

SECTION 6 - ACTION ITEMS

SECTION	RESPONSIBLE DEPARTMENT	ACTION HEADING	ACTION	2019 FOLLOW UP	SUPPORTING DOCUMENTATION	COMMENTS
6.1	PLANNING	· 6.1 Organizing a Process to Collect Municipal Staff Knowledge about Locations of Climate Change Impacts.	CBRM should continue efforts to improve their GIS-based system by including anecdotal, photographic and report-based information that staff holds related to climate change issues. Ideally, users should be able to click on a map and be linked to information related to that location.	On-going collection of GIS-data relating to climate change issues. 2019 included new collection of Bathymetric Lidar (in partnership with NSCC) for the Sydney Harbour. NS Government collected province-wide elevation data which will provide a consistent data source.		
6.2	EMO/FIRE/POLICE	· 6.2 Additional Emergency Preparedness Considerations	<p>CBRM should continue efforts to improve their GIS-based system by including anecdotal, photographic and report-based information that staff holds related to climate change issues. Ideally, users should be able to click on a map and be linked to information related to that location.</p> <p>Given the serious of this issue, it is recommended that CBRM collaborate with the Province's Emergency Management office to educate the public about the importance of storing a few days supply of essentials such as food, water and fuel in case of an emergency.</p> <p>CBRM should continue to work with the fire departments towards the objective of having community fire stations or other public buildings available as emergency shelters. CBRM's Emergency Management office should continue to evaluate contingency plans in response to the range of potential infrastructure failures that could impede an efficient response</p> <p>CBRM should also examine its fuel quantity storage policies to ensure that there will be adequate fuel on hand at all times to be able to operate equipment such as snowplows, fire trucks and other emergency vehicle and back-up generators for two weeks without re-supply.</p>	<p>CBRM's GIS Based System is under continuous development, all pertinent information is uploaded.</p> <p>CBRM in coordination with EMO Nova Scotia promotes 72 hour preparedness for residents. This includes all associated communication and education programming.</p> <p>A secondary ECC has been established at The Grand Lake Road Emergency Service Center. this location is not prone to water issues.</p> <p>This facility houses the CBRM Communications, Dispatch, Center and is generated automatic power back up.</p> <p>This facility provides ample requirements, a commercial kitchen, washroom & shower facilities, offices, board rooms, sufficient parking, secondary communications equipment and private areas if required.</p> <p>This action has been completed and is highly promoted routinely. Emergency measures preparedness includes fueling of vehicles and equipment in preparation for specific events, as well as providing emergency procurement of refueling arrangements for longer duration events.</p>	<p>CBRM All Hazards Emergency Management Plan</p> <p>This has been thoroughly completed and continues to be high priority, updated and improved regularly.</p> <p>This is complete, all CB Regional fire departments are regularly reminded to practice this.</p>	<p>There is a plan in place for Fire & Police to provide emergency transportation service for critical CBRM staff, including Dispatch, NS Health Authority, EHS, and Public Works employees. CBRM has three sources of communications, landline, TMR & VHF for emergency responders. All volunteer fire departments have been visited and assessed as to a predetermined set of criteria for Warming Centers and shelters.</p>

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6.2	EMO/FIRE/POLICE	· 6.2 Additional Emergency Preparedness Considerations	CBRM should advocate for Provincial assistance in the development of an approach to address the decreasing availability of volunteers, especially in rural areas.	Currently our 33 Cape Breton Regional Volunteer Fire departments are in relatively good shape, many at capacity for membership and a few with adequate numbers. There are many automatic and requested mutual aid agreements in place which aids in ensuring proper and adequate response levels in the CB Regional Fire & Emergency service. Fire Administration is currently working on a recruitment and retention program for the CB Regional Fire Service.		
6.3	EMO/EPW/BUILDINGS	· 6.3 Ensure Critical Infrastructure Has Back-Up Power	CBRM should continue to monitor water treatment and supply systems, sewage treatment plants and lift stations, and buildings/facilities that will be used in an emergency event to ensure that they either have back-up power permanently available or have ability to be hooked into a back-up generator with sufficient fuel supply.	<p>- All Backup Generator facilities have standard operating procedures, preventative maintenance plans, and operational plans for fueling during periods of operations. Locations of all backup power facilities have been identified with EMO Representatives and form part of the inventory plan.- All major water treatment plants have been equipped with backup power systems; Glace Bay Water Treatment 2003, New Waterford Water treatment 2007 Louisbourg Water Treatment 2008, Pottle Lake Water Treatment upgraded 2009, Middle Lake Wellfield 2011, Sydney Water Treatment upgraded 2018, Phalens Road Glace Bay booster pumping 2014, Lingan Road Sydney booster pumping 2012,</p> <p>Henry Street Sydney booster pumping 2017, Floral Heights Water Treatment to be tendered 2020</p> <p>- All major wastewater treatment plants have been equipped with backup power systems Many volunteer fire departments have acquired generators that allow for back up power provision. Sydney Fire Station #1 has portable generator power capabilities. Sydney Fire Station # 2 is Post Disaster construction with automatic generated power back up. C.B. Regional Communications Center has generated automatic power back up capabilities.The construction of the new Sydney Fire Station #1 will be post disaster construction with automatic generated back up power.</p>	<p>Wastewater Pre-Design Project - 2018 -New Waterford Wastewater Collection System Predesign Brief - 2018 -New Waterford Wastewater Treatment Plant Predesign Brief - 2018 - Louisbourg Wastewater Collection System Predesign Brief - 2018 -Louisbourg Wastewater Treatment Plant Predesign Brief - 2018 - Glace Bay Wastewater Collection System Predesign Brief - 2018 - Glace Bay Wastewater Treatment Plant Predesign Brief - 2018 - Donkin Wastewater Collection System Predesign Brief - 2018 -Donkin Wastewater Treatment Plant Predesign Brief - 2018</p> <p>- Port Morien Wastewater Collection System Predesign Brief - 2018 - Port Morien Wastewater Treatment Plant Predesign Brief - 2018 - New Victoria Wastewater Collection System Predesign Brief - 2018 -New Victoria Wastewater Treatment Plant Predesign Brief - 2018 - North Division Wastewater Collection System Predesign Brief - 2018 -North Division Wastewater Treatment Plant Predesign Brief - 2018</p> <p>Sydney Harbour West Wastewater Collection and Treatment Project, 2019 - Waste Water Collection System Predesign Brief - Waste Water Treatment Plant Predesign Brief</p>	<p>- All critical water / wastewater pumping / treatment facilities have been reviewed for backup power requirements and upgraded as capital budgets have become available.</p> <p>The predesign briefs have considered backup power for all wastewater systems. This includes all existing and new and existing treatment and pumping facilities. The backup power requirements will be evaluated in greater detail as these projects move through the design and construction phase. Below are additional buildings that have generator backup, currently.</p> <p>É Fire Station #2 É City Hall (Civic Center) É Louisbourg Fire Station , propane É Massey Dr , Public Works Center , propane É North Public Works Center , generator panel with gas generator manual É East Public Works Center, generator panel with gas generator manual. É Central Police partial backup to supply power to holding cells, plan is to keep adding a generator to the capitol budget, (critical)</p>

Municipal Climate Change Action Plan (MCCAP)

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6.4	EPW	· 6.4 Regularly Inspect Sewage Treatment Plant Outfalls	With increased incidence and severity of storm events, CBRM should increase their regular inspections of all sewage outfalls (both those emanating from treatment plants and those discharging untreated sewage) to look for damage to pipes, erosion that may lead to failure, and sedimentation that may affect performance of the outfall. When such occurrences are noted, immediate corrective action should be taken.	- All Sanitary Sewer Outfalls identified through GIS software and assigned a unique identification number. - Asset Management RFP issued December, 2019 - Sanitary Sewer Outfalls with a history of maintenance issues inspected annually by Public Works Department - Deficiencies noted during inspections are scheduled for repair. (Wallace St, Glace Bay, repaired 2012; Cable Street North Sydney , repaired 2019)	Enterprise Asset Management RFP	- All existing sanitary sewer outfalls will either be eliminated or converted to a combined sewer overflow equipped with flow and level monitoring devices as part of future wastewater collection and treatment projects. New Enterprise Asset Management Software will improve how the Municipality schedules and tracks maintenance of existing sanitary sewer outfalls and future combined sewer overflow structures.
6.5	BUILDINGS	· 6.5 Review of Municipal Structures for Snow Loading	CBRM should review all structures in owns and ones that might be used as emergency shelters to ensure that they have sufficient structural integrity to support anticipated snow loads.	Existing facilities receive routine inspections on roof condition. Conditional assessments are utilized to determine if further investigations are required. Many of the larger facilities were assessed a number of years ago with respect to structural configuration. When warranted, structural inspections and intrusive engineering assessments are planned based on conditional analyses.		
6.6	PLANNING	· 6.6 Organize a Process to Collect and Review Community -Based Mapping	CBRM should consider the development of a web and smartphone-based mapping and reporting system, whereby residents and visitors could upload text and images of locations that are being affected by storms and other climate change related events. This would broaden the collection of relevant information and allow people to record relevant data on their own schedule.	Being developed as part of CBRM 311 for collection of community data.		

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6.6	PLANNING	· 6.6 Organize a Process to Collect and Review Community -Based Mapping	<p>Additionally, or alternatively, residents and community associations could be invited to a location, perhaps their fire hall, to discuss climate change-related issues of which they are aware. The groups would be provided with mapping on an air photo base and would mark up areas where issues, such as coastal and inland flooding, erosion, road damage, saltwater intrusion into wells, etc. are occurring. These should be moderated meetings, with a facilitator familiar with the process and required product, so that a consistent level of information is received. These meetings should be held annually, if the web service is not established, so that information on events remains relatively fresh in participants' minds.</p>	Historically, this has been on an as-needed basis, and focussed on specific projects, upgrades, initiatives, etc.		
6.7		· 6.7 Annual Regional Meeting	<p>It is recommended that CBRM meet regularly with:</p> <ul style="list-style-type: none"> - other Cape Breton Municipal Governments - Cape Breton First Nations communities - the Eastern District Planning Commission - relevant Provincial government departments, such as, Transportation and Infrastructure Renewal (NSTIR), Natural Resources, and Environment, and the Municipal Services Division of Service Nova Scotia and Municipal Relations - Parks Canada - Nova Scotia Power Inc. - Bell Aliant <p>CBRM should coordinate/ensure communications between groups responsible for different developments in the municipality making sure that climate change in</p> <p>It is recommended that the following subjects be addressed in the meeting:</p> <ul style="list-style-type: none"> - location and type of potential hazards - potential solutions - the party responsible for taking action 	<p>Association of Municipal Administrators of Nova Scotia (AMANS) Tri-Council Meetings have occurred for the past number of years.</p> <p>Many departmental meetings are held with associated representatives of the Province of Nova Scotia. These sessions include strategic planning, discussions on policies, upcoming legislation changes, etc.</p> <p>CBRM is not the regulator in this respect. Provincial and Federal Governments have their own regulators, regulations, and expertise.</p>		<p>CBRM has a number of members of Municipal Public Works Association of Nova Scotia (MPWANS) who has yearly stakeholder meetings with both Nova Scotia Environment and Nova Scotia Transportation and Infrastructure Renewal. Many information sessions also happen, and are typically operational and issue based.</p>

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6.8	PLANNING	6.8 Establishment of Coastal Setbacks	<p>While the current Municipal Planning Strategy policies advocate for a collaborative approach with the Province, it is recommended that CBRM, on its own, initiate a coastal setback policy to be implemented in its land use bylaws based on elevation, protection of known environmentally sensitive sites in proximity to the coast. And scientifically accepted predictions of seal level rise over time referenced in cited documents below.</p> <p>CBRM should also lobby directly, and by advocacy through the Union of Nova Scotia Municipalities , for the Province to significantly improve its collection of topographic geologic data that will improve the quality of decision making in dealing with phenomenon of climate change.</p> <p>CBRM should take a leadership role advocating that the Province develop a Province-wide coastal management and setback policy.</p>	<p>Preliminary sea level rise scenarios being considered with new provincially collected data. Coastal setbacks will be considered under a future MPS and Land Use Bylaw Update</p> <p>NS Government collected province-wide elevation data which will provide a consistent data source. CBRM routinely partners on acquisition of LIDAR data and has numerous sets of orthophotography and pictometry as part of GIS Layers.</p> <p>CBRM staff continue to work with provincial and federal partners in supporting efforts</p>		<p>CBRM staff should continue to advocate for additional</p>
6.9	PLANNING/EPW	6.9 Floodplain Mapping	<p>CBRM should consider the implementation of regulatory provisions to be in effect in areas of known vulnerability to flooding and erosion due to the adverse effect of climate change. Consideration should be given to implement policies in the CBRM municipal planning strategies and provisions in the land use bylaws that enforce river course setback and protect riverine vegetation intended to offer protection for existing development from erosion, flooding, and inundation.</p>	<ul style="list-style-type: none"> - Multiple examples of shoreline erosion repair - "No development zone" issue paper to follow the guidelines in the Provincial Statement of Interest (MGA) for Wash Brook. - Wash Brook Flood Intensity and Mitigation Project, 2017 - National Disaster Flood Mitigation Project, 2018 (5 major watersheds) - Climate change considerations included in Wastewater predesign projects. - CBRM has adopted Public Safety Canada's NDMP framework for Flood Risk Management in its major watersheds 	<ul style="list-style-type: none"> - Wash Brook Floodwater Conatinment and Intensity Mitigation Project, April 2018, CBCL Inc. - National Disaster Mitigation Program (NDMP) Flood Risk Assessments, June 2019, WSP Inc. - Statement of Provincial Interest Regarding Flood Risk Areas 	<p>The Statement of Provincial Interest Regarding Flood Risk Areas found in the NS MGA recommends restricting development in areas where the potential for flooding has been scientifically determined.</p> <p>The Wash Brook Floodwater Containment and Intensity Mitigation Project conducted by CBCL has delineated the flood lines of the Wash Brook watershed in this manner. It is CBRM's intention to bring forth an issue paper to council to communicate the limits of the flood lines and to discuss possible options for future development restrictions in this area.</p> <p>Similar flood plain modelling is also being carried out on five additional watersheds within the Municipality through the NDMP Flood Risk Assessment work being conducted by WSP Group. This work will delineate the flood lines in these watersheds and inform whether or not restrictions on development are warranted.</p>

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6.9	PLANNING/EPW	· 6.9 Floodplain Mapping	Consideration should also be given to implement a scale of provisions ranging from discouraging new developments and the expansion of existing developments up to a prohibition of new and expanded developments depending on the circumstances derived from an array of variables. It is understood this will be more of a challenge to implement in developed areas than currently undeveloped areas and the degree of difficulty will be correlated to the density of existing development.	Floodplain regulation will be considered under a future MPS and Land Use Bylaw Update with completion of Floodplain mapping		<p>The Statement of Provincial Interest Regarding Flood Risk Areas found in the NS MGA recommends restricting development in areas where the potential for flooding has been scientifically determined.</p> <p>The Wash Brook Floodwater Containment and Intensity Mitigation Project conducted by CBCL has delineated the flood lines of the Wash Brook watershed in this manner. It is CBRM's intention to bring forth an issue paper to council to communicate the limits of the flood lines and to discuss possible options for future development restrictions in this area.</p> <p>Similar flood plain modelling is also being carried out on five additional watersheds within the Municipality through the NDMP Flood Risk Assessment work being conducted by WSP Group. This work will delineate the flood lines in these watersheds and inform whether or not restrictions on development are warranted.</p>
6.10	PLANNING/EPW	· 6.10 Stormwater Management Plans and General Climate Change Reviews	CBRM should amend its municipal planning strategies to include a policy that addresses the potential adverse effects of storm water runoff in areas affected by climate change. This policy should direct that the Subdivision Bylaw include provisions requiring storm water management plans designed to ensure storm water runoff is not increased as a result of a plan of subdivision in watersheds known, or expected to be, adversely affected by flooding, or inundation caused by climate change which would result in increased flooding caused by a breaching of the capacity of downstream systems.	Storm water management plan / bylaw to be considered by EPW/Planning for future developments.		SubDivision By-law / MPS Review to include update to stormwater management requirements

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			<p>For single lot developments a program to advise recipients of Building Development Permits of their obligation to manage storm water on-site should be</p>	<p>Storm water management plan / bylaw to be considered by EPW/Planning for future developments.</p>	<p>Annual Council Approved Budget - 2011 - 2020 Wastewater Separation Reports - 2016 - 2020</p>	<p>Reducing the volume of unnecessary water that enters the sanitary sewer system has evolved into an annual program called the Inflow and Infiltration (I&I) Reduction Program. The core I&I program is funded annually through gas tax in the amount of \$450,000, however all major wastewater projects have adapted to contain an I&I component aimed to reduce the amount of water that will one day be fully treated. For example, under the current Sydney Harbour West Project, CBRM has inspected and evaluated over 1000 manholes, and is currently performing field testing to identify areas that contribute large volumes of groundwater and stormwater to the system. CBRM has also taken advantage of federal programs such as the 2016 Clean Water & Wastewater Fund that are I&I specific.</p> <p>Programs such as this allows CBRM to dramatically increase I&I reduction efforts, leading to more capacity in our systems and an increase in treatment efficiency. Until now, all I&I reduction efforts were focused on improvements of public underground infrastructure. This year, CBRM has placed a focus on private drainage systems, which is an area that is expected to reveal a large volume of water entering sanitary sewer systems. First, we must quantify the volume of water from private drainage systems entering the sewers in relation to other known sources. This knowledge will strengthen the I&I program and help inform decision making in the future.</p>

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6.11	PLANNING/RECREATION	· 6.11 Maintenance of Public Access to Water's Edge	CBRM should meet regularly with Provincial and Federal counterparts responsible for parks and open space infrastructure in the area to remain aware of potential changes and to work together to maintain public health access to important areas.	CBRM staff continue to work with provincial and federal partners in supporting efforts		
6.12	PLANNING/RECREATION	· 6.12 Maintenance of Water's-edge Tourism Infrastructure	CBRM should require that Harbourside Investments for tourism are adaptive in design and thus sustainable. As part of the design process for these types of facilities, specific adaptation planning and design responses should be implemented to protect investments in facilities that support this high value sector.	CBRM staff continue to work with provincial and federal partners in supporting efforts; Regulatory efforts to enforce specific design efforts will require resources as part of MPS and Land Use Bylaw Update	Downtown Sydney Urban Core Plan 2017 by Ekistics , Sydney Harbourfront Conceptual Vision and Design 2014, by Ekistics	
6.13	PLANNING/EPW	· 6.13 Stewardship and Sustainable Development of Bras d'Or Lakes	CBRM can provide a needed stimulus to sustainable development in the region by supporting CEPI and many of its land-use planning initiatives.	CBRM has provided technical and financial supports to CEPI		CBRM Water Utility is an active CEPI Steering Committee member and sits on CEPI Forestry Task team in developing forest management plan for optimization of water quality. Kelly Lake, Louisbourg has been selected as study site to complement locations in Bras d'or Lakes watershed
6.14	PLANNING/EPW	· 6.14 Education	Develop and implement a public education program to: - tell people about what CBRM is doing about climate change - identify the risks and encourage people to think about them	Refer to Attached Appendix 2 and Partnership with Efficiency NS Risks of flooding to private property and what homeowners can do to protect themselves outlined in a brochure/website developed by ACAP	CBRM Energy Audit 2011, Yearly Energy Updates from Onsite Energy Managers Appendix 2 ACAP Homeowners Flood Protection Guide, Jan 2020 ACAP website Dec, 2019	Education Contracts for last number of years with ACAP - Cape Breton. ACAP has been providing extensive education programs for CBRM Water

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6.14	PLANNING/EPW	6.14 Education	- tell people how climate risks or opportunities could affect the development of their properties.	To be considered as part of 2020-2021 development education initiative Oct 2016 CBRM Water Utility commences on water loss reuction programs focusing on reducing the amount of potable water lost through leaking water mains by actively monitoring system inputs, identifying and locating leaks, then quickly repairing them. Reduced water system inputs results in less water being extracted from the environment, thus strengthening the source of supply.	2015 MacAskills Brook Dam Safety Management Plan - Meco Rotary Park Dam Assessment 2012 - exp Rotary Park Control Structure Assessment 2016 - Meco Annual System Water Loss Audits	Reducing system input also means less water pumped and treated, resulting in lower energy and chemical use thus reducing the carbon footprint of water operations. Real losses reduced by 50% since 2015
6.14	PLANNING/EPW	6.14 Education	As part of this program, CBRM should develop a brochure that talks about climate change risks and the appropriate placement of buildings to lessen risks. This information should also be placed with building permit application forms, so people make better informed decisions about where and how they build. CBRM could also circulate the brochure with its tax bills. This type of comprehensive educations approach will require some dedicated allocation of staff time. update to the mitigations that have taken place since 2014, including the relationship with efficiency nova scotia and calculations for savings, energy usage, and greenhouse gas emission reductions	To be considered as part of 2020-2021 development education initiative	Mud Lake / Gilhome's Lake Detailed Design / Tender Specifications Pond 5 - Preliminary Design - Jan, 2020	
7.00	BUILDINGS/EPW	7.00 MITIGATIONS	planned mitigations into the future	- Structural - Mud Lake Outlet Flow Control Structure, 2019- Flood Mitigation Measure for Wash Brook Water Shed. - Structural - Gilhomes Lake Outlet Flow Control Structure, Forecast 2020. - Structural - Pond 5B (Stormwater retention Pond) - Forecast Construction 2020 CBRM's Partnership with Efficiency NovaScotia has provided an Onsite Energy Manager for CBRM since 2014. All available funding mechanisms and opportunities have been investigated. Numerous projects across all depatments, operations, and facilities within CBRM have been identified, prioritized, funded, completed, and qualified. reduce unaccounted for water throughout CBRM water systems	CBRM Energy Audit 2011, Yearly Energy Updates from Onsite Energy Managers Appendix 2 Draft CBRM Energy Plan 2020-2024	The attached reports in Appendix 2, provide a brief overview of all projects that have been completed. CBRM's Objective of reducing all energy used across all departments by 15% from 2015 to 2020, was completed by 2016. Significant reductions and associated savings have been and continue to be experienced by CBRM. Three (3) Bright Business Awards have been recieved by CBRM since 2015.

ICSP - ENVIRONMENTAL PILLAR ACTION ITEMS

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Planning		Protect the Bras d'Or Lakes system	75 Implement recommendations of the Bras d'Or Lakes Development Guidelines within CBRM.	Bras d'Or Lakes development guidelines under consideration for inclusion within future MPS and Land Use Bylaw Update	2008 Bras d'Or Lakes Development Standards - EDM	
			76 Work with Richmond, Inverness, and Victoria Counties, and the Eastern District Planning Commission to implement recommended standards for the balance of Cape Breton Island.	Discussions on-going with Eastern District Planning Commission for implementation of recommended standards for Bras d'Or Lakes		
EPW		Continue Wastewater Treatment Strategy	77 Continue to develop CBRM's wastewater treatment strategy.	Extensive reports, Council Updates, and plans have been developed, presented and are on-going. See updates above.		
			78 Work with senior governments to develop a funding model that will allow CBRM to address the requirements of the Provincial wastewater treatment strategy.	Continuous interaction with other levels of Government. CBRM had representation included on the Federal WSER Regulations development team. CBRM has had numerous discussions with Provincial and Federal departments with regards to CBRM funding needs and collaborative efforts to secure funding.		
			79 Develop wastewater treatment plants as necessary funds and assistance become available.	Ongoing, all high risk facilities are now planned, funded, and cashflowed.		
EPW/Water Utility		Protect municipal water supply watersheds	80 Complete protection strategies for all water supply watersheds in CBRM.	.Source Water Protection Plans (SWPP) have been developed for each CBRM source of supply. Each plan is in the process of being updated to reflect NSE regulatory requirements for 2020	- 2013 Pottle Lake SWPP; 2014 Waterford lake SWPP (Draft); 2014 Killkenny Lake SWPP (Draft); 2013 Floral Heights SWPP (Draft); 2014 MacAskills Brook Watershed SWPP - 2014 Gardiner Mines Well SWPP (Draft) 2006 Middle Lake Groundwater Protection Plan	
Planning		Address Coastal Erosion Issues	81 Encourage and support federal and provincial regulatory agencies to develop a plan to mitigate coastal sedimentation and flooding caused by sedimentation of drainage structures.	CBRM staff continue to work with provincial and federal partners in supporting efforts		
			84 Develop Wind Farm opportunities in CBRM	Development opportunities were directly associated with the Nova Scotia Community Feed in Tarrif (COMFIT) Program with Nova Scotia Power. Projects were evaluated, however the energy reduction program within CBRM provided much more opportunity at the time. COMFIT has been since discontinued.		
Buildings/EPW		Increase green energy development	85 Explore opportunities for geothermal energy development and encourage its use where feasible in CBRM	All new building development projects include requirements to provide enhanced energy efficiency utilizing available technologies. Specific projects would be identified in Appendix 2.		
			86 Investigate Potentials of underground coal gasification and coalbed methane extraction.	This would be outside of the jurisdiction of CBRM.		

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Planning/Various Depts		Adapt to Potential climate change and its Consequences	87 Assess predicted sea level rise and associated storm surge for coastal areas and major watercourses.	Data available as part of regular on-going GIS collection; Preliminary sea level rise scenarios being evaluated with new provincially collected data in potentially "high impact" areas		
			88 Adopt appropriate building and management regulations to minimize the exposure of new construction and infrastructure to anticipated impacts of climate change.	Coastal/floodplain setbacks and other associated regulation change will be considered under a future MPS and Land Use Bylaw Update		
EPW		Improve Public Transit Plan	89 Consider all realistic means to increase the use of transit within CBRM in the context of transit study recommendations.	Transit has been on a growth and development trajectory since 2014, when there were risks of service reductions at that time. Major service expansions have occurred since 2016, and ridership and revenue increases have been experienced at significant levels.	CBRM Transit System Review 2011 - updated report planned for 2020	
Planning/Recreation		Implement Active Transportation Plan	90 Develop all components of the Active Transportation Plan consistent with the adopted program of CBRM	Whitney Pier Community Heritage Trail, Greenlink Trail System, Westmount Walking Loop, Spar Road Paved Shoulders, George Street Bike Lanes, Maryann Corbett Trail on Grand Lake Road, New Waterford Walking Loop Upgrades, New Waterford Highway Shoulder Upgrades for walking and biking	2008 CBRM Active Transportation Plan	Majority of proposed signature projects in CBRM Active Transportation Strategy have been completed
			91 Incorporate sidewalks, walkways, and bikeways as a component of street upgrading projects as they occur			On-going consideration with infrastructure projects with NSTIR, where identified by CBRM.
			92 Secure corridors for walkway and bikeway connections in new subdivisions through required parkland dedication			
EPW/Finance		Encourage the establishment of Wastewater Management Districts	93 Establish WWMDs for existing communities relying on on-site wells and/or septic sewage disposal in CBRM	WWMD's have not been determined as a recommended plan to date.		
			94 Require the establishment of WWMDs for all new developments relying on on-site wells and/or septic sewage disposal in CBRM			
			95 Require the development of financial plans for all WWMDs identifying all the capital, operating, and potential replacement costs, and establishing a charging regime for recovering these costs.			

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	EPW	Continue to address the reduction of Solid Waste	<p>96 Implement a clear bag program to respond to Provincial diversion requirements as well as to benefit from the additional diversion credits</p> <p>97 Take advantage of available capped Sydney Landfill area to expand and extend the life of CBRM's C&D landfill</p> <p>98 Expand the CBRM compost facility to full capacity, as demand increases and as new or enhanced waste streams become available</p> <p>99 Work with private sector and regulatory agencies to develop alternative uses for various waste streams so as to limit the amount of waste transported outside CBRM</p>	<p>A clear bag program has been initiated. We continue to promote our three (3) stream program for waste, recyclables and compost. Through Nova Scotia Regional Chairs Committee we are advocating for a more equitable distribution of diversion credits which will provide additional funding which in turn will help finance new diversion programs.</p> <p>All available space has been developed for C&D landfill. Most recent surveys indicate we have 15 additional years of available disposal available based on current rates of material received.</p> <p>New screening plant installed in Dec 2019 is expected to add capacity to the facility. We continue to explore new uses for finished compost. We are investigating it's use in remediation projects on our various former landfill sites.</p> <p>CBRM continues to investigate emerging technologies for waste handling which will reduce greenhouse gas emissions. Existing programs are continuously promoted to increase diversion andinturn reduce the amount of waste requiring transportation.</p>		
	EPW/Finance/CAO	"Green" Municipal Operations	<p>110 Institute green municipal procurement policy.</p> <p>111 Increase environmental awareness of municipal staff through promotion and training</p>	<p>CBRM Staff are researching existing green procurement policies and will bring forth recommendations.</p> <p>Promote waste reduction and reuse. Recognize the importance of diverting waste. Look for waste to reduce waste in municipal departments. Part of the process for demolition permits to ensure environmental practices are adhered to when</p>		<p>Initial discussions through AMANS have occurred. Currently reviewing possible options.</p>