

Wetland Compensation General Guidance

Wetlands are one of earth's most biologically diverse ecosystems as they are home to a wide variety of plant and animal species. They store water to minimize the impacts of floods and droughts, help reduce soil erosion, retain sediments, absorb nutrients, and help mitigate the effects of climate change. Therefore, when considering a project that has the potential to affect a wetland, the impacts to the wetland and surrounding environment must be considered.

The *Clean Water Act* requires that a Watercourse and Wetland Alteration (WAWA) Permit be obtained prior to undertaking any activity considered an alteration in or within 30 metres of a wetland. If a permit is granted for a project that will result in permanent impacts to a wetland, it will include requirements for wetland compensation. All efforts should first be made to avoid and minimize impacts to a wetland.

What is wetland compensation?

Wetland compensation is the process of off-setting permitted impacts and loss of wetland area and/or function with actions that ensures no net loss of wetland function in the province. Wetland compensation ensures that when wetland area and/or functions are lost, they are restored, enhanced or created elsewhere in New Brunswick. This can include the restoration of naturally occurring wetlands that have been drained or altered; the enhancement of an existing wetland to achieve specific management objectives or the increasing of functionality of a wetland; or the creation of a wetland in an area where one did not exist. Alterations taking place near wetland areas which result in a loss of the wetland area and/or function would also require compensation.

Where do I find information on wetlands?

The [WAWA Reference Map](#), available on [GeoNB](#) is a **reference tool** that provides a map of potential wetland areas and additional wetland and watercourse data. Please note that any alteration within 30 metres of a wetland or watercourse on the ground which meets the Department of Environment and Local Government's (DELG's) [definitions](#), requires a WAWA permit.

Wetlands identified in yellow on the WAWA Reference Map are provincially significant and are given maximum protection. These wetlands include coastal marshes, wetlands of the Lower Saint John River, and other special wetlands. Activities having any impact on these wetlands will not be approved unless the purpose is to rehabilitate, restore, or enhance the wetland, or if the activity is deemed to provide necessary public function.

It is illegal under the *Watercourse and Wetland Alteration Regulation (90-80) – Clean Water Act*, to make or perform any watercourse or wetland alteration unless authorized to do so by a WAWA permit issued by the Minister of Environment and Local Government.

The following information is provided for instances where impacts to wetlands cannot be avoided and wetland compensation is a requirement of a permitted activity within a wetland.

What is the wetland mitigation sequence?

In assessing potential developments in or near wetlands, the department applies a three-step wetland mitigation process to reduce potential negative effects to wetlands. These steps include, in sequential order: avoidance, minimization of unavoidable impacts, and compensation. Compensation will be required whenever permanent unavoidable impacts (as determined through the steps outlined above) are permitted to occur to a wetland.

Mitigation Sequence:

- **Avoid** impacts to the wetland at the planning stage;
- **Minimize** impacts (e.g., require applicable environmental protection measures during permitted alteration etc.;
- **Compensate** for impacts that cannot be avoided or minimized.



In order to achieve the objectives of the New Brunswick Wetland Conservation Policy for no net loss of wetland function, compensation for the loss of wetland is required when an approval to impact a wetland is issued under the *Clean Water Act* or *Clean Environment Act* (or through a Ministerial Order).

Why is there a compensation ratio?

It is almost impossible to fully replicate the complexity and functionality of a natural wetland ecosystem. Wetland compensation projects also take years to successfully function in their intended manner. Therefore, to achieve the objectives of no net loss of wetland function within the province, a greater area of compensated wetland is required than the area of impacted natural wetland. Currently the compensation ratio is a minimum of 2:1; meaning the compensation area required is at least twice the wetland area impacted. Please contact DELG (contact information below) for more information.

If required to provide compensation for a wetland alteration, what are my options?

There are two options:

- 1) The proponent can locate a suitable wetland compensation site, prepare a wetland compensation project proposal and submit it to the department for approval. (See below for more details).
- 2) The proponent can contract a Wetland Compensation Consultant who may have pre-arranged and approved wetland compensation projects to provide compensation on their behalf (See below for more details).



Wetland Compensation Consultants are individuals who have a combination of education in wetland restoration, delineation, hydrology, wetland soils and botany, and have a minimum of five years field or other demonstrated experience in providing successful wetland compensation projects.

These consultants may identify and develop an inventory of potential compensation projects that can be submitted to the Wetland Compensation Technical Review Committee for review and approval. Wetland compensation projects are reviewed on a project specific level. Proponents can contact the department (see below) for a list of Wetland Compensation Consultants who may be able to provide compensation on their behalf.

What information must be included in a Compensation Project Proposal and how is it reviewed?

Prior to submitting a Compensation Project Proposal to the department for review, ensure that the following is included:

- written landowner approval;
- property identification number (PID) and coordinates;
- description of the impacted wetland (type, ecoregion, functional information, WESP results) and description of how the proposed compensation plan will offset the loss of function related to the undertaking;
- description of site and habitat in a landscape context (species, rarity, etc.);
- map of site including all wetlands in the surrounding area;
- description of proposed compensation activity (restoration, enhancement, creation, preservation);
- map of final proposed site plan along with GPS data (*.shp, *.kmz or *.gpx);
- measurable objectives of project (functions, species, area, amount open water, habitat types, etc.);
- schedule of work (start date, estimated completion, etc.);
- design of project (engineering details, water control structures, earthworks, scaled plan, etc.);
- a commitment for future monitoring plans;

- a commitment to maintain the physical structures for at least 30 years; and
- an agreement that the compensated wetland will be classified as a Provincially Significant Wetland, that the footprint will remain in perpetuity and that activities in and within 30 metres of the wetland will be strictly regulated.

In addition, the proponent or their contracted Wetland Compensation Consultant is responsible for identifying suitable compensation site(s) as part of the project proposal.

Once the proposal has been received by DELG for review, the wetland biologist distributes the information to the Wetland Compensation Technical Review Committee. Specific compensation conditions may be required at this time and shall be included in the final wetland compensation report.

BEFORE



AFTER



Projects will be reviewed based on the following criteria:

- Compensation proposals are evaluated based on size, wetland type, function, geographic context, time frame, and probability of success.
- The preferred methods of compensation in order of priority are restoration, enhancement, creation, and occasionally preservation of existing wetland and education/research projects.
- Compensation activities will be assessed based on the following order of priority: on-site, within the same watershed, within ecodistrict, within ecoregion, within New Brunswick. Consideration will be given to compensation activities within Provincial priority areas (ie. Lower Saint John River, coastal zone etc.)
- Compensation activities should focus on the same wetland type as the impacted wetland or a provincially significant wetland type.

- e. Compensation measures must function properly for a minimum of 30 years.
- f. Monitoring is necessary to evaluate the outcome of compensation and the associated cost of monitoring should be considered as part of the compensation process.
- g. Compensation projects will be classified as Provincially Significant Wetland areas and therefore future impacts will be restricted.
- h. Compensation projects will be identified and added to the WAWA Reference Map. GIS shapefile or geographic coordinates of the final wetland footprint will have to be submitted within 6 months of the project completion.

If approved, a final wetland compensation report will be prepared by the proponent and submitted to the Source and Surface Water Management Branch and a Watercourse and Wetland Alteration Permit and/or an Environmental Impact Assessment Certificate of Determination will be issued to the proponent. This may contain additional conditions regarding wetland compensation that the proponent must adhere to, such as the project must be completed within maximum length of time, or specific monitoring requirements.

Who is responsible if a wetland compensation project is unsuccessful?

The Watercourse and Wetland Alteration Permit or Ministerial Order holds the proponent responsible for any failed compensation projects. Proponents can lower their risk of failed compensation projects by contracting with an experienced Wetland Compensation Consultant. If a compensation project fails, the proponent will be required to take appropriate steps to ensure success or determine an alternative plan. Any additional costs or potential reimbursement for failed compensation projects is between the proponent and the Wetland Compensation Consultant.

Contact Information

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