

# **CHAPTER 3**

## **AFFECTED ENVIRONMENT, IMPACTS, ALTERNATIVES, MITIGATION MEASURES & SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

### **Introduction / Overview**

---

The following provides an overview of the general content and organization of each section within **Chapter 3**. It is intended to help orient the reader to the discussion of alternatives, impacts, and mitigation measures.

This document is an SEIS Addendum (i.e., an Addendum to the Final SEIS (2021) for the *47<sup>o</sup> North Master Site Plan Amendment*), and **Chapter 3**, therefore, updates and adds information about the alternatives, impacts, and mitigation measures identified in the prior *SEIS* and SEIS Alternative 6 relative to the changes included in the Revised Proposal. The focus of this chapter is to identify and compare those impacts, and any new or modified mitigation measures. In general, changes to the Revised Proposal and differences in impacts identified in the Addendum are incremental in type and degree and are not significant.

Below is further description of the content and organization of the sections in **Chapter 3**, and some key assumptions for the alternatives and their analysis.

### **Site Area**

In the 2002 Cle Elum UGA EIS, the original EIS for the project, development was proposed on a 1,100-acre site known as Bullfrog Flats. In the SEIS, development of SEIS Alternatives 6 was proposed on an 824-acre portion of the site called 47<sup>o</sup> North. SEIS Alternative 6 also evaluated hypothetical development on an adjacent 25-acre property to the east but not part of the 47<sup>o</sup> North proposal at the time.

The Revised Proposal site studied in this Addendum is approximately 889 acres in size. The difference in site area is due to adding the commercial property to the eastern part of the site and open space to the southern part of the site and removing properties in other portions of the site (e.g., for the municipal recreation center).

Details of the Revised Proposal are included in **Chapter 2**.

### **Methodology**

The analyses conducted for this Addendum generally use the same methodologies as those used in the SEIS. However, where new data was available and other reasonable methods of

analysis were identified, these were employed in the Addendum analyses, as appropriate, including the following.

- **Housing/Population/Employment**
  - updated census data,
  - updated housing value information,
  - updated cumulative impact project permit counts, and
  - new demographic information on RV resort users.
- **Cultural Resources**
  - a new cultural resources survey of the commercial center property, including a pedestrian survey and auger probes.
- **Public Services**
  - updated information from the housing/population/employment analysis,
  - new information on calls for Medic One emergency service,
  - new information on sports and recreation-related incidents and calls for hospital emergency department services,
  - updated analysis of police service impacts (based on the ICMA method by the Police Department),
  - updated analysis of impacts to schools (based on updated student generation rate, grade level percentage information, and enrollment information from the School District),
  - additional analysis of hospital districts service impacts (based on existing and future staffing information provided by Kittitas Valley Hospital Districts), and
  - additional analysis of emergency dispatch service impacts from the RV resort (based call data provided by KITTCOM).
- **Transportation**
  - updated counts and future baseline traffic volumes at selected study intersections,
  - updated trip generation using the latest edition of the ITE Manual,
  - additional analysis of road corridor level of service,
  - additional analysis of the effects of project-specific mitigation measures on the road system, and
  - updated analysis of pro rata shares to mitigate identified improvements.
- **Utilities**
  - updated utility demand assumptions and utility capacity information.
- **Fiscal Conditions**
  - updated information from the public services analysis and other changes to the Revised Proposal.

## **Affected Environment**

**Chapter 3** updates existing conditions on the 47° North site and in the surrounding area since publication of the Draft SEIS in 2020, as appropriate.

## EIS Alternatives

The proposal analyzed in the SEIS was SEIS Alternative 6; the current proposal is the Revised Proposal and that is the focus of the Addendum. The sections in **Chapter 3** (e.g., Section 3.1, **Land Use**) focus on the impacts of the Revised Proposal in comparison to SEIS Alternative 6, noting the incremental differences in impacts and their significance. Where informative, SEIS Alternative 5 (the approved 2002 Bullfrog Flats Master Site Plan) is also noted for comparison purposes.

## Phasing/Study Years

Development of the Revised Proposal is anticipated to start in 2023 and be completed in 2031. Buildout of the residential and RV/glamping areas would occur by 2028, and the commercial center by 2031. For comparison, under SEIS Alternative 6, buildout of the RV/glamping sites and residential areas was also expected to occur by 2028; the commercial property (which was not part of the project at that time) was assumed to be fully developed by 2037.

The SEIS Addendum analyzes one or more of three development years – 2025, 2031, and 2037 – depending on the element being studied (e.g., Transportation analyzes all three years), as described below:

- **Year 2025** represents near-term development of the initial project phases of the Revised Proposal and SEIS Alternative 6 (e.g., residential and RV/glamping uses). Year 2025 is used primarily for analysis of transportation and fiscal impacts.
- **Year 2031** represents full buildout of the Revised Proposal, including the commercial center. Note that the RV and residential components of the Revised Proposal are anticipated to buildout in 2028. For SEIS Alternative 6, 2031 is an interim year, at the approximate mid-point of buildout; commercial uses included in this alternative would continue to develop until 2037. Therefore, 2031 includes buildout of SEIS Alternative 6 residential and recreational uses plus additional increments of commercial use and background growth.
- **Year 2037** represents a future year consistent with the current planning horizon of City of Cle Elum and Kittitas County Comprehensive Plans. No further development of the Revised Proposal would occur after 2031, but background growth would continue during this period.

## Construction Impacts

For most of the elements of the environment (e.g., land use, aesthetics, parks and recreation, public services, and transportation) the analysis of the construction impacts from the Revised Proposal is not substantially different from the analysis of the SEIS

alternatives. The same type and amount of development would occur in a more compressed construction time frame but would result in no significant difference in impacts. The construction impacts under the Revised Proposal on numerous elements of the environment -- earth, water resources, plants, animals, & wetlands, and utilities -- also would not differ substantially from the SEIS Alternatives.,

## Mitigation Measures

Compared to SEIS Alternative 6, no new significant adverse impacts on the elements of the environment would occur from the Revised Proposal and no additional mitigation measures are recommended. The mitigation measures for the Revised Proposal identified in **Chapter 3** include some revisions to the language of measures listed in the Final SEIS and are intended to clarify and help identify processes for implementing the measures. There are no substantive additions or changes to the mitigation in the Final SEIS, however. The mitigation measures listed in **Appendix F** will serve as a basis for conditions that could be imposed through the review process for the proposed Major Modification and a revised Development Agreement.

Below is a description of the different categories of mitigation (e.g., proposed, required, other possible).

- **Proposed Mitigation Measures (Included in the Project)** reflect several types of measures. There are measures that the Applicant has preliminary proposed; that are included or implicit in the revised Master Site Plan contained in the pre-application materials submitted to the city; that are based on measures included in the SEIS and adapted to reflect the Revised Proposal; and/or are above and beyond the “Required Mitigation Measures” described below. This category of measures also includes certain conditions of approval from the 2002 Bullfrog Flats Development Agreement, which were developed to mitigate the environmental impacts of the Bullfrog Flats Master Site Plan as identified in the 2002 Cle Elum UGA Final EIS and through the approval processes for the project. These conditions are summarized in the mitigation measures, some verbatim and others paraphrased for the sake of simplicity.

Because substantial time has passed since the Development Agreement was executed, a lack of complete documentation, and changes in the proposal, the rationale or need for certain of the conditions or some specific requirements is not clear. Also, certain of the conditions no longer apply because they have been performed (e.g., certain properties have already been dedicated to the city). Therefore, only identified conditions of approval that clearly appear to pertain to the Revised Proposal, and which the Applicant has preliminarily agreed to include in, or are implicit in, the revised project, are listed in this summary; modifications that are considered appropriate to reflect the changes in the Revised Proposal and the updated analysis in the Addendum are also identified (underlined or ~~strike-through~~).

It should be noted that these conditions are not categorized as “included in the project” at this point because a formal Master Site Plan Amendment application and a proposed Development Agreement have not been submitted to the city as of this writing. In addition, the City Council may decide to through the land use review process to add or delete individual conditions. However, it is assumed for purposes of the summary that Bullfrog Flats conditions of approval will likely become part of the proposal in the future. As such, the verb “would” is used in the SEIS Addendum to indicate a condition that is assumed to be relevant pursuant to the Addendum analysis and that the City could impose as a condition of approval.

- **Required Mitigation Measures** are measures required by code, laws, or local, state, and federal regulations and the word “would” is used to indicate that compliance is assumed.
- **Approved Bullfrog Flats Conditions of Approval (Not Included in the Project)** are measures that are based on the conditions of approval contained in the 2002 Development Agreement but that the SEPA consultant does not consider likely to apply to the Revised Proposal and will depend on changes to the adopted Development Agreement that may be proposed in conjunction with the major modification and new or updated Development Agreement. These measures are not included in the project at this point, as a formal Master Site Plan Amendment application has not been submitted to the City. As such, they are typically represented with the verb “should” in the Final SEIS and SEIS Addendum to indicate a condition recommended by the City.
- **Other Possible Mitigation Measures** are other measures identified by the SEIS team and the city that could be implemented to further reduce impacts and are represented with the verbs “should” or “could”.

## **Section 3.0**

### **EARTH; WATER QUANTITY & QUALITY; PLANTS, ANIMALS, & WETLANDS; AIR QUALITY / GREENHOUSE GASES; & NOISE**

The Natural Environment section is a summary of the *Natural Environment Technical Memos* on earth; plants, animals, and wetlands; and air quality/greenhouse gases (GHGs) and noise (December 2022) prepared by AESI Associates, Raedeke Associates, and Landau Associates, respectively, in **Appendix A**. Information from the *Utilities Report* (January 2023) prepared by ESM Engineers in **Appendix B** is also referenced.

#### **3.0.1 Affected Environment**

---

##### **2020 / 2021 SEIS & Revised Proposal**

The SEIS described the existing conditions of the site and vicinity with respect to earth, water quantity and quality plants, and animals, and wetlands air quality/ GHG; and noise conditions (see Draft SEIS Sections 3.1, 3.2, 3.3, 3.4, and 3.5 for details). Natural conditions of the site have not changed substantially since publication of the *SEIS* and are briefly described below. Please consult relevant sections of the SEIS document for detailed information.

The site topography is varied and includes steep slope areas along the south site boundary and through the center of the site. Geological hazards, such as landslide, erosion, seismic, and coal mines are present on and near the site. Surface water resources onsite include the Cle Elum River which passes through the western portion of the site and joins the Yakima River to the south of I-90 offsite, and six wetlands along the Cle Elum River and in the central portion of the site. The site is mostly covered by second and third growth forests; grassland with scattered shrubs are present in the two powerline easements that pass through the site. A variety of wildlife inhabit and pass through the site and site vicinity. Endangered, threatened, proposed, candidate, species of concern, and sensitive animal species identified by federal and state agencies potentially occur in the 47° North site vicinity. Priority species, such as elk, use the site during certain times of the year.

A major source of air pollution and noise in the vicinity of the 47° North site is vehicular traffic traveling along I-90, SR 903, and Bullfrog Road, as well as within residential areas surrounding the site. Kittitas County is currently designated as an attainment area for all criteria air pollutants. Air quality/GHG emissions and noise have increased slightly since 2020, primarily due to increased background traffic in the Cle Elum area (see Section 3.6, **Transportation**, and **Appendix C** for details.)

## **3.0.2 Impacts**

---

The Revised Proposal includes minor changes to the proposed Master Site Plan which were reviewed by the SEIS consultants to determine whether impacts associated with these modifications are likely to generate new or different significant impacts. A technical memorandum prepared by each consultant documenting their review and conclusion are included in **Appendix A**. Each concluded that no significant impacts beyond those identified in the SEIS for SEIS Alternative 6 would result from the Revised Proposal. Please consult the SEIS for complete discussions of potential impacts. A brief discussion of incremental impacts associated with the Revised Proposal is presented below.

### **Revised Proposal**

#### **Earth**

The proposed clearing limits under the Revised Proposal would essentially be the same as those under SEIS Alternative 6. These limits would be outside of designated erosion hazard areas, with clearing occurring on the more gently to moderately sloping portions of the site (e.g., with inclinations of approximately 33% or less). Proposed grading volumes and impervious surface areas under the Revised Proposal would be less than under SEIS Alternative 6. As a result, potential erosion, sedimentation, stormwater runoff, and groundwater impacts would be similar to or less than under SEIS Alternative 6. With the revisions to the stormwater design, the stormwater ponds would remain in the same general locations as under SEIS Alternative 6, with infiltration ponds continuing to be limited to those areas of the site underlain by permeable outwash sediments suitable for infiltration. As a result, no significant impacts associated with geotechnical hazards are expected. In summary, the proposed changes to the project under the Revised Proposal are relatively minor with respect to the geology, soils, and groundwater, and the impacts on these conditions would be similar to or less than SEIS Alternative 6.

#### **Water Quantity & Quality**

Like SEIS Alternative 6, no direct impacts to on-site water resources (e.g., the Cle Elum River and wetlands) would occur with development of the Revised Proposal. As mentioned above, proposed grading volumes and impervious surface areas under the Revised Proposal would be less than under SEIS Alternative 6, resulting in similar or less potential erosion, sedimentation, stormwater runoff, and groundwater impacts than SEIS Alternative 6. Temporary and permanent stormwater management systems would be installed onsite to address potential impacts during construction and operation of the project, respectively.

#### **Plants, Animals, & Wetlands**

Impacts to vegetation under the Revised Proposal would be comparable to SEIS Alternative 6, as the clearing limits would essentially be the same.

Clearing, grading, and construction under the Revised Proposal would be similar to SEIS Alternative 6 and would result in similar wildlife habitat loss and increased fragmentation. There would be slightly more activity onsite and associated impacts to wildlife due to the additional 50 housing units and population under the Revised Proposal. No direct impacts to riparian habitat in the Cle Elum or Yakima Rivers would occur, and infiltrated stormwater would not have a measurable direct effect on the Yakima River. Overall, impacts to fish and associated habitat should be minimal under the Revised Proposal or SEIS Alternative 6.

The Revised Proposal would not directly impact any of the on-site wetlands. As with SEIS Alternative 6, all wetlands onsite would be preserved and protected within an open space tract; these tracts would provide the required buffers and additional retained open space beyond the buffer limits. Hydrologic support to the wetlands would be maintained by the proposed stormwater control system.

### **Air Quality / GHGs**

The inclusion of the 50 units of affordable housing and the slight change in the mix of commercial uses under the Revised Proposal would slightly increase emissions compared to SEIS Alternative 6. However, because the region is in attainment for all criteria pollutants, and because tailpipe emissions would increase only slightly, it is unlikely that impacts at local intersections would be significant or cause an air quality “hot spot.”

The increase in multi-family housing units and slight changes in commercial uses under the Revised Proposal would result in a negligible increase in potential greenhouse gas (GHG) emissions relative to SEIS Alternative 6. Forecast annual project emissions for both the Revised Proposal and SEIS Alternative 6 would represent 0.03% of 2035 statewide forecast emissions. The Revised Proposal would represent an increase of 0.001% of annual statewide forecast emissions. Emissions for both SEIS Alternative 6 and the Revised Proposal would be lower than for SEIS Alternative 5

### **Noise**

The proposed changes under the Revised Proposal, including 50 more dwelling units and a change in the mix of commercial uses, are not expected to result in a change in short-term construction noise or long-term operational noise compared to SEIS Alternative 6. The revised Master Site Plan also does not include substantial changes in the location of residential, commercial, or RV resort uses that would change the sources or receivers of noise.

The Revised Proposal is not expected to result in significant changes to local roadway noise compared to SEIS Alternative 6 and would be less than with Alternative 5. The locations at which new project roadways would intersect with existing roadways and the distances between project roadways and existing sensitive land uses would be similar to SEIS Alternative 6. Potential changes in traffic noise were estimated by comparing project-related traffic estimates during the worst-case Sunday PM peak period at two roadway segments where traffic volumes would increase between 25 - 35% with the Revised

Proposal: (1) the RV resort access off Bullfrog Road, and (2) the site access off SR 903. The estimated changes in noise levels between SEIS Alternative 6 and the Revised Proposal would be 0.3 A-weighted decibels (dBA), which is imperceptible to the human ear. This change in modeled noise levels does not represent a change to the analysis in the SEIS.

### **3.0.3 Mitigation Measures**

---

No new significant adverse impacts on the natural environment would occur from the Revised Proposal and no additional mitigation measures are recommended. The mitigation measures identified below include those measures that have been updated for the Revised Proposal from those listed in the Final SEIS. See **Appendix F** for a complete list of the mitigation measures under the Revised Proposal. See the Introduction to **Chapter 3** for a description of the different categories of mitigation (e.g., proposed, required, other possible).

#### **Earth**

##### **Required Mitigation Measures**

- Infiltration facility setbacks from steep slopes would comply with requirements outlined in the 2019 Ecology Manual. Specifically, the 2019 Ecology Manual requires that infiltration ponds be set back from the top of a slope of 15% or steeper at a distance equal to or greater than the height of the slope. The 2019 Ecology Manual allows for lesser or greater setbacks where a comprehensive site assessment concludes that the alternate setback is justified based on the site conditions. Slopes in excess of 15% exist on the ~~adjacent 25-acre commercial property and on the municipal/community recreation center site.~~ Siting of infiltration facilities in this area would consider the slope setback requirements of the 2019 Ecology Manual.

#### **Water Quantity & Quality**

##### **Proposed Mitigation Measures (Included in the Project)**

###### Approved Bullfrog Flats Conditions of Approval (Included in the Project)

- Sufficient water rights are available from New Suncadia to supply water for proposed development of the 47° North site. ~~and the adjacent 25-acre property.~~ New Suncadia and Ecology signed an agreement in December 2015 regarding how they would use their water rights and their mitigation obligations, including putting water rights into Ecology's Trust Water Rights Program and transferring water rights to the City of Cle Elum. The transfer of water rights to the City is pending as of this writing.

## **Plants, Animals & Wetlands**

### **Proposed Mitigation Measures (Included in the Project)**

#### Approved Bullfrog Flats Conditions of Approval (Included in the Project)

- With respect to overall fish and wildlife habitat, the project would include and be bound by those provisions in the Cooperative Agreement between Trendwest (now New Suncadia), Washington State Department of Fish and Wildlife (WDFW), and the Yakama Nation that apply to potential cumulative impacts from the Suncadia resort and development of the 47° North and adjacent 25-acre property. Mitigation actions by others could include the City of Cle Elum enforcing use and access restrictions in designated areas, especially within the Cle Elum River open space, to minimize disturbance to fish and wildlife during mating and breeding seasons.

## **Air Quality/GHG**

### **Proposed Mitigation Measures (Included in the Project)**

- Single family and some of the multi-family residences under ~~SEIS Alternative 6~~ the Revised Proposal would consist of manufactured housing, which research has shown can result in reduced construction-related GHG emissions compared with stick-built houses.