

California Roundtable
Single Stream: Closing the Loop
Taking a Whole Systems Approach
Panel 2 – Challenges Presented by Single Stream (Local Government)
May 23, 2005

(Peter Slote began his career in MSW and resource recovery in 1990 on the private sector side of municipal recycling; by managing Norcal Waste Systems' TURF processing plant for San Francisco's curbside program. In 1995 he moved to the more entrepreneurial environment of private sector commercial recycling, working for Weyerhaeuser Company's recycling division where he got a better perspective on the manufacturers' side of supply chain and product quality issues. In 2001 he moved to the public sector and City of Oakland, where he has spent the past two years helping to negotiate and execute new agreements for residential services that include single stream recycling.)

In 2005 Oakland switched our 95,000 single-family households from 2-bin recycling to one-cart single stream recycling, and we will introduce single stream to 55,000 multi-family units that already have cart service, later this year. The selection of single stream happened in the context of a number of necessary changes to our residential program, including: the addition of food scraps to yard trimmings collection, the change to weekly yard trimmings collection from bi-weekly, and fleet reconfiguration. Many jurisdictions' decisions to single stream or not to single stream are intertwined with other program issues, as ours was. Our research showed that generalities about single stream had little value to us in our decision making process.

The possible downsides of single stream for local governments depend on particular program configuration. For example, if a jurisdiction collects and processes its own material it would be exposed to product quality claims and the potentially restricted markets that single stream materials can be sold into. Likewise if a jurisdiction uses a contracted hauler/processor and has a risk- and-or reward-sharing arrangement with the contractors, then the jurisdiction would be similarly exposed to product quality problems and potentially limited markets. Oakland does not share material revenue risks with our processors. They have assumed all risk for material revenue. And our revenue-sharing agreement is a highly qualified, "windfall" revenue sharing plan, just in case of 1995-style commodity price run-up. So it's difficult to make a case for any *direct* downside to single stream for a local government such as Oakland as it relates to product quality.

If Oakland processed our own materials in a municipal processing plant it would have been a different story. The classic arguments for ensuring high quality product - that is, greater assurance of access to markets during difficult times, and greater flexibility to ship to different markets - that would have changed the political calculus of the choice of single stream.

I think Oakland is fairly typical of cities that have moved away from sharing material revenue risks and rewards with our contractors, and now fund residential recycling entirely through garbage rates. Our contractors, by the way, have been eager for Oakland to make the switch to single stream, since they both have been strategically investing in or moving toward single stream processing for some time.

I believe single stream's impact on product quality (the amount of glass in a bale of paper, for example) is affected *less* by contamination of non-program materials by residents, than by cross contamination of acceptable program materials during single stream processing. While we as a local jurisdiction can have an effect on contamination at the curb, through education and contract management, we have less influence on the processing side, because Oakland's tons

flow into large, regional single stream facilities that process tons from multiple jurisdictions. So, Oakland's "squeaky clean", locally collected tons get mixed in with the County of Sacramento's tons, which are transfer-trucked into Oakland for processing, and probably have a lot more glass breakage. If we had chosen to continue with 2-stream recycling, our material would still be flowing into the private sector's increasingly single stream processing environment. I think that is becoming a fact of life for local governments as large independent facilities and even larger hub-and-spoke -style corporate *processing infrastructure* are capitalized and proliferate.

So, with the absence of exposure to product quality issues, with tidy, covered carts, reduced litter and scavenging (particularly important in the denser urban environment), the consumer appeal of 3-stream collection (that is, garbage, organics, and single stream recycling), and the market share power of large, regional single stream processing facilities, local governments facing the decision to single stream or not to single stream have to ask themselves, "Downside? What downside?"

In the larger picture, it's clear that single stream supports the off shoring of value-added manufacturing. Although secondary fiber and scrap metals were already the #1 and #2 largest commodities by volume shipped from the Port of Oakland before the advent of single stream, single stream is certainly not going to help us retain or capture the value of these materials in our economy, just the opposite. An argument could be made that *industrial practices* such as single stream recycling support the trade deficit.

Residential recycling, indeed all municipal recycling activities, are in local government's domain because they have been placed in the rubric of solid waste and discard management. Thus these activities are driven by the waste diversion paradigm, as well as the more mundane expectations to pick up and manage residents' and businesses' discards. If residential recycling were treated as an *industrial practice*, I think local governments would recognize the impact on local and regional domestic manufacturing infrastructure, jobs and tax revenues.

Perhaps the ultimate downside of single stream recycling for local governments is that single stream *is* so appealing, and that local governments are disconnected from some of the larger potential outcomes of our single stream programs.

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