

August 11, 2015

To: Yachats Planning Commission
cc: Nancy Batchelder, City Recorder

From: Larry Lewis, City Planner

Re: ESEE Analysis Template

At the July 21, 2015 Planning Commission meeting, the Commission discussed that in order to place setback restrictions on non-fish bearing streams, an *Economic, Social, Environmental & Energy (ESEE) Analysis* would need to be prepared to determine if setbacks are appropriate. The following ESEE Analysis Template identifies the contents of an ESEE Analysis and provides an example analysis.

ESEE ANALYSIS TEMPLATE

Site Description:

Site(s):

Location(s):

LWI Description:

Conflicting Uses:

Map(s):

Description of Surrounding Uses:

Resource and Impact Area Summary

Resource Area:

Impact Area Acreage:

Combined Resource and Impact Area:

Number of Parcels Affected:

Existing Local Protections:

ESEE Analysis (EXAMPLE analysis of Sites 'A' and 'B' in the city of Sampleville)

This section details the three alternatives and discusses the Economic, Social, Environmental and Energy (ESEE) impacts to the group of sites. The sites will be assessed and a written evaluation provided of the ESEE consequences of allowing, limiting or prohibiting conflicting uses on these sites.

Economic Consequences

Following is a narrative discussion of the economic consequences (increased infrastructure costs, impacts to property owners, etc.) if the following protection scenarios are pursued:

Prohibit Conflicting Uses (full protection)

The economic consequences of prohibiting conflicting uses would be adverse, because the acreage occupied by wetlands could not be used to allow for urban development or for extension of infrastructure and full utilization of underdeveloped properties. Site 'A' is positioned at the termination of several rights-of-way.

Extension of existing streets is most logical/efficient and affordable along these rights-of-way. Prohibiting conflicting uses on Site 'B' landlocks the only portion of the lot that is not within the wetland. Prohibiting conflicting uses would have at least one significant positive economic consequence: providing substantial stormwater management benefits and eliminating the need for the construction of expensive new facilities.

Limit Conflicting Uses (limited protection)

The economic consequences of limiting conflicting uses are mixed but generally positive. Some residential land (a scarce resource in Sampleville) will not be developable, but certain acreage will remain accessible by limiting conflicting uses. The stormwater runoff control functions of Site 'A' and Site 'B' will not be affected significantly through limited conflicting use, which has positive economic consequences.

Allow Conflicting Uses (no local protection)

Allowing all conflicting uses and relying on the State's fill and removal law would, in most cases, have positive consequences. DSL regulations allow some flexibility to allow conflicting urban uses where no reasonable alternative exists; and DSL regulations allow road and utility extensions where necessary to serve urban development. Negative economic consequences include the possible necessity to construct expensive stormwater infrastructure to manage increased runoff with decreased natural control mechanisms.

Social Consequences

Following is a narrative discussion of the social consequences (education, recreation, aesthetics, etc.) if the following protection scenarios are pursued:

Prohibit Conflicting Uses (full protection)

The social consequences of prohibiting conflicting uses are mixed. Site 'A' and Site 'B' provide a contribution to urban aesthetics and provide a connection to nature (which also has the potential to increase through protection). Prohibiting conflicting uses could, however, greatly limit development efficiency (thereby increasing housing costs and decreasing housing opportunities), with corresponding adverse social impacts including reduced housing equality, reduced quality of life, and potential increased reliance on social safety nets.

Limit Conflicting Uses (limited protection)

The social consequences of partially allowing conflicting uses are generally positive. Urban aesthetics and connection to nature are not eliminated by allowing the identified conflicting

uses, and the provision of greater development opportunity goes far to mitigate the negative social consequences of the remaining protected portions of Site 'A' and Site 'B'.

Allow Conflicting Uses (no local protection)

The social consequences of allowing all conflicting uses in Site 'A' and Site 'B' are mixed. DSL permitting is not sufficient to ensure the protection of wetland values that may be lost to development which is of negative social consequence. Allowing all conflicting uses would likely result in more efficient use of residential and public land – which has positive social consequences (e.g. increased housing equality).

Environmental Consequences

Wetlands provide a wide array of environmental benefits. They protect and preserve drinking water supplies because they purify surface water and ground water. They also reduce soil erosion because the vegetation holds the soil in place. Following is a narrative discussion of the consequences to water quality, hydrologic control, wildlife and fish habitat (as well as other relevant factors) if the following protection scenarios are pursued for Site 'A' and Site 'B':

Prohibit Conflicting Uses (full protection)

Wetlands Site 'A' and Site 'B' provide medium and high level hydrologic (flood) control, and water quality. These wetlands help to protect life and property during floods by storing and absorbing water, a necessity exemplified by significant storms in recent years. Wetland preservation is included as a water quality improvement strategy in the City's TMDL Implementation Plan. Prohibiting conflicting uses will go far to keep both flood control and water quality functions intact. Site 'A' and Site 'B' have only limited fish and wildlife habitat value, still prohibiting conflicting uses is viewed as having positive, if limited environmental consequence. The environmental consequences of prohibiting conflicting uses are positive.

Limit Conflicting Uses (limited protection)

The environmental consequences of limiting conflicting uses are mixed. The impacts to Site 'A' and Site 'B' that would result from limiting conflicting uses would include reducing their capacity to serve flood control, water quality and fish and wildlife habitat functions, which are negative environmental consequences. Positive consequences of this alternative are the relative preservation and maintenance of the wetlands and their functions (beyond the limited impacts).

Allow Conflicting Uses (no local protection)

Wetlands Site 'A' and Site 'B' will always be under the jurisdiction of DSL administrative rules, which regulate the removal and fill of wetlands. However allowing conflicting uses and relying solely upon DSL for wetland "protections" has negative environmental consequences. DSL provisions do not directly address wetland functions and therefore critical wetland functions (hydrologic control, water quality, and habitat) may be lost. Additionally, created wetlands (as often required through DSL permitting) may not provide the same ecological function as naturally occurring wetlands, or provide that function in the locality where it is deemed "significant." This scenario has negative environmental consequences.

Energy Consequences

Following is a narrative discussion of the energy consequences (transportation connectivity, efficient urban development, etc.) if the following protection scenarios are pursued:

Prohibit Conflicting Uses (full protection)

The energy consequences of prohibiting conflicting uses would be mixed but largely negative. Where trees are present, preservation of Site ‘A’ and Site ‘B’ can provide summer shade, source of natural cooling. This option, however, prevents efficient street connectivity and can result in a less compact urban growth form, which has adverse energy consequences (e.g. increased vehicle miles traveled).

Limit Conflicting Uses (limited protection)

The energy consequences of limiting conflicting uses would be positive. In cases where the existing surface drainage system does not impede transportation connectivity or efficient urban development, there would be no reason to replace relatively “green” drainages with less energy-efficient “gray” conduit systems. What shading and cooling potential Site ‘A’ and Site ‘B’ have will be largely preserved. Limiting conflicting uses results in better street connectivity, and reduced energy consumption.

Allow Conflicting Uses (no local protection)

The energy consequences of allowing all conflicting uses and relying on state regulations are also mixed but generally positive. Replacing natural drainage with pipes may result in more efficient use of scarce urban land. In such cases, constructing underground pipes to drain farmed wetlands or to replace surface drainage ditches consumes relatively little energy. Allowing all conflicting uses allows for a more compact urban growth form, which has positive energy consequences.

Conclusions/Recommendation

The relative consequences of each option must be weighed and balanced to determine a preferred or recommended option. Prohibiting conflicting uses does protect critical wetland functions as well as some urban aesthetics and connections to nature. On the other hand, prohibiting any conflicting uses would reduce already limited residential development opportunities, increasing housing costs and housing and utility provision efficiencies, both of which have negative economic, social and energy consequences. The net negative consequences of this alternative make it less attractive.

Allowing all conflicting uses has a mixed bag of consequences as well. Most dramatic are the negative environmental consequences of this option. The critical functions of the wetlands including water quality and in particular, hydrologic (flood) control, will be destroyed under this option. These functions are expensive and difficult to otherwise address and impossible to replace. There are positive social and energy consequences of this option, but the most compelling positive consequences are economic. Efficient urban development and the provision of scarce residential land are compelling economic benefits of allowing all conflicting uses.

*On balance, the ESEE consequences analysis supports **limiting conflicting uses on Site ‘A’ and Site ‘B’**. It is Sampleville’s determination that both the resource site and the conflicting uses are important compared to each other. Limiting conflicting uses on the whole preserves positive consequences from both the “all conflicting” and “no conflicting” uses options.*

By allowing streets to be constructed where access is most efficient or promotes efficient circulation and allowing driveway construction where portions of tax lots are landlocked by wetlands, this option preserves the majority of wetland area and, in turn, the majority of wetland functions, and aesthetics while mitigating impacts to the residential lands inventory, and overall urban efficiency.

Recommendation: *Allow the following conflicting uses conditionally for Site 'A' and Site 'B':*

- *Street construction (local, and minor collectors) where efficient circulation necessitates it.*
- *Driveway/Access construction where portions of tax lots are landlocked by wetland. Construction must avoid wetlands as much as possible.*

Note: All development remains subject to DSL fill/removal permit process.