

# Wetlands

## Why are wetlands being protected?

Wetlands provide critical environmental functions and values, such as protecting water quality, reducing flooding, providing recharge of drinking water in our aquifers and providing habitat for fish and wildlife. Wetlands are one of the five types of critical areas identified in the Growth Management Act (GMA)<sup>1</sup>.

## What is protected within wetland buffers?

Buffers are designed to protect the functions of wetlands from development, ensuring that their habitats are not adversely affected. Buffers are intended to be fully vegetated with native species so that the wetland and the surrounding area within the buffer can continue to provide habitat and protect water sources. Deer, great blue herons, pileated woodpeckers, red-wing blackbirds, beavers, and Pacific chorus frogs are commonly found within and near wetlands, the environment of which are key for their survival.

Building setbacks are the areas between development (such as homes and other such buildings) and the buffers, which are required to allow routine maintenance of development without disturbing the areas within the buffers.<sup>2</sup>

## How is a wetland defined?

Generally, wetlands are areas where water saturates the ground and may even pool at the surface, creating ponds or lakes. This water-saturated ground supports specialized vegetation that can grow in very wet conditions.

More specifically, wetlands are delineated according to the Washington State Wetland Rating System.<sup>3</sup> This rating system is intended to categorize wetlands based on their sensitivity to disturbance, significance, rarity, the functions they provide, and whether or not they can be replaced.

Wetlands are categorized I through IV or by special characteristics, with Category I being the highest value of protection. Examples of special characteristics that may apply to wetlands in Sammamish include bog conditions (organic soil and bog-adapted plant species) or forested wetlands with mature/old-growth stands. The value of these ‘special characteristics’ wetland types may supersede their functions.

<sup>1</sup> [RCW 36.70A.030\(5\)](#)

<sup>2</sup> [SMC 21.03.020.V](#)

<sup>3</sup> [Washington State Wetland Rating System for Western Washington \(Department of Ecology, 2014, or as amended\).](#)

**How are wetlands currently protected?**

Wetlands are currently protected locally under the regulations included in the Environmentally Critical Areas section of the Sammamish Municipal Code<sup>24</sup>. For certain types of wetlands, there are additional state and federal regulations that may apply, which would trigger permits from the State Department of Ecology and the United States Army Corps of Engineers (USACE). All of these regulations are intended to keep development far enough away so that the wetlands can continue to provide wildlife habitat and protect water quality.

Additionally, any removal of native vegetation or construction within a wetland buffer is prohibited unless it is part of an approved alteration. However, certain alterations may be allowed, such as utilities within the buffer, if strict criteria are met.

**Using Best Available Science (BAS), how should wetlands be protected?**

Based on BAS, it should be required that wetland buffers be revegetated with native species appropriate to the ecoregion if the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions. Buffer modifications should be strictly regulated, especially regarding buffer averaging and reductions. Mitigation sequencing should be considered when reviewing development activities, with a priority on first avoiding impacts, then minimizing impacts, and finally mitigating any impacts. Additionally, alternative stewardship and/or ownership of wetlands currently owned by HOAs can be considered.

This BAS is based on the most recent publication from the Department of Ecology, Wetland Guidance for Critical Areas Ordinance (CAO) Updates Western and Eastern Washington<sup>5</sup>. This publication is considered BAS when updating critical areas regulations and includes recommendations for updating wetland buffer regulations and mitigation standards. These recommendations being considered are further summarized below.

**How are wetlands currently identified in the field, as well as on a map?**

The locations of many wetlands within the City of Sammamish are displayed on the City’s online GIS database<sup>6</sup>. However, not all the critical areas in the City of Sammamish are mapped. Furthermore, any of the wetlands located within the City’s boundaries were originally identified as part of the King County wetlands inventory<sup>7</sup>.

Wetland conditions are field verified by a qualified professional and classified using the Washington State Wetland Rating System for Wetland Washington (2014)<sup>8</sup>.

<sup>4</sup> [SMC 21.03.020.Y Wetlands](#)

<sup>5</sup> [Publication No. 22-06-014](#)

<sup>6</sup> Sammamish Property Tool can be viewed at: [ArcGIS Web Application](#)

<sup>7</sup> [iMap \(kingcounty.gov\)](#)

<sup>8</sup> [Washington State Wetland Rating System for Western Washington \(Department of Ecology, 2014, or as amended\).](#)

**Using BAS, how should wetlands be identified in the field and on a map?**

Wetland maps are considered advisory and would trigger requirements for field verification. BAS supports that wetlands should be identified in the field by a qualified professional with the necessary experience and training and classified using the Washington State Wetland Rating System for Wetland Washington (2014)<sup>7</sup>.

Other characteristics that would trigger the requirement for field verification would include the presence of specific vegetation, topography, and hydrology. This field verification, referred to as “wetland delineation,” includes investigating the site for how the water pools or floods in an area, the presence of certain soil types, and the presence of wetland-typical plants and algae.

**How would a wetland map be updated?**

A site-specific wetland map would be updated based on the field verification of the presence and boundary of a regulated wetland by a qualified professional through a report. The identification of any wetlands as part of a development proposal should be included in the City’s advisory wetland map.

**Who would be responsible for updating the map for wetlands?**

The City should ultimately be responsible for the updating of any city maps regarding wetlands. However, updates should be made as critical area reports are provided to the City as part of development proposal applications. Applicants should provide mapping data (shapefiles), in order for the City to update the maps accordingly.

## Summary of Critical Aquifer Recharge Area Changes Being Considered

### **CATEGORY 1 – No Action Needed; Changes Integrated into Draft Code Amendments**

Changes required by the Growth Management Act, clarifications, and other minor changes.

- Include a definition for “wetland” for consistency with BAS.
- Include an identification and delineation criteria as a subsection in the Wetlands section<sup>9</sup> for clarity.
- Remove the wetland category point totals from the summaries in SMC 21.03.020.Y.1 and rely on BAS to avoid outdated references by scoring wetland categories based on the Ecology Wetland Rating System for Western Washington.
- Clarify language regarding allowances for recorded critical area tracts, NGPAs, and easements.<sup>10</sup>
- Strengthen language regarding the prioritization of mitigation sequencing.
- Provide definitions and more clarity for the different types of mitigation the code allows, including, but not limited to, Establishment/Creation, Rehabilitation, and Enhancement.

### **CATEGORY 2 - Requires Planning Commission & City Council Direction for Code Amendment Integration**

Changes don't impact the project timeline, require additional budget, or require further policy/impact analysis.

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<sup>9</sup> [SMC 21.03.020.Y](#)

<sup>10</sup> [SMC 21.03.020.Y.1.b\(ii\)](#)

- Update wetland buffer widths and categories<sup>11</sup> for consistency with BAS.
  - Consider adopting one of the three options described in [Ecology Publication No. 22-06-014](#).<sup>12</sup>
- Require wetland buffers to be revegetated with native species appropriate to the ecoregion if the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions.
- Consider relocating or revising the habitat corridor requirement from the Fish and Wildlife Habitat Conservation Area section<sup>13</sup> for consistency with BAS.
- Review buffer modification allowances to ensure consistency with BAS, including, but not limited to, buffer width averaging and buffer reduction.
- Update mitigation ratio requirements<sup>14</sup> for consistency with BAS.
- Consider including the credit/debit tool described in [Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Final Report](#)<sup>15</sup> as an alternative mitigation technique.<sup>16</sup>
- Consider applying increased protections to bog wetlands and associated buffers to prevent stormwater impacts that could change pH and alter sensitive plant communities.
- Remove outdated or superseded references to ensure the most up-to-date information is being utilized, including references to pilot programs and the wetland management area – Special district overlay.

**CATEGORY 3 - Requires Planning Commission & City Council Direction for Future Workplans**

Changes may impact stakeholders and/or require additional budget and staff time.

N/A

<sup>11</sup> [SMC 21.03.020.Y.1.b](#)

<sup>12</sup> [Ecology Publication #22-06-014, Appendix C](#)

<sup>13</sup> [SMC 21.03.020.Z.2](#)

<sup>14</sup> [SMC 21.03.020.Y.3.f](#)

<sup>15</sup> [Ecology Publication #10-06-011](#), Olympia, WA, March 2012, or as revised

<sup>16</sup> in [SMC 21.03.020.Y.4](#)