

## 28.0 BUFFERS

Buffers are an important part of the Nordic Aquafarms project. The primary purpose of vegetated buffers is to protect water quality by minimizing the potential for soil erosion and sedimentation into site and surrounding water bodies. However, buffers also provide green space, create a visual screen, provide travel corridors for wildlife, and also protect wildlife habitat. The following sections described Nordic's goals and proposed plan for buffers at the site.

### 28.1 Objectives

Buffers are being designed and maintained on the site to:

1. Provide a natural means of sedimentation and erosion control;
2. Reduce the potential for site development to cause soil erosion;
3. Maintain wildlife corridors, particularly along existing streams; and
4. Provide visual screening, especially along areas defined in Section 6.0 as "public viewing areas".

### 28.2 Proposed Plan

Overall, the proposed project seeks to minimize the potential for the development to cause soil erosion by minimizing encroachment into buffers. This will be accomplished through reduced side slope grading where practicable. Side slopes of 2:1 are proposed adjacent to the Water/Wastewater Treatment Facility and Wetland 6. Side slopes of 1.5:1 along the entire length of the Grow Modules to the side of the project along Reservoir Number One are also being utilized to provide vegetated buffers, a travel corridor and to maintain setbacks. Additionally, riprap slopes adjacent to Wetland 2 are proposed to reduce encroachment into the wetland. Additional details on site grading and sediment and erosion controls are provided in Sections 12 and 14 of this application and the accompanying drawing sets.

The proposed project will maintain a 50-foot setback and a 40-foot, no-disturbance buffer in newly developed portions of the site, in accordance with City of Belfast ordinances. In addition, the project will maintain a 75-foot buffer from Route 1. So that the project may use the "open yard" concept for fire safety, up to 60 feet of additional setback from lot lines is proposed, leading to 100+ feet of buffer for most of the project site. This centralized building design will help maintain existing wildlife habitat and provide visual screening.

The slope along the northern property line will be revegetated with a mix of evergreen and deciduous trees to enhance the buffer between the site and the neighboring properties. The intent is to naturalize this and other areas that are disturbed and otherwise not part of stormwater treatment and return them to predevelopment vegetated conditions. A mix of plant sizes and types will be used to emulate existing species diversity. A restoration seed mix will be used to stabilize the immediate ground surface and allow larger species to take hold. Additional planted screening is proposed at the southeast corner of the site. Areas with high visual interest and visibility including the main entrance will be planted with flowering accent trees, low shrubs, and ornamental grasses.

As part of the wetland impact mitigation proposal included in the NRPA permit application that accompanies this permit application, the project is maintaining a minimum 75-foot deeded buffer along the stream named S9 as shown on **Figure 10-1**. Also, S9 is the focus of the riparian restoration plan which extends beyond the 75-foot deeded buffer, providing as much as 150' between the stream and

project development in some locations. The riparian restoration and deeded buffer will create quality wildlife habitat and a travel corridor along S9. Plantings proposed as part of the site restoration plan and to enhance visual screening for the project are shown on plans **LP101**, **LP101a**, **LP102**, and **LP 107**.

A 250-foot Shoreland Zone abuts the southern portion of the project site. The Belfast community has utilized a trail along the shore of the Lower Reservoir and the Little River within this Shoreland Zone for recreation (hiking, dog walking), and the land provides a valuable linkage between the project site and the larger area of wildlife habitat on the Upper Reservoir parcel of land to the northwest. As part of the real estate agreement between the Belfast Water District and Nordic Aquafarms included in Section 2.0, the 250' buffer along the Lower Reservoir and the Little River abutting the project site will remain with the City of Belfast. The transfer of land back to the community will preserve a significant 250-foot buffer on the southern and western boundaries of the proposed project, in addition to the 100+ feet of buffer described above. Access to riparian habitat and significant water bodies will help meet the goals of the project by linking site buffers with the larger portions of land preserved by the City of Belfast, while also providing an approximately 350-foot buffer from the edge of the reservoir and Little River to the proposed site buildings.

In summary, Nordic's centralized building layout includes a number of buffers imposed on the property that serve to protect water quality, create visual screening and, provide for and protect wildlife habitat and travel corridors. Some encroachment into the buffers is required to support the project infrastructure; however, areas of encroachment have been either avoided where possible or minimized where practicable.

