

SWAC Update on Feasibility Project

What are we going to do today?

- Update Council on SWAC's feasibility project
- Provide answers to Council questions
- Decide next steps for SWAC/workgroup

Please hold all
your questions till
you see...



Where are we?

- SWAC workgroup is undergoing review of a feasibility study on a predominately curbside model
- The workgroup also has a model drafted with drop-off services and many tier two through four service levels available
- Costs/prices have been studied and are undergoing review at various levels

How did we get here?

December 2010 - a snapshot

- San Juan County Solid Waste is in debt \$1,000,000+
- Facilities are open less
- Rates to customers are very high
- SJI facility as a transfer station is out of compliance
- Town of Friday Harbor is hauling the super-majority of its waste to Skagit County.

January 2011

- County Council Solid Waste SubCommittee proposes feasibility study to SWAC
- SWAC accepts and makes it the only item on the 2011 work plan
- SWAC forms subcommittee to act as work group - composed of 4 SWACers, 1 citizen, and the Solid Waste Program Manager

SWAC Project

- Operational and financial feasibility for a predominately route-collected model
- Identify the operational model and costs
- Develop possible solutions for “Tier 2-4” services

Level of Service Tiers

Tier 1

- Garbage and recycling services
- HHW, batteries, used oil and antifreeze (if grant funded)

Tier 2

- Litter, noxious weeds, beach clean-up
- C&D debris
- Metal recycling
- Appliances
- Composting

Tier 3

- Reuse facilities

Tier 4

- Co-composting
- Source-separated recycling

February

- Workgroup meets to scope out the project and assign tasks
- Information collected and reported at SWAC meeting
- SWAC consents to continued workgroup action

March 9

- Workgroup outlines operational model for largely route-collected garbage and recyclables
- Problems/opportunities emerge on hard-to-reach households and tier 2-4 services

March 21

- Workgroup meets with Solid Waste SubCommittee to present findings in feasibility study
- Drop-off garbage and recyclable service opportunities discussed
- Numbers for system presented in detail and discussed by SubCommittee, Administrator and Utility Manager

March 24

- SWAC reviews workgroup's update on the feasibility study

Predominately Route-Collected Model

Assumptions

- Predominately route collected
- All waste transferred in Skagit, not San Juan County
- Next-to-zero staffing on County payroll

Route Collected Garbage

Works about the same as it does now

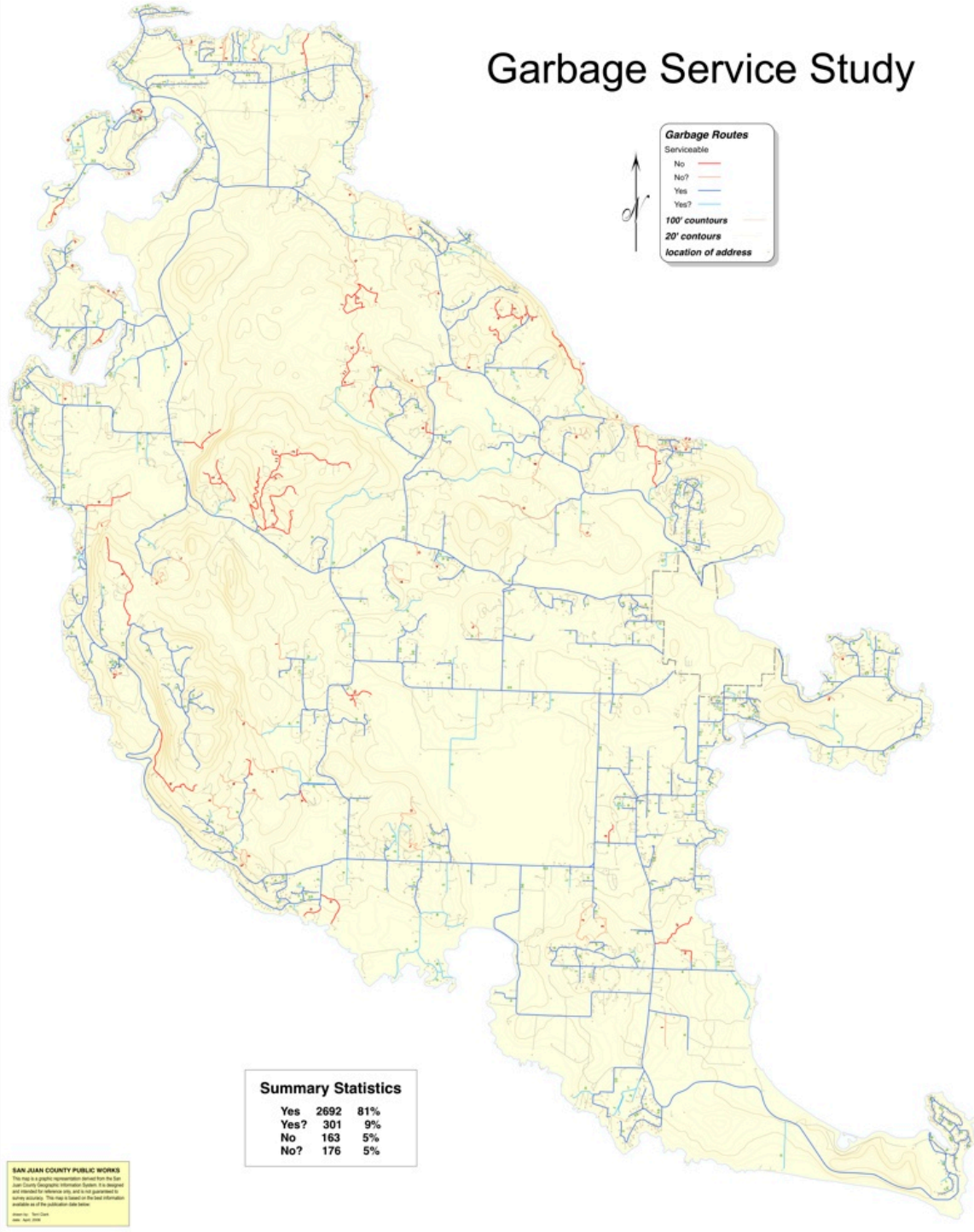
- Certificated Hauler operates routes on the four ferry-served islands
- Reaches 90+% of households and businesses
- Pick up is weekly, every other week or infrequent
- Containers include cans and 2-yard containers
- Service available at the house or end of the driveway

Route Collected Commingled Recyclables

Works about the same as garbage does now

- Certificated Hauler operates routes on the four ferry-served islands
- Reaches 90+% of households and businesses
- Pick up is every other week or infrequent
- Containers include cans and 2-yard boxes
- Service available at the house or end of the driveway

Garbage Service Study



San Juan Island Service Area Map

- about 3350 households are on San Juan Island
- about 350 cannot be reached safely or without causing damage

90% of all households can be served at home

Shared Dumpsters

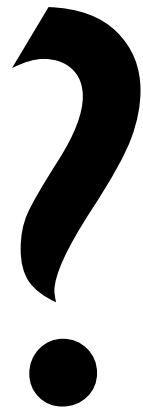
- Siting on County right-of-way requires code change
- Siting on private land requires code change and cooperation among individuals for pricing, clean-up
- Ever-present vermin attractant
- All require monitoring for illegal disposal by non-community members

How do we deal with other kinds of waste?

- Route collection for fluids, batteries, bulky items and appliances problematic (ie. size, vehicle access, costs, special routes) and illegal
- Hazardous waste must be through round-up approach
- Litter and noxious weeds feasible through container pick-up or other methods

Areas in Need of Better Solutions

- Hundreds of households not able to be serviced by route collection would use problematic dumpsters or cans along the road
- Appliances and bulky items difficult/expensive to collect
- Tier 2-4 services not adequately addressed
- No on-island self-haul option exists



Another way to service the community is a hybrid model

that lies somewhere between the bookends of

Zero Stations -
Entirely Route-
Collected

Hybrid

Three-Facility
Model

Assumptions

- Household self-haul service requires a Solid Waste Facility with structures, roofs, and/or tipping floors **FALSE**
- Household self-haul service requires an industrial-zoned parking lot with adequate queuing space
- Self-haul is the currently preferred delivery method by many for core garbage and recycling services

Drop-Off Services = Self-Haul Services into a Packer Truck

- Drive to a drop-off location
- Dump material
- Record payment
- Leave

Assumptions

- Garbage and commingled recycling services available
- Preferred locations are at existing sites
- Some kind of lease/use agreement would need to be considered with property owner
- Getting waste off-island the same as route collected method
- packer truck

Requirements

- Pre-paid punch cards or customer accounts are used to expedite traffic
- Dumpsters would be used for “surge capacity”

Opportunities

- Any household (not just those in hard-to-service areas) may access the service
- Existing reuse facilities (i.e. The Exchange and the Take it or Leave it) could continue to be co-located with drop off venue
- Appliances, fluids, batteries, bulky items, noxious weeds, litter and steel may be dropped off
- Hours open to the public could be flexible, and would be at least 2 or more days/week (one weekday and one weekend day)
- Hazardous waste round up could be co-located

Risks

- Transport and transfer costs go up significantly
- Customers dislike new service model
- No industrial zoned options available
- Unknown unknowns



So What does this All Cost our Community?

- Debt and legacy costs still remain
- Little to no capital costs to the County
- 1.0 or less FTE on County (Solid Waste) payroll
- Collecting and transferring to Skagit

Collecting and Transferring to Skagit County

Collection Costs

+

Transport
& Transfer Costs

=

Total Costs

Collection

- packer truck
- labor (including benefits)
- maintenance and repair
- fuel
- license and insurance
- overhead
- profit and B&O taxes
- state refuse tax
- county excise tax

If collecting at Drop-Off lot

- sani-can
- dumpsters
- lease

Transport & Transfer

- packer truck
- labor (including benefits)
- maintenance and repair
- fuel
- license and insurance
- overhead
- ferry
- tip fee
- profit and B&O taxes
- state refuse tax
- county excise tax

Transport & Transfer Costs

- Most costs are set because of transfer time and route
- Some costs are percentages of subtotaled costs
- Other costs vary depending on weight
- Tonnage transported is largest sensitivity variable on cost/ton

Transfer Costs

cost	cost ea.	per	trip	cost	5 tons	6 tons	7 tons	8 tons
truck	\$9.00	hr	2	18.00				
labor	\$38.00	hr	8	304.00				
m&r	\$2.75	hr	2	5.50				
fuel	\$4.40	gal	4	17.60				
license/ins.	\$14.00	day	1	14.00				
subtotal 1				359.10	72	60	51	45
overhead	11.4%			40.94				
ferry	\$140.00		1	140.00				
tip fee	\$90.00		1	90.00				
subtotal 2				540.04	198	180	167	158
profit/b&0	9.0%			48.60				
state tax	3.6%			21.19				
excise tax	10.0%			58.86				
cost/ton				668.70	245	223	207	195

Collection Costs - Route

- Many costs are set because of equipment and labor
- Some costs are percentages of subtotaled costs
- Route density (number of stops on a route) is largest sensitivity variable on cost/ton
- Currently regulated by the WUTC

Route Collection Costs

cost	cost ea.	per	cost
truck	\$9.00	hr	9.00
labor	\$38.00	hr	38.00
m&r	\$2.75	hr	2.75
fuel	\$4.40	hr	22.00
license/ins.	\$14.00	hr	1.75
subtotal 1		hr	73.50
overhead	11.4%		8.38
subtotal 2			81.88
profit/b&O	9.0%		7.37
state tax	3.6%		3.21
excise tax	10.0%		8.92
total			101.39
stops/hour	30	hr	3.38
cost/ton	40 lbs	can	168.98

Collection Costs - Drop Off

- Many costs are set because of equipment and labor
- Some costs are percentages of subtotaled costs
- Tonnage collected and transported is largest sensitivity variable on cost/ton

Drop Off Collection Costs

cost	cost ea.	per	cost	5 tons	6 tons	7 tons	8 tons
truck	\$9.00	wk	216.00				
labor	\$19.00	wk	456.00				
m&r	\$2.75	wk	66.00				
fuel	\$4.40	wk	158.40				
license/ins.	\$14.00	wk	42				
dumpsters	\$1.16	wk	6.96				
lease	\$0	wk	0				
sani-can	\$23.00	wk	23.00				
subtotal 1			968.36	194	161	138	121
overhead	11.4%		110.39				
subtotal 2			1078.75	216	180	154	135
profit/b&0	9.0%		97.09				
state tax	3.6%		42.33				
excise tax	10.0%		117.58				
total			1335.76				
cost/ton				267	222	191	167

Collection and Transfer Costs

Cost/Ton at	5 tons	6 tons	7 tons	8 tons
Route Collection	169	169	169	169
FH to Skagit	245	223	207	195
Total Cost/Ton	414	392	376	364
Cost/40 lbs Can	\$8.28	\$7.84	\$7.52	\$7.28
Drop-Off Collection	267	222	191	167
FH to Skagit	245	223	207	195
Total Cost/Ton	512	445	398	362
Cost/50 lbs. can	\$10.25	\$8.91	\$7.96	\$7.24

Prices to Customers

(best estimates given on-hand data)

Route-Collected	per can
Garbage	\$7.50
Recycling	\$6.50
Drop-Off Service	per can
Garbage	\$9.00
Recycling	\$8.00



Other services and prices to customers

- Batteries, Oil, Antifreeze and Appliances - a bit less than current
- Noxious Weeds and Litter/Beach Clean-Up - still free
- Construction Debris - about the same as now, and about the same as garbage (available off island through San Juan Sanitation/Ferndale recycling facility)
- Composting - at-home compost machines still available at cost for residents
- Steel Recycling - free to drop off (expanded to San Juan and Lopez islands)

A special Note on Reuse

- Reuse opportunities are a cherished ideal in our county community
- Dozens of facilities currently accept reusable items, and many make a profit off of them
- While the Exchange and Take it or Leave it are intrinsic to the culture of Orcas and Lopez, reuse is thriving outside their facilities on all islands.
- The county, as property owners, can keep the Exchange and Take it or Leave it open by allowing them to use the land/venue

Summary

- Route collected-only service is feasible - sort of - but is problematic for a number of reasons that are difficult to address
- Hybrid model with route collection and drop-off services appears feasible, financially viable and offers pretty much the same services citizens are used to now
- Hybrid model is likely to be less expensive to the community than current rates
- Hybrid model will definitely be much less expensive than status quo after 2012 transfer negotiations
- More work (but not much) is needed to complete feasibility study

