



## Office of the Auditor

# WASTE REDUCTION AND OUTREACH AUDIT FOLLOW-UP

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March 2, 2011

### SUMMARY

Of the 12 recommendations in the 2008 audit, *Waste Reduction and Outreach: Shift in strategy recommended*, the Resource Conservation and Recycling Division implemented seven, and four were in process. The Metro Council did not act on one recommendation. The Division made progress by developing a strategic plan that prioritized waste prevention activities, but faces challenges in executing the strategies and measuring their effectiveness.

### BACKGROUND

At the time of the 2008 audit, the Waste Reduction and Outreach Division promoted recycling, taught conservation concepts, and demonstrated waste prevention ideas around the region. Organizationally, it was part of the Solid Waste and Recycling Department. Its programs included the Recycling Information Center, Recycling at Work, and Fork It Over, all of which were aimed at diverting waste from area landfills.

The initial audit found that while residents were committed to recycling, they also were producing an increasing amount of waste. It concluded that greater environmental benefits could be gained by focusing resources on preventing waste in the first place. The audit recommended that the Division better align its activities with the Metro Council's focus on sustainability, reposition its priorities and resources on waste prevention, and strengthen its capacity to evaluate the effectiveness of its activities.

In October 2008, the Division moved to a new department, changed its name, and assumed new responsibilities. Known now as Resource Conservation and Recycling, this Sustainability Center division oversees activities to reduce greenhouse gas emissions, conserve natural resources, and protect the environment and human health. It continues to oversee Metro's recycling and toxics reduction programs and other activities related to statutory requirements. In addition, it manages Metro's internal sustainability and regional climate change initiatives.

### SCOPE AND METHODOLOGY

The objective of this audit was to determine the status of the recommendations made in the original 2008 audit. We interviewed management and staff and reviewed long- and short-range plans, budget materials, reports and other documents to assess progress made on 12 recommendations.

We conducted our follow-up audit work in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## RESULTS

This follow-up audit occurred six months after the Division adopted a strategic plan. The plan starts to move the Division from daily program activities to developing policies and influencing manufacturing decisions that could bring larger returns. Some strategies in the plan had been initiated, but many still were undeveloped. Employees were in the process of figuring out how to fit their work to the new strategies.

The original recommendations were organized into four areas: 1) aligning Division activities with the Metro Council's focus on sustainability, 2) improving the effectiveness of waste prevention activities, 3) measuring program effectiveness, and 4) promoting efficient and effective operations. We found the Division had implemented seven recommendations. It addressed recommendations to align activities and make operational improvements. It made progress on increasing the effectiveness of waste prevention activities and measuring program effectiveness, but more work was needed in these two areas. A list of the 12 recommendations and their status is on page 6.

### ALIGNING SUSTAINABILITY ACTIVITIES

The intent of these three recommendations was to make sure program activities and Council direction were aligned. Two of the three were implemented.

The Council adopted sustainability as a guiding principle for internal operations in 2003 and for all policies and programs in 2008. Council used the state's definition of sustainability, which says current generations should conserve resources so that future generations can meet their environmental, economic and community needs.

Council did not take formal action to adopt a specific sustainability framework to guide how programs and policies should be changed. In the absence of such a framework, management relied on the "prevent, reduce, reuse, recycle, landfill" hierarchy to prioritize waste prevention activities, which was recommended by the audit as an alternative. By moving up the hierarchy to focus on prevention activities, the Division has begun prioritizing waste prevention activities over recycling. We recommend that management keep Council informed about its strategic direction, the tradeoffs involved, and implementation activities.

### IMPROVING THE EFFECTIVENESS OF WASTE PREVENTION ACTIVITIES

Management implemented the recommendation to develop a waste prevention strategy but still needed to target additional resources to prevention activities.

The strategic plan contains four goals. Three of them focus on reducing environmental and human health effects of waste generation, toxic chemicals in consumer goods, and greenhouse gas emissions associated with the consumption of goods and food. The fourth goal is to invest in equitable community involvement and benefits.

Individual strategies to achieve the goals, captured in both the strategic plan and staff work plans, represent the Division's integrated waste prevention strategy. The plan refocuses the work of the Division to developing policies and taking actions to limit the harmful effects of products from production to disposal. By intervening at various points along the product lifecycle, the Division predicts the region can reduce harmful health and environmental effects.

The plan divides manufactured products into three sectors: consumer goods, food, and construction and landscaping materials. Within those sectors, the work plans associated with the strategies identify specific products, such as light bulbs that contain mercury. The work plans spell out the steps staff and other participants will take on that product.

While the prevention strategy is completed, management has not been as effective in shifting additional resources to prevention activities. It added a few prevention activities to its intergovernmental agreements with local governments to provide recycling services. It also switched one employee from recycling activities to reuse activities.

The prior staffing configuration of one employee being assigned to manage one program was insufficient to carry out the work in the strategic plan. To leverage existing resources and expertise, management organized staff into four teams to implement the plan. The teams and their cross-functional responsibilities are:

FY 2010-2011 Teams	Scope of Responsibility
Infrastructure	Programs to make food and built environment systems more sustainable and strengthen the region's materials reuse and recovery capacity.
Education	Targeted programs to influence consumer behavior and build support for policy initiatives.
Legislation	Development of legislative proposals for the 2011 Legislative session.
Research and Measurement	Measurement of the Division's progress toward meeting its goals and development of evaluation methods and tools to be used across projects.

Source: Strategic Action Plan, July 2010

During the follow-up audit, employees still were managing individual programs while taking on new duties related to prevention. Day-to-day operations had not been relinquished to others, such as local government partners. Without additional resources or a reconfigured workload, the Division may not be able to accomplish its new goals.

While potentially significant, these implementation risks are mitigated somewhat by the willingness of Metro staff to meet the expectations set out in the plan. Employees we interviewed said there was some hesitation in the Division about letting go of their hands-on roles in familiar and successful programs. However, they endorsed the broad-based strategies they believe will have a greater effect.

## MEASURING EFFECTIVENESS

Five recommendations in the 2008 audit addressed measuring program effectiveness, and two of them have been implemented. Management adopted reducing waste generation as a key performance measure. It also increased its capacity to analyze the environmental and fiscal effects of its programs with new methodologies.

The three incomplete recommendations are inter-related and will be critical to the successful implementation of the strategic plan. Although some progress was made, the Division had not:

- consolidated its data into a Division-wide system
- developed performance measures, or
- standardized its program evaluation tools.

### *Consolidating data*

Management decided against a single data system after reviewing its program needs. The Division took steps to improve the efficiency of its three individual data systems and has plans to do more. However, these actions fall short of addressing the risks identified in the 2008 audit and could impede the Division's ability to measure its effectiveness.

In the past six years, data management or information systems issues made up 18% of the recommendations made by the Metro Auditor's Office. This indicates an agency-wide solution may be needed, which is beyond the authority of mid-level managers.

### *Developing performance measures*

The next phase of the Division's strategic planning process is to develop performance measures for its four strategic goals. Management estimated they would be finished by the end of this fiscal year. The task is difficult because of the complexity of the systems involved and the large number of variables that could drive negative health and environmental outcomes. Even so, management will have to measure how the Division's strategies influence results and to what degree. That will involve selecting the appropriate proxy indicators to monitor progress.

### *Standardizing program evaluation*

Management took some steps to increase its internal evaluation capacity, but more work is needed. The benefit of standardizing program evaluation methods is that it allows comparisons of benefits and costs across programs. This would help the agency make decisions about what programs are worth investing in, which could address some of the Division's concerns about workload.

## OPERATING EFFICIENTLY AND EFFECTIVELY

Both operational recommendations were implemented. Management reduced the number of managers between its lowest level employees and the Chief Operating Officer before the COO added a deputy position over the Sustainability Center. It also provided training for local government staff in Community-Based Social Marketing, and Metro staff participated in procurement and contract administration training.

## AREAS NEEDING FURTHER ATTENTION

The strategic plan responded to several weaknesses identified in the original audit. We reviewed the document and found some areas where the plan could be improved. According to the plan, there should be a direct link between goals, strategies and actions. We found that all of the goals had associated strategies and actions, but not all strategies and actions had associated goals. These unlinked items were operational or process activities rather than those intended to achieve the four strategic goals.

For example, there is a “targets and measurement” category of strategies and actions that is not linked to a goal. Measuring progress is an important element in strategic planning, and we recommend adding a goal related to evaluation or accountability to capture those strategies and actions. Another category called “solid waste system sustainability” lists actions to “address the system’s long-term services, financing, and participant roles and responsibilities.” There is no related goal to improve the solid waste system or an obvious connection to the four strategic goals. The unconnected actions could lead to time and resources being invested in activities that don’t lead to the achievement of a strategic goal, which is how the Division’s program effectiveness will be judged.

To strengthen the clarity and transparency of the plan, management should link all strategies and actions to specific goals. Those that do not align with one of the four goals should be removed from the document and managed separately. Alternatively, goals can be added that capture the unconnected strategies and actions.

Additionally, management should continue making progress on:

- targeting resources to waste prevention activities
- establishing performance measures
- working with upper management to develop a Division-wide data system, and
- standardizing program evaluation tools, processes, and procedures.

## STATUS OF METRO AUDITOR RECOMMENDATIONS

2008 Recommendations	Status
<b>1. To align Division activities with the Metro Council's focus on sustainability:</b>	
a. Metro Council should adopt a sustainability framework that will guide how programs and policies should be changed to make sustainability the guiding principle.	<i>NOT IMPLEMENTED</i>
b. Management should work with the Metro Council to clarify and prioritize recycling and waste prevention activities.	<i>IMPLEMENTED</i>
c. In the absence of a sustainability framework, the Division should use the waste management hierarchy to prioritize activities with the greatest environmental impact.	<i>IMPLEMENTED</i>
<b>2. To improve the effectiveness of waste prevention activities:</b>	
a. The Division should prepare a waste prevention strategy outlining priority materials and/or sectors and integrating separate prevention and reuse activities.	<i>IMPLEMENTED</i>
b. If the Metro Council prioritizes waste prevention, the Division should target additional resources to waste prevention activities and build waste prevention elements into its grants.	<i>IN PROCESS</i>
<b>3. To measure program effectiveness more consistently and completely:</b>	
a. The Division should adopt a waste generation goal as a key performance measure.	<i>IMPLEMENTED</i>
b. The Division should establish performance measures for the Waste Reduction and Education and Outreach Sections that are better aligned with the objectives in the Regional Solid Waste Management Plan.	<i>IN PROCESS</i>
c. The Division should develop a Division-wide data management system that will provide standardized data management and timely reporting.	<i>IN PROCESS</i>
d. The Division should standardize program evaluation tools (e.g. cost-benefit analyses, white papers, pro forma), processes, and procedures to facilitate regular evaluation of fiscal and environmental impacts and inform strategic decision-making.	<i>IN PROCESS</i>
e. The Division should increase its capacity to analyze costs and environmental impacts of its programs through staff training or establishing Memorandums of Understanding with departments that have this technical expertise.	<i>IMPLEMENTED</i>
<b>4. To promote efficient and effective operations:</b>	
a. Metro management should review Division positions with 5-6 layers of management to identify opportunities to reduce layers of management.	<i>IMPLEMENTED</i>
b. The Division should evaluate staff expertise and training in contract management and applying community-based social marketing techniques.	<i>IMPLEMENTED</i>



## Metro | Memo

Date: February 28, 2011

To: Suzanne Flynn, Metro Auditor

From: Michael Jordan, COO *MJ*  
Scott Robinson, Deputy COO *SR*  
Jim Desmond, Director, Sustainability Center *JD*  
Matt Korot, Program Director, Resource Conservation & Recycling *MK*

Subject: Management Response to Waste Reduction and Outreach Audit Follow-up

This memorandum is management's response to the final draft of the Waste Reduction and Outreach Audit Follow-up report issued by your office on February 11, 2011. We appreciate your thoughtful input. The draft report is useful to us by both confirming the progress that the division (now known as Resource Conservation & Recycling) has made since the original audit findings and noting the areas in which further steps should be taken.

Management concurs with your characterization of the status of the 2009 Metro Auditor recommendations. We have a few specific comments below that are intended to elaborate or provide our perspective on your findings.

*Consolidating Data*

We agree that effective and efficient data management is critical to success at both the agency-wide and divisional levels. Resource Conservation & Recycling has made refinements to its data tracking, management and evaluation systems and has additional improvements planned. Challenges include managing both the variety of data (recycled tonnage, recommendations made to businesses through the Recycle at Work program, adults and children reached through education, reported behavioral change) and the multiple providers and users of the data (local governments, Oregon Department of Environmental Quality, schools, partnering organizations).

*Developing Performance Measures and Standardizing Program Evaluation*

These recommendations go hand-in-hand with each other and are supported by management, with work on meeting them well underway. The division's effort to develop outcomes-based performance measures to supplement statutorily determined waste generation and recovery ones is driven by both a need for more meaningful measures and a desire for greater standardization in evaluation across projects.

*Targets and Measurement Goal*

The audit follow-up recommends that the division specifically establish a targets and measurements goal. The absence of such a goal in no way reflects a diminution of the importance of this area. In fact, Resource Conservation & Recycling has an internal team charged with developing and overseeing the implementation of the targets and measurements that will guide the division's work in meeting its strategic goals. Management will consider establishing a distinct goal in order to explicitly acknowledge and guide the allocation of resources in this area.

**MANAGEMENT RESPONSE, CONT'D**

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The audit follow-up also notes that the division has a category of strategies and actions called “solid waste system sustainability” that are not explicitly tied to its four strategic goals. In practice, these are tied to the goals, but management acknowledges that this may not be evident to those outside of the division and that rigor in connecting actions to goals is critical to managing our time and resources.

Thank you for your work and that of Mary Hull Caballero on this audit follow-up.