
Program:	A.1 MAINTAIN AS PARTNERSHIP OF PLANS
Program Scope:	Ensure the paradigm of being a partnership of plans is maintained and that all individual municipalities, or smaller partnership waste diversion efforts and plans, are acknowledged and fully considered through all activities.
Sector:	All
Action Highlights:	Municipal Cooperation, Collaboration and Commitment to Regional Success
Action By:	Municipal representatives in cooperation with the Waste Diversion Coordinator
Program Description:	Municipalities develop and implement programs and policies that consider regional objectives as well as local ones; they share resources and facilities. The Capital Region Waste Management Committee (CRWMAC, or its successor) facilitates cooperation and acts in an advisory role consulting regularly with municipalities. The CRWMAC through the coordinator would occasionally provide involved municipalities with advice on activities, while coordinating discussions about the need for and/or the availability of sharable facilities and resources within and without the ACR.
Prerequisite:	Waste Diversion Coordinator in place
Time Frame:	On-going
Importance to Success of Plan Goals:	Partnering municipalities will be thinking regionally as analysis is conducted while other non-participating municipalities will be aware of such an opportunity.
Benefits:	<ul style="list-style-type: none">▪ Participating municipalities have a sense of contributing to common goals▪ Opportunities for improved, cost effective services are identified and implemented▪ Participants provide leadership to other municipalities and demonstrate opportunities for cooperation to other municipalities and the ICI and C&D sectors
Resource Requirements:	No additional funds are required; however, it is assumed that the waste coordinator will use 10% of his or her time for this function.
Performance Measurement Metrics:	<ul style="list-style-type: none">▪ Regional reporting could report on the percentage of municipalities cooperating and considering initiatives for regional application in this manner▪ Percentage participation of stakeholders from all waste sectors
Roles and Responsibilities:	<ul style="list-style-type: none">▪ Waste Diversion Coordinator acts as a facilitator to support municipal cooperation through coordinating services such as meeting management, including and informing other potential partners▪ Municipalities conduct stakeholder consultation, feasibility and technical analysis while informing the ACR Diversion Coordinator on progress

Primary Barriers to Success	Potential Solutions to Barriers
Lack of a Waste Diversion Coordinator	Use existing resources to fill an interim Waste Diversion Coordinator function while a more permanent solution is found.
Lack of commitment by municipalities	Review activities and programs to identify and address causes. Adjust goals and objectives to encourage participation. Coordinator regularly connects with municipal representatives.
Lack of performance measures	Design and adopt a recommended performance measurement system.

Program:	A.2 EXAMINE GOVERNANCE STRUCTURE FOR CRWMAC
Program Scope:	Establish a new governance model for the Capital Region Waste Management Committee (CRWMAC) or its possible successor that reflects its role within the new reality created by the implementation of the Capital Region Integrated Waste Management Plan (CRIWMP).
Sector:	All
Action Highlights:	Governance workshop to redefine role for CRWMAC
Action By:	Participating municipalities; contracted facilitator/coordinator
Program Description:	<p>Municipalities participate in a workshop or group of workshops that will explore past and current roles assumed by the CRWMAC in addressing waste minimization and diversion in the Capital Region.</p> <p>The workshops will examine the new reality created by implementing the CRIWMP and what role the municipalities envision for the CRWMAC in the future.</p> <p>Potential topics for discussion include, but are not limited to, the following:</p> <ul style="list-style-type: none">▪ Leadership▪ Membership and structure▪ Decision-making role in plan implementation▪ Relationship to the Waste Diversion Coordinator position▪ Funding requirements and models▪ Type of organization and level of authority▪ Planning function <p>The new governance model will be shared and adopted as policy in some form by municipalities in the Capital Region. This could be done through some form of “hand-shake” agreement such as a Memorandum of Understanding signed by all participants.</p>
Prerequisite:	None
Time Frame:	Start as soon as possible. May take up to six months
Importance to Success of Plan Goals:	Will enable the implementation of the CRIWMP as a regional function.
Benefits:	Municipalities would benefit from the CRWMAC (or its successor) fulfilling an on-going role as a platform to review success and consider new directions for the future.
Resource Requirements:	<ul style="list-style-type: none">▪ Contracted Facilitator/Coordinator and location for workshops - \$20,000▪ Time commitment for workshop – 12 hours for each participating municipal representative
Performance Measurement Metrics:	Completion of some form of signed agreement between municipalities.
Roles and Responsibilities:	CRWMAC members would participate in workshops and a professional facilitator would manage and drive the process and report on options.

Primary Barriers to Success	Potential Solutions to Barriers
"Volunteer burnout"	Keep meetings to a minimum and delegate work to subcommittees or task groups with clearly defined objectives to guide contracted facilitator/coordinator. Rotate membership and chair on an annual or bi-annual basis to share the load.
Uncertainty in decision-making	Develop clearly defined roles and organizational structure

Program:	A.3 IMPLEMENTATION COORDINATION
Program Scope:	Create a “Waste Diversion Coordinator” position to immediately focus on supporting implementation and assisting municipalities.
Sector:	All
Action Highlights:	Leadership for plan implementation
Action By:	Participating municipalities
Program Description:	<p>Create the Waste Diversion Coordinator position to fill a leadership role in implementing the integrated waste management plan in the ACR.</p> <p>Develop a job description for the position that identifies the skill set necessary to provide the needed leadership as follows:</p> <ul style="list-style-type: none">▪ Working knowledge of waste management policies and practices.▪ Knowledge of performance measurement methods.▪ Excellent negotiating and communication skills.▪ At least 5, preferably 10 years of experience working with organizations in the public and/or private sector at an intermediate/senior level; and▪ Must be able to communicate effectively with senior municipal, provincial and private sector leaders. <p>Identify the appropriate compensation to attract and retain a suitable candidate and identify governance structure and funding model supporting the position.</p>
Prerequisite:	Agreement upon governance structure and funding/reporting
Time Frame:	Three to six months (to create and fill position)
Importance to Success of Plan Goals:	This position will play a critical role in the initial implementation of the plan and the on-going delivery of future advances
Benefits:	<ul style="list-style-type: none">▪ Dedicated position identified to provide the leadership needed▪ Individual can focus on implementation
Resource Requirements:	\$85K - \$100K including overhead and office accommodations
Performance Measurement Metrics:	<ul style="list-style-type: none">▪ Percentage of participating municipalities▪ Timely delivery of on plan recommendations▪ Waste diversion rate increasing▪ Interest in participating by IC&I and C&D sectors
Roles and Responsibilities:	<ul style="list-style-type: none">▪ Manage performance measurement system<ul style="list-style-type: none">– Gather data from participating municipalities and other partners– Consolidate data and prepare summary reports– Report results to participating municipalities▪ Coordinate delivery of recommendations on residential recycling and organics diversion.▪ Lead discussions with IC&I and C&D sectors to engage those sectors in waste diversion activities.

**Roles and Responsibilities
(continued):**

- Coordinate dialogue with other Alberta municipalities and agencies with respect to pursuing a provincial waste management policy review.
- Provide leadership and coordination on other plan-related issues.
- Act as a resource to member municipality waste management staff members.

Primary Barriers to Success	Potential Solutions to Barriers
Lack of a governance structure	Set up a temporary position using existing resources to begin implementation while governance issues are addressed
Lack of a funding model	Workshop to address funding model

Program:	B.1 Develop MSW Tracking System
Program Scope:	Current ACR waste statistics do not fully identify accurate amounts of MSW entering the system which affects the understanding of overall system capacity, resiliency, and program design. The purpose of this program is to develop a measurement system that provides the statistics needed to manage the overall MSW system whether being private or public.
Sector:	All
Action Highlights:	Engage facility owners/managers to determine how waste statistics can be collected
Action By:	Waste Diversion Coordinator managing a consultant
Program Description:	<p>Conduct waste composition studies for the existing waste stream, either via curbside audits or at transfer stations, on a regular basis. Perform the studies in a way that provides disaggregated data, especially to break out commercial streams from residential streams. These studies will define what is in the waste going to disposal.</p> <p>Use scale tracking from various facilities that receive MSW (recyclables and waste) to confirm materials, or products, diverted from disposal in the ACR.</p> <p>Expand regulatory tools and relationships to acquire additional material generation data by product and sector from haulers and businesses as relevant, to best gauge diversion progress over time; and</p> <p>Implement a well-defined monitoring and measurement program that:</p> <ul style="list-style-type: none">▪ Requires receiving collected and/or processed tonnes by material or product type;▪ Requires recording and tracking the tonnes by day, week and/or month;▪ Requires regular review and analysis of the data; and▪ Data review should also include cost, recovery rates, contamination rates, residue rates.
Pre-requisite:	None
Time Frame:	As soon as possible to gather the statistics needed for other programs
Importance to Success of Plan Goals:	Very important since statistics are required to track the performance of future diversion programs allowing waste managers to adjust them accordingly.
Benefits:	<ul style="list-style-type: none">▪ Accurate statistics to inform performance measurement programs;▪ Validated accurate information that can be reported in whole to the public to demonstrate the success of programming;▪ Accurate statistics from which future facilities can be designed.

Resource Requirements: One week of the Waste Diversion Coordinator and \$20,000 for consultant services to set up the system.

Performance Measurement Metrics:

- Percentage of total MSW (diverted and refuse) measured accurately on a scale rather than interpolated.
- Composition studies to estimate the components of recyclables and returnable products in the waste stream informing potential diversion programs.

Roles and Responsibilities:

- Waste Diversion Coordinator assists consultant to gather information.
- Municipal solid waste staff members assist in convincing facility owners to cooperate.
- Consultant to gather statistics and develop a complete model of the MSW waste stream.

Primary Barriers to Success	Potential Solutions to Barriers
Facility Managers from private facilities refusing to give up statistics.	Prepare non-disclosure agreements and/or consider regulatory tools.
Facilities that may not have scales at their facility	Use volume-based approach as a last resort

Program:

C.1 Create a Working Group

Program Scope:

Provide a Working Group to guide the Waste Diversion Coordinator and to review collection contracts involving a cross-section of municipalities particularly as it relates to term, service levels and contract clauses.

Sector:

Residential

Action Highlights:

- Develop working group to focus on municipal collection programs and guide the Waste Diversion Coordinator
- Regular monthly meetings and special meetings as required are suggested

Action By:

- CRWMAC
- Waste Diversion Coordinator

Program Description:

There are a variety of residential initiatives including: standardizing contracts; harmonizing drop-off and collection systems; standardizing organics collection. These all fall into one general category and require the focus of municipal waste managers dealing with their residential collection systems. To focus on this area in a more efficient way, a Working Group will be created and will guide the Waste Diversion Coordinator throughout these initiatives as it will require consensus from municipal representatives. The following steps are suggested:

- Identify municipal staff members that already work together on commissions or Boards and focus on these partnerships to see how their models can be expanded to others
- Think geographically where natural synergies can be found within common transportation corridors
- Encourage committee members that capture these aspects to participate on this working group
- Have regular monthly meetings to and special ones as needed to focus on addressing tactical issues
- Select a chair that the Waste Diversion Coordinator can regularly call for direction

Pre-requisite:

Having some governance model in place

Time Frame:

As soon as the Waste Diversion Coordinator is hired

Importance to Success of Plan Goals:

Medium

Benefits:

- Direction to the Waste Diversion Coordinator will improve performance
- Regular meetings will build relationships and improve the opportunity for partnering between municipalities that currently are not

- Resource Requirements:**
- 12 regular meetings per year and special meetings as need
 - Central meeting venue
 - Municipal representatives will volunteer
 - The Waste Diversion Coordinator will likely spend 10% of their time on this issue

Performance Measurement Metrics: Meeting attendance

- Roles and Responsibilities:**
- Waste Diversion Coordinator will facilitate, take minutes, and follow-up with committee members
 - Working group members will guide Waste Diversion Coordinator on decision-making especially focused on residential collection programs, partnerships and standardization of municipal contracts

Primary Barriers to Success	Potential Solutions to Barriers
Poor meeting attendance	Have lunch provided with meetings in a venue conveniently located
Conflicting direction to higher CRWMAC	Develop a policy and procedure on how to address these kinds of situations.

Program:	C.2 STANDARDIZE CURBSIDE COLLECTION
Program Scope:	In concert with A3, C4, D2, D4, G1 and H1, determine opportunities for inter-municipal collaboration for collection frequency and acceptable materials.
Sector:	Residential
Action Highlights:	Municipal Cooperation, Collaboration and Commitment to Regional Success
Action By:	Municipalities in the Capital Region possibly through Waste Diversion Coordinator
Program Description:	<p>In concert with H1, assess current contract end dates to determine when/if harmonizing is mutually advantageous and if so, utilize contract extension clauses to sync contract end dates.</p> <p>Inter-municipal program standardization should be consistent with current best practices of multi-municipal planning (for collection and processing), optimizing operations (for cost and diversion) and generally accepted principles for effective procurement and contract management.</p>
Prerequisite:	Initial assessment of harmonization of collection (and possibly) processing contract end dates followed by discussion on collaboration opportunities.
Time Frame:	2014 (i.e., in the case of the Town of Devon and Strathcona County) and during the planning period as contracts come up for renewal
Importance to Success of Plan Goals:	Greater consistency across the region as it would not require re-education of residents if they were to migrate within the region
Benefits:	<ul style="list-style-type: none">▪ Considered a current best practice▪ Economies of scale (i.e., less cost per tonne per HH, for administration, etc.)▪ Decreased contamination (i.e., greater diversion with less cost)▪ Increased participation (i.e., greater diversion through increased tonnage)▪ Standardized promotional and education program (i.e., decreased costs)
Resource Requirements:	Waste Diversion Coordinator (3%)
Performance Measurement Metrics:	<ul style="list-style-type: none">▪ Participation▪ Diversion▪ Cost
Roles and Responsibilities:	<ul style="list-style-type: none">▪ Coordination of current contract end dates▪ Coordination of a multi-municipal RFP for collection (and possibly processing)▪ Contract management and performance measurement system▪ Communicate lessons learned (i.e., if Devon and Strathcona were to standardize in 2014) to other ACR municipalities as their contracts become due so as to achieve continual improvement

Primary Barriers to Success	Potential Solutions to Barriers
Lack of a Waste Diversion Coordinator	Use existing resources to fill an interim Waste Diversion Coordinator function while a more permanent solution is found.
Lack of interest in multi-municipal standardization	Identify primary cause (i.e., political), review activities and programs to identify, qualify and quantify benefits of standardization.
Contract end dates not closely aligned	Further to H1, in the event that multi-municipal cooperative tendering is not possible due to current contract end dates, discussion and agreement should be undertaken to ensure RFPs and contracts – when written – are structured similarly with respect to terms and conditions such as collection frequency, acceptable materials and possibly set out style (i.e., cart or bag) and processing location.

Program:

C3 HARMONIZE DROP-OFF SYSTEMS

Program Scope:

In concert with A3, C4, D2, D4, G1 and H1, determine opportunities for either inter-municipal utilization of existing depots or establish new depots as a support system for the curbside collection system or as the primary method of material management.

Sector:

Residential, IC&I, C&D

Action Highlights:

Municipal Cooperation, Collaboration and Commitment to Regional Success

Action By:

Municipalities in the Capital Region

Program Description:

The utilization of existing, or the identification of new facility locations, to support and aid in the achievement of the 80/20 goal could be coordinated amongst participating municipalities to harmonize what is collected, possibly combine contracts, provide similar equipment and messaging. To carry this out, it will be necessary to:

- Establishing a baseline for what is currently existing, where opportunities exist to improve the current system (i.e. allow inter-municipal drop off) or construct new facilities to serve the long term vision
- Develop a detailed list of contacts, terms and services for all member municipalities identify those interested in cooperating and identify “windows of opportunity” to make changes
- Input dates and lead time into computer by Waste Diversion Coordinator to have reminders of these upcoming opportunities and inform interested municipalities
- Partnering municipalities can develop common services and contract terms as-needed
- As part of planned meetings, have sessions dedicated to discussing new depot locations and where partnering might provide strategic advantages to the participating municipalities
- The City of Edmonton has well designed “Super Depots” that could act as a model and already collect via drop-off from adjacent municipalities
- Harmonizing materials collected and messaging contracts could provide greater economies of scale and reducing costs which should be explored, especially where common transportation routes exist from the depots to the various material destinations

Prerequisite:

None

Time Frame:

Dependent on current infrastructure/cooperation between municipalities for inter-municipal deposition of materials and municipal specific needs.

Importance to Success of Plan Goals:

- Depots, when used as the **primary** disposal/diversion outlet, need to provide not only the necessary services but also the opportunity to educate and reinforce programs and expectations through personal interaction provided the site staff are educated and informed of the current programs and services
- Depots, when used as a **supplementary** disposal/diversion outlet to curbside collection services, provide the opportunity to educate and reinforce programs and services and serve to further waste diversion efforts

Benefits:

- When designed, operated and promoted effectively considered a best practice
- Economies of scale significantly improved if existing infrastructure is utilized or cooperation between municipalities for shared facilities are used
- Decreased contamination (i.e., greater diversion with less cost)
- Increased participation (i.e., greater diversion through increased tonnage)
- Standardized promotional and education program (i.e., decreased costs)

Resource Requirements:

- Waste diversion coordinator (1% of their time) could facilitate and regularly remind member municipalities of upcoming windows of opportunity to cooperate such as a contract term coming to an end. When municipalities identify opportunities to work together, it is assumed that this could carry on at their expense.

Performance Measurement Metrics:

- Participation, vehicle traffic, tonnage, diversion
- Cost (capital and operating)

Roles and Responsibilities:

- If inter-municipal cooperation is used for existing facilities, tonnage and traffic information should be tracked by municipality (source of material for performance measurement).

Primary Barriers to Success	Potential Solutions to Barriers
Lack of inter-municipal agreement to use existing facilities	Discuss/negotiate inter-municipal agreements to allow 'cross-border' usage with the appropriate level of financial compensation
Lack of resources (financial or human) to ensure existing facilities are operated within current best practices	Liaise and negotiate with provincial and federal governments to identify possible funding sources for facility modifications/upgrades Discuss/negotiate inter-municipal agreements for cost sharing based on utilization by each participating municipality
Lack of resources (financial or human) to design, construct and operate new / supplementary facilities	Liaise and negotiate with provincial and federal governments to identify possible funding sources

Program:	C4 HARMONIZE PROMOTIONAL AND EDUCATIONAL PROGRAMS
Program Scope:	In concert with A3, C4, D2, D4, G1 and H1, determine opportunities for multi-municipal cooperation on the design and messaging for promotion and educational materials.
Sector:	Residential
Action Highlights:	Municipal Cooperation, Collaboration and Commitment to Regional Success
Action By:	Municipalities in the Capital Region
Program Description:	<p>The establishment of common/standard messaging, script and graphics as follows:</p> <ul style="list-style-type: none">▪ Survey committee members and if there are enough (i.e., a majority) interested municipalities then proceed to next step▪ Review and assess current promotional and educational materials in the Region▪ Consult with member municipalities and other stakeholder▪ Determine a mutually acceptable consistent branded theme▪ Develop messaging, colouring, etc. that would be consistent and used by all participating municipalities▪ Contract a graphic artist and communications group to develop theme and communication package▪ Prepare implementation plan to evolve system to new communication system▪ Implement new system
Prerequisite:	<ul style="list-style-type: none">▪ Having a Waste Diversion Coordinator in place to coordinate▪ Survey member municipalities to determine if there is enough interest at the time
Time Frame:	<ul style="list-style-type: none">▪ Approximately six months to complete▪ As soon as possible across the Capital Region where similarities currently exist
Importance to Success of Plan Goals:	<ul style="list-style-type: none">▪ Considered a best practice▪ Economies of scale (i.e., less cost for design, development and deployment)▪ Decreased contamination (i.e., greater diversion with less cost)▪ Increased participation (i.e., greater diversion through increased tonnage)▪ Standardized promotional and education program (i.e., decreased costs)
Benefits:	<ul style="list-style-type: none">▪ Reduced costs to participating municipalities▪ Decreased contamination and greater participation
Resource Requirements:	<ul style="list-style-type: none">▪ Waste Diversion Coordinator role (20% of their time); contract with graphic artist/communication company (\$20,000)

Performance Measurement Metrics:

- Participation, tonnage, diversion rate, customer service inquiries, etc.

Roles and Responsibilities:

- Assimilation of current program information via the Waste Diversion Coordinator
- Contract with graphic designer/communications firm
- Municipal staff dedicated to P&E

Primary Barriers to Success	Potential Solutions to Barriers
Lack of a Waste Diversion Coordinator	Use existing resources to coordinate harmonization of P&E materials (where applicable) to current programs If/when multi-municipal tendering is undertaken, utilize either the Waste Diversion coordinator or existing resources to harmonize P&E materials
Lack of resources (financial or human) to design, develop and/or deliver new P&E materials	Liaise and negotiate with Capital Region municipalities and/or provincial government to identify possible funding sources

Program:

D.1 Develop Organics Reduction Strategy

Program Scope:

Develop a comprehensive Organics Diversion Strategy that engages all sectors and develops clear programs to reduce compostable organics in a regional sense, building on existing organics collection and processing systems currently in place.

Sector:

All

Action Highlights:

- Develop a long-term Organics Reduction Strategy Document;
- Include infrastructure and organics capacity study results and recommendations (D.3. and G.1.); and
- Comprehensive approach striving for using highest, best use principles.

Action By:

- Capital Region Waste Management Advisory Committee (CRWMAC)
- Provincial commitment required for implementation of regulatory program options

Program Description:

Reducing the compostable organics stream making up more than 30% of the entire waste stream is one of the most important components of meeting the overall MSW waste reduction targets. A comprehensive focused organics reduction strategy will engage the stakeholders and focus on diverting the various compostable organics types.

A comprehensive Organics Reduction Strategy for the ACR should:

- Consider the results of the system capacity study (G.1. and D.3.) and support initiatives to address the long term capacity issues involved with current development trends in the private (and public) sector.
- Address the following organics streams: brush and chipped wood, clean dimensional lumber, yard and garden waste, food contaminated paper, tissue and paper towels, and food scraps from all sectors.
- Consider potential to combine other sector feed-stocks such as abattoir waste; bio-solids and agricultural waste streams.
- Should include in the strategy, the following elements along with associated costs and implementation requirements: infrastructure and existing collection and processing programs mostly identified in Phase 1, the following updated or new programs categorized as follows:
 - Reduction programs, such as: non-standard edible food programs, natural landscaping and yard care; master composter; and, backyard composting.
 - Collection programs, such as: yard waste depots, Christmas tree diversion, periodic and seasonal yard waste curbside collection, regional wood waste diversion/reuse.

- Processing programs, such as: regional yard waste composting, development of private facilities, mulch production, and regional wood waste. Also consider composting type from hi-tech to low tech aerobic system and anaerobic digestion processing with energy recovery.
- Consider and address Edmonton’s co-composting process needs to ensure source separation systems do not conflict while striving for highest and best use principles;
- Uses an education, facilitation and legislation approach (in that order) to motivate change towards these desired activities. This approach would use Community-Based Social Marketing Techniques.

Pre-requisite: None

Time Frame: Organics diversion capacity is a major issue currently with capacity issues and thus, development over the next year and expansion over the next 2-5 years with additional program options similar to C&D Strategy is suggested.

Importance to Success of Plan Goals:

- “Buy-in” of communities and contractors

Benefits:

- Potential to divert up to 40% of the total waste stream
- Remove organics from landfills reducing methane production

Resource Requirements:

- Consultants and engagement specialists likely needed to conduct stakeholder engagement sessions around the region and develop overall strategy (approx. \$100,000)
- The ACR Waste Diversion Coordinator facilitates completion (20% of their time over 6 months)

Performance Measurement Metrics: Completion of strategy document supplementing ACR IWMP

Roles and Responsibilities: Consultants to conduct consultation and develop strategy Waste Diversion Coordinator to facilitate process.

Primary Barriers to Success	Potential Solutions to Barriers
Lack of participation during sector consultation	Educate organics generators about the potential for cost savings, recognition, and environmental protection
Resistance to composting systems based on poor performance of past private facilities	Strive for higher value systems which may mean higher up-front costs with the higher confidence in odour control.
Markets poor in the areas for compost products with little return	Institute differential tipping fee bylaws to encourage organics diversion with fees less than that of disposal

Program: **D.2 Standardize Organics Diversion Services**

Program Scope: Begin the process of standardizing organics collection across the region; add food scraps for jurisdictions and sectors that currently do not collect these separately.

Sector: Residential and IC&I sectors

- Action Highlights:**
- Standardize organics collection to provide consistency for materials collected, including food scraps and food-soiled paper
 - Provide education and enforcement for contamination minimization
 - Ensure consistent container type/colour/signage and vehicle types for collection

Action By: CRWMAC and member municipalities, haulers

Program Description: Municipalities will work together with the Waste Diversion Coordinator to review best practices with respect standardizing the collection of organics from the residential waste stream. The purpose of standardizing organics collection is to maximize diversion, efficiency and cost effectiveness. Knowledge gained by municipalities that are currently diverting organics and from haulers can be used by others to reduce the need for extensive studies. Pilot studies may be warranted to ground-truth proposed organics diversion and collection options. Municipal representatives, haulers and other stakeholders would convene quarterly to coordinate implementation in phases.

Pre-requisite: None

Time Frame: Estimate four to six months for planning study; implementation ongoing

Importance to Success of Plan Goals: High

- Benefits:**
- Increased diversion
 - Increased route density to maximize efficiency and cost-effectiveness

Resource Requirements: Waste Diversion Coordinator, 0.25 FTE to coordinate organics diversion activity.

Performance Measurement Metrics: For residential, track jurisdictions including food scraps as part of organics collection or accepted at depots. Monitor tonnage, participation, and contamination levels.

Roles and Responsibilities: Municipal representatives, haulers

Primary Barriers to Success	Potential Solutions to Barriers
Lack of consensus across the region about how organics collection services should be harmonized	Since different haulers service different municipalities, develop a hauler-based organics diversion and collection plan.

Program:	D.3 Analyze Organics System Resiliency and Capacity
Program Scope:	Analyze organics system resiliency and capacity over time
Sector:	Residential and IC&I (clean wood)
Action Highlights:	<ul style="list-style-type: none">▪ Conduct a detailed analysis of the existing organics management system▪ Project future infrastructure needs to ensure reliable processing is available over time
Action By:	CRWMAC and member municipalities
Program Description:	<p>The purpose of this detailed review is to build on the Phase 1 report work and analyze the organics system resilience and capacity with more accurate data to ensure that current facilities are stable and have the ability to process existing organic materials well into the future. Additional focus is applied here due to the more challenging issues related to organics composting. It will also map out future processing capacity and opportunities for expansion (e.g. site acquisition) as organics diversion is optimized. These increases are anticipated as a result of population growth, an expansion of accepted materials in organics streams, and an overall increase in participation as organics diversion is promoted through service changes (i.e., less frequent garbage collection) and education campaigns. The review will build on the Phase 1 existing system information by quantifying future projections for the variables noted above. To establish system resiliency over time, the review will include an assessment of strategically located public and private available land, various technologies to fit each setting, and opportunities for end market development.</p>
Pre-requisite:	Current system assessment
Time Frame:	Estimate four to six months to complete
Importance to Success of Plan Goals:	Highly important for ensuring that future processing capacity and end markets are developed in the region
Benefits:	<ul style="list-style-type: none">▪ Forethought on future processing needs ensures adequate processing capacity over time▪ Diversification of facility types, locations and ownership type (public/private) adds resilience to the processing system, reduces costs through minimized travel and other system efficiencies▪ Maximized diversion rates across the region
Resource Requirements:	Budget \$75,000 to \$100,000 to complete; Waste Diversion Coordinator to oversee project for four hours a week over six months at an estimated 100 hours
Performance Measurement Metrics:	Current facility stabilization, action plans and timelines developed for existing and/or future facility development to meet processing needs for projected feedstock tonnage
Roles and Responsibilities:	Regional staff to manage and coordinate

Primary Barriers to Success	Potential Solutions to Barriers
Limited resources	Seek funding through federal and provincial sources or fund through a joint municipal fund from the region
Lack of interest or prioritization across the region	Provide clear rationale given limited existing infrastructure, operating challenges to date, and quantification of organics tonnage increases to date and future projections based on program and population growth

Program:	D4 Optimize Organics Collection
Program Scope:	Examine the collection frequency for organics and other waste streams to optimize resource utilization and diversion while reducing health and environmental issues for residents.
Sector:	Residential, IC&I, and C&D
Action Highlights:	<ul style="list-style-type: none">▪ Examines the viability of using collection frequency to maximize efficiency and diversion▪ Recommends a process for overseeing implementation across the region
Action By:	CRWMAC and member municipalities, haulers
Program Description:	<p>In D.2, organics systems are standardized in the residential sector only while this program will look at expanding the standardized services to collect all organics streams generated by both the residential . Examine the collection frequency for organics and other waste streams to optimize public and private resource utilization and to reduce health and environmental issues for residents. For example, picking up organics more frequently and garbage less frequently (i.e., every other week for residential) can provide an incentive for residential participation while putrescible are collected more frequently. More frequent IC&I organics collection can mitigate odours and health concerns and cost savings generated from less frequent garbage pickup can also serve as motivators for ICI customers. Differential tipping fees with organics being charged significantly less than refuse will encourage separation.</p> <p>A brief study would be completed to compile and quantify results from best practice case studies within and beyond the region. Waste Diversion Coordinator to oversee coordination across municipalities to gain buy-in on strategies to optimize organics collection as relates to service frequency.</p>
Pre-requisite:	None
Time Frame:	Estimate three months to complete study, two years to implement
Importance to Success of Plan Goals:	Highly important to maximize effectiveness of organics diversion programs
Benefits:	<ul style="list-style-type: none">▪ Increased program compliance in organics diversion programs▪ Consistent collection to reduce confusion as residents compare across the region▪ Increased overall diversion
Resource Requirements:	Budget \$30,000 for best practices study; 0.25 FTE for Waste Diversion Coordinator to oversee study and facilitate quarterly meetings throughout the planning and implementation process.

Performance Measurement Metrics:

- Track percentage of jurisdictions that increase service frequency for organics collection while opting for less frequent garbage collection
- Track ICI sector organics collection participation and service frequency for both organics and garbage
- Monitor tonnage and participation levels

Roles and Responsibilities:

- Waste Diversion Coordinator to oversee study plus facilitate review, stakeholder engagement and program implementation
- Municipal representatives and haulers to review plan and actively engage in implementation

Primary Barriers to Success	Potential Solutions to Barriers
Lack of commitment by regional jurisdictions (residential) and/or haulers (IC&I).	Provide adequate feasibility information to demonstrative effectiveness of action, convene regularly to identify and overcome barriers and maintain progress.

Program:	E1 Engage the IC&I Sector
Program Scope:	Engage the IC&I sector in a meaningful, constructive dialogue to identify opportunities for understanding and collaboration to address waste diversion issues
Sector:	Municipalities, IC&I
Action Highlights:	<ul style="list-style-type: none">Engages the primary stakeholders in the IC&I industry on waste diversion opportunitiesGains valuable insight on potential waste diversion program options from stakeholders
Action By:	CRWMAC and member municipalities
Program Description:	<p>With the goal of promoting regional waste reduction measures within these sectors, conduct semi-annual engagement sessions with stakeholders in varying municipalities from the four main industry groups: Associations, Generators, Haulers, and Processors.</p> <p>Discuss the need for increased diversion of IC&I waste from landfilling, along with brief information provided on current municipal waste diversion programs that can assist sector participants.</p> <p>Stakeholders would provide information and opinions on current waste diversion systems and potential future local and regional waste diversion program opportunities. Introduce program alternatives with voluntary, incentivised or regulatory aspects for consideration by stakeholders to see if they are supported by the private sector.</p> <p>Serves as very valuable insight into which potential waste diversion programs are going to be most suited to the region and accepted by the stakeholders.</p>
Pre-requisite:	None
Time Frame:	On a semi-annual basis
Importance to Success of Plan Goals:	<ul style="list-style-type: none">Education of the IC&I stakeholders industry“Buy-in” of stakeholders on particular future IC&I waste diversion programs
Benefits:	<ul style="list-style-type: none">Opportunity to educate industry stakeholders on waste diversionStakeholders will appreciate being included in future program planning and implementation resulting in them being more cooperative.
Resource Requirements:	<ul style="list-style-type: none">Waste diversion coordinator to facilitate semi-annually (1% of their time). Speakers would be invited and volunteer. A venue would be required.
Performance Measurement Metrics:	<ul style="list-style-type: none">Stakeholder participation
Roles and Responsibilities:	<ul style="list-style-type: none">ACR Coordinator will keep stakeholders informed on the latest waste diversion initiatives within this sectorProvide information on potential future waste diversion program options

Primary Barriers to Success	Potential Solutions to Barriers
Lack of commitment by stakeholders	<p>Have a sufficient notification period when inviting stakeholders and possibly “piggyback” onto already established groups and associated committees.</p> <p>Include brief preamble on reasoning for engagement sessions and state the need for information and opinions on future waste diversion program options.</p> <p>Invite a variety of stakeholders from different industry groups – Associations, Generators, Haulers, and Processors.</p>

Program: **E.2 Develop IC&I Waste Management Strategy**

Program Scope: Develop a comprehensive IC&I Waste Management Strategy that addresses long term capacity, considers available similar models to provide a reward and encouragement system, and uses an education, facilitation and legislation approach (in that order) to motivate change.

Sector: IC&I

Action Highlights:

- Develop a long-term IC&I Strategy Document
- Include the design of a voluntary pledge program to motivate business

Action By:

- Capital Region Waste Management Advisory Committee (CRWMAC)
- Provincial commitment required for implementation of regulatory program options

Program Description: Reducing the waste generated by the IC&I sector is one of the most important components of meeting the overall MSW waste reduction targets. Because this sector is mostly unregulated, having an overarching guiding strategy will be instrumental in encouraging the private sector to reduce their waste.

A comprehensive IC&I Waste Management Strategy for the ACR should:

- Consider the results of the system capacity study (G.1. and D.3.) and support initiatives to address the long term capacity issues involved with current development trends in the private (and public) sector
- Consider existing models such as the Abbotsford Environmental Pledge Program to provide a reward and encouragement system that rewards the continual improvement of activities within businesses. This program could be tailored specifically for MSW or could be maintained as is for a 'one stop shop' for environmental issues
- Uses an education, facilitation and legislation approach (in that order) to motivate change towards these desired activities. This approach would use Community-Based Social Marketing Techniques

Pre-requisite: None

Time Frame:

- Development over the next year and expansion over the next 3-5 years with additional program options similar to C&D Strategy
- Start with appropriate voluntary program options within the next year and proceed with economic and regulatory program options if the region is not meeting desired diversion targets

Importance to Success of Plan Goals:

- Education of the retail and service sectors
- "Buy-in" of communities and contractors

- Benefits:**
- Potential to divert up to 40% of the total waste stream (IC&I Waste)
 - Decrease waste going to landfill
 - Increase opportunity and revenue for Edmonton Waste Management Centre of Excellence
 - Gain valuable materials that can be re-used and/or recycled and, if necessary; stockpile them for use as alternate daily cover for regional landfills
 - Increase deconstruction business opportunities in the region
- Resource Requirements:**
- Consultants and engagement specialists likely needed to conduct stakeholder engagement sessions around the region and develop overall strategy (approx. \$150,000)
 - The ACR Waste Diversion Coordinator facilitates completion (20% of their time over 6 months)
- Performance Measurement Metrics:** Completion of strategy document supplementing ACR IWMP
- Roles and Responsibilities:** Consultants to conduct consultation and develop strategy Waste Diversion Coordinator to facilitate process.

Primary Barriers to Success	Potential Solutions to Barriers
Lack of participation by businesses during sector consultation	Educate construction industry about the potential for cost savings, recognition, and environmental protection

Program:	E.3 Develop an IC&I Waste Diversion Toolkit
Program Scope:	Increased IC&I waste reduction depends on the IC&I sectors' understanding of benefits and procedures. User-friendly materials such as an IC&I Waste Diversion Tool Kit will educate management and staff about the benefits of proactive waste management and about convenient and cost-saving procedures.
Sector:	IC&I
Action Highlights:	<ul style="list-style-type: none">▪ Develop guidelines in the form of a "tool kit" to guide businesses on how to identify and select options, design programs, and estimate costs and savings▪ Toolkit could be used for small and large businesses
Action By:	Waste Diversion Coordinator guiding consultant
Program Description:	<p>Increasing IC&I waste reduction depends on the IC&I sectors' understanding of benefits and procedures. User-friendly materials in the IC&I Waste Diversion Tool Kit will educate management and staff about the benefits of proactive waste management and about convenient and cost-saving procedures.</p> <p>Developing a waste reduction plan is the necessary second step of any serious attempt to reduce business waste. The development of an IC&I Waste Diversion Tool Kit would provide a step-by-step approach on how to develop a waste reduction plan for any type of business. The kit would provide a framework upon which to build practical waste reduction and recycling programs appropriate for small and large businesses. The framework could include:</p> <ul style="list-style-type: none">▪ Methods for setting priorities▪ Identifying waste reduction options▪ Conducting cost benefit analyses of each option▪ Selecting an option and customizing programs to reduce waste▪ Revising procurement policies and procedures
Pre-requisite:	None
Time Frame:	Having this available in the short terms will be encouraging to businesses as the IC&I Waste Reduction Strategy is developed
Importance to Success of Plan Goals:	High
Benefits:	<ul style="list-style-type: none">▪ Increases waste reduction▪ Increases awareness of waste reduction fundamentals and specifics▪ May increase business as the public will see efforts made by the company▪ Should reduce costs
Resource Requirements:	\$25,000 to \$35,000 with contract management time for Waste Diversion Coordinator

Performance Measurement Metrics:

- Number of toolkit’s downloaded from website or requested.
- Number of businesses using the toolkit.

Roles and Responsibilities:

- Waste Diversion Coordinator (Access and promote Tool Kit components)
- Municipal staff (Participate in opportunities for education)

Primary Barriers to Success	Potential Solutions to Barriers
Lack of understanding/commitment by management and staff	Educate about the benefits of education
Lack of follow-up by Capital Region Staff members	Educate about the need for timely information

Program:

F.1 Develop a C&D Waste Management Strategy

Program Scope:

Develop a waste management strategy that addresses the long term capacity issues involved with current development trends and harmonize materials collected; builds on current C&D waste diversion initiatives (including the Edmonton Waste Management Centre of Excellence); encourages the provincial government to expand the number of materials legislated under the *Designated Material Recycling and Management Regulation*; and considers banning certain materials from disposal as diversion services expand with the potential to ban designated materials from regular diversion programs entirely when alternatives become available (e.g., EPR).

Sector:

C&D, IC&I

Action Highlights:

- Engages the sector and develops an overall strategy to address diversion and disposal of C&D waste within this sector
- Program options will be mostly voluntary; however, there may be some regulatory levers such as a Building Permit system
- Provides valuable educational information to this sector through established Building Permit systems in member municipalities

Action By:

- Capital Region Waste Management Advisory Committee (CRWMAC)
- Provincial commitment required for implementation of economic and regulatory program options

Program Description:

- Engage C&D stakeholders and obtain valuable information on current C&D waste diversion from the stakeholder groups: associations, generators, haulers, and processors. Also get their opinions on potential future C&D waste diversion programs to get a sense of appropriate programs for the region. Provides an insight into which program options would be accepted amongst the stakeholders in the industry.
- Conduct Baseline study - to improve data recording, a baseline study would build on what has been identified in the Phase 1 report in collaboration with the Provincial government and industry.
- Develop mostly voluntary program options, such as; the Green Building Certificate Program that promotes energy/water conservation and waste reduction/diversion; and develop infrastructure to establish increased collection, transfer, and processing facilities for C&D waste material.
- Develop economic program incentive options, such as, incentives for green design - buildings or developments with green design receive incentives, such as reduced permitting fees, and establish differential tipping fees at all regional landfills where clean and separated material specific loads are charged a lower tipping fee (destined for C&D waste material diversion drop-off sites). A higher tipping fee generating revenue could be charged for loads containing Designated Materials with minimal inspector time invested.

Program Description (continued):	<ul style="list-style-type: none"> ▪ Develop regulatory program options such as; <ul style="list-style-type: none"> – Mandatory waste diversion plans - standardized Material Recovery Plan would be required by the region as part of building/development permit application requiring dedicated regional staff to process applications and handle enquiries – Provincial or regional deposit-refund program - development of a municipal deposit-refund program for C&D projects requiring dedicated regional staff to run program and handle enquiries ▪ Disposal bans - materials with well-established diversion opportunities are banned from disposal at the landfill requiring sufficient education beforehand along with easily available markets for materials being banned
Pre-requisite:	None
Time Frame:	<ul style="list-style-type: none"> ▪ Development over the next year and expansion over the next 3-5 years with additional program options ▪ Start with appropriate voluntary program options within the next year and proceed with economic and regulatory program options if the region is not meeting desired diversion targets
Importance to Success of Plan Goals:	<ul style="list-style-type: none"> ▪ Education of construction industry ▪ “Buy-in” of communities and contractors ▪ Promote use of Edmonton’s R&D facility ▪ Address infrastructure development for additional C&D drop-off facilities in all regions ▪ Sustainable markets for C&D materials, such as wood, drywall, asphalt shingles, cardboard, etc.
Benefits:	<ul style="list-style-type: none"> ▪ Potential to divert up to 27% of the total waste stream (C&D waste) ▪ Decreases waste going to landfill ▪ Increased opportunity and revenue for Edmonton Waste Management Centre of Excellence ▪ Gain valuable materials that can be re-used and/or recycled and, if necessary; stockpile them for use as alternate daily cover for regional landfills ▪ Increased deconstruction business opportunities in the region
Resource Requirements:	<ul style="list-style-type: none"> ▪ Consultants and engagement specialists likely needed to conduct stakeholder engagement sessions around the region and develop overall strategy (approx.. \$150,000) while ▪ The ACR Waste Diversion Coordinator facilitates completion (20% of their time over 4 months)
Performance Measurement Metrics:	Completion of strategy document supplementing ACR IWMP
Roles and Responsibilities:	<ul style="list-style-type: none"> ▪ Consultants to conduct consultation and develop strategy Waste Diversion Coordinator to facilitate process

Primary Barriers to Success	Potential Solutions to Barriers
Lack of participation by contractors and construction companies during sector consultation	Educate construction industry about the potential for cost savings, recognition, and environmental protection

Program:

F.2 Expand Land Used for C&D Recycling at Landfill

Program Scope:

Expand or create space at existing landfills to provide areas to sort out recyclable C&D materials while other materials are stockpiled for other uses such as alternate daily cover at the landfill or feedstock for energy-from-waste facilities.

Sector:

C&D Sector, home owners

Action Highlights:

- Develop areas at the landfill to process and divert C&D waste from disposal
- Provide options for the C&D sector and residents undertaking home renovations with options to divert material generated by construction, demolition and renovation activities

Action By:

ACR municipal landfills and/or private sector landfills (if interested) who provide solid waste services to municipalities to develop plans for recycling C&D waste at landfill sites (space pending)

Program Description:

The purpose of this program is to ensure that C&D waste is more efficiently and better environmentally-managed at the landfill facilities where drop-off occurs by sector participants. A review of all facilities would be conducted and land identified as suitable to this task. Spacing requirement will be based on research complete on similar facilities elsewhere in North America. As a minimum, the program will consist of source segregation of C&D waste which can include metal (ferrous and non-ferrous), wood waste, gypsum wall board, corrugated cardboard, concrete, asphalt, glass and plastic; however, grinding and sorting of wood waste and other C&D materials could also be incorporated.

The basic steps of completing such a program are as follows:

- Identify suitable facilities with existing compatible programs or available space for a new program
- Identify suitable space and access to enable the design of such facilities
- Adjust, if necessary, tipping fees to encourage users to source-separate material for easier management on site
- Provide information to C&D sector and residents about new opportunities
- Support to implement C&D waste diversion options at the landfill facilities
- Having available space/storage area at landfill sites and developing an understanding of best management practices and markets for C&D material commodities

Pre-requisite:

- Support to implement C&D waste diversion options at the landfill facilities
- Having available space/storage area at landfill sites and developing an understanding of best management practices and markets for C&D material commodities

Time Frame:

- Based on priority, implementation of this program could occur anytime pending space availability and approval by facility management
- Target for having facilities available – spring 2014 (next construction season)

Importance to Success of Plan Goals:

- Increase waste diversion
- Save landfill space/capacity

- Benefits:**
 - Options for diverting some C&D materials
 - Will encourage the C&D sector to use municipally-owned facilities to improve diversion
- Resource Requirements:**
 - A feasibility study for candidate facilities could be between \$10,000 and \$15,000
 - Staffing, facility operations, capital upgrades and reloading capabilities would depend on individual facilities
- Performance Measurement Metrics:**
 - Tonnes of C&D waste diverted and landfill space saved
 - Customer visits for this waste stream
- Roles and Responsibilities:**
 - Waste Diversion Coordinator would facilitate development of a strategy for candidate facilities
 - A Consultant could develop the program strategy and site layout

Primary Barriers to Success	Potential Solutions to Barriers
Private facility operators not willing to participate in process	With municipal facilities offering additional diversion facilities with lower tipping fees, the private sector may have to compete
Lower tipping fees for disposal at private facilities	Institute differential tipping fees to attract C&D material

Program:

F3 Develop a Construction Site Diversion Toolkit

Program Scope:

Immediately develop a Contractors 'Construction Site Diversion Toolkit' to be provided through the Building Permit system to inform Contractors on choices they can make to source separate materials to increase diversion

Sector:

C&D, IC&I

Action Highlights:

- Voluntary C&D waste diversion program option
- Provides valuable education to industry through established Building Permit system

Action By:

CRWMAC

Program Description:

Develop a 'Construction Site Diversion Toolkit' to provide to contractors when they receive a building permit using the established municipal Building Permit system. The Toolkit will have information on C&D waste, as well as information on how to and why to participate in source separation on construction sites. Additionally, the Toolkit educates the contractors on how to properly sort material and where the materials can be taken for recycling/processing. The Toolkit also provides information on current regulations and encourages environmentally sustainable projects such as LEED certified buildings by demonstrating the needed documentation.

The online Toolkit will have links to updated presentations and workshop opportunities for contractors to learn about managing C&D waste. Progress can be advertised on the website, acting as reinforcement for viewers participating in waste diversion programs.

The toolkit would be largely based on already existing construction toolkits in North America. For example, Metro Vancouver and St. Louis, Missouri have successful programs from which a template for CRWMAC can be developed.

Pre-requisite:

None

Time Frame:

Within the next year

Importance to Success of Plan Goals:

- Education of the construction industry
- "Buy-in" of contractors to the diversion programs

Benefits:

- Voluntary approach – more easily accepted among industry members
- Educates construction industry on diversion opportunities
- Takes advantage of already established program – Building Permit system

Resource Requirements:

- Knowledge of a variety of C&D waste diversion program options in the region – need to be able to demonstrate diversion options for contractors
- Consultant to design Toolkit, including on-line version
- Waste Diversion Coordinator to provide continuous updates and research for new program options as program grows (5% FTE to support initiative when set up)

Resource Requirements (continued):

- Promotional and educational items for toolkit – handouts, public advertising, etc. assume \$20,000
- Staff to provide education and assistance to contractors as requested (5% FTE to support initiative when set up)

Performance Measurement Metrics:

- Contractors participating in source separation and C&D waste diversion statistics
- Demand for certain waste diversion requirements on construction sites and requirement that contractors provide back waste diversion quantity numbers

Roles and Responsibilities:

- It is assumed a consultant working with municipal staff will develop a Construction and Demolition Toolkit and post it on a website for easy access to information for all contractors and businesses
- Consultant to provide guidelines for educational program on using toolkit and to promote it to contractors and construction companies
- Municipal staff will be responsible for distribution of toolkit through Building Permit system for validity of program

Primary Barriers to Success	Potential Solutions to Barriers
Lack of commitment by contractors and construction companies.	Educate about the potential for cost savings, recognition, and environmental protection.
No direct incentive for participation	Establish as a part of the established Building Permit program - encourages voluntary action by contractors. Provide final Permit or Occupancy Permit only when information required in the toolkit is provided by Contractor.

Program:	F-4: Disposal and Material Diversion Plans for Contractors
Program Scope:	After initial education and promotion of better C&D material management in the first couple of years, set up a system in cooperation with all municipalities to require both proper disposal and materials diversion plans from contractors along with a system of enforcement by linking material management practices to Development Permits.
Sector:	C&D
Action Highlights:	Building permit and demolition permit process requirements that require contractors to assess waste materials generated and develop a plan that maximizes waste diversion.
Action By:	<ul style="list-style-type: none">▪ Study to assess what is done in other jurisdictions, identify suitable options for municipalities to consider and consult with contractors to gather feedback from proposed changes▪ Municipalities need to amend bylaws to modify building and demolition permit process that will require contractors to maximize waste diversion efforts.
Program Description:	Development of new procedures for managing C&D waste as part of the building and demolition permit process could be carried out as follows: <ul style="list-style-type: none">▪ Assess current process for waste management from contractors and how building and demolition permitting processes affect waste management practices for C&D waste;▪ Identify gaps in implementing system that need to be examined further; and▪ Consult with industry associations to see if this can be done independently from the overall C&D Waste Reduction Strategy.
Pre-requisite:	None necessary, but may want to have C&D Strategy in place before to combine consultation costs and reduce concerns by this sector.
Time Frame:	6 months for studies and 12 months for process development and contractor consultation. Could take 6 months for studies and 12 months for process development and contractor consultation.
Importance to Success of Plan Goals:	Buy in from contractors and mandatory requirements to ensure a level playing field.
Benefits:	Maximize waste diversion from the C&D sector by requiring the firms that generate the waste to manage it appropriately.
Resource Requirements:	The process would be led by the Waste Diversion Coordinator, but there may be a need for external help as follows: <ul style="list-style-type: none">▪ \$60,000 to assess disposal practices and building/demolition permitting

processing

- \$120,000 to develop strategy and conduct stakeholder consultation

Performance Measurement Metrics:

Waste diversion rates and materials diverted per year

Roles and Responsibilities:

Municipalities to lead the process with coordination/assistance from the Waste Diversion Coordinator.

Primary Barriers to Success	Potential Solutions to Barriers
Maybe too controversial to be implemented independently	Develop this program as part of the regional C&D Strategy initiative prior to implementation.
Consultation with sector may be too expensive	Combine with C&D initiative if too expensive and combine consultation.

Program:	G1 Solid Waste System Capacity Review
Program Scope:	Review the capacity of the solid waste management system (for all waste streams)
Sector:	All
Action Highlights:	Retain consultant to assess the capacity of the entire solid waste system and forecast future solid waste demand for a minimum 20 year period.
Action By:	Regional representative to issue an RFP to assess the disposal and processing capacity for solid waste and divertible materials
Program Description:	<p>Assess disposal, recycling and processing facilities and their processing capacities. Based on waste forecasts, the assessment should identify how much additional processing capacity is required in the future.</p> <ul style="list-style-type: none">▪ Acquire accurate waste quantity statistics over the first couple of years▪ Recalculate projected waste quantities based on assumptions made in Phase 1 including population projections▪ Obtain list of solid waste facilities, assess capacities, understand future processing requirements▪ Identify deficiencies and develop strategies to address them (e.g., private or public solutions)▪ Develop implementation strategy for recommended strategies
Pre-requisite:	More accurate waste quantity statistics in all sectors both public and private
Time Frame:	Estimate 4 to 6 months to undertake study. Dependent on level of detail for the study
Importance to Success of Plan Goals:	Understand when new capacity is required so that planning and schedules can be developed to address ahead of time
Benefits:	<ul style="list-style-type: none">▪ Short-term and long-term budget management for the region and municipalities▪ Avoids costly emergencies when capacity runs out
Resource Requirements:	Budget \$50,000 to \$80,000 to complete with some Waste Diversion Coordinator time to manage consultants
Performance Measurement Metrics:	Processing capacity (tonnes per day, per week and per year)
Roles and Responsibilities:	Regional staff to manage consultant led study

Primary Barriers to Success	Potential Solutions to Barriers
Private facilities unwilling to provide waste statistics.	Consider regulatory approaches or guarantee confidentiality.
Private industry solutions may not provide long term assurance needed while public control may not be desired by elected officials and objected to by the private sector.	Identify suitable property central to catchment areas to be acquired by local government; however, secure private companies to design/build/operate/finance facilities under contract terms.

Program:	H1 Standardize Terms and Conditions for Waste/Recycling Collection
Program Scope:	Develop standards for waste and recycling collection programs
Sector:	Residential
Action Highlights:	Similar approach and criteria for collecting waste and recyclables to ensure residents understand how programs work
Action By:	Municipal governments who manage or administer contracts to collecting waste and recyclables
Program Description:	<p>Municipalities work together to develop standard approaches, material types, and criteria for waste and recycling collection as follows:</p> <ul style="list-style-type: none"> ▪ Conduct sessions to identify optimum terms and conditions ▪ Prepare a Contract Terms and Conditions schedule to be attached by any municipality to their standard contract ▪ Maintain these terms and conditions to reflect the latest with annual updates
Pre-requisite:	Collection program administered or controlled by municipality
Time Frame:	Variable - when collection contracts expire or when collection vehicles need to be changed over
Importance to Success of Plan Goals:	Unified collection program that is consistent across the region allowing and easier transition to cooperative contract approaches and municipalities partnering on RFPs
Benefits:	Minimize misunderstandings and regional approach to public education and ease partnering opportunities
Resource Requirements:	Minor Waste Diversion Coordinator involvement, but currently already undertaken by municipal staff alone
Performance Measurement Metrics:	Annual reporting on new partnering arrangements
Roles and Responsibilities:	Minor Waste Diversion Coordinator involvement and mostly municipal staff cooperation to development standardized terms

Primary Barriers to Success	Potential Solutions to Barriers
Private Lack of leadership so contracts are renewed without consideration.	Waste Diversion Coordinator will remind municipal representatives of this program and assist to coordinate meetings where needed.
Terms and conditions become out of date and focus lost.	Annual updates facilitated by Waste Diversion Coordinator will ensure schedule is always current.

Program Scope:

I.1 WASTE MANAGEMENT POLICY REVIEW

Program:	Lobby Alberta Environment and Sustainable Resource Development (ESRD) to review current provincial waste management policies.
Sector:	All
Action Highlights:	Collaboration between municipalities and between municipal organizations while seeking commitment from ESRD for a timely review of waste management policies
Action By:	Municipalities in Edmonton-Calgary corridor, provincial municipal associations, RCA to take advantage of the interest created by the Red Deer workshop
Program Description:	<p>Municipalities representatives will work together with provincial municipal associations and the RCA to develop common positions on key issues identified at the April 19, 2013 workshop in Red Deer, including but not limited to:</p> <ul style="list-style-type: none">▪ Prepare position paper and meet with ESRD to consider options▪ Meet with ESRD program managers and senior management (ADM/DM) to present municipal position on provincial waste management policy and to identify opportunities for collaboration with ESRD to review and update current policies▪ Meeting with the Minister in September 2014 to secure a commitment by ESRD to review WM policy within 2 years (before next provincial election)
Pre-requisite:	<ul style="list-style-type: none">▪ Participation of municipalities representing at least 75 percent of Albertans to create the critical mass to attract the attention of the provincial government.▪ Identify if there is support from AUMA and AAMD&C
Time Frame:	<ul style="list-style-type: none">▪ Prepare position paper by mid-April 2014▪ Begin meeting with ESRD in May 2014▪ Meeting with the Minister in September 2014 to secure a commitment by ESRD to review WM policy within 2 years (before next provincial election)
Importance to Success of Plan Goals:	Significant changes to provincial policies and their implementation are required to facilitate waste diversion activities in the IC&I and C&D sectors, a key element to achieve the waste reduction targets in the ACR
Benefits:	<ul style="list-style-type: none">▪ Province will understand the significance of this issues to municipalities across Alberta▪ Resulting policies will reflect the current reality▪ The process will identify the need for provincial commitment to set enforceable targets
Resource Requirements:	<ul style="list-style-type: none">▪ Prepare position paper: included in Waste Diversion Coordinator function▪ Workshop facilitator and location - \$10,000▪ Elected official/staff time commitment for meetings, workshops – 6 hours each per meeting/workshop (including travel time)▪ Develop a final report: included in Waste Diversion Coordinator function

Performance Measurement Metrics:

- ESRD completes the review of provincial waste management policy including a plan for implementing changes before March 31, 2017
- Provincial commitment to enforceable targets for waste diversion by all sectors

Roles and Responsibilities:

- Waste Diversion Coordinator can:
 - Meet with representatives from Calgary region and other interested municipalities to identify interest
 - Meet with AUMA, AAMD&C and RCA about interest in participating
 - Make arrangements for workshops/meetings to develop municipal positions on waste management issues
 - Coordinate discussions with ESRD program management
 - Prepare position paper and final report
- Facilitator can;
 - Lead discussions on various topics
 - Consolidate input into position document for presentation to ESRD
- The CRWMAC Chair could:
 - Coordinate participation by representatives from ACR
 - Facilitate discussions with Minister of ESRD

Primary Barriers to Success	Potential Solutions to Barriers
Lack of interest by other municipalities	Develop position based on Capital Region interests and invite others to consider participating
Lack of interest by AUMA and/or AAMD&C	Begin process without them. Identify how objective is consistent with their policies.
Lack of interest by ESRD	Develop position document and begin advertising campaign to garner public support. Expand process to include ICI and C&D sectors to demonstrate universality of support