

Reduce, Reuse and Recycle

Final Report and Recommendations

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January 28, 2005

Overview

Sitka has made great strides in the RRR program since its implementation 15 months ago. Why should Sitka support a vigorous RRR program? Garbage and the way we choose to manage it, is a challenge not only in Sitka, but also in our region and nation as a whole. Sitkans generate an increasing amount of garbage every year. Not only is garbage a highly visible and expensive issue, but it is also one with which every individual can relate since EVERYONE generates garbage. We all share a responsibility for protecting and maintaining our environment and we must recognize that through our lifestyles and behaviors each one of us can make a difference. Collectively, Sitkans can also choose to make a difference and demonstrate to the region that we are on the cutting edge by continuing to promote and expand RRR programs and policies. Decision points must be made based not only on the bottom line but also in consideration of our impacts to our community, region and earth.

Recyclables also have a market value. Garbage does not. We pay, in round numbers, \$150/ton for recyclables and \$120/ton for garbage. However, after being sold on the market Sitka receives a “rebate.” Recyclables therefore end up costing less to dispose (not counting infrastructure costs).

Sitka has a solid, user-friendly RRR program given the constraints from which we must work in. Sitkans do not have far to drive to deposit their recyclables. The Marine Services Center and Keet Gooshi Heen School are centrally located. Both are open 24 hours a day, 7 days a week. Contrast this with Juneau that has much farther driving distances and is only open two days a week.

Sitka has laid an excellent foundation for expanding the RRR Program. Community members who initially envisioned the program through the collaborative planning process, Solid Waste Implementation Team members who continue engagement, city staff and the citizens of Sitka are to be commended for their efforts. We have come a long way in a year. Let’s continue the forward direction that has been established.

A number of accomplishments were achieved in 2004.

Bin Modification

Openings were enlarged or redesigned on the cardboard and mixed paper bins to facilitate ease of recycling based on user suggestions.

Pavement

The area under the bins was paved to improve the site by decreasing standing water and mud, which was prevalent. Pavement also facilitates sweeping the site to maintain a clean area.

Secondary Site

An additional site was established at Keet Gooshi Heen School in August to ease the burden on the Marine Services Center location, encourage recycling by the school, and to encourage families to recycle when dropping off or picking up their children.

Shredded Paper

A separate bin was established for shredded paper to accommodate the business community and to facilitate handling and baling tasks. This was based on high user interest in having shredded paper accepted as one of the recyclables.

Number of 32-gallon cans

Nearly 500 households have signed up for the 32-gallon can. Many households recycle but still choose to use the 90-gallon can. Those who have switched have been surprised with how little garbage they produce. Essentially, only plastics remain and organic material if home composting is not done.

Public Education

- **Print Media.** 148 pieces of print media were produced in 2004 for the Sitka Sentinel and Sitka Soup. This included press releases, public service announcements, photographs, advertisements and flyers posted about town.
- **Radio.** Four, 30 minute to an hour-long call-in "Garbage Show's" were hosted on Raven Radio. The RRR coordinator went on air during Problem Corner 8 times as part of educational outreach. 180 radio 30 sec. advertisements were placed on Raven Radio and KIFW in addition to in-kind PSA's.
- **Classroom / Group Presentations.** 27 educational sessions were presented in Sitka's public schools (Keet Gooshi Heen and Blatchley Middle School), Mt. Edgcombe Preschool, Chamber of Commerce, Girls Scouts, Sitka Rotary Club and Sheldon Jackson College.
- **Monthly Grind.** Students presented recycling skits during two Monthly Grinds.
- **Displays.** RRR displays were placed at the main post office and Kettleston Memorial Library.
- **Website Link.** A link to RecycleSitka from the city's website promotes RRR concepts, provides education and an opportunity for individuals to ask questions.
- **Business Contacts.** Approximately 40 contacts were made directly with the business community to promote recycling.

- **Individual Contacts.** A count was not kept but they number in the hundreds.

Events

- **Green Bag Lunches.** Two Green Bag Lunches were held at Harrigan Centennial Hall.
- **Recycle Extravaganza.** Two weekend “Pack the Bins” events were conducted in April 2004 during the citywide clean-up week. “Winners” of drawings received donated recycling incentives from local businesses and \$5 discounts off their utility bill. City employees, 4 businesses and 2 public schools participated in a roadside litter pick-up, separating out recyclables.
- **Compost.** Two Christmas tree and pumpkin events were coordinated with STA and an educational event was conducted during the Recycle Extravaganza’s. Free compost was distributed and 3 businesses donated home composters for a drawing.
- **Electronic Waste.** Coordinated with STA, a one-time event was hosted in May 04.

RRR Coordinator Tasks

The RRR Coordinator position is essential to the success of the program and is needed in the future to not only maintain the program but to grow it. Short, mid and long-term priorities for this position are listed followed by specific recommendations to Sitka’s RRR program.

Short term (through June 30, duration of existing contract)

The following tasks should be considered priorities for the next RRR Coordinator and will yield the most results in this time period.

- On-going residential and business contacts to encourage recycling
- Monthly RRR events (green bag lunches, presentations, radio shows, etc.)
- Super Saturday, April 9th – educational event at Baranof School
- City wide clean-up – Second Recycle Extravaganza, April
- Coordinate electronic waste event with STA, April
- “Keep Glass in Sitka” campaign
- Update general paid advertising efforts
- Weekly cleaning of recycling centers (sweeping, picking up small trash)
- Update website
- SE Conference: Maintain connection to regional MSW study to ensure / advocate for significant RRR component

Mid-term

- Continue short term tasks
- Research pros and cons of separating out office paper from mixed paper
- Research costs, constraints and opportunities for recycling PET and HDPE plastics
- Maintain connection with SE Conference

- Research and promote expanded and shared aluminum recovery and recycling effort
- Expand collaborative RRR events / projects with STA
- Form a “Friends of RecycleSitka” group of volunteers to coordinate event recycling programs and to offer general support

Long-term

- Continue short term tasks
- Maintain connection to regional MSW study and SE Conference to advocate for RRR direction
- Research opportunities and constraints for pros and cons for mandatory recycling, curbside service and city management of MSW
- Research opportunities and constraints for a more comprehensive composting effort to include STA and the Fortress of the Bears

RECOMMENDATIONS

Public Education

Vigorous public education is an integral part of the RRR effort and must be on-going. Sitka now has one full year of collection data to use as a benchmark for comparison purposes. Most of the RRR Coordinator’s time in 2004 was spent in educational outreach efforts; however Sitka is still only recycling at a 5% general rate. The national average is about 30%. There is much left to do and plenty of opportunity to do so.

Recommendation

- Continue spending several hours / week at the Marine Services Center and at KGH in public outreach / cleaning sites.
- Continue contacting individuals who do not properly separate items (unflattened boxes primarily) to educate.
- Continue contacting individuals who overfill garbage cans (32, 90 or 350 containers) to educate and encourage reducing and recycling of contents.
- Continue one-to-one contact with commercial / larger producers of MSW to encourage them to recycle.
- Continue and expand media to promote RRR efforts.
- Continue educational opportunities in the schools and other groups.

RRR Position

This position provides the foundation for the RRR program. Existing city staff has sufficient responsibilities that would preclude them from delivering a vigorous, organized and consistent RRR program. An RRR program directed by volunteers is not recommended.

Recommendation

- Continue funding RRR contract position beyond June 30, 2005.

Mandatory Recycling

Research should be conducted to determine the pros and cons of a mandatory recycling program in Sitka. Communities that mandate recycling have a higher rate of compliance when compared with voluntary programs. Costs, contracts, curbside pick-up, containers, and regional MSW solutions need to be weighed.

Recommendation

- Begin research on mandatory recycling programs well before current contractual obligations are full-filled.
- Consider using Green Star, Inc in Anchorage to help with this research. Juneau may be interested in cost-sharing individual to come to region.

City Management of MSW

Petersburg manages their MSW needs effectively. Research is suggested to determine the pros and cons of city management of MSW in Sitka before existing contractual obligations are met.

Recommendation

- Explore city management of MSW well before current contractual obligations are full-filled.
- Consider tapping into Greenstar out of Anchorage to assist in assessment.

Curbside pick-up

Curbside pick up of recyclables increases voluntary participation. This will be very costly to implement unless recycling becomes mandatory. Probable low participation rates would drive costs too high.

Recommendation

- Research opportunities and constraints for curbside services.

Southeast Conference

Southeast Conference is financing a regional study of MSW solutions with Smith, Bayliss and Leresche, Inc. from Juneau. The study should include an RRR review. A menu of choices should be researched and summarized.

Recommendation

- Sitka should be very proactive in expressing interest in hosting any regional RRR programs and economic opportunities. Gaining support from SEDA should be initiated for potential economic development activity.
- Sitka should bird-dog the Smith, Bayliss and Leresche study to ensure a comprehensive RRR component is included.

Recyclables

Newsprint

- No change recommended

Cardboard, Glass, Tin

- No change recommended

Mixed Paper

Sitka could separate office or white paper from mixed paper because it consistently has a higher market value. Office paper currently sells for (current value pending information from Rabanco). Mixed paper sells for (current value pending information from Rabanco).

- **Pros:** Higher rate of return when it goes to market.
- **Cons:** Implementation would require contract negotiation, public education, additional bins, more staff time from commercial users to separate and potential contamination from the general public.

Recommendation

- Expand research to weigh pros and cons of separating white paper from mixed paper
- Consider separating office white paper from other mixed paper for commercial participants only (SEARHC, SCH, USFS, USCG, CBS etc.)

Plastic

Many residents have expressed interest in recycling plastics in Sitka. Plastics come in multiple grades for recycling. The lower numbers (#1 and #2) have the greatest resale value.

Juneau began recycling gallon milk and water containers (HDPE #2) and clear beverage container's (PET #1) in November on a voluntary basis. An informal survey was conducted to estimate the number of these containers entering Juneau from large grocery stores only. Vending machines, convenience store and cruise ship sources were not included. Results of that survey estimate that 3,770,000 PET and 4,500,000 HDPE containers were imported into Juneau in 2004. This is interesting to note because prior to the survey, people believed there were far more PET #1 containers. In other words, there were more gallon milk and water containers than clear pop and water bottles. However, the numbers might change if a more detailed analysis were conducted to include all vending machines and smaller stores.

Participation rates started at 5% and have increased to an estimated 8% in a few short months due in large part to schools, churches, Juneau Friends of Recycling and other organizations encouraging people to recycle. The City and Borough of Juneau purchased recycling containers for these organizations to use.

Current market values as of 1/26/05 are prices / pound of baled plastic delivered to the pier in Seattle for export to Asia. Pricing for Sitka would be calculated using the agreed upon formula for baled material delivered to Rabanco. The market value currently is:

- PET is .19/lb
- HDPE Natural is \$.20 /lb
- HDPE Pigmented is \$.12/lb

Recommendation

- Research potential for recycling HDPE and PET plastics to begin prior to termination of existing contracts

Electronic Waste

Individuals and businesses are interested in electronic waste recycling. In May 2004, STA organized a one time only, e-waste recycling event. It was very successful with minimal public promotion. Sitka Medical Center recently inquired about recycling outdated equipment and was willing to pay a fee. Due to lack of storage space on their end and the city's, and no firm commitment of another recycling event in the near future, Arrowhead Transfer hauled all equipment to the transfer station.

Anchorage has had tremendous success in conducting annual electronic recycling events in 2003 and 2004. Last May, they collected 610, 695 lbs (more than 305 tons) of electronics from businesses (including nonprofits, schools, and government agencies) and residences. This was twice the quantity (280,283 lbs) collected in May 03 and *the largest quantity of electronics for a one-time collection event nationwide!* Material was primarily from Anchorage but electronics were brought from about a dozen communities statewide and from as far away as Fairbanks and Ketchikan. 26.5 trailers were filled and shipped to Total Reclaim in Seattle for processing and recycling.

Green Star worked with 47 sponsors, including Dell, Inc., which provided funding to offer recycling for households for free; the Rasmuson Foundation, which provided funding to offer recycling to nonprofit organizations for free; and BP as the event's overall presenting sponsor. In addition, the shipping and moving of trailers was donated, as was almost all the equipment and supplies used. Over 200 volunteers participated, providing 800 person hours of effort over four days of collection and clean up.

For more details about the event, contact Green Star at 907.278.7827 or at www.greenstarinc.org/electronicsummary2004.php

Recommendation

- Promote a second cooperative E-waste recycling event with STA to be coordinated in April during the annual city-wide clean-up
- Contact Green Star to develop similar model in Sitka and region for the future
- Acquire in-kind help from businesses and sponsors to defray costs for the public, ie, freight companies, local businesses and services organizations and citizen volunteers.
- Promote e-waste recycling in the region through SE Conference
- Locate local dry storage space for businesses and individuals to deposit electronic equipment. A short-term solution may be warehouse space out at the Industrial Park

Composting

The city has worked with STA over the past year to co-host pumpkin and Christmas tree composting drives. STA is interested in expanding the community composting project.

Recommendation

- Explore opportunities with STA to expand composting program. They have access to funding sources that may enhance this effort.
- Include composting educational events linked to annual city-wide clean up program
- Work with Community School to incorporate composting project at KGH

Aluminum

The Baranof Barracuda Swim Club must be commended for their foresight in beginning the aluminum can recycling program 20 plus years ago. It has and continues to be an excellent fundraising and community service opportunity for their membership.

While hard numbers have not been made available, it is reasonable to expect that revenues have increased over time with increased volume of cans and scrap aluminum being recycled. It is also reasonable to expect the rate of recycling aluminum has increased since the city implemented a broader recycling program. The club benefits from the educational outreach and paid advertising financed through the RRR position at no cost to them. Several communities in the region support youth or community service groups by either giving cans or letting groups collect cans for recycling. However, no community, based on current research, gives scrap aluminum away.

The Club will need to move from its present location at the Turnaround as the skateboard park develops. Discussions and communications have been brought forward indicating financial hardship on the part of the Club to cover the costs of moving the existing building to a new location and for site preparation. A desire has been expressed from the Club that the City covers these expenses.

Note: The following recommendation is not to be interpreted as a desire to withdraw recycling opportunities from the Club nor undermine what they have accomplished. It would be most discouraging if discussions were not open and collaborative in nature. Information from the Club and City should be transparent to base sound decisions upon.

Recommendation

- Review historical revenue data generated by aluminum recycling from the Club. This review should include a more detailed analysis of revenue since the city recycling program was implemented (August, 2003) and compared with previous years.
- Explore alternative recycling arrangements with Club leadership. This *could* include: City management of all aluminum recycling – collection, baling, storing and selling when the market is high. The Club would receive an annual payment from the city based upon the historical review of revenue generated.

- The Club could collect cans only and the city collect all scrap metal is an option to investigate.
- Retain community service component of existing program by Club members to increase number of cans recovered for recycling (increased pick-up from bars for example).
- A financial payment to the Club should be “guaranteed” from Assembly to Assembly in future years.
- Research alternative aluminum recycling programs in the region/state
- Research additional uses of sharing revenue generated by aluminum recycling.
Note: This is revenue above and beyond what the Barracuda’s would receive on an agreed upon annual basis. Examples: Petersburg sends one bale of aluminum with each trailer of MSW or recyclables shipped to Seattle. One bale pays for all shipping costs. In Anchorage, businesses have created a *Recycle for Rondy* program, which allowed people to donate the value of their recycled aluminum cans to the Fur Rendezvous World Championship Sled Dog Race. Fur Rondy has received about \$40,000 from the can donation program since 2000. Sitka could consider designating aluminum can recycling for other groups after the Barracuda Swim Club received their share.

Rate Structure

Commercial accounts are free to use the recycling program at no extra cost. The city pays for pick up, processing and shipping recyclables to Seattle after items are dropped off at the Marine Services Center. Businesses, if they do an excellent job of recycling, should be able to reduce either the number of garbage pick-ups and / or reduce their size can. Paper and cardboard account for most waste for many businesses. The same holds true for residential accounts.

Sitka might well consider instituting a rate structure several communities have adopted to cover these costs, or at least defray the costs.

Residents in Juneau pay a \$4.00 monthly fee to cover costs associated with household hazardous waste and recycling costs. Commercial accounts pay a recycling fee based on quantity. Commercial and residential accounts must haul recyclables themselves. Garbage disposal fees are paid directly to a private contractor for both residential and commercial accounts.

An environmental protection assessment fee of \$2.33 is being considered in Petersburg. This flat fee would be assessed for both residential and commercial accounts and would cover costs associated with removing chemicals from the solid waste stream and the sewers (HHW collection). It will be used to fund the expense of shipping recyclables, which is considered another environmental issue. The revenue generated from the fee will be earmarked in the budget for these two causes.

mmendation

- Expand rate research in the region and develop recommendation for Sitka for residential and commercial accounts to cover handling and shipping costs.

Overfilling garbage cans

In August 2004, an ordinance was drafted which would make overfilling a garbage can illegal and punishable by a fine of up to \$250. The intent was to discourage individuals from overfilling their garbage cans. Overfilling cans attract ravens and bears. Cans tend to tip over more easily and creates an unsightly mess. Households are also not paying for the service level they have paid for if they overfill their cans habitually.

The Assembly was not interested in adopting this ordinance and it failed on first reading. It was recommended to promote the 200 lbs. of additional garbage that every household is entitled to bring to the Transfer Station, every month, at no extra charge. This was done through paid advertising on Raven Radio, KIFW radio, Sitka Sentinel and Sitka Soup. In addition, the RRR contractor personally contacted individuals who overfilled cans and offered suggestions as to how they could reduce and recycle their excess in addition to hauling it to the Transfer Station.

Cans are still being overfilled.

Petersburg has adopted a “closed lid ordinance”. It has been effective in keeping the bears out of town and keeping things from getting messy. Petersburg Municipal Code Chapter 14.12.030.B and C deal with this issue. People are also charged for extra garbage for each volume, less than or equal to 32 gallons, over their service level at the time of pickup. The charge is an additional \$4.88 per 32 gal volume. This has worked very well in keeping the litter problem down as well as covering the City for garbage that is set out over the service level being paid for by the customer. The following is from their code:

Petersburg Municipal Code, Chapter 14.12.030.B

B. ...Containers shall have a tight-fitting overlapping cover or a cover permanently attached to the container. A reasonable effort shall be made to stow or secure refuse containers in such a manner that refuse will not be accessible to animals.

C. The customer shall keep each refuse storage container clean inside and out so that no odor nuisance shall exist. Covers shall not be removed except when necessary to place refuse in the storage container or take the same there from. Containers shall not be overloaded to the extent that covers cannot be securely replaced.

Recommendation

- Sitka adopts similar language in the Municipal Code to discourage individuals from overfilling garbage cans.