SCORE Implementation Plan

Prepared by the Minnesota Pollution Control Agency

In partnership with the Association of Minnesota Counties, the Minnesota County Solid Waste Administrators, and the Solid Waste Management Coordinating Board

Minnesota Pollution Control Agency

April 2011

Legislative Charge

2009 Minnesota Session Law chapter 37, Article 1, Section 62 (1,2)

A goal of the Pollution Control Agency is to ensure solid waste is managed to conserve materials, resources, and energy. The Agency requires counties to provide data which is compiled then reported in the annual SCORE report to the legislature. The Agency shall develop recommendations to amend the reporting requirements under §115A.557, subdivision 3, in ways that reduce the resources counties employ to collect the data, while ensuring that estimation methods used to report data are consistent across counties and that data reported are accurate and useful as a guide for solid waste management policy makers.

Authors

Peder Sandhei
Arlene Vee
Richard Andre
Paul Smith
David Cera

Editing and Graphic Design *(if any)*

Theresa Gaffey
Paul Andre, Scott Andre
Jennifer Holstad
Cover photo: Paul Andre, Scott Andre

Minnesota Pollution Control Agency

520 Lafayette Road North | Saint Paul, MN 55155-4194 | www.pca.state.mn.us | 651-296-6300
Toll free 800-657-3864 | TTY 651-282-5332

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Introduction

The 2009 Minnesota Session Law Chapter 37, Article 1, Section 62 (1,2) requires the Commissioner of the Minnesota Pollution Control Agency (MPCA), in consultation with the Association of Minnesota Counties (AMC), the Solid Waste Administrators Association (SWAA), the Solid Waste Management Coordinating Board (SWMCB), and other interested parties to make recommendations that improve and abbreviate the SCORE reporting requirements under Minn. Stat. § 115A.557.

This legislative directive provided the opportunity for the Agency to resolve the data duplication that occurred as a result of the MPCA/Office of Environmental Assistance (OEA) merger that occurred in 2005. Solid waste management and policy was divided between the two agencies. The merger has allowed for programs to interact more closely, however; the large cost of database development has delayed merging of the data systems from the two agencies.

Solid waste data previously went to two separate agencies, with differing databases, for different program needs. It was easier and less expensive in the short term to maintain them as separate. Now that the MPCA and OEA are one agency, there is a need to reduce the duplication in reporting and duplication in databases to streamline data management. This will require a short term investment to ensure that data being collected is suitable for all of the programs that are affected as well as the database structure modifications to make this possible.

This Implementation Plan describes proposed changes to the SCORE program that: reduce the resources counties use to collect the data; provide better and more consistent measurement; improve the clarity of the outcomes measured; and identify the responsible stakeholders to meet the data/measurement needs. This Implementation Plan expands on the MPCA's *SCORE Reporting Recommendation* report submitted to the Legislature in February 2010.
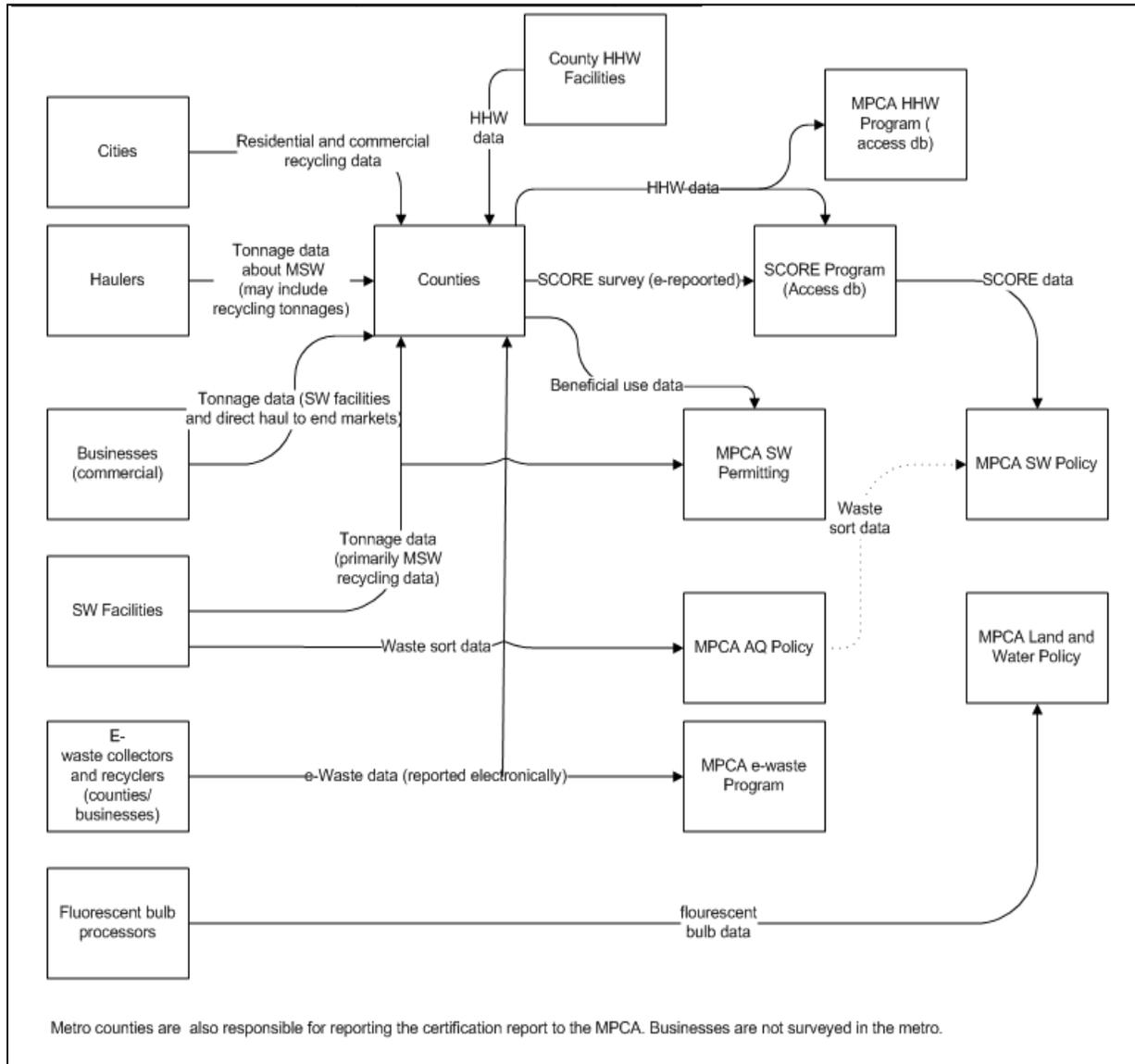
County burden

Minnesota counties have done a great job of managing solid waste in the state. Each county takes great pride in their accomplishments; however, county expenditures to manage solid waste increase every year. Counties are expected to provide more services all the time, with shrinking budgets. If the State can relieve them from some of their reporting requirements, they will be able to focus more staff time and resources to their programs.

Counties are required to submit a large number of reports for their solid waste related activities and, in most cases, are happy to do so because they understand the need for the information. The issue that the counties have raised is that in many instances, they are reporting the same or similar information in many different reports. They would prefer to only submit information once.

Counties spend a large amount of time tracking down the data from various sources such as businesses, haulers, solid waste facilities, and cities to aggregate the data for the SCORE survey. This process can be difficult at times because they do not have the authority to require those parties to report. Figure 1 shows the current flow of solid waste data from the various entities.

Figure 1 – Current Solid Waste Data Flow

Metro counties are also responsible for reporting the certification report to the MPCA. Businesses are not surveyed in the metro.

Scope

The initial scope of this project was to look at the SCORE program to make reporting easier for counties, remove duplicative data, and to remove data that is no longer needed. Minor modifications to the SCORE survey form were completed for the 2009 reporting year; however, the Agency felt that system changes would be required to truly provide reporting relief.

The scope of the project grew to include all of the reports that the Agency receives that contain solid waste data. More than 15 reports were identified (Table 1). This results in the Agency requesting the same information from the same sources in different ways as well as being inefficient in the way the Agency consolidates and analyzes the data internally.

Table 1 – Reports that contain solid waste data and the responsible program

Report name	Responsible program	Data location
E-Waste Collector Report	Electronic Waste	Access (E-Waste) Database
WTE Air Permit Report	Air Permits	MPCA File System/OnBase
SCORE Survey	Local Government Assistance	Access (SCORE) Database
HHW Report	Household Hazardous Waste	Staff Cube (Access DB)
Telephone Books Report	Source Reduction	Staff Cube/Excel DB/Access DB
Beneficial Use Report	Solid Waste Permits	Staff Cube/ File room
Landfill Report	Solid Waste Permits	Delta/ File Room
MRF Report	Solid Waste Permits	Delta/ File Room
Transfer Station Report	Solid Waste Permits	Delta/ File Room
WTE and RDF Report	Solid Waste Permits	Delta/ File Room
Yard Waste Compost Facility Report	Solid Waste Permits	Delta/ File Room
SW Compost Facility Report	Solid Waste Permits	Delta/ File Room
Demonstration Facility Report	Solid Waste Permits	Delta/ File Room
Fluorescent Bulb Report	Land Permits	Staff Cube
VSQG Report	Source Reduction	Staff Cube/OnBase
Results/Certification Report	Local Government Assistance	Staff Cube

The project focused on data that is currently being collected. With that in mind, the Agency needs to be aware of possible future data opportunities that may be collected at some point in the future.

Policy decisions were not considered as part of the project. It was determined that the scope was already sufficiently large; however, the work identified several key policy issues that will need to be addressed in a future Solid Waste Policy Report as a result of the recommendations in this report. Those policy issues are discussed with each recommendation.

Process

A stakeholder group was developed with representatives from the Association of Minnesota Counties (AMC), the Solid Waste Management Coordinating Board (SWMCB), and the Solid Waste Administrators Association (SWAA). The entire list of stakeholder participants is listed in Appendix A.

The stakeholders, along with Agency staff developed the recommendations over a series of meetings. As the scope shifted away from the SCORE report toward internal Agency streamlining issues, fewer meetings were required and county representatives were only involved in the issues that related to data collection and reporting.

A series of internal meetings were held to develop program consistency and to identify opportunities to streamline Agency processes. The county stakeholder group was updated on the progress of the internal discussions during every meeting to ensure that they understood what the Agency was deciding and to keep the process as transparent as possible for everyone involved.

Recommendations

Several recommendations have resulted from the work conducted over the past year and a half. Some of these recommendations have already been executed, while others may need legislative changes or development of new systems before they can be implemented. As such, a phased approach will be required in order to improve the data flow. The specific actions and timeline for completing the actions for each phase are discussed in the Timeline section later in this report. Figure 2 shows the proposed data flow once all phases are complete.

Figure 2 – Proposed Data Flow
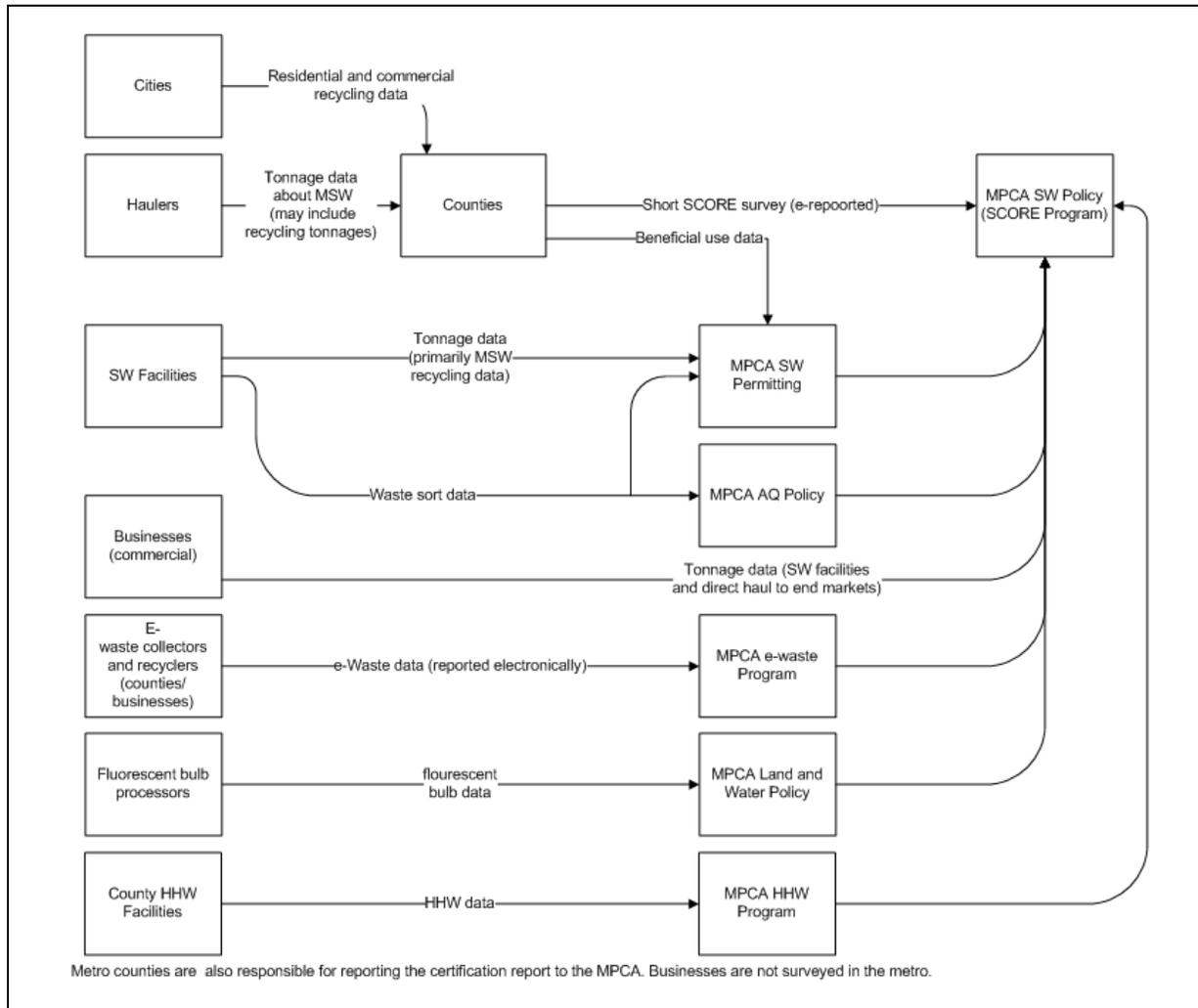
The high level view of these recommendations is that data accuracy and easing the efforts of the counties were the highest priorities. A concerted effort was made to:

- put the reporting burden in the hands of the entity with control of the data
- replace estimates with documented information

The current SCORE data relies on estimation techniques and it is preferable to replace those estimates with documented numbers where available.

Recommendation – rely on existing facility reporting instead of county reporting

The entities that handle solid waste materials are the best sources of information for tonnage data. For that reason, the workgroup feels that the Agency should put added emphasis on facility reporting. The solid waste facilities know exactly how much material is being processed and handled. Facilities are currently required to report on an annual basis to the Agency; however, the data comes in via numerous reports that are not readily available for analysis by MPCA staff. There are several challenges that need to be addressed prior to switching to facility reporting. Agency programs need to coordinate to ensure that the information that is coming from the facilities will be consistent and usable for the purposes of the SCORE report. The current database that houses the data from the facilities is designed for issuing permits, not for data analysis and big picture policy development. Database modifications are needed to make the data more accessible.

Despite the challenges, existing facility reports provide most of the data needed for SCORE. The one limitation of the facility reports is that they do not adequately document the origin of the waste, which makes it more difficult to assign recycling rates by county. The following reports that are currently submitted to the Agency by facilities will provide much of the necessary data:

- **Transfer Station Annual Report –** Collects information on: Recyclables, Organics, Municipal Solid Waste (MSW)
- **Solid Waste Recycling Facilities Annual Report** (MRFs) – Collects information on: Recyclables
- **Yard Waste Compost Facilities Annual Report** – Collects information on: Organics
- **Solid Waste Compost Facilities Annual Report** – Collects information on: Organics
- **Refuse Derived Fuel Facilities Annual Report (RDF)** – Collects information on: Waste to Energy
- **Waste to Energy Facilities Annual Report (WTE)** – Collects information on: Waste to Energy
- **Solid Waste Land Disposal Facilities Annual Report (C&D, Industrial, MSW)** – Collects information on: Landfills

Use of the data that is submitted directly from facilities is data that counties will no longer need to provide, thus greatly reducing their level of effort.

Recommendation – new hauler reporting to counties on MSW and recycling via licenses

In order to make facility reports more useful and effective for policy purposes, there is a need to track how the waste, organics, and recyclables move from facility to facility, in some cases out of the state. The haulers are the only entities that know how waste is moving because they are the party responsible for transport. The Agency will not have a complete understanding of the amount of material that is leaving the state if facilities are the only parties that report.

It was a recommendation of the stakeholder group to make haulers responsible for tracking the origin of waste loads, breakdown of loads (i.e. commercial/residential), weight of the loads, materials collected (MSW, recyclables, organics), and load destinations. Many counties require haulers to report this information already as part of the existing SCORE process. A standard framework needs to be developed so that all counties are getting the same information from the haulers. Statewide licensing of haulers would not collect a fee, but rather set a base requirement for local reporting requirements. Counties would still be free to require additional information in their licensing agreements with haulers.

The following policy issue will need to be resolved in the next Solid Waste Policy Report:
Haulers of MSW are already required to be licensed in the State of Minnesota per Minn. Stat. § 115A.93. Through hauler licenses, counties and cities have the ability to require those haulers to report specifics about material transported and where it is taken. Currently, there is no licensing requirement for recycling haulers. In addition, the term "recycling hauler" needs to be defined. Additional questions that need to be addressed include: should haulers of source separated organics be required to be licensed too and should all haulers be required to provide data to the state or counties? Typically, haulers are good about providing data to the counties, so this may not be difficult to implement.

Recommendation - Facility Waste Sorts – new permit requirement

Minn. R. 7007.0501 states that waste combustor facilities must do a fractional analysis of solid waste. In addition, Minn. R. 7011.1270 states that waste combustor facilities, "shall conduct a waste composition study every five years". It is recommended that these requirements also be applied to select landfills. These landfills would include the four metro landfills as well as other select landfills that serve the major waste generating regions. Waste sorts provide the state and counties with the best measure of the effectiveness of their respective programs. If there is little or no recyclable material ending up at the landfill facility, then the program is effective. Conversely, if there is a lot of a specific recyclable material identified as part of the waste sort, then the program can focus on improving collection or diversion of that material.

Recommendation – use a diversion rate instead of a recycling rate

The source reduction and yard waste credit system that currently exists in SCORE reporting is confusing. It allows source reduction activities and yard waste collection to count towards each counties recycling rate. The Agency would like to measure each portion of the hierarchy individually and add up the individual portions to calculate a diversion rate. Terminology should be addressed because referring to the adjusted rate as the "recycling rate" is not accurate. Diversion rate or SCORE rate are two options that could be adopted to reduce confusion over the adjusted rate figure.

Recommendation – make modifications to the SCORE Survey Form

There are numerous changes proposed for the SCORE survey form that counties are required to submit annually. The proposed changes are summarized by section, as there are multiple changes in every section of the form. Some of these changes cannot be implemented until database changes occur.

Section 1 – Program survey

- Remove the Full Time Employee (FTE) questions. A great deal of time is spent trying to identify who within the county is working on SCORE related activities. In addition, the data is not used by the Agency for policy changes, counties do not use the data for staffing, and data requests for the FTE information do not occur. The FTE section is required in statute, so a change will be required to implement this recommendation.
- Expand the yard waste section to include data about source-separated organics. There is a need to track the source separated organics facilities in addition to the yard waste facilities. The two combined will give a complete picture of the county organics programs.
- Remove the household hazardous waste (HHW) section from SCORE. This information is covered in the annual HHW report that is submitted to the Agency. This will reduce the reporting burden to counties by requiring them to report the information once.

- Revise the procurement section to better reflect the Agency's environmentally preferable purchasing program (EPP). The current questions do not offer much information that is useful to the program. The EPP program has submitted questions that will be more useful that will replace the existing questions.
- Remove the electronic appliance section. This information is now covered by the electronic waste (e-waste) collector and recycler reports. If a county is an e-waste collector, they already submit a report. Others would not need to submit information on e-waste. Much like the HHW section, this reduces the reporting burden by only requiring the information in one location.
- Revise and shorten the source reduction checklist. It is currently two pages in length, and many questions are not useful for the source reduction program. The source reduction program has submitted new questions that are more useful and are only one page in length.
- Reduce the reporting frequency of this section to five years. The answers to the questions in this section do not change often, so a one-year snapshot, every five years will be sufficient for the purposes of the Agency. This will make filling out the report much easier in four out of five years.

Section 2 – Revenues and expenditures

- The revenue section is critical for tracking state expenditures to the counties, as well as the other revenue counties are receiving for SCORE related activities. The only possible change would be to track Local Recycling Development Grant (LRDG) funds on this form instead of a separate form that metro counties presently complete.
- Abbreviate the expenditures section. The counties are required to provide more detail than the Agency needs.
- Include LRDG expenditures on the Metro form. By putting the LRDG requirements into the SCORE report, the number of reports that the metro area counties have to complete is reduced.
  - o We need to explore further how to consolidate the Annual and Certification Reports from the Metro area, to identify if they are able to be incorporated into the SCORE report process.

Section 3 – Materials collected for recycling

- Remove the C/I/I estimated column. All of the counties use different estimates and the Agency wants verifiable documented numbers. Hauler and facility reporting should collect the information that is missed here with more accuracy.
- Remove the mechanical and hand separated column. This column is confusing and rarely used. These documented tonnages can simply be placed in the residential and C/I/I documented columns of the survey form.
- Once Agency database modifications and reporting changes have been implemented, along with quality assurance and quality checks, material grades may no longer need to be collected from the counties. If successful, the counties will only need to report total tons of material recycled, organics management, and MSW.

Section 4 – Waste generation

- Counties that have passed no-burn resolutions will no longer need to report the estimates of on-site disposal. It is not anticipated that this will incentivize counties to pass no-burn resolutions as this issue is very controversial at the local level.
- Track the destination of recyclables and organics in addition to tracking MSW. This provides a more complete picture of the entire system and will create the ability to cross check data from facilities and haulers.

Recommendation – increased internal coordination of Agency Solid Waste reports and permits

A major component of providing SCORE relief to the counties is to reduce duplicative data collection. In order to accomplish that, the agency must review the reports that contain solid waste data and search for duplication.

All agency reports need to standardize the nomenclature used to describe various material grades that are reported. This is essential to ensure that all programs are describing the same material. By standardizing the way the material is reported to the agency, the confusion surrounding data analysis will be eliminated.

The Agency is currently working to coordinate all affected programs to ensure that all programs are collecting the information that they need to remain effective, while standardizing the data as much as possible. It is important that data modifications do not impair the ability of the enforcement and permitting programs from completing their work.

Recommendation – make internal Solid Waste Data Management revisions

Perhaps the most important recommendation is to change the way data is managed within the Agency. Many of the recommendations above will not be possible without developing a system that allows Agency staff to easily access and analyze the data coming from all of these different sources.

Currently, the Agency is already collecting data from facilities, but the data is very difficult to access, which in turn makes data analysis difficult. The data is stored in several different databases that have different structures and do not have connections between them. In some cases the data is stored in hard copy in file cabinets or staff cubes. Figure 3 shows where various solid waste data and information is currently stored.

Figure 3 – Current Data Storage
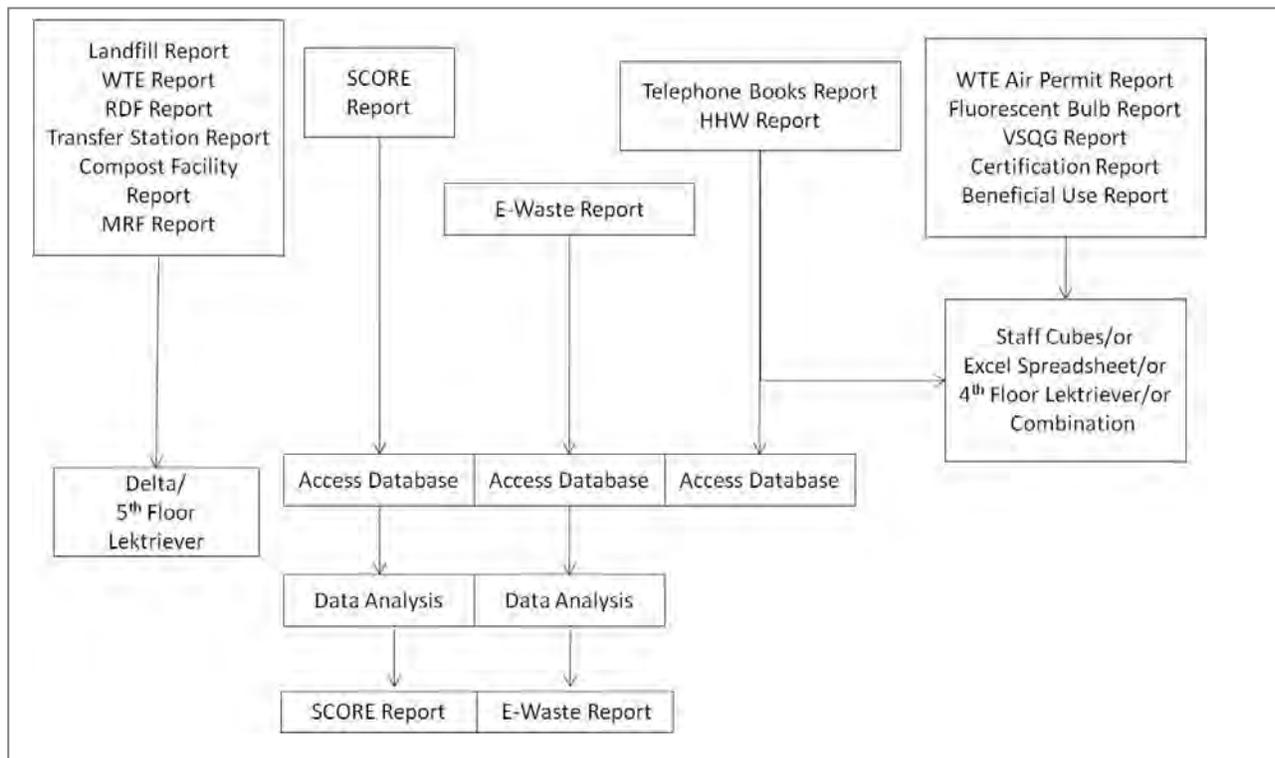
Updating the solid waste data management system will help reduce the reporting burden for counties and facilities while improving the quality of our data for analysis, improve our ability to validate the data and will lead to higher quality data that staff can have confidence in reporting, and make data more accessible to the public and to the Agency staff.

The Agency is currently evaluating options to improve this system. Many things need to be considered as part of this process, such as data quality, need for types of data, reporting consistency, cost, staff time, efficiency gained, effect on programs, and effect on regulated entities and data providers.

Recommendation – do not address construction and demolition debris at this time

Construction and demolition debris recycling and reporting was discussed as part of this process. Due to the enormous scope of this project, it was shelved to be discussed at a later date. There is also a separate initiative starting in another area of the Agency that is addressing this issue. All data management decisions need to keep this issue in mind, so that the system will be flexible enough to add it at a later date.

Timeline

Due to the breadth and scope of the SCORE data recommendations, the recommendations will be phased in over the next few years. There will be four general phases, with Phase one currently underway.

Phase 1

- Minor adjustments have been made to the SCORE survey to reduce the effort from counties. These changes were done now because they did not require database modifications to implement. The rest of the modifications will have to wait until legislation is adjusted to allow them and the database structure is complete.
- Begin to report the SCORE adjusted recycling rate as a Diversion Rate.
- Work with legislative staff to develop changes for SCORE legislation.
- Internal program coordination is already underway. Work with permitting staff to modify facility reports as needed.
- Begin work on the data request process.
- Complete Implementation Plan Report (this report) for the legislature to communicate the plan.

Phase 2

- Complete the internal program coordination so that data is ready for the new data structure.
- Implement data structure changes as recommended by the Agency's Information Services Office.
- Complete data management functionality test.

Phase 3

- Begin analyzing data from haulers and facilities.
- Add waste sorts to landfills through the permitting process.
- Put hauler and facility data through QA/QC.
- Test new data against the SCORE data to ensure usability.
- Implement recommendations for the five year program survey section.

Phase 4

- Implement final modifications to SCORE survey form.
- Reduce reliance on counties for data.
- Increase reliance on businesses, haulers, and facilities for data reporting.