

Mendocino Central Coast
Commercial Transfer Station
Siting Study

Report of Findings

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1.0 EXECUTIVE SUMMARY

Mendocino County Solid Waste Division and the City of Fort Bragg jointly manage the municipal solid waste stream generated in the central coast area. The waste is currently collected at two locations. Self-haulers bring their waste to the Caspar Transfer Station and commercially collected waste is processed through the Pudding Creek Recycling Center. The waste is then hauled to the Willits Transfer Station, reloaded into long-haul trucks and shipped to the Potrero Hills Landfill, near Dixon, California.

The Mendocino County Board of Supervisors approved a plan proposed by the Solid Waste Division to consolidate the waste stream at one transfer station, in the central coast area and ship it directly to the landfill. A centralized facility will be more cost-effective to operate and could provide expanded waste management services. A Project Description for the facility is presented in the next section of this report.

The County and City retained the services of Winzler & Kelly Consulting Engineers to conduct a siting study to identify a number of potentially suitable sites for the facility. The study area included an approximately 10 mile wide strip of land along the coast between the Navarro River and Ten Mile River. The study area contained approximately 11,200 individual parcels.

Two meetings were held, in Fort Bragg to provide the public with the opportunity to participate in the siting process. Weighted site evaluation criteria were developed based on the physical requirements of the facility (such as access, construction and operations) as well as environmental constraints and input from the public. Using an iterative screening process Winzler & Kelly identified 25 potentially suitable sites, compiled Site Analysis Data Sheets for the top ten sites (tabbed sections below) and prepared a Draft Report of Findings.

A third public meeting was held to present the Report of Findings to the public and accept additional feedback. A summary of the most often and vehemently expressed opinions included:

- A site should be chosen based on long-term planning for population growth and for transportation efficiency (fuel costs). The existing Caspar Transfer Station site was considered by most to be in conflict with these criteria.
- The facility should not be sited in a residential neighborhood or at a location that had to be accessed via a rural, residential road. The definition of "residential" was debated. The residents of Road 409 and Gibney Lane expressed their intense opposition to having the transfer station in their areas.
- The Site should be south of Fort Bragg to minimize traffic impacts to the city center.
- The GP Mill Site has some positive attributes for a transfer station facility based on its central location and past industrial usage. However, the property owner has indicated that they would not be a willing seller. In addition, the City and the property owner are working on a master development plan that may include a mix of residential, commercial, and visitor-serving uses that could create traffic and other potential land use conflicts with a transfer station.

Eliminated Due to Non-Willing Seller Status

- 16 Highway 1 - G-P Mill Site West of Fort Bragg
- 74 Gibney Lane - Mendocino Forest Products Site
- 38 Thorbecke - North Side of Highway 20
- 44 Thorbecke - South Side of Highway 20
- 48 Thompson - Highway 20

Eliminated Due to Viewshed Impacts and Site Limitations

- 31 Babcock - Highway 20, West Parcel
- 32 Babcock - Highway 20, East Parcel

Study Area

Fort Bragg is located approximately 140 miles northwest of San Francisco. The Central Coast Area (Study Area) is along the Highway 1 corridor from the Navarro River in the south to the Ten Mile River in the north. It includes the incorporated City of Fort Bragg, and unincorporated County area associated with the communities of Cleone, Caspar, Mendocino, Little River, Albion and Comptche.

Study Area Population

The population for the Study Area based on 2000 Census blocks is as follows:

City of Fort Bragg	7,026
Unincorporated areas	11,763
Total Population	18,789

Solid Waste Volume

All solid waste from the Study Area has been delivered to the Willits Transfer Station since 2002. Year 2005 solid waste tonnage records indicate that 15,916 tons of solid waste were received from the Study Area. Based on the three years of data from the Willits Transfer Station, the growth rate for the waste stream is approximately 3.33% annually. The growth in the waste stream is affected by a combination of factors including population growth and per capita generation rate. For the purpose of this exercise it will be assumed that the generation rate remains constant at 4.6 lbs/person/day and that the population is growing by 3.33% per annum. A 30-year projection at the present growth rate indicates that the waste stream will grow to 43,735 tons/year (120 tons/day), by 2036.

Sizing the Facility

The size of the building and entire facility depends on the size and character of the waste stream being generated and on the services being offered at the site. The factors included in the analysis were:

- A 30-year planning horizon
- Projected growth rate in the waste stream (3.33% per annum)
- Size of the transfer station building
- Office space
- Truck scales and gate house
- Services being offered (recycling, special wastes household hazardous wastes, etc)
- Processing and storage of recyclable/reusable materials
- Internal traffic patterns
- Vehicle parking and truck storage
- Buffer zones and landscaping
- Storm water management facilities

The size of the transfer station building is based on maneuvering room requirements for trucks and loaders within the building, the operations that will be carried on inside and around the building and waste storage requirements. It is prudent to design for three days of waste storage within the building to allow for road closures and surges in the waste

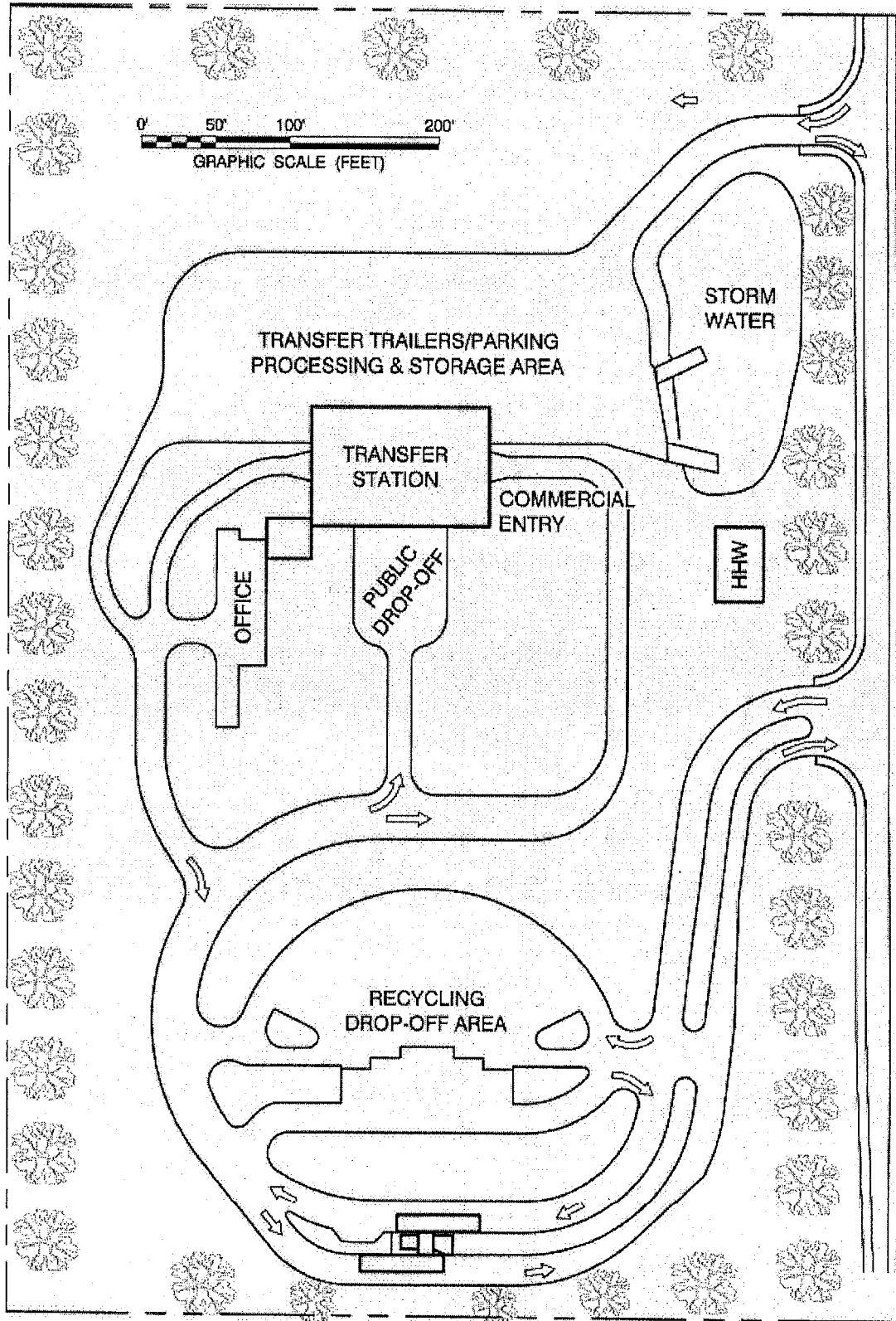


Figure 1: Conceptual Transfer Station Site Layout

to an oil/water separator, then into the sewer system or to a holding tank whose contents would regularly be hauled to the Fort Bragg sewage treatment plant for disposal.

If the chosen site is large enough; at some point in the future, additional resource recovery processing activities could occur and various buildings and mechanical systems could be installed and operated at the transfer station facility. Such facilities would require additional permitting and environmental review.

3.0 SELECTION AND EVALUATION OF POTENTIAL SITES

This section of the Report of Findings documents the development and implementation of the site screening and selection process and provides detailed data pertinent to evaluation and ranking the sites. It also presents initial cost estimates for the ten top-ranked sites.

A detailed explanation of the methodology that was used is presented in Attachment 1 (Site Selection/Evaluation Methodology) and summarized below. The methodology uses various physical criteria to screen the candidate sites and eliminate problematic ones.

The first cut at the screening process is called the fatal flaws analysis. Exclusionary criteria (such as steep topography, flood plains and small parcel size) are used to eliminate parcels with characteristics that make their development difficult or physically impossible. Potential impacts from the project (such as noise, traffic, vectors and odor) and their affect on the community are then considered in further narrowing the field of possibilities until a reasonable number of potentially suitable sites are identified. The potential sites (25 in this case) are then evaluated and ranked using site-specific criteria. The site-specific criteria are developed through a public process described below.

Engage the Public and Develop Weighted Site Evaluation Criteria

A public meeting was held, in Fort Bragg on January 11th 2007, at Town Hall. The City and County publicized the meeting in the local news media, inserted informational flyers in the garbage bills and direct-mailed flyers to individuals that had previously expressed interest in such matters or lived on areas specifically being considered in the study (Road 409, Gibney Lane and West Highway 20). Approximately 80 people attended and the meeting was televised and recorded.

A PowerPoint slide show was presented to describe the Project and the methodology that would be used identifying potentially suitable sites for the facility. The fatal flaws analysis was explained and a series of maps used to demonstrate how the exclusionary criteria were used to eliminate sites from detailed analysis (see Figure 2 and Figure 3). A large paper map showing the remaining potential parcels within the boundaries of the study area was displayed and the public was invited to place stickers on parcels that they thought would be an appropriate site for the transfer station.

A list of preliminary site-specific evaluation criteria was presented and discussed. The public was asked to assign weighting factors (between 1 and 5) to each criteria indicating the significance they thought each one should be given in the evaluation process. Approximately 450 public input/contact forms (Attachment 2) were distributed to the public and 136 forms were returned. The contact information provided by the respondents was added to the mailing list for notification of future meetings.



Figure 2: Study Area

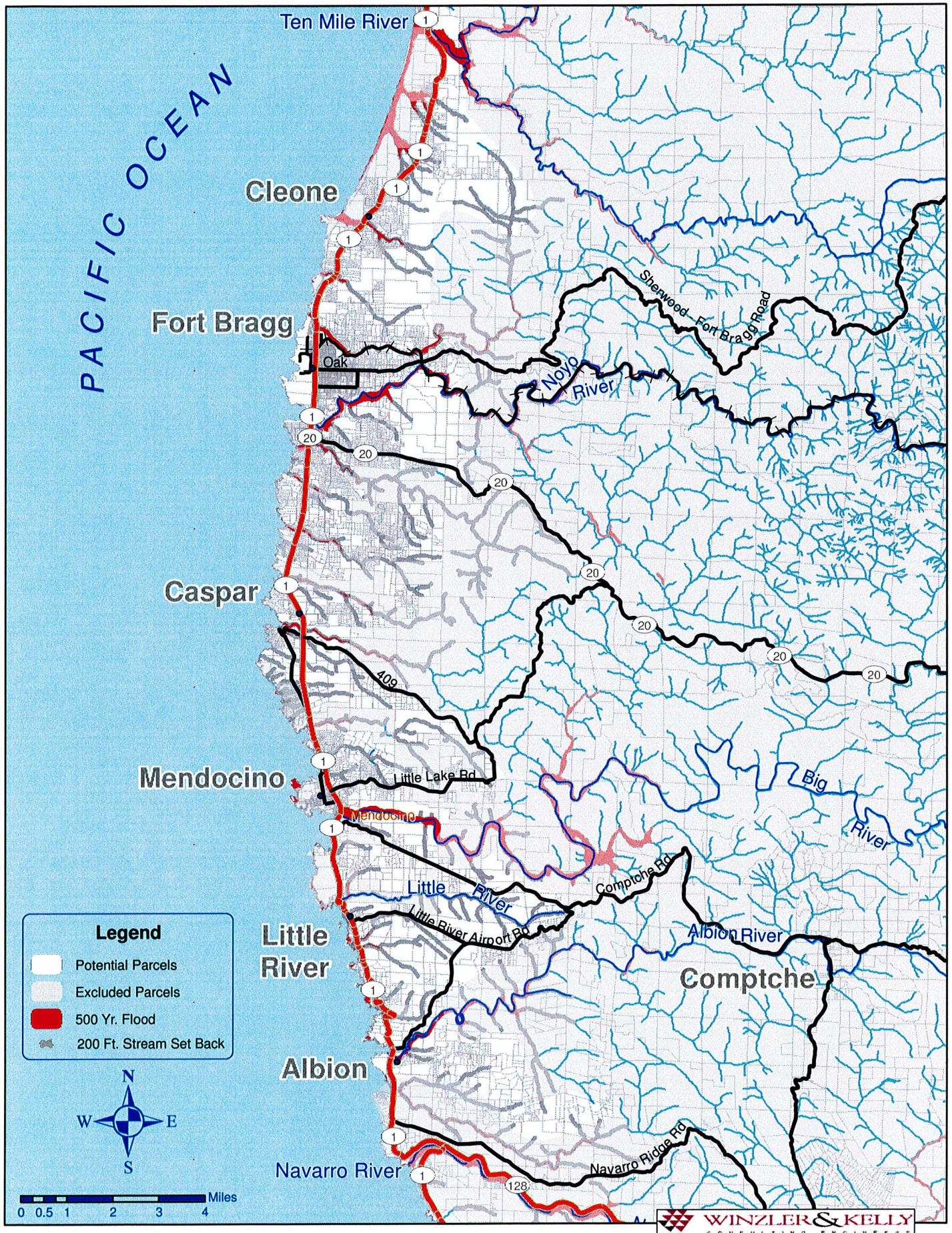


Figure 3: Location of Tier 1 Parcels (1,470)

The weighting factor assigned to each criteria is the arithmetic average of all “votes” tallied from the public input forms. There were a total of 49 site evaluation criteria on the original list, not all of which were useful in the preliminary site screening process. Evaluation of some of the listed criteria will require detailed, site-specific studies that will occur during the CEQA Process and were not within the scope of this project. The remaining criteria were grouped (condensed) under broader headings as shown by the color-coding shown on Table 2 (Condensed Site Evaluation Criteria Worksheet). The weighting factors for the condensed criteria are the arithmetic averages of the criteria that were grouped. Before the condensed site-specific criteria could be applied and the sites ranked, the number of potential sites had to be further reduced.

Identify and Rank the 25 Most Suitable Sites

All the parcels in the study area (11,192) were subjected to a 5-tiered screening process illustrated on Figure 4 and described below. Unsuitable sites were eliminated and the 25 most suitable sites were ranked according to the weighted evaluation criteria.

Tier 1

Tier 1 screening criteria were exclusionary and represented “fatal flaws.” These were regional characteristics that made the site or area unsuitable for the project. They included:

- slopes > 15%,
- parcels < 5 acres, and
- flood plains and setbacks

Applying these Tier 1 criteria to the study area eliminated 9,722 parcels leaving 1,470 for consideration under Tier 2 criteria (see Figure 3, Location of Tier 1 Parcels).

Tier 2

Tier 2 screening criteria were used to eliminate parcels that:

- were occupied or already developed,
- were too steep or topographically challenged,
- had poor site access (through dense residential neighborhoods or required crossing of creeks or rivers),
- were accessed through rural residential neighborhoods (that have roads less than 20' wide, speed limits of 25 mph or less, houses fronting on the roadway, and limited historic traffic), or
- had obvious environmental constraints such as creeks or Pygmy Forest, in the coastal zone.

The sites were examined using Google Earth software (aerial photos/topographic map). This eliminated another 1,359 of the Tier 1 parcels, narrowing the field of potential sites down to 112 (see Figure 5, Locations of Tier 2 Parcels).

Tier 3

The Tier 2 parcels were evaluated using the filter of potential, site-specific impacts and logistical difficulties of constructing and operating a transfer station at each of the sites. Using the condensed evaluation criteria developed through the public process and GIS (geographic information system) data provided by the County and site visits, aerial maps,

Figure 4: The 5-Tiered Screening Process

METHODOLOGY	
•	The study area includes 11,192 parcels.
•	Tier 1 Criteria were used to screen these parcels and reduce the number of potentials parcels to 1,470.
•	Tier 2 Criteria were applied through aerial photographs, topographic maps, and GIS data to screen these parcels and reduce the number of potentials sites to 112.
•	Tier 3 Criteria (Condensed Criteria, Table 2) were applied during a series of field surveys to screen the remaining 112 parcels and reduce the number of potentials sites to 25.
•	These top 25 sites were ranked using the Tier 3 Criteria.
•	Tier 4 Criteria eliminated unwilling sellers. Property owners of the top 25 sites were called to determine if they were willing to sell their property.
•	Tier 5 currently represents the top 10 ranked sites that have willing sellers.

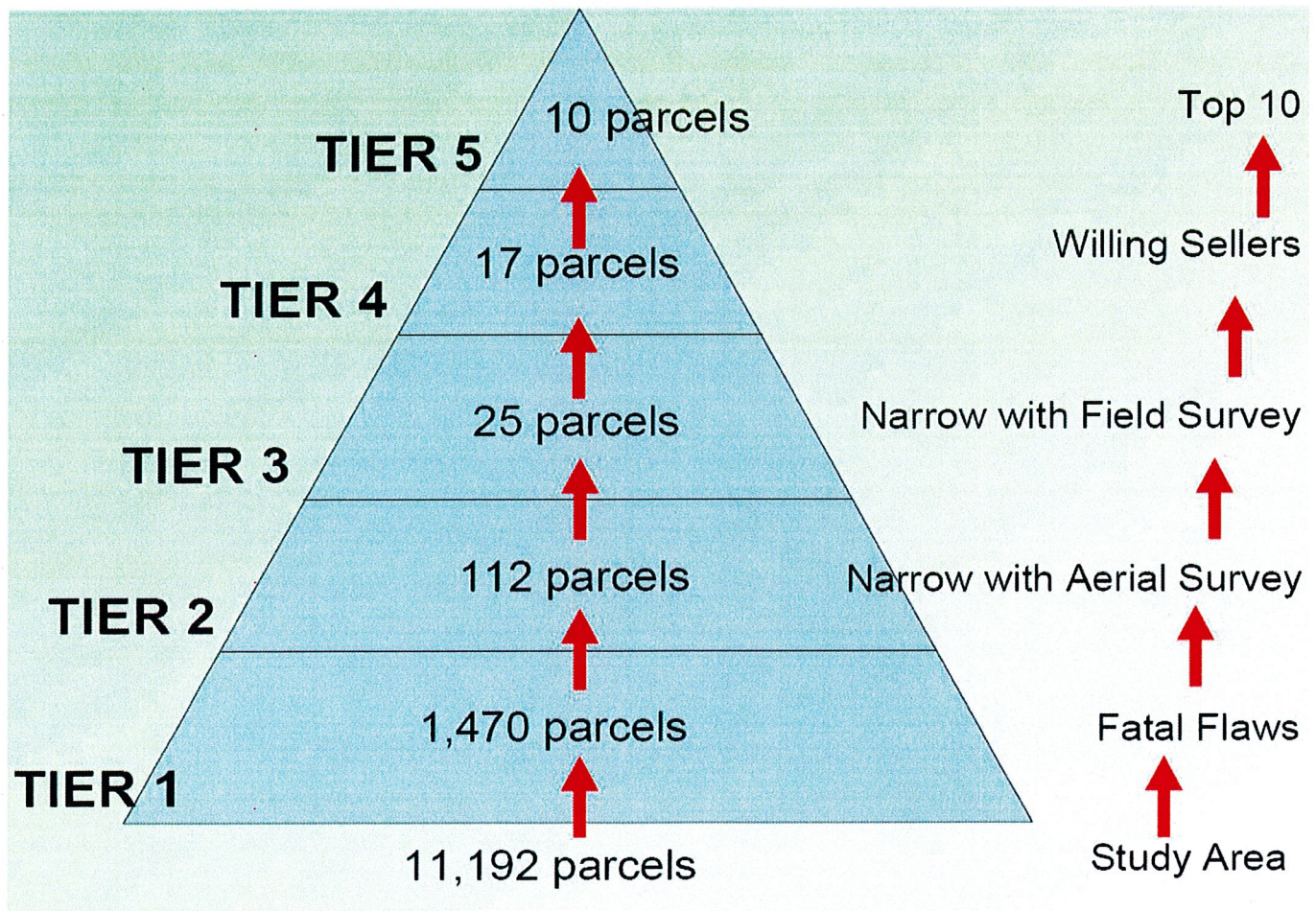


TABLE 2: CONDENSED SITING CRITERIA WORKSHEET

Original Evaluation Criteria Presented to the Public	Public Average Weight
Land clearing and grading could impact surface water drainage patterns	3.4
Land clearing and grading could impact groundwater resources	3.8
Land clearing and grading could impact rare and endangered species	2.9
Land clearing/grading could impact Environmentally Sensitive Habitat Areas	3.2
Land clearing and grading could impact neighbors privacy and views	3.8
Land clearing and grading could impact agricultural land	2.4
Land clearing and grading could impact scenic vistas from nearby areas	2.9
Runoff could impact surface water quality in creeks and streams	4.1
Runoff could impact neighbors if it flowed onto their land or road	4.2
Runoff could impact agricultural land	2.7
Dust could impact neighbors and the immediate neighborhood	4.0
Dust could impact local air resources	3.3
Noise could impact rare and endangered species of animals	2.8
Noise could impact neighbors	4.7
Traffic could impact neighbors and the immediate neighborhood	4.6
Traffic could impact level of service on the streets/Hwys near the site	4.2
Air pollution could impact neighbors and immediate neighborhood	4.2
Air pollution could impact air resources of larger community	3.4
Vectors could impact rare and endangered species	3.1
Vectors could impact ESHAs	3.1
Vectors could impact neighbors and immediate neighborhood	4.1
Light pollution could impact rare and endangered species	2.8
Light pollution could impact ESHAs	2.8
Light pollution could impact neighbors and immediate neighborhood	4.0
Light pollution could impact scenic vistas	2.9
Visual impact of project could effect neighbors/neighborhoods	4.0
Visual impact of project could effect viewsheds	3.3
Location will impact how much driving users must do to reach site	3.2
Cost of site will impact tipping fees	2.3
Cost of site could impact City and County budgets	2.4
Litter on route to transfer station could impact	3.9
Fire at the transfer station could impact public services	2.5
Fire at the transfer station could impact air quality	4.2
Property Values	4.2
Poor Public Access	3.4
Unstable Geology	3.3
Lack of Utilities	2.6
Unwilling Seller	2.8
Acquisition and development costs	2.4
Fatal flaw siting "TS" in a residential neighborhood	5.0
High density residential area	5.0
Pedestrian & bicycle/children walking & playing	5.0

1 = Minor Impact
5 = Major Impact

Condensed Criteria ¹	Condensed Weight
Buffer to Neighbors ²	4.1
Functional Class of Access Road ³	4.2
Ingress/Egress @ Access to Hwy ⁴	4.0
Distance off Hiway 20 or 1	3.6
Site Development Issues ⁵	3.2

Condensed Criteria Notes
<p>1. Original Evaluation Criteria were grouped to create a manageable number of criteria that could be used to rank the sites. Groups are coded by color.</p> <p>2. Considers light, dust, noise, vectors (less neighbors and further away the better); conflicting land use</p> <p>3. Considers the functional class and Level of Service of approaching roadways (Major Arterial = 1, Smaller = 5); Potential Impact to LOS</p> <p>4. Considers access safety issues, site distance, accel/decel lanes, turning lane, number of intersections</p> <p>5. Considers grading, vegetation cover, wetlands, creeks, zoning, new road cuts, existing road upgrades, clearing, cut/fill, new utilities, utility upgrades, etc</p>

Other Considerations	Wieght
CEQA evaluation required ⁶	XXX
Accessed thru Rural Residential ⁷	Fatal Flaw
Unwilling Seller	Fatal Flaw

Other Consideration Notes
<p>6. Not used as a screening criteria. These considerations must be evaluated during the CEQA process.</p> <p>7. < 20' wide, <25 mph, houses front on road, limited historic traffic</p>

road maps, soils maps and Google Earth the 25 most suitable sites were identified. The criteria used in this evaluation included:

- adjoining land use,
- proximity and density of neighbors and the presence of a buffer zone (potential impacts to neighbors from light, dust, noise, odors, and vectors),
- potential traffic impacts to the Level of Service of the connecting roadways, as well as the functional class of the access roadway,
- potential traffic safety and ingress/egress impacts,
- site development considerations such as grading, road construction, vegetation removal, installation of new utilities, and
- if the site would require access via residential roads that are less than 20' wide, have speed limits less than 25 mph, have houses that front on the road and have had limited historic traffic,
- the cumulative driving distance that the site would require of all self-haul customers and commercial trucks (sites closest to the junction of Highway 1 and Route 20 "the Gateway" would create the least cumulative driving distance).

The Gateway is a point that all of the waste in the study area must pass through on its way to the Willits Transfer Station. Minimizing the distance between the transfer station and the Gateway will minimize system-wide transportation costs. The Gateway concept replaced the waste centroid analysis applied earlier in the process. The centroid is the theoretical center of mass of the waste stream but was problematic due to the lack of detailed population data and the nature of the road system in the study area.

Additional field data was collected on the top 25 sites. The sites were evaluated using the five, weighted site evaluation criteria developed through the public input forms (the condensed criteria). Each criteria was given a rating (between 1 and 5) at each site. If the site would present problems under that criteria, relative to the other sites, its rating (or score) was high. Little or no potential impacts resulted in a low rating. The rating was then multiplied by the weighting factor to arrive at a score for that criteria, at that site. The scores for each criteria were summed to produce an cumulative score for that site.

The site with the highest overall score would have the greatest number of potential impacts and technical problems. The site with the lowest overall score would be the site that will create the least problems (as compared to other sites). It is important to note that even the sites with the highest scores (most problematic) are not "bad" sites. These top 25 sites have been winnowed from a total of 11,192 parcels. Therefore, these sites have all made it into the top 0.2% of all parcels in the study area and have good development potential for the proposed project. Attachment 1 provides additional detail about the methodology used to Rank the sites.

The ratings were based on limited site reconnaissance. Detailed investigations involving soil types, vegetation, rare and endangered species and cultural resources were not included in the scope of work but will be done on the sites taken into the CEQA Process. A few of sites were eliminated from the top 25 due to field conditions observed during the site visits. The Ranking of the top 25 sites is shown on Table 3.

Table 3: Site Evaluation Criteria Matrix for Top 25 Sites

Condensed Site Evaluation Criteria ¹			Traffic Impacts ⁴		Buffer to Neighbors ⁵		Access Safety ⁶		Cumulative Driving Distance ⁷		Development Logistics and Costs ⁸	
Weighting Factors ²			4.2		4.1		4.0		3.6		3.2	
Site	Site Name	Total Score	Rating ³	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score
1	Hawthorne - Highway 1	69.2	5	21	2	8.2	4	16	4	14.4	3	9.6
2	Anderson - Highway 1	69.2	5	21	2	8.2	4	16	4	14.4	3	9.6
11	North Fort Bragg Industrial Site	67.3	5	21	3	12.3	5	20	3	10.8	1	3.2
12	Pudding Creek Recycling Center	71.4	5	21	4	16.4	5	20	3	10.8	1	3.2
16	Rt 1 - GP Industrial Site in Fort Bragg	19.1	1	4.2	1	4.1	1	4	1	3.6	1	3.2
18	Georgia Pacific Woodwaste Landfill	55.5	3	12.6	1	4.1	3	12	3	10.8	5	16
22	Summers Ln. - Animal Shelter	57.6	5	21	2	8.2	3	12	1	3.6	4	12.8
31	Babcock - 20 West	31.4	2	8.4	2	8.2	2	8	1	3.6	1	3.2
32	Babcock - 20 East	35.5	2	8.4	3	12.3	2	8	1	3.6	1	3.2
36	Golf Course/CalTrans Soil Stockpile	23.2	1	4.2	2	8.2	1	4	1	3.6	1	3.2
38	Thorbecke - North of 20	56.8	3	12.6	2	8.2	3	12	4	14.4	3	9.6
39	Jackson State Forest - North of 20	33.2	1	4.2	2	8.2	1	4	2	7.2	3	9.6
40	Liesure Time RV Park/Gravel Pit	27.3	1	4.2	3	12.3	1	4	1	3.6	1	3.2
41	Jackson State Forest - South of 20	33.2	1	4.2	2	8.2	1	4	2	7.2	3	9.6
44	Thorbecke - South of 20	56.8	3	12.6	2	8.2	3	12	4	14.4	3	9.6
48	Thompson - Highway 20	56.8	3	12.6	2	8.2	3	12	4	14.4	3	9.6
50	Simpson - Majesky	68.7	4	16.8	3	12.3	4	16	3	10.8	4	12.8
52	Simpson - Jackson SF - Parcel 4	68.7	4	16.8	3	12.3	4	16	3	10.8	4	12.8
53	Boice - L&S	73.3	5	21	3	12.3	5	20	2	7.2	4	12.8
61	Boice Ln- Mitchell	73.3	5	21	3	12.3	5	20	2	7.2	4	12.8
74	Gibney Ln - Mendo Forest Prod Mill Site	59.1	4	16.8	3	12.3	4	16	3	10.8	1	3.2
79	Gibney Ln - Jackson SF - Parcel 5	72.8	5	21	2	8.2	5	20	3	10.8	4	12.8
82	Jackson State Forest - 409 West	56.8	3	12.6	2	8.2	3	12	4	14.4	3	9.6
83	Jackson State Forest - 409 East	56.8	3	12.6	2	8.2	3	12	4	14.4	3	9.6
85	Caspar Transfer Station	61.3	4	16.8	1	4.1	4	16	5	18	2	6.4

MAXIMUM POSSIBLE SCORE (BAD)	95.5	5	21	5	20.5	5	20	5	18	5	16
MINIMUM POSSIBLE SCORE (GOOD)	19.1	1	4.2	1	4.1	1	4	1	3.6	1	3.2

Notes:

- 1 - Condensed Site Evaluation Criteria is based on the original selection criteria originally presented to the public.
- 2 - The Weighting Factors indicate how much significance the public thought each criteria should be given in the evaluation.
- 3 - Each criteria was rated on a scale of 1 to 5, in comparison to the other sites being considered. A rating of 1 indicates that development will create minimal problems, under this criteria. A rating of 5 indicates the site will be problematic.
- 4 - The rating number is based on a combination of factors that will determine how the flow of traffic will be affected on the roads between the site and the "gateway," including the functional classes of the roads (Highway verses rural residential), the existing Level of Service and the number of trip ends generated by the project.
- 5 - The rating number is based on the size and effectiveness of the buffer zone between the Site and the neighbors. Long distances and thick vegetation earns a rating of 1). The buffer zone will mitigate for light, dust, noise, odors and vectors.
- 6 - The rating number is based on traffic safety issues such as the sight distance at and the number of intersections, the presence of turning lanes and/or accel/decel lanes,
- 7 - The rating number is based on the travel distance from the site to the "gateway." This will affect the average distance all discards will be transported in the journey through the County. Shortest distance earned a 1.
- 8 - The rating number is based on a combination of factors that will affect the cost and effort required in development of the Site including length and type of access road required, utilities available/required, grading and vegetation type.

Tier 4

Tier 4 criteria was “willing seller.” The owners of each of the top 25 sites were called to determine if they were willing to sell their land. Eight property owners were unwilling to sell. The 10 most suitable, highest-ranked sites were chosen from the remaining sites

Tier 5

Tier 5 analysis consisted of compiling available data on the top 10 and estimating the costs to acquire and develop the sites. This information was presented to the TAC and will be presented at the public at a second public meeting (May 10, 2007). Based on feedback from the public; three or more will be recommended to the County Board of Supervisors for evaluation through the CEQA Process. The remaining sites can serve as alternates should the CEQA evaluation determine that any of these sites are unsuitable.

Cost Estimates

A detailed cost estimate was prepared for the Conceptual Transfer Station Site Layout (Table 4). Site-specific cost estimates were made for each of the top 10 sites. The main differentiating feature between each site at this point is the length of the access road into the facility from the main access road. Table 5 presents a summary of the preliminary site-specific cost estimates. This table was included in the Draft Report of Findings. Updated and more accurate cost estimates are include in the Site Data Sheets (tabbed dividers below). A major cost item not included in this table is the purchase or lease cost of the parcels. These costs are to be negotiated. The cost factors considered included:

- Environmental Site Assessments
- Other environmental studies (such as wetlands, biological, soils and traffic)
- Initial Study (part of CEQA Process)
- Public Hearings and other meetings
- Permits and regulatory interactions (SWPPP, RDSI, WDRs, building permit)
- Engineering (including design, bid documents, contract and bid assistance)
- Construction/development (site work, utilities, buildings, scales, roads, etc)
- Equipment (loader to move garbage, excavator to load, sweeper for cleanup)

Site Analysis Data Sheets and Site Maps

The following section contains Site Analysis Data Sheet for each of the top 10 ranked sites. They are presented as packets in the tabbed sections below. Each Data Sheet includes a site number and site name. Site numbers were assigned to each of the top 112 sites sequentially from the northernmost site working southward. Site name is the site’s primary access route and the name of owner of the parcel(s) associate with that site. Following the site name and number, each data sheet displays a range of general site information, land use data, and site-specific evaluations.

Following each Data Sheet is a Soil Map and a Site Location Map for each site. All Site Location Maps are based on the aerial photographs and GIS data provided by the County. The boundary of the entire parcel is outlined with a thick green line and the boundary of the desired Site within the parcel is outlined with a thinner yellow line. Most Sites will require a lot split or some kind of lease agreement.

Table 4. Detailed Cost Estimate for Conceptual Transfer Station Site Layout (Cont)

Description	Number of Units	Unit Price	Total
Metals			
Transfer Station (Purchase & Erect)	10,000 SF	\$35.00 / SF	\$350,000
HHW Building (Purchase & Erect)	1,600 SF	\$35.00 / SF	\$56,000
Push Wall Armoring	1,500 SF	\$25 / SF	\$37,500
Bollards	25 EA	\$200 / EA	\$5,000
Metals Subtotal			\$448,500
Other Buildings			
Gate House	216 SF	\$150 / SF	\$32,400
Breakroom / Bathroom	450 SF	\$100 / SF	\$45,000
Other Buildings Subtotal			\$77,400
Doors			
20' x 25' Roll-Up Doors w/Motors	2 EA	\$14,000 / EA	\$28,000
22' x 11.5' Roll-Up Doors w/ Motors	3 EA	\$8,000 / EA	\$24,000
14' x 18' Roll-Up Door w/ Motors	2 EA	\$8,000 / EA	\$16,000
20' x 13.5' Roll-Up Door w/ Motor	1 EA	\$8,000 / EA	\$8,000
8' x 10' Roll-Up Door (HHW)	1 EA	\$5,000 / EA	\$5,000
6' x 8' Roll-Up Door (HHW)	1 EA	\$5,000 / EA	\$5,000
12' x 8' Roll-Up Door (HHW)	1 EA	\$5,000 / EA	\$5,000
8' x 8' Roll-Up Door (HHW)	1 EA	\$3,000 / EA	\$3,000
Doors Subtotal			\$94,000
Finishes			
Included in Building Costs	LS	\$0 / LS	\$0
Finishes Subtotal			\$0
Specialties			
Purchase 35' x 11' Scale	1 EA	\$35,000 / EA	\$35,000
Install 35' x 11' Scale	1 EA	\$2,000 / EA	\$2,000
Purchase 10' x 14' Scale	2 EA	\$16,000 / EA	\$32,000
Install 10' x 14' Scale	2 EA	\$2,000 / EA	\$4,000
Purchase 70' x 11' Scale	1 EA	\$80,000 / EA	\$80,000
Install 70' Scale (surface mount)	1 EA	\$5,000 / EA	\$5,000
Install Signage	8 EA	\$200 / EA	\$1,600
Security Alarm System	1 LS	\$2,500 / LS	\$2,500
Video System	1 LS	\$3,000 / LS	\$3,000
Phone System	1 LS	\$4,000 / LS	\$4,000
Public Address System	1 LS	\$2,000 / LS	\$2,000
Steel Deflectors on Pushwall	5 Sheets	\$225 / Sh	\$1,125
Paint Striping	1 LS	\$3,000 / LS	\$3,000
Traffic Control	1 LS	\$5,000 / LS	\$5,000
Steel Staircase for Waste Oil Tank Access	1 LS	\$1,000 / LS	\$1,000
Oil Tank	1 LS	\$5,500 / LS	\$5,500
2500 Gallon Contact Water Tank	1 EA	\$3,000 / LS	\$3,000
Specialties Subtotal			\$189,725

Table 5. Summary of Site-Specific Cost Estimates

Item	Cost
Costs Common to All Sites	
Environmental, Permitting, Design and Construction	\$2,622,350
Construction Management (7% of construction cost)	\$183,565
Subtotal	\$2,805,915
Contingency (15%)	\$420,887
Total (Not including land cost that is still to be negotiated)	\$3,226,802
Equipment	
Excavator	\$250,000
Loader	\$180,000
Sweeper	\$140,000
Subtotal	\$570,000
Contingency (10%)	\$57,000
Total	\$627,000
Access Road Improvements (Unit Costs)	
Road Improvements into Site from Highway (32' wide from Mendo DOT)	
Upgrade an existing road (/linear foot)	\$250
Pioneer a new road (/linear foot)	\$400
Site 40 - Liesure Time RV Park/Gravel Pit	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (50' Upgrade)	\$12,500
	\$3,866,302
Site 39 - Jackson State Forest - North of Highway 20 (Land to be leased)	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (50' New + accel/decel lanes)	\$120,000
	\$3,973,802
Site 41 - Jackson State Forest - South of Highway 20 (Land to be leased)	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (50' New + accel/decel lanes)	\$120,000
	\$3,973,802
Site 36 - Mendocino Coast Parks and Recreation District	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (750' Upgrade)	\$187,500
	\$4,041,302
Site 85 - Caspar Self-Haul Transfer Station	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (1,400' Upgrade)	\$350,000
	\$4,203,802
Site 12 - Pudding Creek Transfer Station	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (0')	\$0
	\$3,853,802
Site 11 - Industrial Site North of Fort Bragg	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (50' Upgrade)	\$12,500
	\$3,866,302
Site 82 - Jackson State Forest - Road 409 West (Land to be leased)	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (50' New + accel/decel lanes)	\$120,000
	\$3,973,802
Site 83 - Jackson State Forest - Road 409 East (Land to be leased)	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (50' New + accel/decel lanes)	\$120,000
	\$3,973,802
Site 18 - Geogia-Pacific's Woodwaste Landfill	
Costs Common to All Sites + Equipment	\$3,853,802
Road Improvements (3,900 Upgrade + 3,000 New) (Off-grid electrical service??)	\$2,205,000
	\$6,058,802