leasable area (square footage which typically adds up to less than 100%) and calculation of nonusable square footage allocated to tenants for purposes of computing the pro rata share of common area expenses (including utility rooms, bathrooms, structural support columns). As square footage can be calculated in different ways, it is important to have a clear calculation detailed in the lease. The lease needs to clearly identify if tenant is responsible for a greater share of costs if other space is vacant or if management assumes that risk (calculating rent based on total leaseable space).
- ◆ Scope and terms of any negotiated build out to suit individual tenants, any allowances provided for the tenant to perform renovations required for its business, and approvals required by management before improvements made. If allowances provided, the lease should require that a portion of that allowance be repaid if a tenant moves out before the end of their lease. The lease should also clearly identify what items a tenant may remove upon termination (considered as “fixtures”).
- ◆ Rent, preferably with a specific dollar amount, including escalator clauses and consideration of percentage based rent (based on a gross sales breakpoint or other performance measure, and audit rights to verify). Management may include an administrative fee, in addition to reimbursement of actual expenses, often as a specified percentage of specified expenses in the lease.
- ◆ Reservation of space for exclusive use by landlord.
- ◆ Complete description of leased premises, including description of common areas and shared facilities, equipment and/or services, and any utility easements or other building or access constraints.
- ◆ Lease duration and a method of renewal and extension options. Tenants may want a shorter initial term, with rights to additional renewal terms.
- ◆ Clear description of lease commencement, possession, rent commencement and termination dates, as tenants may want to take possession for making improvements prior to opening for business and cash flowing in to pay for rent. Also, some tenants may not be willing or able to move in until other tenants have moved in that they are relying upon for use of shared equipment and/or services. This may require contingency clauses to clearly spell out how and when tenants follow each other into the Park.
- ◆ Commitment of management to cooperate with tenant in obtaining necessary government approvals (e.g., zoning, building permits, environmental permits, sign permits). For businesses with long permitting processes, commencement of leases and/or rent may be contingent upon obtaining such approvals.
- ◆ Management should ensure that the leased premise currently complies with existing laws and regulations. Tenants should commit to comply with all applicable laws. If a tenant triggers compliance with a law in the future that requires structural changes (e.g., Americans with Disability Act), then the tenant should commit to paying for those changes, or terminate the lease.
- ◆ Regulations concerning tenant’s business operations, including any limitations or requirements on what are legally permitted uses of the facilities.

- ◆ Ability to relocate tenants if desirable upon notice.
- ◆ Leases should include a subordination clause in favor of one or more mortgage lenders, and to recognize the lender as the landlord under the lease, to facilitate mortgage financing of the Park. In return, tenants may request a non-disturbance clause that ensures the lease remains in effect upon future mortgaging of the property, so long as the tenant has not defaulted on the lease.
- ◆ Insurance requirements for tenants and overall facility and Park coverage provided by management, including personal property, casualty and public liability insurance. Management should name tenants as additional insured on common area liability policy.
- ◆ Noncompete covenants (or not) within the Park. Park may want to limit the number of any particular type of business, to maximize the value of the lease to the first business of a particular type locating there. In this situation, management may ask tenants not to establish other tenant locations within a particular radius of the leased premises. Conversely, the Park may choose to attract many businesses of a particular type (e.g., reuse and repair businesses or thrift shops) to maximize the chance of consumers finding exactly what they want in this one general location (like an auto mall).
- ◆ Policy regarding sublet and assignment and landlord's capture of increased rental upon sublet or assignment. Need to clearly establish how to address consolidations, sale of stock and/or mergers and whether management approval is required, if these would affect the nature of other business relationships within the Park.
- ◆ Who has what obligation to perform what repairs and maintenance in common areas (such as roof and painting of exterior of buildings), shared services (e.g., heating and cooling), shared equipment (e.g., forklift or baler) and areas dedicated to tenant (e.g.; loading docks). Leases should anticipate how costs are allocated if equipment or facilities require replacement. Tenants may be provided the right to make repairs or replace equipment if management fails to do so, and may or may not be allowed to deduct the cost of those repairs from rent.
- ◆ Who has what obligation to pay for which utilities and common services (e.g., security, cleaning, lighting) and which costs vary with occupancy rates and which don't.
- ◆ Allocations for taxes, and rights to protest taxes by whoever is paying them.
- ◆ Responsibilities of management for Park advertising and Park signage, including listing of businesses within the Park. Leases often include a Promotional Fund to which tenants contribute for overall advertising of the Park, based on square footage of leased space. Also, any limitations on placement, size and approvals required for artwork for signs for individual businesses should be clearly stated.
- ◆ Responsibilities for shared facilities for receiving and deliveries, display and sale of products, or for education and demonstrations.
- ◆ Responsibilities for internal roads and parking areas, and allocation of designated parking spaces for specific tenants, management and customers.
- ◆ Responsibilities for environmental problems need to be clearly delineated. Tenants should be apprised of the status of environmental issues at the time of leasing. Tenants may also want the right to use hazardous materials (e.g., oil, gasoline,

cleaning supplies) that are used in the operation of the tenant's business as long as they are in compliance with applicable law. Tenants and management both need to indemnify each other regarding the costs of their own environmental cleanup.

- ◆ Landlord's right of access.
- ◆ Rights of the parties in the event of condemnation and an objective standard for when a taking prevents a tenant from using the leased area for the purpose set forth in the lease. At the point of notice of condemnation, tenants should have the right to terminate the lease, modify the terms and conditions of the lease to adjust for the taking, or seek compensation from the condemnation proceeding for moving expenses, unamortized costs of tenant improvements and any other value lost due to a move.
- ◆ Rights of the parties in cases of damage or destruction, partially or of the whole premises. Management's insurance should clearly be written to rebuild, not just pay the mortgage. Rent should be abated during the period of repairs if tenants cannot operate, on a pro rata basis.
- ◆ Continuous operation clauses ensure that tenants do not cease operations for a long period while continuing to pay base rent. A closed operation for one tenant could negatively impact other tenants and the full Park, so it needs to be discouraged.
- ◆ Indemnity obligations and provisions for default and breach. Both parties should be provided with sufficient notice and opportunity to cure any defaults before further actions being taken.
- ◆ Notices should be allowed by fax, overnight courier service and/or email, in addition to any notices sent by mail.

Primarily these issues are set as a matter of policy by the landlord and are captured in a form sublease which terms are not typically very negotiable by the subtenants. The main negotiable legal points are the term and the tenancy and renewal options.

Responsibility for oversight and monitoring of the Park and performance by subtenants is typically done by property management, which may or may not be onsite.

Development Entity Internal Structure

The typical structure for a private developer/operator is the formation of a single purpose limited liability company (LLC). In a LLC, the members are the equivalent of a corporate shareholder and the managers are the equivalent of corporate officers. Limited liability companies provide the flexibility of internal operating structure that formerly was gained in partnership or joint venture agreements while keeping the liability shield and perpetuity features enjoyed by corporations.

For purposes of accounting as well as limiting legal exposure, a developer will typically form a new entity for the sole purpose of developing or operating a single project.

The governing structure of a LLC is an operating agreement that will provide for termination/withdrawal/dissolution provisions, including buy-sell provisions, among the

members as well as the structure for the appointment of management. Oftentimes individual members will be asked to give personal guarantees to project lenders. A corporation itself may be a member of an LLC.

Flow Control

Under current California law, cities and counties (and special districts) may grant exclusive franchises for the collection of solid waste. The term solid waste has been defined by the California Supreme Court to mean material that the generator pays to have taken away. Material that is sold by the generator, or, arguably, material that is donated by the generator, is not solid waste and is not within the legal scope of an exclusive franchise.

Many materials that are accepted and processed and used in a RR Park lack sufficient market value to be purchased by a collector from a generator. Materials may have some value after processing, and will be attractive to the generator to reuse, recycle or compost if the costs of collecting and processing those materials are less than it would cost to have those hauled away and disposed of as wastes. Accordingly, if such materials are within the scope of an exclusive franchise there is market impairment in the collection process which then impacts the market in the downstream processes of tipping fees, processing and sale. By example, if a tenant within the proposed RR Park sorts and processes mixed construction and demolition debris and all drop boxes at construction sites are placed by an exclusively franchised collector, the RR Park tenant is entirely dependent upon one supplier.

It is very important that the feasibility of the project considers the geographical supply and sources of material coming in to RR Park tenants and determines whether there are existing flow control ordinances within those jurisdictions that impair the supply.

Within Del Norte County, the existing franchise with Del Norte Disposal² says:

“To the extent allowed by law, this Franchise is exclusive for the purposes of providing Recyclables Collection services to Single-family and Multi-family residences within the Franchise Area on a fee-for-service basis. *Nothing in this Franchise Agreement infringes upon the right of a resident from donating or selling Recyclable Materials* from Single-family or Multi-family Residential sources to any party of their choice. (§4.1C.1.)

“This Franchise is *non-exclusive* for the purposes of providing Recyclables Collection services to *Commercial and Industrial establishments*. (§4.1C.2.)

² Franchise Agreement for Solid Waste and Recyclables Collection Services for Crescent City and Del Norte County, CA, May 8, 1996.

“Not included in the definition of Solid Waste are Hazardous, Medical and Infectious Waste, *and source-separated recyclable materials*. (Article 1, Definition of “Solid Waste”)

“Recyclable Materials” or “Recyclables” means domestic, commercial or industrial discarded materials intended for and capable of being recycled, and that are *separated, set aside, handled, packaged or offered for Collection by a Waste Generator in a manner different from Solid Waste*, and specifically includes, without limitation, all glass, paper, plastic, metal, wood waste, and yard waste, separated from Solid Waste by Generators. (Article 1, Definition of “Recyclable Materials”)

The franchise has a generator intent driven dividing line between commercial waste and recyclables that allows commercial collection of commingled recyclables even if there is some residue. All these clauses read together mean that commingled recyclables set aside different from solid waste would be allowed, although the franchise would NOT allow a commercial solid waste load to be taken by a recycler to be sorted apart back at a MRF.

This franchise language should not limit materials flowing to the RR Park from within Del Norte County. However, this issue may become more important for one or more projects at a RR Park if they require additional materials from surrounding areas to support their operations.

Materials governed by exclusive franchises or policies affecting the landfill may also be directed by the governing bodies to the Resource Recovery Park. In San Diego County, when the County owned the landfills, it mandated that businesses separate designated recyclable materials from the waste stream. The County exerted its authority over this requirement by its enforcement at the gate of the landfills. In Del Norte County, similar mandatory source separation policies could be adopted to govern the remaining years of the landfill, and then the Transfer Station/Material Recovery Facility.

Financial Issues

Among the many financial issues to be addressed in the tenant negotiation and the drafting of leases and park rules are:

- ◆ Who will own the facilities and what are the financial implications of ownership.
- ◆ How initial siting, permitting, and construction costs will be raised and shared.
- ◆ Complete identification of all operating expenses to be passed through to tenants inclusive of management soft costs and any all taxes and assessments against the park realty.
- ◆ Calculation of leasable square footage (which typically adds up to less than 100%) and calculation of nonusable square footage allocated to tenants for purposes of computing the pro rata share of common area expenses.
- ◆ How utilities will be shared.

- ◆ Rent, inclusive of escalator clauses consideration of percentage based rent (and audit rights to verify).
- ◆ Policy regarding sublet and assignment and landlord's capture of increased rental upon sublet or assignment.
- ◆ Who has what obligation to perform what repairs and maintenance.
- ◆ Who has what obligation to pay for which utilities.

As noted above, these issues are usually set as a matter of policy by the landlord and are captured in the form lease. These terms are not typically very negotiable by the tenants. The main negotiable financing points are the particulars of the scope of the build out and the responsibility of the payment of the build out, the rental and any escalating features.

Shared Space, Equipment & Services

An incubator for new recycling businesses could provide a lower cost location for such businesses to grow and prosper. Businesses are provided with resources shared among other businesses. Small business incubators typically provide small sized commercial or manufacturing space, lower end of market rents, pooled administrative services, free or low cost technical assistance to qualifying tenants. These services could include conference rooms, copiers and faxes, receptionists, bookkeeping, and business technical assistance (e.g., review of business and marketing plans).

Different types of incubators could be developed, depending on local needs and resources, including:

- ◆ Graduating Incubator - The goal of the graduating incubator is to support businesses until they are strong enough to move to their own location.
- ◆ Non-graduating Incubator – The non-graduating incubator supports businesses until they are strong enough financially to become fully independent. In this model, a single business or administrative entity could be the incubator, or several businesses could pool their resources to jointly own the facility. Successful businesses could stay in the Park, with new businesses beyond the original ones being accommodated in locations adjacent to the initial incubator facility, or by moving some of the shared services (e.g. restaurant, showroom) to adjacent buildings.

Amenities

In order to make the RR Park a destination point for residents and businesses, the Park could include a variety of amenities. There could be many reasons why residents and businesses would want to come to the Park. In planning a RR Park, space could be set aside for some of these activities, even if they are not able to be built as part of the initial stages of the Park's development.

Some of these improvements could be built as tenants locate in the Park. Other of these improvements could be built as grants and other funding become available over time. Funding for these amenities could come from solid waste or other funding sources. For example, a Parks and Recreation Department could provide funding for a playground or small amphitheater. Including other government departments in the planning process would encourage them to keep the RR Park in mind for funding and new programs.

Park amenities could include:

- ◆ Nature Walk: Pathways, interpretive and warning signs, viewing platforms near points of interest, built from reused/recycled/compost content products.
- ◆ Children's Playground: Playground equipment, surface finish, fencing built from reused/recycled/compost content products.
- ◆ Amphitheater: A small outdoor amphitheater for summer arts and nature programs (like Recycletown in Sonoma County provides).
- ◆ Demonstration Sites: For production and use of compost, native plants, and Integrated Pest Management to conserve water and decrease wasting. This could be located on either side of a pathway leading to the main entrance of a RR Park.
- ◆ Artist in Residence and Displays: Provide workspace for artist(s) in residence who could assist all Park businesses in creative design. Art from scrap and recycled products could be prominently displayed throughout the Park.
- ◆ Classroom: Provide classroom to host recycling and community programs, including Master Composter or Master Gardener training, Commercial Auditor training, recycled art classes or nature interpretive courses.
- ◆ Showroom: Develop room to showcase products manufactured, remanufactured at this site and for other reuse/recycled content manufacturers in the area. Products would be available for sale from the Showroom and guides would be available to other resale/stores to purchase other merchandise. If there is an Artist in Residence program, the Artist's workplace could be part of the showroom, to highlight how products are made. The showroom could also include temporary displays (e.g., children's environmental theme projects).
- ◆ Environmental Education Display/Museum: Provide environmental displays and/or environmental education museum as part of the Park to attract families to attend.

Monitoring

Monitoring issues include quality standards to be included in Codes, Covenants and Restrictions or local permit conditions. These would be included as part of lease agreements with all RR Park tenants. The management of the RR Park would monitor compliance with quality standards and notify tenants when out of compliance. Park rules should clearly stipulate the penalties for non-compliance with such rules, including financial penalties, lack of access to shared services, and/or termination of the lease.

Reporting

One of the unique aspects of a RR Park is the role it could play in helping the community meet the diversion requirements of AB939, the CA Integrated Waste Management Act.

Reporting could be required in a format that enables the Authority to report all diversion activities in Annual Reports to the CA Integrated Waste Management Board required under AB939.

MODEL ADMINISTRATIVE STRUCTURES

There are many ways that facilities could coordinate ventures like a RR Park. Models of such administrative structures include:

- ◆ Existing RR Park
- ◆ Solid Waste Authority
- ◆ Airport Authority
- ◆ Eco-Industrial Parks
- ◆ Tribal Master Plans
- ◆ Shopping Mall

The administrative structures for these facilities have many common elements. A description of each of these models highlights many of the administrative issues that they address. These should provide significant insight to the development of a RR Park.³

Existing RR Park

In 1999, Urban Ore lost its lease on its old site and the landlord wouldn't sell them the property. Urban Ore thought they might have to leave Berkeley or even go out of the building materials reuse and recycling business if they couldn't find a site. But then Urban Ore got tremendous support from the City of Berkeley, the Alameda County Waste Management & Recycling Board, and the CA Integrated Waste Management Board (CIWMB).

Urban Ore is in the process of developing a 2.2-acre RR Park in a former steel pipe manufacturing facility in Berkeley, California. The building itself is a reuse demonstration project, and it will house a collection of reuse businesses and small manufacturers.

Urban Ore is moving its 2 acres of used goods to this new leased location, on 7th Street 1/2 block south of Ashby, right off Interstate 80. It's a great location with great visibility. There are two major lumberyards, a hardware store, and two other reuse facilities within three blocks, providing a steady stream of potential customers flowing nearby. However, as Urban Ore was in one location for 18 years, it will take time to reorient people to a new location.

Urban Ore has several departments:

³ Much of the data describing the Urban Ore and Monterey RR Parks was excerpted from a case study "Resource Recovery Parks" drafted by Gary Liss & Associates for the CA Integrated Waste Management Board, August 2000.

- ◆ Building Materials Exchange
- ◆ Hardware Exchange
- ◆ Arts and Media Exchange
- ◆ General Store
- ◆ Salvage and Recycling

Urban Ore will have subtenants whose businesses focus on reuse or manufacturing from recycled feedstocks. It will be like a mall based on recovering materials and keeping resources in the economic stream. Although no subleases have been signed yet, potential subtenants include a:

- ◆ Nonprofit that rebuilds and upgrades computers and then sells them at low cost to low-income people
- ◆ Company that makes fancy countertops out of recycled glass embedded in Portland cement (looks like granite).
- ◆ Overflow warehousing for another reuse company
- ◆ Blacksmith who makes things out of scrap steel.

Urban Ore is leasing this private property, and then subleasing space as any mall developer would do. Urban Ore is solely responsible for both the operations and the financing of this facility.

Urban Ore is exploring interest in shared overhead or equipment as part of its negotiations with potential tenants. So far, they are in discussions with one enterprise for ways to share or trade supplies and services, as well as selling each other's products. They will also be designing in a big meeting room to host community and recycling groups, training for employees on site, and classes on how to use recycled building materials.

The support for Urban Ore's RR Park began with a unanimous City Council vote in the spring of 1999 instructing staff to do whatever they could administratively and financially to keep Urban Ore in Berkeley. The results were astonishing.

City staff provided creative problem-solving at every step of the way and:

- ◆ Amended its zoning to permit a new use, "Materials Recovery Enterprise," in the Mixed Use-Light Industrial zone.
- ◆ Provided extensive staff assistance on a fast track basis which identified and corrected deficiencies in the area specific plan which otherwise prohibited reuse business within the zone.
- ◆ Provided extensive staff assistance on a fast track basis for processing of necessary use permit and building permit applications. Issued a use permit in record time.
- ◆ Provided a \$100,000 low-interest rate, long term, interest payment only, loan
- ◆ Waived permit fees
- ◆ Provided waivers, where possible, of certain site-improvement permit conditions.

- ◆ Provided a renewed salvaging license

The Alameda County Waste Management & Recycling Board gave Urban Ore a \$100,000 grant to spend as needed so they could either buy the property they had or move to a new site. The CIWMB executed a \$200,000 service agreement with the City, to make this RR Park a demonstration facility of reused and recycled content building materials.

For Urban Ore, last year's site crisis has turned into a huge opportunity. Urban Ore now has a ten-year lease with two five-year options on the property. Construction will cost around \$750,000 to adapt the facility.

The construction will be partially financed by the service agreement between the CIWMB and the City of Berkeley. The City will contract with Urban Ore to provide the demonstration facility and become a showcase for how to use recycled building materials in a large building. Urban Ore will include an educational display on the materials, provide a self-guided tour, and offer other information and classes.

The public agencies are providing the cash for Urban Ore to use in adapting the facility and loan guarantees so they can borrow. They are also helping with connections to other businesses, and getting permits. In short, it was a highly unusual commitment of city resources to provide critical assistance to an enterprise, without which the project would not have been possible.

Solid Waste Authority

The Monterey Regional Waste Management District (MRWMD) is a good example of the role that has been played by a Solid Waste Authority in establishing and operating a RR Park. The MRWMD operates a Regional Environmental Park in Marina, California. The Environmental Park includes one of the first RR Parks in California, and a water pollution control facility that handles most of Monterey County's biosolids (sewage sludge).

Geographically, the MRWMD extends from Moss Landing in the north to Big Sur in the south, with the Pacific Coast forming the west boundary and the Salinas Valley forming the east boundary. The service area is 853 square miles, and the service population is 170,000.

The RR Park includes a 315-acre permitted sanitary landfill site, a 126-acre buffer area (mostly Salinas River floodplain), and 20 acres for the administration building, scalehouse, public drop-off recycling station, resale facility (Last Chance Mercantile), maintenance buildings, landfill gas power project, materials recovery facility (MRF), and a permanent household hazardous waste collection facility. In addition, construction and

demolition (C&D) recycling operations, composting facilities, and a soils blending facility are located on the landfill site.

MRWMD limits land uses at the site to compatible uses and facilities that use recycled materials as feedstocks. The Monterey RR Park was designed in large part based on the concept of the "Serial MRF" in Berkeley. This concept was promoted by Urban Ore in the 1980s and 1990s, and encouraged people to coordinate, co-locate and promote related reuse, recycling and composting businesses in an area. Rather than building new facilities to compete with existing private investments, Serial MRFs built on those investments. Public investments were only needed to meet clear gaps in existing and reasonably anticipated private activities.

As there were many private curbside recycling programs in the Monterey area, the MRWMD did not include the processing of residential curbside materials as part of their MRF design. Instead, the MRWMD MRF targets materials brought in from self-haul loads and commercial wastes, construction and demolition (C&D) debris, wood waste and yard waste received at the facility. The MRF has achieved its current goal of diverting 60% of these incoming materials. (Garbage trucks hauling residential garbage and wet commercial waste are still sent directly to the landfill.)

The 95,000-square-foot MRF building was completed in May 1996 at a cost of \$9.6 million. Recycled construction materials were used throughout the MRF building: in its base rock, its fiberglass and cellulose insulation, the wall paneling, bathroom tiles, bathroom partitions, and floor coverings (the employee meeting area floor coverings are made from recycled tires). The MRF's special design features earned a \$34,000 rebate from PG&E for energy conservation.

Rather than developing its own composting and C&D recycling facilities, the MRWMD contracted with existing private operators to provide those services. In the case of composting, the MRWMD leases part of their site to several local composting companies for a nominal fee. As part of the contract with these composters, MRWMD requires them to use MRWMD organics as feedstock for their products first, and MRWMD has some control on what they bring in from outside the site.

MRWMD sells the following low-cost landscaping supplies made from recycled wood and yard waste. These are sold in bulk at the MRF by the ton, and in bags at the Last Chance Mercantile. At the Last Chance, customers are provided a two cubic foot heavy plastic bag, and they can fill their own bag for the published price.

Material	Description
Compost	100% organic material, such as mushroom bedding and woody products
Potting Soil	Mix of sandy soil (20%), humus (65%) and other organic material.
Top Soil Blend	Mix of sandy soil (40%), humus (30%) and other organic material.
Woodchips	Processed wood cuttings available in several colors

Mulch	Processed green cuttings, 3/4" and smaller.
Ground Cover	Processed green cuttings, 3/4" and larger.
Firewood	Tree rounds, limbs, and branches only. (Does not include any processed wood or lumber products.)
Fines	Recovered organic material and dirt.

MRWMD also contracts with the Granite Construction Company to process C&D materials on site. Granite brings in a mobile crushing unit when there is a large enough pile of material received on site. Granite provides the MRWMD with a royalty of \$0.50 for every ton processed at their facility. Granite also processes contaminated soils.

Most of the crushed C&D material is used by Granite in a wide variety of area construction projects. As an example, most of a recent repaving of Cannery Row in Monterey used recycled base rock from this facility.

MRWMD uses a lot of crushed material on site for roads and other construction purposes. MRWMD often takes product in trade for the royalties due them.

In addition, the first landfill gas-to-electrical energy system in Central California was installed at the landfill in 1983. More than 2,800 kW of continuous power is currently being generated. The District also accepts and safely recycles or disposes of household hazardous waste.

Airport Authority

Airports may be good models for many of the financial, organizing and administrative issues involved with the development of a RR Park. Urban Ore has encouraged local governments to develop RR Parks in the same way as they have played a role in the development of airports. Local governments generally set up special Airport Authorities or separate City departments for the development and management of airport facilities. These city agencies often serve as the landlord for the airport, with rents from airlines for spaces in terminals and hangars used to pay for the development of these facilities. The following is a review of key issues in airport development and management that may offer ideas of different ways to develop and manage a RR Park.⁴

The operation of an airport is a highly complex relationship between a number of government and private organizations. Each organization plays an important role in the activities of the air transportation system.

There are three major groups involved in making a major airport work:

⁴ Excerpted from the website of the City of Los Angeles Airport Authority (www.lawa.org).

- ◆ Airport operator
- ◆ Regulators
- ◆ Aviation related enterprises

Airport Operator

The airport operator may be a special Airport Authority or a separate City department for the development and management of airport facilities. The airport operator is primarily responsible for the physical elements of the airport, including:

- ◆ Runways
- ◆ Fueling facilities
- ◆ Passenger terminals

The airport operator is continually upgrading facilities and services to meet increasing user demands.

The operator rents space to organizations that wish to use its facilities. These tenants include aviation-related businesses and businesses that provide services to travelers. Revenues from such enterprises, and from landing fees charged to the airlines, enable airports to operate without utilizing general tax funds.

Regulators

To ensure the safety of the flying public, local, state and national laws and regulations that govern how it may be built and operated very heavily regulate an airport. Airport facilities are inspected regularly to confirm compliance with these regulations.

- ◆ The Federal Aviation Administration (FAA) is the agency of the federal government that is responsible for creating and enforcing the rules, regulations and standards that apply to all aspects of civil aviation.
- ◆ The U.S. Department of Transportation's Aviation Consumer Protection Division is responsible for processing consumer concerns and complaints pertaining to air carriers.

Aviation related enterprises

Commercial air carriers are private companies licensed by the U.S. government to operate aircraft between cities to carry passengers and freight for profit. Their operating procedures are closely regulated by the FAA to ensure public safety. These carriers are responsible for a number of passenger-related services.

Competition among air carriers in the United States, along with government regulation, has produced a complex but flexible air transportation system. The needs of the people in

the community, the physical facilities provided by the operator, the regulations set by government to maintain safety, and the incentive to provide profitable airline service to all, combine to make an airport work to serve the traveling public.

Airport Example – Los Angeles World Airports (LAWA)

As the aviation authority for the nation's second largest city, and hub of one of the world's most populous metropolitan areas, Los Angeles World Airports (LAWA) is faced with the challenges of providing an airport system to serve a major portion of the Southern California market. LAWA has met this challenge, and at no cost to the taxpayer.⁵

LAWA is a self-supporting branch of the City of Los Angeles, governed by a seven-member Board of Airport Commissioners. By the Charter of the City of Los Angeles, the Board is responsible for the formulation of airport policy. The Board is composed of business and civic leaders appointed by the Mayor, approved by the City Council, who serve staggered five-year terms. There are 56 divisions of professional and administrative staff to carry out the policies of the Commission. More than 2,500 employees operate and maintain the four airports in the LAWA system.

Airport Example – Greater Toronto Airport Authority Development Project

On December 2, 1996, the Greater Toronto Airports Authority (GTAA) assumed responsibility for the management, operation and maintenance of the Lester B. Pearson International Airport (LBPIA).⁶ This description is provided as an example of how a major capital construction project is pursued by an Airport Authority.

The Greater Toronto Airports Authority's (GTAA) goal is to redevelop LBPIA into a pre-eminent international airport that is passenger friendly, functional, visually appealing and cost effective.

The Airport Master Plan describes an Airport Development Program (ADP) that is required in order to provide sufficient capacity for the next 20 years. This Master Plan is consistent with the long-term vision of Transport Canada to maximize the development potential of the airport. The Airport Master Plan will serve as a guide to airport management, and will also provide the backdrop for future discussions on all airport issues that impact on airport development and the allocation of land resources. The Airport Master Plan builds on the GTAA's ongoing dialogue with the airlines, airport businesses, agencies of federal, provincial and municipal governments, the business community, airport users, community groups, special interest groups and the general public.

⁵ Excerpted from the website of the City of Los Angeles Airport Authority (www.lawa.org).

⁶ Excerpted from the GTAA website (www.lbpia.toronto.on.ca/publications/briefing_adpo.pdf)

The Airport Development Program (ADP) includes five major projects: Terminal Development, Airside Development, Infield Cargo Development, South Development, and Utilities and Airport Support. In addition to these, an Operating, Maintenance and Restoration Capital Plan will maintain and upgrade existing facilities.

Eco-Industrial Parks

RR Parks are an offshoot of another major effort in this country and around the world: the development of eco-industrial parks (Eco-parks). Eco-parks focus on environmental management issues, and stress the synergistic use of wastes from one company as resources for another in the park.⁷

In a landmark 1996 report,⁸ the President's Council on Sustainable Development (PCSD) recommended that "Federal and state agencies assist communities that want to create eco-industrial parks... [as] models of industrial efficiency, cooperation, and environmental responsibility."

PCSD defined an eco-park as a group of businesses that work together and with the community to efficiently share resources (materials, water, energy, infrastructure, natural habitat, and information), enhance economic prosperity, and improve the environment. A community, local government, a nonprofit organization, or a business can initiate eco-parks, but their success often depends on broad support and collaboration.

The PCSD highlighted three general models of eco-parks⁹:

- ◆ Zero-emissions eco-park, in which a group of businesses are co-located and work together to reduce or eliminate emissions and wastes.
- ◆ Virtual eco-park, in which businesses are geographically separate, but work together to minimize their impact on the environment.
- ◆ Eco-development, in which non-industrial establishments apply the principles of industrial ecology.

Industrial ecology is the study of a closed loop in which resources and energy flow into production processes, and excess materials are put back into the loop so that little or no waste is generated. Products used by consumers flow back into production loops through recycling to recover resources. Ideally, the loops are closed within a factory or among industries in a region.

⁷ Excerpted from a case study prepared by Gary Liss & Associates for the CA Integrated Waste Management Board, August, 2000 entitled "Resource Recovery Parks."

⁸ President's Council on Sustainable Development (PCSD), "Sustainable America: A New Consensus for Prosperity, Opportunity, and a Healthy Environment," 1996.

⁹ President's Council on Sustainable Development (PCSD), "The Road to Sustainable Development: A Snapshot of Activities in the United States," 1997.

This newly evolving area of economic development is only beginning to be tested in practice. Early experience suggests that it presents unique opportunities to link economic development, environmental protection, and social equity in communities throughout the United States.

Examples of Eco-Parks

By 1999, half a dozen Eco-Park locations in the U.S. were in their final construction phase and had secured tenants including Northampton County/Cape Charles, VA; Minneapolis, MN; Burlington, VT; and Londonderry, NH.¹⁰ Many other areas have begun to plan and implement eco-industrial parks, including Dallas, TX; Albuquerque, NM; Detroit, MI; Los Angeles, CA; and Alameda, CA.¹¹

Northampton County, Virginia

An example of the first type of eco-park (a zero emissions eco-park) is the Port of Cape Charles Sustainable Technologies Industrial Park, located in Eastville, Northampton County, Virginia. Northampton County and the town of Cape Charles have teamed up to reenergize the area's economy and preserve its rich natural and cultural assets. The resulting partnership, named the Joint Industrial Development Authority of Northampton County and its Incorporated Towns, is developing the Cape Charles Sustainable Technology Park on 130 acres for business and industry.

The project began when the President's Council on Sustainable Development designated Cape Charles as one of four eco-industrial demonstration sites nationwide, opening the door for funding from other federal agencies. Citizens, officials, and developers participated in a design charette that provided a framework for the Park's design. Funding is being received from local, regional, state, and federal sources.

The community is designing the Port of Cape Charles eco-park as part of a comprehensive Sustainable Development Action Strategy. Its success will ultimately be judged by whether it creates jobs for local people and by whether the area's natural and cultural resources are protected and maintained.

The eco-park will provide for water recycling among the resident companies by means of a used-water collection system, a water recovery facility, and a recycled-water distribution system. In addition, a technical panel will be established to analyze and determine whether other companies within the park can use the by-products of existing and proposed companies.

¹⁰ The following examples of eco-parks are based on summaries provided in the PCSD 1997 Report, "The Road to Sustainable Development: A Snapshot of Activities in the United States."

¹¹ A Planner's Overview of Eco-Industrial Development," Maile Deppe, Tom Leatherwood, Peter Lowitt, and Nick Warner, American Planning Association Annual Conference 2000, Eco-Industrial Session, April 16, 2000

The nation's first fully leased eco-industrial park opened in early 1999.¹² Groundbreaking for the park as a whole occurred on October 16, 1996, and the first tenant is Solar Building Systems Inc. The Park, located between a golf course, downtown, and a Chesapeake Bay Natural Area Preserve, boasts a green building designed with help from the Rocky Mountain Institute for maximum resource efficiency, pollution prevention, and cost effectiveness. Efforts focus on recruiting compatible companies and on developing an effective process for managing the park as an industrial ecosystem. The local community's enthusiasm and commitment to the project are high and will be a key to the eco-park's future success.

Brownsville, Texas

An example of the second type of eco-park (a "virtual" eco-park) is a project in Brownsville, Texas. Brownsville is located on the southern tip of Texas in the Rio Grande Valley and is often referred to as a city "on the border, by the sea." It has a rich natural environment and is considered to be one of the three top bird-watching sites in the United States. At the same time, the city has some of the most serious environmental problems in the northern hemisphere and is struggling to address its high poverty rate and unemployment rate.

Local and state government officials have been the primary drivers behind the development of an eco-park in this border region. It is clear that if the region's industrial growth is to continue, the nature of that development must change to protect both human health and the environment.

As a virtual eco-park, the Brownsville project takes a regional approach to exchanging waste materials and by-products. This approach is sometimes referred to as regional "industrial symbiosis." The project could eventually include a group of businesses that are geographically located together, but co-location is not the driving force behind the project at this time. As currently envisioned, the project will include not only industrial facilities, but also small businesses and the agricultural sector.

The planning process for the Brownsville project has focused on identifying firms that could benefit from participating in regional industrial symbiosis. A database of companies in Brownsville and in the neighboring city of Matamoros, Mexico, has been developed and is being analyzed to identify potential materials exchanges among these industries and/or new companies.

The Texas Department of Commerce and the Brownsville community have provided initial funding, and project leaders are working to secure long-term support. State officials will be working closely with project leaders to ensure that permitting procedures

¹² Source: Cornell University, Center for Eco-Industrial Development, <http://www.cfe.cornell.edu/wei/eidp/CapeCharles2.html>

do not become a barrier to development. Cost-based data was added to the database, and a marketing plan will be developed to evaluate and recruit participants. Efforts will also be made to educate and involve the local residents in implementing the project.

Burlington, Vermont

An example of the third type of eco-park (eco-development) is the Riverside Eco-Park in Burlington, Vermont. This project will create an agricultural-industrial park in an urban setting which will (1) generate electricity using bio-mass technologies that utilize readily available resources (e.g., wood chips), (2) use the waste heat generated by the power plant to support the greenhouse production of fish and horticultural products, (3) use biologically-based "living systems" to digest liquid organic wastes (which are common in the food processing industry) to purify water and create high strength fertilizers; and (4) recycle and compost the area's waste foodstuffs and yard debris to replenish local soils, increase agricultural production, and support value-added organic food industries. All of these emerging technologies are being developed with the ultimate goal of transferring them to other industries and communities.

This project is expected to have several positive results including reducing the waste heat that is released into the air and water, improving soil conditions and water quality, and creating sustainable jobs for the local people. A feasibility study which examined the inputs, outflows, and costs of the bio-mass energy systems and the living systems led to the conclusion that combining the two systems could be economically and environmentally beneficial. The next steps will be to prepare engineering and cost analyses of the linked systems.

The Riverside Eco-Park is now using the waste heat to operate green houses and aquaculture. They have also created a large composting project for the community and commercial farms in the Intervale (area adjacent to the downtown).

A Community Development Block Grant, the Burlington Electric Department, the Department of Public Works, and Cornell University are providing support; and funding applications have been submitted to the U.S. Environmental Protection Agency and the U.S. Department of Energy. A number of organizations and companies have been recruited to participate in the first demonstration project, and additional partners will be recruited as the strengths and weaknesses of the project are identified. Project leaders have developed an aggressive five-year plan that is expected to lead to the transfer of this eco-development model to other sites and to the development of commercially viable spin-off industries.

Tribal Master Plans

The Cabazon Resource Recovery Park (CRRP) model is essentially a governmental economic development initiative derived from an ecological philosophy and an economic

development need. The primary stockholder (the Cabazon Band of Mission Indians) is acting as the master developer, the landowner, and the local enforcement agency. The general goal of the project is to attract private investment and development in the CRRP by using the Tribe's land resources, various development incentives that can be created by the Tribal government, available grants or other financing mechanisms available to the Tribe.

The Tribal economy and that of the surrounding community will be improved through the investment of private operators in the park, payment of rents, participation in profits, job creation, decrease in disposal costs, and increase of products manufactured.

The target set of businesses to be developed includes recyclers, processors, manufacturers, and power generators. The development of the CRRP is based on the philosophy that such parks are culturally appropriate and should be developed as working models for economic development and enhanced environmental stewardship. The CRRP was not developed in response to an internal disposal or recycling mandate but rather to: a) fill a service void for recycling/disposal facilities that did not exist; and, b) achieve the highest and best use of land resources for economic development as part of a comprehensive economic development plan for the community.

Under the CRRP model, government sets the development parameters of the project, acts as master developer and may participate financially (passively or actively) in each individual business, but has no direct responsibility in managing any of the businesses developed. Private industry finances, develops and operates the individual business. As any other jurisdiction competing for economic development, the Tribal government leverages its land, resources, and governmental powers to "set the stage" to attract the target businesses to the CRRP. The more creative and successful the jurisdiction is at setting the stage with economic/or time saving incentives, the more likely the park is to be successful.

The predominant theme in setting the stage for private industry development within the park is based on economics, not the environment. Private industry will invest and develop recycling and reuse business if the economics are attractive enough. The CRRP model is based on setting an attractive enough stage for development to occur by improving the economics through two general categories of activities:

- ◆ Government sponsored economic development initiatives.
- ◆ Operational incentives as a result of synergies among park participants.

Generally, industry will initially locate in the park because of the major development incentives that can be afforded by the government and secondarily because of the synergies that can be accomplished. Once the core or anchor facilities have located in the park, inter-facility synergy becomes an increasingly important factor in developing businesses within the park.

Shopping Centers

Shopping Centers may be a good model for many of the administrative and marketing issues involved with the development of a RR Park. Urban Ore has described RR Parks, in part, as “Discard Malls,” a “Reverse Shopping Mall” and “one-stop shop” for reused and recycled materials and products. This highlights the commercial, retail and public aspects of a RR Park. For a better understanding of how shopping center design can best be applied to RR Parks, the following is a review of the different types of shopping centers that may offer ideas of different things to include in a RR Park.¹³

Shopping Centers are a group of retail and other commercial establishments planned, developed, owned and managed as a single property. On-site parking is provided. The center's size and orientation are generally determined by the market characteristics of the trade area served by the center. The two main configurations of shopping centers are malls and open-air strip centers.

Malls typically are enclosed, with a climate-controlled walkway between two facing strips of stores. The term represents the most common design mode for regional and superregional centers. A strip center is an attached row of stores or service outlets managed as a coherent retail entity, with on-site parking usually located in front of the stores. Open canopies may connect the storefronts, but a strip center does not have enclosed walkways linking the stores.

There are a wide variety of shopping centers. Neighborhood Centers are designed to provide convenience shopping for the day-to-day needs of consumers in the immediate neighborhood. A supermarket anchors about half of these centers, while about a third have a drugstore anchor. A Convenience Center provides a narrow mix of goods and personal services to a very limited trade area. A typical anchor would be a convenience store like 7-Eleven or other mini-mart.

A Regional Center provides general merchandise (a large percentage of which is apparel) and services in full depth and variety. Its main attractions are its anchors: traditional, mass merchant, or discount department stores or fashion specialty stores. A typical regional center is usually enclosed with an inward orientation of the stores connected by a common walkway and parking surrounds the outside perimeter.

A Superregional Center (malls larger than 800,000 square feet) is similar to a regional center, but because of its larger size, a superregional center has more anchors, a deeper

¹³ Much of the following information is excerpted from the website of the International Council of Shopping Centers (<http://www.icsc.org/>).

selection of merchandise, and draws from a larger population base. As with regional centers, the typical configuration is as an enclosed mall, frequently with multilevels.

A Theme/Festival Center typically employs a unifying theme that is carried out by the individual shops in their architectural design and, to an extent, in their merchandise. The biggest appeal of these centers is to tourists. Often restaurants and entertainment facilities anchor them. These centers, generally located in urban areas, tend to be adapted from older, sometimes historic, buildings, and can be part of mixed-use projects.

An Outlet Center consists mostly of manufacturers' outlet stores selling their own brands at a discount. An Outlet Center is usually located in a rural area, or occasionally in tourist locations. A strip configuration is most common, although some are enclosed malls, and others can be arranged in a "village" cluster. Some large projects combine outlet stores with traditional off-price stores like Marshalls.

The 1980s saw an unparalleled period of growth in the shopping center industry, with more than 16,000 centers built between 1980 and 1990. This was also the period when superregional centers became increasingly popular with shoppers. Shopping centers continue to evolve and serve communities' social and economic needs. With the combination of fashion, food, entertainment, and services, shopping centers have greatly expanded their role in the communities they serve.

Shopping Center Management

Managing a shopping center is a unique challenge in the world of property management. It requires mastering the art and science of identifying, understanding and meeting the needs of consumers, merchants and landlords. It's a difficult job and learning it never stops. Issues that must be addressed range from finance, tenant mix and leasing through legal issues, development and retailing.

The financial success of a shopping center is tied to the ability of retailers to increase sales productivity. A center depends in large measure on this increase in productivity to produce a continually growing rental income stream. For this to happen, the collaboration between the center and its stores must be a harmonious one, with each party understanding the roles and responsibilities of the other. Those responsible for the center must understand the nuts-and-bolts of retailing. They also must be able to recognize trends so that the most productive mix of retailers can be assembled in an environment conducive to selling goods and services.

Shopping Center Leasehold Improvements

One of the most important obligations of shopping center owners is to provide modern, efficient, and environmentally sound retail space for their tenants and the public. Owners must periodically refurbish and replace many structural components of their buildings - such as internal walls, ceilings, partitions, plumbing, lighting, floor coverings, electrical

and communication outlets, and computer data ports - in order to meet the specific needs of their tenants and to comply with government regulations.

Current law dictates that these modifications - commonly referred to as "leasehold improvements" - be depreciated over 39 years. However, most leasehold improvements have a much shorter economic life - usually between 3 and 10 years.

The Small Jobs Business Protection Act of 1996 allows owners to expense the unrecovered basis of leasehold improvements in the year that they are destroyed or abandoned. Previously, only tenants who made such improvements could do so. Unfortunately, leasehold improvements must still be depreciated over a 39-year recovery period while they are in service.

The International Council of Shopping Centers (ICSC) recommends that the cost recovery period for leasehold improvements should be 10 years or the term of the lease.

ATTACHMENT A

SPECIFIC CDBG UNDERWRITING CRITERIA

FOR SMALL BUSINESS INCUBATORS

According to guidelines for Community Development Block Grants (CDBG), small business incubators such as proposed to be included in the RR Park will have to provide a:

- ◆ Feasibility study,
- ◆ Operating budget,
- ◆ Marketing plan to attract appropriate incubator tenants, and
- ◆ Plan for delivering technical assistance to incubator tenants.

Additionally, applicants may also be required to provide

- ◆ letters from tentatively committed tenants or proposed lease agreements for committed tenants, and
- ◆ business/financial information on each start-up tenant that will document the financial feasibility of the small business and its ability to create jobs

Small business incubators typically provide small sized commercial or manufacturing space, lower end of market rents, pooled administrative services, free or low cost technical assistance to qualifying tenants. An application to CDBG for a business incubator must provide financial information on the incubator operation, as well as on prospective tenants. Letters of intent, if available, should be submitted with the application. In addition, financial information may be required on prospective tenants to determine the tenant's financial feasibility and ability to generate jobs.

The CDBG-funded real property should remain in use as a small business incubator from the date CDBG funds are first spent for the property until five years after closeout of the CDBG grant, unless the grantee complies with the regulatory requirements pertaining to the change in the use of real property.

All CDBG assisted projects must maximize the utilization of available private dollars from equity and/or debt. Proposals demonstrating a ratio of at least two private or other public dollars to every CDBG dollar (2:1) will receive 15 points, the highest number available in this category. Projects with ratios of less than 2:1 are still eligible but will receive less points. Job retention projects must demonstrate private leverage, but consideration will be given to less than a 2:1 ratio if it can be demonstrated that personal and business assets are depleted. Consideration will be given to less than a 2:1 ratio for start-ups, emerging businesses and business incubators. These situations will be evaluated on a case-by-case basis. Start-ups must provide evidence of an equity injection.

A market analysis is required if an existing business has a new product or service, or is a start-up. Real estate developments require an "absorption" study to substantiate the need for additional commercial or manufacturing space as well as the impact on existing

businesses, particularly shopping center projects. Small business incubators require a market feasibility study that indicates that home based businesses, new manufacturing and service businesses do not have access to adequate space at an affordable rate and that they require the proposed type of incubator space to grow. Net job creation is an important additional consideration in evaluating market feasibility of projects.

DEVELOPMENT PROJECT--
SAMPLE LEASE CONDITIONS
FOR Target Interest Groups (TIG) HIRES

Miscellaneous:

1. It is hereby understood and agreed by Tenant that Landlord has made no warranty or representation as to the present condition of, or suitability of the Premises for Tenant's intended use or uses.

2. Tenant understands that Landlord has entered into a financing agreement with the _____ and the State of California to construct the demised premises. A condition of that financing is the provision of employment for low/moderate income residents. In order to attain these goals and the goals of the project in general, Tenant hereby agrees as follows:

a. Tenant shall provide financial information including, but not limited to a balance sheet and profit/loss statement, prepared in accordance with generally accepted accounting principles, every six months during the term of this lease; the first such reporting shall be due not less than eight months following the commencement of the Lease Term. If Tenant is in default of its obligation to pay rent, Tenant shall make books, records and other financial information available, to Landlord, for review during business hours.

b. Tenant shall provide, at the beginning of the Term, a statement of current employment and projected employment figures for the Term of this Lease. Thereafter, on a quarterly basis, Tenant shall provide to Landlord's designated agent a written report of its progress in meeting employment projections.

c. Tenant will execute a First Source Hiring Agreement satisfactory to the _____. This agreement shall provide that Tenant will use its best efforts to recruit and utilize employee referrals meeting the Targeted Income Group (TIG) standards. A copy of the First Source Hiring Agreement is attached as Addendum 2, and is a part of this Lease by reference.

d. Tenant shall comply with all provisions hereof and ordinances and other laws against unlawful discrimination on account of race, creed, sex, age disability, or color. This Lease is subject to Title VI of the Civil Rights Act of 1964 (Public Law 88-352) and the rules and regulations issued pursuant thereto, and the Tenant shall comply with Executive Order No. 11246, entitled, "Equal Employment Opportunity", as supplement in Department of Labor Regulations(4CRF, Part 60).

e. Tenant shall use its best efforts to locate any future corporate offices and/or related office or manufacturing or warehouse facilities in the same structure or structures within the Premises. Upon graduation from the incubator facility, Tenant will, if adequate space is available, locate within the County limits of _____ . Landlord, through its agent _____ City/County Development Corporation, will assist in new site location at no charge to Tenant.

f. Tenant understands that this Lease, the demised premises and the additional services provided are designed to provide space for emerging businesses. Once the business has reach a stage where such services are no longer required, or growth dictates a need for more space, it is expected that the business will relocate to another facility within the County/City. Tenant and Landlord will review the progress of the business annually and mutually agree upon a "graduation" date from the Incubator.

g. Tenant agrees that specific rules regarding outside area maintenance, employee parking, and traffic control may be promulgated by Landlord for the benefit of all Tenants. Tenant further agrees to abide by these rules.

h. In the event Tenant changes the nature of the business. For example, from a sole proprietorship to a corporation, then the existing Lease shall be terminated upon a written notice from Tenant and a new lease made in the name of the new business entity. Such lease shall be executed based substantially on the terms and conditions contained herein.

Note: Grantees are advised of their potential liability regarding job creation and benefit to the TIG. Grantees may want to develop specific remedies applicable to the tenant where there are instances of non-compliance or non-conformance.

4. Management Capacity of Applicant. Describe the capacity of the applicant in implementing all phases of grant administration. Discuss the experience of the applicant or administrative subcontractor to perform the following functions.

- loan underwriting
- loan closing
- construction oversight
- grant record keeping and reporting
- financial recordkeeping
- income screening
- monitoring of business for jobs
- loan management and servicing
- for small business incubators, property management

PROJECT INFORMATION INCUBATOR PROJECTS

- ___ Feasibility study documenting the need and feasibility for a small business incubator.
- ___ **Incubator Guidelines.** Include tenant selection criteria, **tenant graduation policy**, delivery plan for business assistance to tenants, marketing plan to attract tenants and experience/resume of managing agent.
- ___ Copy of the application to all other funding sources, including all documentation.
- ___ Commitment Letter(s) from all other funding sources, including proposed terms.
- ___ Correspondence indicating the status of the availability of other funding sources.
- ___ Monthly incubator income projections for two years, with and without CDBG.
- ___ Annual incubator income projections for 5 years with and without CDBG.
- ___ Projected incubator debt schedule.
- ___ Draft Lease Agreements.
- ___ Summary of collateral offered.
- ___ Third party cost estimates, including documentation of the cost of real property, acquisition, construction/rehabilitation, and/or equipment costs.
- ___ Evidence of site control.
- ___ Appraisals of real property.
- ___ Letters of intent to lease or pre-leases.
- ___ Start-up business tenant: a business plan, pro forma balance sheets and income statements, most recent personal Federal tax return and current financial statements for principals with 20 percent or more ownership.
- ___ Existing business tenant relocating or expanding to the development: a brief history of the business, last 3 years business Federal income tax returns, last three years business balance sheets and income statements, current balance sheet and income statement (less than 60 days old).
- ___ Letter from the community from which the business is relocating, indicating it has been notified about the impending relocation, and providing its comments.

Special Incubator requirements:

1. Self Evaluation Income Screening forms on the retained jobs.
 2. A written letter of understanding to the Department that the City will charge the Incubator project a fee for management on the basis of the amount of time the staff spends managing the Incubator project. The letter will state that the City has been notified by the Department that any net revenue from the Incubator project will be considered program income revenue by the Department or HUD. The City is further notified that CDGB program income must be disbursed for eligible CDBG activities. In the event the funds are disbursed for ineligible activities, the City will be required to reimburse the Department or HUD for these expenditures.
1. Waiting lists of prospective tenants, if appropriate.

2. Feasibility study showing local and regional market rents, availability of low rent facilities, and demand for incubator space. Include listing of sites available for graduating tenants when they leave the incubator.

SAMPLE CONDITIONS TO CONTRACT

Within 90 days from the date that funding is approved, the (City/County) shall submit the following:

1. A Management Plan for the incubator, acceptable to the Department, including a description of the conduct of operations as well as a description of new management capacity and how the on-site manager will be paid. The management plan shall include the job duty description of the City's new economic development position showing the requirement for Incubator Management experience as a desirable criterion for candidate selection.
2. A statement as to how the \$8,000 deficit shown in the first year revenue/expense projections, will be covered. And a commitment letter from the City stating they will accommodate those funds.
3. The final accumulation of all Self Evaluation Income Screening forms on the retained jobs.

SAMPLE GRANT SPECIAL CONDITIONS

Prior to the drawdown of funds and within 90 days from the date the grant agreement is executed, the (City/County) shall submit the following:

1. Grantee shall develop, and insert into the new lease agreement, language acceptable to the Department describing the conditions under which the tenant shall graduate from the incubator facility within a designated period of time such as 3 to 5 years. This language shall encourage tenants to graduate during this period, providing for extenuating circumstances or short term extension.
2. Grantee shall provide HCD a copy of the renovation plans and specifications.
3. A Labor Standards Monitoring Plan, acceptable to the Department, describing how labor standards will be monitored by the City and the contractors during the construction of the project. Also, describe how Section 3 standards will be met.
4. A letter from the City stating that all work will be done without the need for relocating the businesses.
5. A letter from each existing tenant indicating that their cash flow for the next 5 years will be sufficient to pay the lease payments as they increase and the jobs will be created.

6. A written letter of understanding to the Department that the City will charge the Incubator project a fee for management on the basis of the amount of time the staff spends managing the Incubator project. The letter will state that the City has been notified by the Department that any net revenue from the Incubator project will be considered program income revenue by the Department or HUD. The City is further notified that CDGB program income must be disbursed for eligible CDBG activities. In the event the funds are disbursed for ineligible activities, the City will be required to reimburse the Department or HUD for these expenditures.

7. The City may receive, as a cost to the project, a return on equity from the Incubator project. The priority return on equity shall be determined by establishing fair market value of the facility with a limited summary appraisal (including market and income approaches) performed by an MAI appraiser at the time rehabilitation is completed. Equity amount shall be determined by subtracting the amount of the grant from that appraisal amount. The City may receive the return on equity as a cost to the Incubator project in an amount up to a maximum of an annual 10% of the equity amount.



Del Norte Solid Waste Management Authority

1700 State Street, Crescent City, CA 95531

Phone (707) 465-1100 Fax (707) 465-1300

www.recycledelnorte.ca.gov

The Authority's mission is the management of Del Norte County solid waste and recyclable material in an environmentally sound, cost effective, efficient and safe manner while ensuring 100% regulatory compliance with law.

Staff Report

Date: 11 July 2017
To: Commissioners of the Del Norte Solid Waste Management Authority
From: Tedd Ward, M.S. – Director *Tedd*
File Number: 011801 – Water Monitoring and Analysis
Topic: Potential for processing groundwater samples using the Crescent City Wastewater Treatment Plant Laboratory

Summary / Recommendation: Status report; no additional action required. Considering the analysis below, staff do not recommend using the wastewater treatment plant lab for analyzing water samples. The only constituent that the Authority is required to analyze that the wastewater treatment lab is certified to conduct is turbidity, which represents only about 0.6% of the Authority's costs for lab analysis – less than \$150 annually.

Background: At the June Authority meeting, staff were asked to explore the potential for having a portion of the water samples collected at the landfill be analyzed by the Crescent City Wastewater Treatment Plant laboratory.

The Authority spends over \$20,000 annually for laboratory analysis of water samples. This suggestion makes sense if there is opportunity for either the Authority to reduce monitoring expenses or if analysis can be done by the local lab for approximately the same cost. Also, the Authority would prefer to use in-County resources to the extent possible.

Analysis: The constituents that must be monitored at the landfill are set under Monitoring and Reporting Program 97-90 from the Regional Water Quality Control Board for the North Coast Region. This is also the agency that oversees the activities and discharges of the Crescent City Wastewater Treatment Plant. In both cases, the constituents monitored reflects the potential impacts associated with the landfill and the treatment plant respectively. Consequently, much of the monitoring associated with the wastewater treatment plant is intended to monitor their treatment processes, monitoring biological indicators such as fecal coliform. In contrast, water quality monitoring at the



landfill is intended to detect the potential release of water that has contacted or been impacted by materials in the landfill. Furthermore, labs need to be certified for specific analytes. So for example, the wastewater treatment plant is certified to test for settleable solids, chemical oxygen demand, and nitrate on wastewater, but not for surface water or groundwater coming from the landfill.

Facilities & Programs Coordinator Kyra Seymour exchanged e-mails with Tara Wood, who works at the treatment plant lab. Considering the entire list of tests the Authority needs done for our water quality monitoring, Ms. Wood indicated that the only potential test the wastewater treatment plant lab could do for the Authority would be turbidity. This test costs \$15 per sample, and the Authority conducts a total of nine of these annually for an annual expense of \$135. For this cost, Northcoast Labs mails the Authority sampling bottles and a cooler. After samples are collected, they are placed in the cooler on ice, and collected the next day by a delivery service.

So if Authority staff were to use the wastewater treatment plant lab for analyzing turbidity, staff would still need to prepare and send all other samples to North Coast Labs. So there would be the additional steps of arranging with the wastewater treatment plant lab staff the time to collect sample bottles, and the communications as to when those samples would be delivered and analyzed.

Finally, the Authority's water quality monitoring data is regularly uploaded to the GeoTracker database as required by the Regional Water Quality Control Board. North Coast Labs prepares a report for easy upload to this system. If turbidity was analyzed by the wastewater treatment plant lab, Authority staff would have to manually upload turbidity data into GeoTracker.

Alternatives: The Board could direct Authority staff to take the steps necessary to begin turbidity analysis using the wastewater treatment plant lab. Staff are not recommending this action, as the additional staff effort to split samples to two labs would increase Authority costs to conduct these tests and report the results. Furthermore, such a change would be of minimal financial benefit to the wastewater treatment plant lab (likely less than \$150 per year).

DEL NORTE ABANDONED VEHICLE ABATEMENT SERVICE AUTHORITY

1700 State Street, Crescent City, CA 95531
Phone (707) 465-1100 Fax (707) 465-1300

July 13, 2017

Attn: Stephanie Young,
Department of Resources Recycling and Recovery (CalRecycle)
1001 I Street--P.O. Box 4025, Mail Stop 10A-18
Sacramento, CA 95812-4025

RE: Support for Del Norte County's application to CalRecycle's Illegal Disposal Site Abatement Grant program

Dear Ms. Young:

The Del Norte Abandoned Vehicle Abatement Service Authority, a Joint Powers Authority of the County of Del Norte and the City of Crescent City, supports Del Norte County's application to CalRecycle's Illegal Disposal Site Abatement Grant program. If awarded this grant would remediate unsightly abandoned illegal dump sites, several of which are adjacent to watercourses. This grant would also address the high cost to abate the many motorhomes, trailers, and campers, abandoned throughout Del Norte County. These can adversely impact areas with tainted runoff windblown trash, vermin, and vectors. These sites have a damaging effect on the health of the environment and the surrounding community.

The Del Norte Abandoned Vehicle Abatement Service Authority is confident in the abilities of the Code Enforcement Officer Dominic Mello, to manage this project. We are willing to help achieve the success of these projects by offering our services in assisting with, outreach, site characterization, documentation, and strategy as needs arise. Our agencies have a history of collaboration, and this grant project will be an excellent opportunity for our complementary skill sets to be utilized.

This grant will aid with the shared goal of improving quality of life for our community, enhancing environmental health, and removing threats to health produced by biohazardous material, rodent and disease vectors, and other varieties of hazardous materials. This county consists of 75% public land including old growth redwoods, wetlands, rivers, and coastal lands, so the removal of blight is quite impactful and improves economic prosperity, with opportunities for an increase in ecotourism, increasing the overall health, and wealth of the community.

Sincerely,

Blake Inscore, Chair
Del Norte Abandoned Vehicle Abatement Service Authority

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