

Section I – Items for Authority Action

TO: Chair and Members of the Authority
Meeting #5/18, Friday, June 22, 2018

FROM: John MacKenzie, Chief Executive Officer

RE: TRCA GUIDELINE FOR DETERMINING ECOSYSTEM COMPENSATION

KEY ISSUE

Endorsement of the TRCA Guideline for Determining Ecosystem Compensation for use by TRCA staff, municipal staff, infrastructure proponents and landowners to determine what is required to restore ecosystem structure, function and land base after the (last resort) decision has been made to allow removal or partial removal of a natural feature with compensation.

RECOMMENDATION

WHEREAS despite Toronto and Region Conservation Authority's (TRCA) and municipalities' commitment to natural heritage protection and adherence to a strong provincial policy and regulatory regime, natural systems continue to be negatively impacted by development and infrastructure within the Toronto region;

AND WHEREAS past approaches to ecosystem compensation have only been partially successful at replacing lost ecosystem functions;

AND WHEREAS the land use planning, environmental assessment and permitting processes determine when impacts to ecosystems are appropriate;

AND WHEREAS The Living City Policies recommend that when it has been determined that development or infrastructure cannot fully protect a natural feature after all options for protection and mitigation have been exhausted, and no other federal, provincial or municipal requirement can protect the feature, that compensation for lost ecosystem services be provided;

AND WHEREAS there is a lack of consistent guidance and direction on determining what is required to effectively replace ecosystem losses;

AND WHEREAS staff have developed a technical guideline for determining what is required to compensate for losses to a natural feature (for use after the decision to compensate has been made) based on their experience and expertise in restoring natural features;

AND WHEREAS in some instances TRCA accepts funds from proponents to undertake ecosystem restoration to compensate for ecosystem loss;

THEREFORE LET IT BE RESOLVED THAT the TRCA Guideline for Determining Ecosystem Compensation dated June, 2018 be endorsed and the Authority delegate approval for technical updates to the Chief Executive Officer (CEO);

THAT staff be directed to work with municipalities, the Province of Ontario, the Government of Canada, and provincially and federally regulated entities to implement the Guideline recognizing their distinct regulatory frameworks;

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THAT staff be directed to track compensation where TRCA is implementing the compensation actions and report to the Authority on project outcomes, financial accounting and overall program successes;

AND FURTHER THAT municipal partners, the Ministry of Natural Resources and Forestry, the Ministry of Municipal Affairs, the Ministry of the Environment and Climate Change, Parks Canada, Environment and Climate Change Canada, the National Energy Board, the Canadian Environmental Assessment Agency (CEAA), Conservation Ontario, neighbouring conservation authorities, and the Building Industry and Land Development Association (BILD) be so advised.

BACKGROUND

The possibility of creating a compensation “protocol” was first suggested to TRCA by representatives of the building and land development industry in the mid-2000s as a way to provide greater clarity and standardization to the practice of compensation where impacts to natural features were allowed.

TRCA had also recognized that although Ontario has a strong environmental protection framework for development (the Provincial Policy Statement and Provincial Plans) and for infrastructure (the Environmental Assessment Act process, National Energy Board and CEAA processes), natural feature losses were still occurring in TRCA’s jurisdiction. Further, these losses were being incurred with little or no replacement of the features, functions, land and overall ecosystem service benefits that were once provided by those features.

Where compensation was provided, it was done on an ad hoc basis that frequently resulted in not fully replacing all that was being lost. In addition, TRCA’s Terrestrial Natural Heritage System Strategy (TNHSS) (2007) identified that the existing natural heritage system was too small and fragmented to maintain biodiversity in the face of continued urbanization. To this end, greater effort was needed to curb natural system losses and to restore habitats. Fortunately, at the same time, TRCA’s restoration ecologists were gaining, through funding from municipal partners and other federal and provincial agencies, experience and expertise in undertaking ecological restoration and in strategically prioritizing opportunities for restoration across TRCA watersheds.

At Executive Committee Meeting #8/09, held on October 9, 2009, Resolution #B138/09 was approved as follows:

THAT staff be directed to develop a protocol for determining compensation for ecosystem services to be included in TRCA's Living City Policies and development review;

THAT staff seek input on the proposed protocol from municipalities, academia, ENGOs, development industry/stakeholders, Conservation Ontario's Ecological Goods and Services Working Group, and the South Central Ontario Conservation Authorities (SCOCA);

THAT staff continue to participate in and/or help coordinate current and ongoing research on compensation and ecosystem goods and services, locally and in broader study areas to further refine the protocol;

THAT staff report to the Authority with the final draft of the policy and protocol, and the results of the consultation, for approval;

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AND FURTHER THAT staff seek funding for:

- a) the development of case studies with municipal and industry partners to test the implementation of the policy and protocol in practical situations,*
- b) for the development of a TRCA database to assist in the valuation and tracking of compensation projects corporately,*
- c) to pursue other avenues of research to improve the science behind the valuation protocol.*

RATIONALE

After an extensive external consultation process, The Living City Policies document was approved in 2014, which contains compensation policies for use by TRCA staff in their role as technical advisors to municipalities under the *Planning Act* and *Environmental Assessment Act* review and approval processes. The policies recommend that after all other options for protection, minimization and mitigation have been exhausted, and where no other federal, provincial or municipal requirements exist to protect a feature being impacted by development or infrastructure, that compensation for lost ecosystem services be provided.

The Guideline for Determining Ecosystem Compensation (the Guideline)

In support of The Living City Policies, the Guideline was developed to guide how to determine the amount of compensation required to replace lost or altered ecosystems in a repeatable and transparent manner, after it has been decided through the planning, environmental assessment and/or TRCA permitting process, that compensation is required.

Seven principles have been established through the development of the Guideline. These principles build off the direction provided within The Living City Policies and help to guide the application and implementation of ecosystem compensation.

1. Compensation must be considered only as a last resort within the established mitigation hierarchy of: Avoid, Minimize, Mitigate, Compensate.
2. The compensation process should be transparent helping to ensure accountability of all parties involved.
3. The compensation process should strive to be consistent and replicable.
4. Compensation outcomes should strive to fully replace the same level of lost ecosystem structure and function in proximity to where the loss occurs, and where possible, achieve an overall gain.
5. Compensation should be directed to on-the-ground ecosystem restoration and be informed by strategic watershed and restoration planning.
6. Implementation of compensation should be completed promptly so that ecosystem functions are re-established as soon as possible after (or even before) losses occur.
7. The compensation process should use an adaptive management approach incorporating monitoring, tracking and evaluation to gauge success and inform program improvements.

The Guideline is underpinned by the scientific understanding that has evolved from TRCA's Terrestrial Natural Heritage System Strategy, by TRCA's years of experience and expertise in restoration ecology, and by TRCA planning and development staff's experience in reviewing compensation files in the planning, environmental assessment and permitting processes.

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External Consultation

Once an initial draft of the Guideline was completed in May 2015, it was circulated for external review to provincial ministries, municipalities and neighbouring conservation authorities. Staff revised the Guideline to address this feedback and, in 2017, circulated the updated version to the same public agencies as well as to BILD, consultants and environmental non-governmental organizations.

The following is a brief summary of the major categories of comments:

- Concern was expressed that introduction of the Guideline would result in proponents advocating for impacts without fully exploring options for protection;
- There was confusion regarding if/how the Guideline would impact the existing review and approvals process;
- There was confusion regarding whether the Guideline provided direction on when impacts may be appropriate with compensation;
- Concern was expressed over the extent of compensation required (some stakeholders felt the requirements were too high, others felt they were too low);
- There was concern over the application of the Guideline to public agency projects, particularly as it pertained to municipal infrastructure projects; and
- There were comments regarding the importance of transparency and accountability of decisions and compensation outcomes.

Staff revised and improved the Guideline to address the comments received. The June 2018 version of the Guideline is available at this [link](#). In particular, the following revisions were made:

- Greater emphasis on the context for the Guideline being used only after the decision to allow impacts within the planning, Environmental Assessment (EA) or permitting processes has been made, and that any decision to allow impacts should be aligned with The Living City Policies which state that it should be an option only after all other options for protection and mitigation (federal, provincial, municipal policies and regulations) have been exhausted. The Living City Policies sections that outline this recommendation have been included in Section 1 of the Guideline.
- The Guideline more fully highlights that its application does not result in any modifications to the existing planning, environmental assessment or permitting processes. The Guideline emphasizes that it is a tool that can aid in helping to determine compensation requirements once the decision to allow impacts has been made.
- Modifications were made to the method of determining compensation requirements to ensure it, to the best of our ability, accurately reflects what is needed to replace lost ecosystem functions. The Guideline recognizes the limitations of the method in addressing all of the ecosystem functions lost while also highlighting the need to work with the parties involved to ensure a consistent approach to application.
- The important partnerships between TRCA and municipalities have been highlighted including our shared objectives for natural heritage protection. The revised Guideline also more fully recognizes that TRCA and municipalities may wish to adapt the Guideline to their own needs, especially for municipal infrastructure projects. Further the Guideline stresses that TRCA will work with municipal partners to implement the Guideline in a balanced and fair manner.
- Along with the Guideline, TRCA has developed an internal process to direct how compensation decisions and actions will be tracked and reported on helping to ensure transparency and accountability.

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Staff believe that the current version of the Guideline addresses the numerous and varied perspectives of the stakeholders and represents a defensible best practice approach based in science and local experience.

What's in the Guideline

The Guideline is organized into four sections. These sections are briefly outlined below:

Section 1: Provides an overview of the context, rationale, applicability and roles of TRCA and other participants in compensation, and outlines principles that establish the intent of the Guideline.

Section 2: Outlines an approach for determining compensation requirements in both the private land development process and the public infrastructure process. The Guideline establishes an approach that attempts to replicate, to the extent possible and without significant delay or lag time, the same ecosystem structure and associated level of ecosystem functions that are to be lost. There are two components that must be addressed when making this determination: restoring the ecosystem structure and functions, and replacing the land area removed from the natural system.

Section 3: Lists and describes important considerations in planning and implementing a compensation project.

Section 4: Explains the TRCA habitat restoration planning and implementation approach (TRCA Management Framework).

The appendices provide supporting information including restoration typical costs as well as details and examples of how to apply the method outlined in the [Guideline](#).

Application of the Guideline

The Guideline is a living document and TRCA is committed to working with municipalities and other stakeholders in its early application to ensure a balanced approach and to learn and improve from application. The draft of the Guideline has already been used by TRCA staff on a best efforts basis with willing municipalities and landowners.

TRCA Ecosystem Compensation Management Framework

The Guideline recognizes that there are different options for who will undertake the compensation restoration works: either the proponent, the municipality, TRCA, or through a combined effort. TRCA, through years of experience planning and implementing successful restoration projects and TRCA's understanding of the ecosystem restoration needs of our watersheds, is often recognized as the most effective agency to undertake, or provide guidance on, ecosystem compensation actions.

TRCA has developed the tools and processes needed to ensure a coordinated, transparent, accountable and adaptive approach to managing TRCA's compensation program. These tools and processes apply to all cases where funds are directed to TRCA, via an approved agreement, for implementing compensation restoration and conservation land securement. TRCA recognizes the collaborative nature of the compensation process, the varying roles of the parties involved, and the need for coordination, particularly with TRCA's municipal partners.

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Regular reporting will be made to the Authority summarizing the status of all compensation projects undertaken by TRCA including implementation status, financial accounting and project monitoring results. This reporting will also provide an opportunity to review and evaluate the success of the overall compensation program and identify opportunities for improvement.

A compensation database has been developed to track compensation projects within TRCA's portfolio and support reporting to the Authority. The database tracks the activities and decisions related to the implementation of compensation actions including compensation requirements, project selection and design details, implementation status, financial aspects, status of deliverables and monitoring results.

FINANCIAL DETAILS

Funding for the development of the Guideline and the Management Framework was provided as part of the regular TRCA municipal levy for Watershed Strategies, Restoration and Infrastructure, and Planning and Development.

Tracking, reporting and administration for compensation restoration projects and land securement undertaken by TRCA on behalf of proponents will be 100% funded by the proponent.

DETAILS OF WORK TO BE DONE

- Release the final approved version of the Guideline by posting it on the Planning and Development Procedural Manual and Technical Guidelines webpages of the TRCA website.
- Continue to work with TRCA's municipal partners in the application of the Guideline.
- Continue to track and report outcomes annually to the Authority for all projects where TRCA is implementing compensation actions.
- Update and improve the Guideline with lessons learned from implementation.

Report prepared by: Noah Gaetz, extension 5348, Mary-Ann Burns, extension 5763

Emails: ngaetz@trca.on.ca, mburns@trca.on.ca

For Information contact: Noah Gaetz, extension 5348, Mary-Ann Burns, extension 5763

Emails: ngaetz@trca.on.ca

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