

# A2 Critical Areas

## White Paper: Wetlands and Development in Buckley

### Executive Summary

**Buckley is required by the Growth Management Act (GMA) to accommodate population growth targets established by Pierce County. But future development in Buckley is constrained by the presence of significant area of wetlands. Many of these wetlands are of low value and are degraded. Assuming a future population density range that is appropriate for the city, Buckley may need to consider strategies for development in close proximity to wetland areas. One approach to accomplish this is through a *wetland mitigation strategy* which entails expanding, enhancing, or restoring existing wetlands to compensate for the loss of low value wetlands. To this end, the basic steps Buckley could take are outlined below:**

- **Identify one or more degraded wetland “receiving sites” suitable for restoration and/or enhancement that can be acquired by the city.**
- **Establish developer mitigation fees to fund the identification, acquisition, and improvement of the “receiving sit”.**
- **Assess developer mitigation fees on a case-by-case basis.**
- **Allocate funds to acquisition and enhancement/restoration of the receiving site.**

**If carefully executed, such an approach could meet both the needs of the city and the goals of the GMA.**

### Introduction

**Under Washington’s Growth Management Act (GMA), the city of Buckley is required to accommodate local population growth targets established by Pierce County. Concurrently, the GMA stipulates that Buckley must identify and preserve “critical areas,” which include wetlands.<sup>1</sup> The presence of significant acreage of wetlands in Buckley raises a conflict between the above two GMA goals. The purpose of this White Paper is to elucidate possible solutions to this conflict.**

### Existing Conditions

**Buckley has been assigned a population growth target of an additional 3,105 persons by the year 2017 population through Pierce County Council Resolution No. R2000-173. This translates to the addition of 1,269 households. Given that one of Buckley’s overarching goals is preserve its small-town character, it is likely that the city residents would reject any plans to accommodate future population growth with very high density housing such as high-rise housing. Even if the city were**

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<sup>1</sup> The Land Use Regulatory Reform Act of 1995 integrated GMA and SEPA, requiring Comprehensive Plans to identify Critical Areas, including wetlands.

to approve such buildings, it is doubtful that any developer would be interested as the market does not currently support this housing type, nor can it be expected to do so in the future. It is likely that Buckley's future growth will be accommodated at a density appropriate to the character of the city, e.g., in the range of five households per acre. At this density, 1,269 households would consume approximately 380 acres total, which includes about 75 acres (20%) for roads and infrastructure and 110 acres for parks (to meet national standards).

The city limits of Buckley enclose 2,452 acres, and the Urban Growth Area (UGA) to the West and Southwest encloses another 614 acres. The land use within Buckley is as follows: 44% residential, 3% commercial, and 21% public (parks, Rainier School, etc.), 11% agriculture, and 21% vacant land. The vacant land comprises 892 acres, however, a significant amount is designated as wetlands, as discussed below.

Wetlands are scattered throughout the Buckley area.<sup>2</sup> Buckley's relatively flat topography and prevalent hydric soil known as "Buckley Loam" cause slow drainage that produces seasonal wetlands. These wetlands are generally small and fragmentary, lack long-term standing water that supports common riparian flora and fauna, and do not drain to the White River by surface flow. Much of the wetland area is located in pastures, where a century of agriculture has profoundly modified the soil horizon and native flora and fauna. In short, most of Buckley's wetlands are relatively low-grade from an environmental standpoint, and have been classified according to State guidelines mostly as Class IV, with some Class III.<sup>3</sup> According to the U.S. Department of Fish and Wildlife, approximately 12% of Buckley's total land area is wetland. For the unincorporated portion of Buckley's UGA, Pierce County reports that 34% of the land area is wetland. These are gross approximations based largely on aerial photo interpretations. Actual wetland acreage is assumed to be much higher based on field experience.

The 2002 Pierce County Buildable Lands Report documents that Buckley has a total of 493 acres of vacant residential land.<sup>4</sup> Of this vacant land, 197 acres were identified as critical areas, a significant portion of which are wetlands. After subtracting for all other factors that constrain land use (e.g. roads, stormwater facilities, etc.), the report shows only 135 acres buildable land available for residential development in the city. Under existing zoning, this acreage translates to 501 households, far short of the growth target of 1,269 households. If all the available buildable land

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<sup>2</sup> RCW 36.70A.030 (20) provides the following definition of wetlands: *"Wetland" or "wetlands" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.*

<sup>3</sup> Washington uses a four-tier system to classify wetlands, with Class I being the best. Guidelines for identifying critical areas are given in WAC 365-190-080.

<sup>4</sup> 2002 Pierce County Buildable Lands Report, available online at: <http://www.co.pierce.wa.us/xml/services/home/property/pals/pdf/blreport.pdf>.

was zoned R-5 (5 units/acre), the 135 acres would then be able to accommodate 675 households, or slightly more than one half the population growth target.

### Strategies

Given the above-described existing conditions, it is clear that in order to meet Pierce County growth targets while maintaining existing community character, Buckley may need to explore development in close proximity to wetland areas. It is particularly timely for Buckley to address this issue now, before the influx of development that is likely to result from their expansion of infrastructure, the opening of their new sewage treatment plant. (Note: The following discussion is based in part on a meeting between the University of Washington Urban Planning Team and two environmental planning consultants from Adolfsen Associates who volunteered their assistance.<sup>5</sup>)

First, to address three initial key points:

- There is no legal way to “declassify” a wetland.
- Farmed wetlands are protected just like any other wetland.
- Attempting to reduce wetland buffers is not a productive strategy for Buckley because the area of wetlands is so large, and because Class IV wetlands do not require buffers, however, some relief might be accorded to Class III wetlands.

Buckley’s proposed wetland strategy calls for mitigation: making up for wetlands lost to development by enhancing existing wetlands or creating new wetlands. The principal national approach to this process involves “no net loss,” although in reality, any wetland mitigation project typically needs to show a net improvement of wetland function and value. The basic approach is to identify the least functional wetlands as potential areas for new development, and identify higher quality, but degraded wetlands to be improved and/or expanded to compensate.

As wetland classification must be based on best available science (BAS), so must any wetland mitigation project.<sup>6</sup> However, BAS associated with restoration and enhancement activities regarding wetlands is notoriously debatable. In practice, mitigation ratios (the ratio of replacement wetlands to wetlands developed) have been at least 2:1, and can be as high as 6:1. A 2001 study showed that about half of wetland mitigation projects are successful.

If strictly adhering to BAS is preventing the city from meeting other key goals of the GMA such as population accommodation, Buckley can craft an approach that meets the BAS requirements and allows for appropriate population density to be maintained. WAC guidelines allow for extenuating circumstances, specifying the following general approach concerning potential impacts:

1. avoid
2. minimize
3. mitigate

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<sup>5</sup> Planner Akuno Masterson, and ecologist Teresa...?

<sup>6</sup> RCW 36.70A.172 states that best available science must be used in the designation and protection of critical areas.

One common tool for wetland mitigation projects is a mitigation bank. As described by the U.S. Environmental Protection Agency, “a wetlands mitigation bank is a wetland area that has been restored, created, enhanced, or (in exceptional circumstances) preserved, which is then set aside to compensate for future conversions of wetlands for development activities. A wetland bank may be created when a government agency, a corporation, or a nonprofit organization undertakes such activities under a formal agreement with a regulatory agency.”

Given the relatively small scale of Buckley and its future development, it would likely be more fitting for Buckley to establish a wetland mitigation program independently. Such a program can be thought of as an unofficial “mini bank” that is operated by the city. One key advantage of this approach is that it reduces up front expenditures in comparison to official mitigation banks, which tend to require expensive restoration work in advance of new development. Some funding opportunities may exist if the wetland in question is connected to salmon habitat, which may apply to wetlands on the White River.

Working independently, Buckley could take the wetland mitigation process one step at a time. Mitigation efforts could occur after funds have been raised through developer mitigation fees. The basic steps in this process would involve the following:

- Identify a degraded wetland “receiving site” or sites that can be acquired by the city and are suitable for improvement.
- Establish developer mitigation fees to fund the identification, acquisition, and improvement of the “receiving site”.
- Assess developer mitigation fees on a case-by-case basis.
- Allocate the funds collected through fees for the acquisition and improvement of the receiving site.

The establishment of mitigation fee amounts would be based on the individual circumstance of the proposed development, depending primarily on the value of the wetlands lost. In addition, the city could potentially use varying mitigation fees as a lever to channel growth to desired areas. For example, developing near the city center is aligned with the goals of the GMA, and Buckley could structure mitigation fees to promote this end.

The city may anticipate objections from developers regarding the additional overhead costs of paying wetland mitigation fees. However, the only other legal choice developers have is to not develop. Functionally, developer participation will be based on an assessment of cost. It is reasonable to expect that mitigation fees can be structured such that mitigation costs are covered, and that developers can still realize economically successful projects.

### Recommendations

Given the conflict between wetlands conservation and population growth accommodation, Buckley is in a unique situation to request assistance from state authorities. Buckley should start by contacting the Department of Ecology (DOE) and the Department of Community, Trade, and Economic Development (CTED) to acquaint them with the situation, and invite them to visit the city. CTED can provide the economic and community outlook to help reach a balanced agreement

between accommodating the projected population growth and the need to protect the environmental as mandated by DOE. Buckley stands to be an important and challenging test case for these two agencies to reach a satisfactory compromise.

Buckley should create an up-to-date inventory of its wetlands to provide the basis for proposing mitigation projects. It is likely that Buckley's current wetlands inventory was determined aerially, and thus it would be worth having an on-site analysis done. This inventory should include classification. The Department of Ecology may be able to assist in these tasks. In order to facilitate developing an appropriate mitigation scheme, particular emphasis should be placed on developing an inventory of the following:

1. wetlands connected to salmon habitat
  2. wetlands with high function and value
  3. wetlands of low quality
  4. wetlands near the city center
  5. wetlands on publicly owned land
- To the extent possible, Buckley should ensure the inventoried and mapped wetlands are verified, with DOE signoff.
  - Buckley should consider hiring an environmental consultant to develop a wetland mitigation scheme.
  - Buckley should evaluate possible methods to fund wetland mitigation, such as developer mitigation fees or a stormwater levy.
  - Buckley should investigate setting up a small-scale, unofficial wetland mitigation bank. The first in this process is to identify a likely site specific "receiving area" to be the target of wetland restoration efforts.
  - Buckley should seek to combine wetland mitigation with the establishment of new parklands, i.e., wetlands can contribute to parks.
  - Buckley should focus on wetlands around the White River as potential candidates for expansion and enhancement. Government funding is more available for wetland mitigation associated with salmon-bearing streams such as the White River.
  - Buckley should explore removing drain tiles from unused agricultural lands as a means to help restore historic wetlands