SECTION IV – BUFFER ZONE

A. Characteristics

Buffer Zones are highly likely to be significant to the wetland resource values identified in Section I of the Bylaw. Naturally vegetated Buffer Zones help to reduce or prevent water pollution, provide and protect wildlife habitat, protect groundwater, help reduce erosion and mitigate flooding and storm damage, and provide sedimentation control. The Commission finds that regulations applicable to activities involving the Buffer Zone are necessary and proper for the following reasons:

1. Temperature: Shade and cover provided by riparian vegetation can moderate air and water temperature in streams and the shallows of ponds and other water bodies.

2. Sediments and Other Contaminants: Buffer Zones filter sediments and other contaminants, including but not limited to pesticides and heavy metals, from surface water flow. Buffer Zones also prevent erosion in and into resource areas and preclude development that could lead to increased contaminant loading.

3. Nutrients (nitrogen and phosphorous): Buffer Zones reduce nutrient loading in water bodies by: filtering from surface water flow the nutrients bound to sediments, removing nutrients from ground water through uptake in vegetation, and precluding development which could increase nutrient loading as a result of septic systems and activities like lawn fertilizing and landscaping.

4. Maintenance of Stream Flow: Buffer Zones can r, provide flood storage capacity , help maintain ground water, stream base flow, and water quality during low-flow and flood periods.

5. Wildlife Habitat: The vegetated uplands adjacent to wetlands constitute one of the richest Zones for aquatic organisms, mammals, birds, and amphibians because they provide shade and cover, food, shelter, breeding habitat, and corridors critical for wildlife movement.

Construction and other activities or alterations within buffer Zones can harm resource areas through siltation, regrading, compaction of soil, and loss of pervious ground. Following construction or other alterations, use of the buffer zone frequently degrades adjacent resource areas as a result of the deposition of lawn and yard debris, increased runoff, nutrient loading, habitat degradation, and increased temperatures.

These adverse impacts can arise from both construction and from the ultimate use of the project involved. They include, but are not limited to, erosion, siltation, loss of groundwater recharge capability, contamination of water bodies by surface runoff carrying heavy metals such as lead, cadmium, copper and zinc, hydrocarbons such as gasoline and motor oil, pesticides and herbicides, bacteria, viruses, and sediments. Nutrient loading of water bodies results from misuse of lawn fertilizers as well as septic effluent. Wildlife habitat diversity may be lost through introduction of invasive plants.

B. Presumption of Significance

When a proposed activity involves the removing, filling, dredging, degrading, discharging into, building upon, or altering of a Buffer Zone, the Commission shall presume the Buffer zone is significant to the protection of all the resource values protected by the Bylaw These presumptions may be overcome only upon a clear showing that the Buffer Zone does not play a role in the protection of those interests. No work will be permitted in the Buffer Zone that has a significant adverse impact upon the interests given above and only upon a specific written determination to that effect by the Commission.

C. Performance Standards

The intent of the Bylaw and these regulations is to avoid, minimize, and mitigate alterations in the Buffer Zone, and to ensure that new land disturbance, structures, and activities are located as far as possible from resources areas, consistent with conditions at the site and the characteristics of the proposed work.

The Buffer Zone shall be presumed significant to the resource values protected by the Bylaw as referenced in Section I; therefore, the following regulations shall apply:

The Inner Buffer Zone shall consist of the first 50 feet of upland closest to the adjacent resource area and includes the following sub Zones:

1. No-Disturbance Zone

   That portion of the Buffer Zone extending twenty-five (25) feet from the wetland, bank, dune, or water body defining the Buffer Zone's inner edge, is designated as a No-Disturbance Zone No activity/alteration will normally be permitted within the twenty-five (25) foot No Disturbance Zone. It is presumed that the first twenty-five (25) feet of the Buffer Zone is essential to the interests associated with the adjacent resource area

   In an undeveloped No-Disturbance Zone, alterations, including but not limited to grading, landscaping, removing (clearing or cutting) of vegetation, filling, excavating, operation of vehicles or machinery, paving, and construction of roads shall not be permitted with the exception of work intended to support the protected values and interests (such as invasive species removal) or sufficiently minor work that will have no effect on the resource areas, or water-dependent structures.

In a previously developed No-Disturbance Zone, the Commission may impose such additional requirements as are necessary to protect the resource values protected by the Bylaw including but not limited to requiring that a buffer strip be created where none currently exists.,.

2. No-Build Zone.

   No structure as defined in these regulations or roads and paths will normally be permitted within the first fifty (50) feet upland of a resource area.

3. Outer Buffer Zone.

   The Outer Buffer Zone consists of all areas in the Buffer Zone not located in a No Disturbance Zone or No-Build Zone. No activity/alteration shall be permitted in the Outer Buffer Zone that is more likely than not to harm or eventually harm the Buffer Zone or the adjacent resource area.

4. Within these zones, the following performance standards shall apply.

   a. To the maximum extent possible, the Buffer Zone shall be retained in a naturally vegetated conditions.
   b. Where temporary Buffer Zone disturbance is permitted, revegetation with native species may be required.
   c. Work in the Buffer Zone shall not substantially alter the hydrology of the site, including runoff rates, volume, water quality, flood storage capacity, or flow paths.
   d. Notwithstanding paragraphs (a)-(c) above, the Commission may permit limited unavoidable work in the Buffer Zone associated with construction of a structure crossing a wetland or stream (such as a footbridge), as long as all performance standards for work in the wetland or stream are met and work in the Buffer Zone is minimized and appropriately conditioned.

e. To the maximum extent possible, work shall be located away from the adjacent resource area.
f. Work in the Buffer Zone shall not impair critical wildlife habitat or any vernal pool habitat.
g. The use of herbicides, pesticides fungicides, fertilizers or other chemical treatments constitutes an alteration of the Buffer Zone as defined in the Bylaw law and in the West Tisbury Board of Health Fertilizer Regulations and thus is prohibited unless explicitly allowed by the Commission in an Order of Conditions.
h. The Commission may require the placement of permanent markers to establish the boundary of any limit to future alteration. {Do you want to include specific guidelines here? }
i. There shall be no new lawns within 50 feet of any resource area.
j. Lawn irrigation systems are prohibited in the 100 foot Buffer Zone to the wetlands resource areas and in the 100-year flood zone.
k. When an applicant proposes any project in the Buffer Zone the Commission shall require that any new or existing irrigation system shall have a rain sensor.
l. When an applicant proposes any project in the Buffer Zone the Commission shall require that existing irrigation systems irrigate lawns and vegetation only and shall not spray water onto streets or other impervious surfaces.
m. Sod is prohibited.
n. Lawn clipping shall remain in place after mowing of lawns.
o. When an applicant proposes a project in the buffer zone that will increase the nutrient loading to any wetland or water body, the Commission shall require the reduction of an existing lawn as mitigation for the proposed activity.
p. Lawns shall consist of a drought tolerant fescue mix (90% fescue); it can be a blend of mostly fine fescues or tall fescues mixed with some perennial ryegrass and clover.

6. For work in Previously Developed Buffer Zones.

a. Where the No-Disturbance Zone has been previously altered, the Commission may consider the extent of the existing development in its review of subsequent proposed work, and where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to the resource are to protect the interests of the Bylaw.
b. Where the Buffer Zone has been previously (i.e. before adoption of these regulations) altered within 50 feet of the adjacent resource area, new development shall be located landward of existing development , unless the work will result in a net improvement to the capacity of the Buffer Zone to protect wetland values.
c. Notwithstanding paragraph (a) above, the Commission may permit limited and unavoidable work in the Buffer Zone associated with construction of a structure crossing wetland or stream, as long as all performance standard for work in the wetland or stream are met and work in the Buffer Zone is minimize and appropriately conditioned.

7 Waiver

Notwithstanding any of the foregoing prohibitions, the Commission may allow certain activities or structures in a No-Disturbance or No Build Zone by waiver, as provided in Section III. N of these regulations, when no other practicable alternative exists. Petitions for a waiver shall be included in writing in the Notice of Intent filed under the Bylaw for review and approval by the Commission.

8 The Commission may impose such additional requirements as are necessary to protect the resource values protected by the Bylaw.