

### 19.6.3 Ecological Buffers as Part of the Mitigation Strategy

Ecological buffers (buffers) are an important component of a mitigation strategy where development is proposed adjacent to sensitive or significant feature(s). While an important tool, buffers should not take precedence over siting and design as mitigation tools. The best approach is to apply multiple layers of mitigation that reduce reliance on buffers as the primary means of addressing potential impacts. The focus of this approach is on weaving mitigation, net benefit and regenerative opportunities throughout the land planning and design process. The TLNAP applies these concepts by introducing guidelines for regenerative and nature-inclusive design to the Trent land planning process (refer to Section 7.0)

#### *Buffers and the Mitigation Hierarchy*

Buffers may support multiple parts of the mitigation hierarchy:

- » **Avoid** – through proper design, buffers may effectively avoid some types of potential impacts from occurring (e.g., sedimentation)
- » **Minimize** – buffers very strongly support minimization of potential impacts of multiple types (e.g., edge effects, hydrologic, noise, light)
- » **Restore** – where existing edges of habitats may have experienced degradation (e.g., dumping along a wetland edge), buffers can provide an opportunity to address these impacts.

- » **Compensate** – buffers are generally not an acceptable method of compensation. Their primary function is to reduce or avoid impacts associated with adjacent development. In some circumstances, buffers can provide some compensatory opportunities. As an example: small cultural meadow areas removed could have their function replicated or compensated through establishment of healthy ecological buffers.

Beyond mitigation to achieve a ‘no negative impact’ outcome, buffers can provide opportunities to achieve a net benefit or regenerative opportunities. This may include:

- » Net increase in an under-represented habitat type(s)
- » Introducing foraging habitat currently lacking adjacent to features
- » Habitat enhancements (e.g., nesting structures, hibernacula)
- » Increasing overall size of a habitat complexes (collection of features)
- » Increased habitat complexity

Planning and design of ecological buffers is to consider the suite of mitigation measures being proposed as well as site design and site-specific conditions.