

CITY OF SASKATOON COUNCIL POLICY

NUMBER

C09-041

POLICY TITLE <i>Wetland Policy</i>	ADOPTED BY: <i>City Council</i>	EFFECTIVE DATE <i>November 4, 2013</i>
ORIGIN/AUTHORITY <i>Clause 2 , Report 18–2006 of the Planning and Operations Committee; Clause 4, Report No. 16-2013 of the Planning and Operations Committee; and Hearing 3b, dated November 4, 2013.</i>	CITY FILE NO. <i>CK. 4110-38</i>	PAGE NUMBER <i>1 of 9</i>

1. PURPOSE

- 1.1 To implement the Official Community Plan Bylaw No. 8769 concerning wetlands conservation and management.
- 1.2 To provide guidance to landowners, developers and City of Saskatoon (City) staff on achieving responsible integration of wetlands into the urban environment.

2. DEFINITIONS

- 2.1 Buffer – is an area of relatively undisturbed vegetation adjacent to a wetland and its riparian area that serves to reduce adverse effects to wetland function from adjacent development and activities.
- 2.2 Compensatory Mitigation – measures used to offset any impacts to wetlands and/or wetland function that may result from urban development. Compensatory mitigation can include measures such as wetland buffers, landscaping, wetland restoration, enhancement, preservation and/or constructed wetlands.
- 2.3 Constructed Wetland – a constructed and/or modified water body that fluctuates with water drainage but holds water at all times. Constructed wetlands are designed to mimic some or all of the functions of naturally-occurring wetlands, including filtering pollutants from storm water runoff, and providing habitat with associated buffers/riparian areas.
- 2.4 Dedicated Land – comprises buffer strips, Municipal Reserve, Environmental Reserve and Municipal Utility Parcels as defined in *The Planning and Development Act, 2007*.

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- 2.5 Enhancement – modification of one or more physical, chemical or biological features of wetlands to achieve improved function within a degraded wetland.
- 2.6 Naturalized Park – as defined by the City’s Park Development Guidelines Administrative Policy No. A10-017.
- 2.7 Riparian Area – transitional areas between aquatic and terrestrial ecosystems. The plants and soils within riparian areas are strongly influenced by the presence of water.
- 2.8 Significant Wetland Resources – wetlands classified as “Preserve” in accordance with the Minnesota Routine Assessment Method and any wetlands located within significant wetland complexes as identified in the City’s Wetland Inventory and Functional Assessment.
- 2.9 Wetland – lands having water at, near or above the land surface or land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, aquatic vegetation and various kinds of biological activity which are adapted to a wet environment. Wetlands can hold water temporarily or permanently, with water levels fluctuating over the course of a single year and over many years with climactic cycles.
- 2.10 Wetland Complex – a combination of individual wetlands and surrounding riparian areas that have complementary functions and have greater significance when viewed together compared to individual significance.
- 2.11 Wetland Function - a natural process or series of natural processes that take place within a wetland and can be grouped broadly as physical, biological and chemical. Typically, these processes can include the storage of water, transformation of nutrients, growth of living matter and the value these processes have for the wetland itself and the surrounding ecosystems.
- 2.12 Wetland Functional Assessment – a process used to measure or quantify the level or quality of function of an existing wetland. For the purposes of this policy, the Minnesota Routine Assessment Method will be used for any required wetland functional assessments.

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2.13 Wetland Impact – infilling, altering or physically draining a wetland, any impact to the riparian area and any type of interference with the hydrological function of the wetland.

3. POLICY

3.1 Wetland Inventory and Functional Assessment

- a) The City will maintain an inventory of wetland resources that includes both classification and functional assessment of wetlands and the identification of any significant wetland complexes. The inventory will be comprised of existing data where available, and information obtained from supplementary studies in new growth areas or where applicable data is absent. This inventory will be comprised of maps and tabular data for all growth areas of the city.
- b) Identification and Classification – the Wetland Inventory will include the identification and classification of all wetlands within the identified area according to the Steward and Kantrud Wetland Classification System.
- c) Functional Assessment – where conditions are conducive to a high level of wetland function, the Wetland Inventory will include a functional assessment of selected Stewart and Kantrud Class 3, 4, and 5 wetlands to be conducted using the Minnesota Routine Assessment Method. If not previously existing as part of the Wetlands Inventory, or if conditions may have changed significantly from a previous assessment, a functional assessment should be conducted as part of Natural Area Screening during the Area Sector Plan or Area Concept Plan process. Conditions that can trigger a functional assessment include:
 - i. primarily natural surroundings/limited adjacent cultivation;
 - ii. existence as part of a wetland complex; and
 - iii. previous identification or known presence of rare or endangered species or suitable habitat.

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- d) Wetland Complexes – The Wetland Inventory will include identification of wetland complexes and associated riparian areas that are significant based on the above functional assessment. Regardless of the functional class of individual wetlands contained within them, wetland complexes identified as significant shall have the highest priority for protection and preservation.

3.2 Wetland Mitigation Plan

- a) A Wetland Mitigation Plan:
- i. is required by the City as an integral part of any Area Concept Plan or Area Concept Plan Amendment that has the potential to impact wetlands identified as Preserve, Manage 1 and Manage 2 according to the functional assessment categories as identified in the City's Wetland Inventory; and
 - ii. may, at the discretion of the Planning and Development Branch and in consultation with the Environmental Services Branch, be required for any other development proposal that requires City approval, including the development of civic facilities and infrastructure, and any public or private utilities, if the development has the potential to impact wetlands identified as Preserve, Manage 1 and Manage 2 according to the functional assessment categories as identified in the City's Wetland Inventory.
- b) In conjunction with the Administrative review of an Area Concept Plan, the included Wetland Mitigation Plan will be reviewed for compliance with this policy and the demonstration of a reasonable balance between anticipated impacts to wetland resources resulting from a proposed development, and measures taken to mitigate for those impacts.
- c) Significant wetland resources identified in the Wetland Inventory should be the primary focus of preservation efforts. Unavoidable impacts to significant wetland resources will require compensatory mitigation.

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- d) A Wetland Mitigation Plan must include:
- i. An account of anticipated impacts to all wetlands in the Concept Plan area identified as Preserve, Manage 1 and Manage 2 according to the functional assessment categories as identified by the City's Wetland Inventory, with a focus on any wetland resources identified as significant;
 - ii. An explanation of all measures, which must be consistent with the Wetland Development Guidelines, that will be taken to mitigate for impacts as part of the proposed development;
 - iii. If applicable, an explanation of any impacts for which mitigation is not proposed;
 - iv. For all retained wetlands, an explanation of how development will interface with wetlands and their associated riparian areas and how successful establishment of vegetation communities will be ensured;
 - v. A description of measures to be taken to ensure that impacts on wetlands are minimized while development is underway;
 - vi. A monitoring strategy to ensure the measures outlined in the Wetland Mitigation Plan are implemented; and
 - vii. A proposed allocation of wetlands, associated riparian areas and buffers into categories of Dedicated Lands. The allocation will be subject to the review and approval of the City.
- e) Possible compensatory mitigation measures to offset impacts to wetlands include:
- i. Permanent preservation of wetlands;
 - ii. Restoration or enhancement of wetlands;
 - iii. Replacement of wetland function through the development of constructed wetlands or the re-establishment/restoration of historical wetlands;
 - iv. Development of sensitive recreational, educational and/or interpretive infrastructure adjacent to retained wetlands and associated riparian areas;

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- v. Development, within the Concept Plan area, of sediment forebays, bioswales, rain gardens and other storm water management features that may provide for pre-treatment of runoff and/or reduce the need for traditional storm water management infrastructure.
- f) For any development that requires City approval, where a Wetland Inventory has not been completed, the City may require the developer to undertake a Wetland Inventory for the subject development area in accordance with Section 3.1 of this policy.
- g) The City may, at the time of subdivision and in accordance with *The Planning and Development Act, 2007*, enter into a servicing agreement with the developer to ensure the measures proposed in the Wetland Mitigation Plan are completed.

3.3 Wetland Development Guidelines

- a) Wetland Development Guidelines will be established to provide guidance for:
 - i. general establishment and management procedures for constructed and preserved wetlands;
 - ii. buffer widths;
 - iii. erosion and sediment control measures;
 - iv. pre-treatment, treatment and conveyance to maintain acceptable water quality and quantity levels, including maintenance reduction measures where wetlands are integrated into the storm water system;
 - v. maintenance of hydrologic function;
 - vi. protection of wetland resources during development;
 - vii. management regime for initial establishment of wetland and riparian plant communities;
 - viii. harvest and reuse of wetland and riparian soils where wetlands are modified or lost to development;
 - ix. types of vegetation to be planted and timelines for establishment recognizing that native plants should be used if possible; and
 - x. low impact development techniques.

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- b) The construction process is critical to the establishment and growth of the vegetative community of a wetland. Any alteration or development within a wetland should be sequenced such that plant growth is maximized during the first growing season.
- c) Where wetlands are being used for storm water storage and treatment, measures such as the installation of suitable control structures should be taken to mimic the natural hydrologic cycles wherever possible.
- d) In the absence of Wetland Development Guidelines, development proposals impacting significant wetland resources should address each of the elements identified in Clauses 3.3 a) and 3.3 b) above, as part of the Wetland Mitigation Plan, along with supporting documentation based on advice from a Qualified Wetland Aquatic Environment Specialist, or suitable alternative as determined by the Development Officer and/or demonstration of adherence to best practices used in other jurisdictions.

3.4 Wetland Management

- a) Retained wetlands, including Constructed Wetlands and associated riparian areas should normally be integrated into the City's parks system and managed as Naturalized Parks.
- b) Management efforts will focus on ensuring that wetlands and associated riparian areas maintain or improve the level of ecological function and water quality over the long term and should include a program for regular monitoring and evaluation.
- c) Where wetlands provide a storm water management function in an area, necessary maintenance on the wetland in support of this system should be sensitive to the wetland management regime and should strive to avoid and/or minimize negative impacts to the ecological function and water quality of the wetland.

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4. RESPONSIBILITIES

4.1 General Manager, Community Services Department – shall be responsible for:

- a) Administering this Policy and recommending updates to this Policy;
- b) Maintaining, and developing where necessary, a wetlands inventory and functional assessment for all growth areas of the city;
- c) Ensuring incorporation of this Policy in the Official Community Plan and other statutory documents;
- d) Reviewing and approving Wetland Mitigation Plans in conjunction with the administrative review of any Area Concept Plans or other development proposal where required;
- e) Undertaking and maintaining Servicing Agreements to ensure appropriate compensatory mitigation measures are taken.

4.2 General Manager, Infrastructure Services Department – shall be responsible for:

- a) Informing supervisors and managers in affected branches of the procedures relative to this policy;
- b) Ensuring that other policies administered by the department are consistent with this policy;
- c) Reviewing and approving Wetland Mitigation Plans in conjunction with the Administrative review of any Area Concept Plans or other development proposal where required;
- d) Developing and implementing a management strategy for the ongoing operation and maintenance of preserved and constructed wetlands; and
- e) Recommending annual budget requirements to implement the procedures relative to this policy.

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- 4.3 General Manager, Utility Services Department – shall be responsible for:
- a) Assisting in the administration of this policy and recommending updates to this policy;
 - b) Informing supervisors and managers in affected branches of the procedures relative to this policy;
 - c) Ensuring that other policies administered by the department are consistent with this policy;
 - d) Reviewing and approving Wetland Mitigation Plans in conjunction with the Administrative review of any Area Concept Plans or other development proposal where they are required;
 - e) Developing and maintaining Wetland Development Guidelines;
 - f) Developing and implementing a management strategy for the ongoing operation and maintenance of preserved and constructed wetlands; and
 - g) Recommending annual budget requirements to implement the procedures relative to this policy.
- 4.4 Planning and Operations Committee – shall be responsible for:
- a) Reviewing proposed policies and policy revisions and referring such policies to City Council for approval.
- 4.5 City Council – shall be responsible for:
- a) Reviewing and approving any proposed policies and policy revisions as recommended by the Planning and Operations Committee.