

# 1. Summary

## 1.1 The Proposed Action

Northland Resources, LLC, doing business in Cle Elum, Washington as Sapphire Skies, proposes residential development of 330 acres within the City's Urban Growth Area, and 28 acres already within the City limits (358 acres, total). Depending on the alternative selected for implementation, a small amount of neighborhood commercial development (20,000 to 40,000 square feet) is proposed to provide services to residents within the project and visitors. The purpose and objectives of the proposal are described in detail in Draft EIS Section 2.2.

The proposal includes an application for annexation to the City of Cle Elum, and City action to adopt a Comprehensive Plan land use designation and zoning for Planned Mixed-Use Development (contingent upon annexation). Details regarding improvements within the development that would be owned and maintained by the City (such as streets, parks, and utilities) versus ownership and maintenance responsibility to be retained by the Homeowners' Association will be defined in a Development Agreement to be negotiated between the City and the project proponent. The Development Agreement will also define the project's proportionate-share responsibility for capital and operating expenses for general City government, roadway and intersection improvements, public services and utilities.

A mix of single-family detached homes and attached dwelling units is proposed (875 to 985 dwelling units, total) for permanent residents and second homes. Some of the detached and attached units available as second homes may be sold in "fractional" ownership interests and may be rented for use by seasonal visitors. Approximately 150 to 163 acres (40 percent to 46 percent of the project site) will be preserved in permanent open space for recreational use, including interconnecting trails with ties to the Coal Mines Trail and existing City streets for pedestrian and bicycle use. Proposed trails will provide connections to and from the downtown core to planned public amenities within the development. Trails and open space within the project are intended for City-wide public use. The level of proposed improvements to parks, open space and trails varies with the conceptual land use alternatives evaluated in this EIS. These are described in Draft EIS Section 2.6.

## 1.2 SEPA Procedures and Public Involvement

The City of Cle Elum received the application for Rezone and Development Agreement for the City Heights Planned Mixed-Use Development on June 11, 2009. On June 18, 2009, the City issued a Notice of Application, Determination of Significance, and Request for Comments on the EIS to be prepared for the proposed project. The notice was mailed to all property owners within 300 feet of the project, to Federal, State and local agencies, and to the Yakama Nation. General public notice was also advertised in the *Northern Kittitas County Tribune*, and posted on the City's website. The Notice of Application advised interested parties of where they could review the application and supporting documents. The Determination of Significance identified the need for an Environmental Impact Statement (EIS) to be prepared to describe and evaluate the potential adverse impacts of the proposed development. The proposed scope of the EIS was included in the Notice of Application, Determination of Significance, and Request for Comments on the Scope of the EIS. A 30-day public comment period was indicated in the Scoping notice, with comments due July 17, 2009.

The City conducted an expanded Scoping process in accordance with WAC 197-11-410. An open house public meeting was held on July 8, 2009 in the Walter Strom Middle School, during which the public was encouraged to help the City determine the potential impacts and alternatives that should be analyzed in the EIS. In addition, the City held 10 meetings with police and fire department representatives, the school district, public utility providers, and City service providers. Following the close of the EIS Scoping period on July 17, 2009, the City prepared a *Scoping Summary* document that described in detail the analysis required for each element of the environment.

During the Draft EIS preparation period, the City and EIS team maintained communications with public service representatives to invite their review, comment, and input to the description of potential impacts and mitigation measures, and to the fiscal analysis being performed.

Issuance of this Draft Environmental Impact Statement in April 2010 initiates a 45-day public comment period during which Tribes and agencies with jurisdiction, and interested individuals are invited to review and comment on the proposed action, alternatives, and analysis of potential environmental effects. Draft EIS Chapter 5 contains the Distribution List, identifying recipients of the document (in electronic form), and/or recipients of a Notice of Availability of the Draft EIS. The Draft EIS comment period will close in early June 2010 (see the *Fact Sheet* for specific dates).

The City and applicant will hold an open house public meeting during the Draft EIS comment period in May 2010. Parties on the Distribution List will receive notification of the date, time and location of the open house. Comment forms will be available at the meeting, and/or letters of comment and e-mail communications will be accepted by the City of Cle Elum Community Development Department (see the *Fact Sheet* for information regarding how to submit comments.)

Following the close of the Draft EIS comment period, the City and EIS team will review and respond to all comments received. Comments and responses will be published in the Final EIS, to be distributed to everyone on the Draft EIS Distribution List (Chapter 5), as well as anyone in addition who commented on the Draft EIS. The Draft and Final EIS, as companion documents, will be provided to the City of Cle Elum Planning Commission and City Council for their use (along with other information about the proposal) during the decision making process for the City Heights Planned Mixed-Use development.

Draft EIS Section 2.5 describes the Planned Mixed-Use Development review and approval process. There will be additional public meetings and public comment opportunities during Planning Commission and City Council sessions while this process is conducted. Notice of these public meetings will be published in the *Northern Kittitas County Tribune*.

### **1.3 Conceptual Land Use Alternatives**

Five conceptual land use alternatives are evaluated in this Environmental Impact Statement (EIS): four build alternatives and No Action. These development concepts are illustrated and described in more detail in Draft EIS Chapter 2. There are two development scenarios within the City of Cle Elum that would be consistent with the applicant's request for annexation, rezone, and urban development within the City's Urban Growth Area. If for any reason the annexation action does not occur, the EIS also evaluates two development scenarios within unincorporated Kittitas County. Each of the four development alternatives has a somewhat different allocation of uses in order to evaluate a range in possible development density, services, and amenities. The actual land use plan to be selected for development may include components of the different alternatives evaluated, within this range.

## **Alternative 1: The Applicant's Preferred Alternative**

Key features of the applicant's Preferred Alternative for development of the City Heights project include:

- Approximately 985 dwelling units of which approximately 70 percent would be single-family detached homes and 30 percent would be single-family attached units.
- Approximately 20,000 square feet (sf) of neighborhood commercial development in two 10,000 sf locations on the site. For the purpose of the *Fiscal Analysis*, it was assumed that approximately 10,000 sf of neighborhood commercial use would be convenience retail, and approximately 10,000 sf would be professional office use.
- Approximately 155 acres of parks, open space, and public amenities, walking paths, hiking trails, and multi-use path/bike access.
- On-site provisions for public utilities, including water supply, wastewater collection, stormwater management facilities, electrical power, natural gas and communications.

The total estimated population of at full build-out of Alternative 1 would be approximately 2,207 persons if all units were permanently occupied. The project proponent estimates that 65 percent (approximately 640 d.u.) would be permanently occupied and 35 percent would be considered seasonal or second homes with peak occupancy anticipated during summer (Memorial Day through Labor Day) and during winter breaks (for any alternative). However, for the purpose of environmental review and impact analysis, it is assumed that 90 percent of all dwelling units in any conceptual land use alternative would be permanently occupied, and 10 percent would be seasonal or second homes.<sup>1</sup> At 90 percent occupancy, the Alternative 1 resident population would be approximately 1,987 persons, and the student population would be approximately 228 (see Draft EIS Section 3.17.5 for additional information regarding student population projections by grade level).

Four points of primary access are proposed to serve Alternative 1. The west access from SR 903 is proposed across property owned by Cle Elum Pines West, LLC and Teanaway Ridge, LLC, referred to in the EIS as the "Deneen property." Existing streets and roads that would serve the site include Stafford Avenue/Summit View Road, Montgomery Avenue, and Columbia Avenue (see additional information in Draft EIS Section 2.9.4 regarding the Transportation System proposal). The Deneen property access route would involve an elevated bridge crossing of Crystal Creek and the Coal Mines Trail (see Figure 2.9-1 in Draft EIS Chapter 2).

Development standards and mitigation requirements would be specified in a Development Agreement to be negotiated with the City. There would be one consistent set of Covenants, Conditions and Restrictions (CC&Rs) to be enforced by a Homeowner's Association.

## **Alternative 2: Reduced Residential Density**

The conceptual land use plan for the Reduced Residential Density Alternative includes the following principal features:

- Approximately 875 dwelling units of which approximately 60 percent would be single-family detached and 40 percent would be single-family attached units.

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<sup>1</sup> For the purpose of environmental review and impact analysis, the percentage of primary homes is higher (90 percent) than the project proponent's estimate described for each alternative in this section, due to the City's preference to anticipate the development of permanent-resident neighborhoods within City Heights.

- Approximately 40,000 square feet (sf) of neighborhood commercial development in two 20,000 sf locations on the site. For the purpose of the *Fiscal Analysis*, it was assumed that approximately 10,000 sf of convenience retail uses would be provided, and approximately 30,000 sf of professional office use.
- Approximately 161 acres of open space to be preserved.
- One multi-use path.
- On-site provisions public utilities: City water supply and wastewater collection, stormwater management facilities, electrical power and communications.

There would be limited or no public amenities in the Alternative 2 development concept due to reduced resources compared to Alternative 1. The total estimated population at full build-out if all units were permanently occupied would be approximately 1,943 persons. The project proponent estimates that approximately 50 percent of homes in this alternative (approximately 440 d.u.) would be permanently occupied, and 50 percent would be considered second homes (though for the purpose of impact analysis, it is assumed that the development would be 90 percent occupied by permanent residents and 10 percent occupied by seasonal residents). At 90 percent occupancy, the Alternative 2 resident population would be approximately 1,749 persons, and the student population would be approximately 199.

Primary access to serve Alternative 2 would be provided from Alliance Road (to the west end of the development from SR 903), Stafford Avenue/Summit View Road, Sixth Street, and Columbia Avenue. The Alliance Road route would be constructed to the standards of a Collector Road (described in Draft EIS Section 2.9.4.3), and would require widening and improving an existing at-grade crossing of the Coal Mines Trail and an overcrossing of Crystal Creek. Montgomery Avenue (east end) would be used for emergency vehicle access only under Alternative 2, with entrances at or near the power line easements. Development standards and mitigation requirements would be specified in a Development Agreement to be negotiated with the City. Similar to Alternative 1, there would be one consistent set of Covenants, Conditions and Restrictions (CC&Rs) to be enforced by a Homeowner's Association.

### **Alternative 3A: No Annexation, Development within the County Under Single Ownership**

The conceptual land use plan for Alternative 3A would be essentially the same as Alternative 2, with approximately 875 dwelling units (d.u.) based on the 4 to 5 dwelling units per acre criteria in the Kittitas County Planned Unit Development (PUD) provisions. As with Alternative 2, Alternative 3A assumes approximately 60 percent single-family detached and 40 percent single-family attached units, and approximately 40,000 square feet (sf) of neighborhood commercial development in two 20,000 sf locations on the site. All open space (approximately 161 acres) would be unimproved in Alternative 3A, with no public amenities. There would be on-site provisions for public utilities (e.g., water supply, wastewater collection, stormwater management facilities, electrical power and communications); however, the City may or may not choose to provide City water and sewer outside the City limits to serve the project under this alternative. Therefore, some on-site utilities may be privately-owned and operated under this alternative. See additional information regarding water and sewer service options in Draft EIS Sections 2.9.2 and 2.9.3, below.

The total estimated population of the full build-out condition of Alternative 3A would be approximately 1,943 if all units were fully occupied. At 90 percent occupancy, the resident population would be approximately 1,749, and the student population would be approximately 199. The project proponent's estimate of permanent and seasonal occupancy with Alternative 3A is 50 / 50, although for the purpose of the impact analysis, it is assumed that 90 percent of the dwelling units would be permanently occupied and 10 percent would be seasonal or second homes.

As with Alternative 2, primary access to Alternative 3A would be provided from Alliance Road (to the west end of the development from SR 903), Stafford Avenue/Summit View Road, Sixth Street, and Columbia Avenue. The Alliance Road route would be constructed to the standards of a Collector Road, and would require widening and improvements to the existing at-grade crossing of the Coal Mines Trail and the overcrossing of Crystal Creek. Montgomery Avenue (east end) would be used for emergency vehicle access only with Alternative 3A, with entrances at or near the power line easements. Development would be regulated by Kittitas County land use policies and development regulations. Conditions of approval and mitigation requirements would be specified through the County's PUD (or similar) procedures. Given that Alternative 3A would also be developed under single ownership (like Alternative 1 or Alternative 2), there would be one consistent set of Covenants, Conditions and Restrictions (CC&Rs) to be enforced by a Homeowner's Association.

### **Alternative 3B: No Annexation, Development within the County Under Multiple Ownerships**

Under Alternative 3B, the property would be sold and developed in up to 17 individual parcels. For the acreage located within the UGA, there would be a possible rezone prior to sale to facilitate higher residential density than under existing County zoning. Alternatively, some or most parcels within the UGA would likely be developed under Kittitas County Planned Unit Development (PUD) regulations or Performance-Based Cluster Plat criteria. For the acreage already within the Cle Elum City limits, it would be developed in accordance with City zoning and development standards. It is estimated that the residential density under Alternative 3B would be approximately 500 lots, and that all homes to be constructed on the site would be single-family detached. This alternative would not meet the objectives of the proposal or the urban residential density standards of the Washington State Growth Management Act.

Development would likely occur in a discontinuous pattern over a longer period of time if Alternative 3B were selected for implementation (although there is no time-certain for phased implementation of any of the conceptual land use alternatives). Separate Covenants, Conditions and Restrictions (CC&Rs) might be developed for each parcel or group of parcels; however, it is possible that there would be no CC&Rs for some or any of parcels. The rezone of Tax Parcels 19165 or 493935 proposed under Alternative 1 or Alternative 2 would not be anticipated with Alternative 3B.

Little or no open space would be provided with development of multiple parcels under multiple ownerships. There would be no trail system or public amenities, and no commercial development.

The total estimated population with Alternative 3B would be approximately 1,150 at full build-out if all units were permanently occupied. The project proponent's estimate of permanent and seasonal occupancy with Alternative 3B is 50/50, although for the purpose of the impact analysis, it is assumed that 90 percent of the dwelling units would be permanently occupied, and 10 percent would be second homes. At 90 percent occupancy, the total estimated resident population would be approximately 1,035 persons, and the total student population would be approximately 121.

There would be no assurance that a coordinated road system would be built to serve the site under Alternative 3B. Road access or easements would be required to serve each parcel. Utilities would likely consist of on-site wells and on-site sewage disposal systems. Water would be provided through independent Group A community water systems with new water rights, or by individual water right permit-exempt wells. There would be no coordinated stormwater management system with Alternative 3B.

#### **Alternative 4: No Action**

If the City Heights Planned Mixed-Use Development did not proceed, there would be no alteration to the site at this time. Northland Resources, L.L.C. would have the discretion to decide whether to maintain ownership of the property, pursue some other use, or delay and reapply for development at some future time. The property could be sold to others for development. Based on the fact that the site is within a designated Urban Growth Area, it is presumed that it would undergo urban development sometime within the current City/County 20-year planning period (2005–2025). However, for the purpose of this analysis, it is assumed that under Alternative 4, there would be no change to the existing conditions of the property.

### **1.4 Significant Impacts and Mitigation Measures**

The full text of the Affected Environment, Potential Impacts, and Mitigation Measures for the proposed action and conceptual land use alternatives is presented in Draft EIS Chapter 3. A summary matrix of potential impacts and mitigation measures is provided in Table 1.4-1, below. In some cases, these descriptions are considerably abbreviated from the full discussion in Draft EIS Chapter 3, and lack explanations of terminology and analytical methods. Summary statements of project impacts in the table also appear in the absence of the context of existing environmental conditions (the Affected Environment discussions in Draft EIS Chapter 3). For these reasons, readers are encouraged to review the more comprehensive discussion of issues of interest in the Draft EIS to develop the most accurate understanding of impacts associated with the proposed action. A comparison of the potential impacts of the alternatives is provided in Draft EIS Chapter 2, Table 2.10-1.

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>EARTH</b>	
<p>Site development would result in permanent modifications to topography as a result of grading to construct roads, utilities and building sites. Earthwork in the range of approximately 1,538,000 to 2,106,800 cubic yards would be required, depending on the alternative selected for implementation. It is projected that approximately 90% of this material can be redistributed on-site, resulting in minimal requirements for export of unsuitable materials or import of select fill.</p>	<ul style="list-style-type: none"> <li>. The proposal includes clustering development on existing prominent terraces to the maximum extent practicable in order to minimize development in steeper areas that would require more grading.</li> <li>. The open space proposal under Alternative 1, 2, or 3A would preserve unique physical features of the site in permanent open space: the Slick Rock feature along the south boundary and approximately one-half of the Red Rock waste rock pile – the area with the highest elevations and steepest gradient.</li> <li>. No development is proposed in the lower portion of Balmers Canyon where unconsolidated soils resulted in a recent landslide.</li> <li>. Construction slopes will be required to conform to Washington Industrial Safety and Health Act (WISHA) requirements for excavation and trenching.</li> <li>. Site grading under Alternative 1 or 2 would be required to comply with Title 15, Chapter 15.30 of the Cle Elum Municipal Code, including obtaining a grading permit.</li> <li>. Site grading under Alternative 3A or 3B would be required to comply with the Kittitas County Code, which specifies compliance with the International Building Code (IBC) and standard construction and geotechnical engineering practices. The County does not currently require a grading permit.</li> <li>. If site development is proposed closer to steep slopes than indicated in applicable regulations, and/or in areas where slopes greater than 40% would be modified, specific additional geotechnical evaluation would be required prior to permit approval.</li> <li>. Coordinated planning could minimize impacts to topography by consolidating the location of access roads, borrow areas, and staging areas during construction, and by consolidating the location of roadways, utility corridors, and stormwater management facilities in the developed-condition of the site.</li> <li>. If Alternative 1 or 2 is selected, haul routes and plans will be submitted to the City of Cle Elum Public Works Director for approval prior to the start of construction activity.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>If mechanical means of excavating bedrock on the site prove to be ineffective, minor blasting techniques may be required to remove obstructions in areas planned for the construction of roads, utilities and home sites. The blasting method would generally consist of drilling shallow holes to the desired depth, loading holes with small amounts of explosives, connecting holes in a designed sequence, covering the area to prevent dispersion, and detonating explosives to fracture rock in localized areas for excavation. Impacts to subjacent/lateral support on adjacent properties would not be anticipated because development activities would be conducted in accordance with applicable regulations, geotechnical standards, and prudent construction practices.</p>	<ul style="list-style-type: none"> <li>. Blasting (if any) shall be performed consistent with the requirements of the Washington Department of Labor and Industries, Washington Administrative Code (WAC 296-52), and other applicable regulations.</li> <li>. Consistent with the conditions of the property owner's easement to Puget Sound Energy, no blasting shall be done within 300 feet of the electrical transmission corridors through the site without PSE's written consent, and PSE shall not unreasonably withhold this consent.</li> <li>. A detailed blast specification would be prepared, as needed, by a Project Engineer to integrate the findings and recommendations of the <i>Geotechnical Report</i> and the <i>Coal Mine Hazards Risk Assessment</i>, and to outline blasting objectives and activities.</li> <li>. The Blasting Contractor would prepare a site-specific blast plan, as needed, to identify all details and procedures for on-site blasting.</li> <li>. Blast monitoring shall be performed as necessary according to WAC 296-52 to record vibration and sound levels.</li> <li>. Blast mats would be used as necessary to prevent the occurrence of flyrock.</li> <li>. Soil and rock slopes created by blasting (if any) shall be modified and maintained according to the recommendations of a qualified Geotechnical Engineer.</li> </ul>
<p>Certain on-site geologic units will be suitable for producing structural fill material, such as glacial deposits consisting of sands and gravels. Use of this material will minimize off-site trips to import structural fill. Soils with a high percentage of fines would be moisture-sensitive making them difficult to work with in wet weather.</p>	<ul style="list-style-type: none"> <li>. Soils with a high percentage of fines (such as bedrock residuum and coal waste rock) can be used for structural fill if earthwork is performed during dry weather conditions and proper methods of compaction are employed. Alternatively, these soils can be used as general fill in areas not sensitive to settlement (such as areas to be landscaped).</li> <li>. If excess unsuitable material is generated during site grading, it may be exported from the site.</li> </ul>
<p>Total organic carbon (TOC) content in the Red Rock area waste rock is less than 10%. Laboratory test results were below all environmental screening levels for other chemical constituents.</p>	<ul style="list-style-type: none"> <li>. Based on the results of laboratory analysis, the Red Rock area waste rock can be left in-place and, subject to geotechnical suitability, could be used as fill elsewhere on the site or off-site.</li> </ul>
<p>Development within areas containing past uncontrolled fills would have no impact on development other than to require an increased level of effort if unsuitable subgrade material is modified or removed/replaced.</p>	<ul style="list-style-type: none"> <li>. If site development that requires subgrade modification is proposed within areas containing past uncontrolled fills, additional geotechnical investigation of the subsurface condition of these areas may be warranted.</li> </ul>
<p>Seismic events could impact the integrity of structures, roadways, and utilities within the development, and would have the potential to destabilize slopes; however, risk of surficial ground rupture and liquefaction is considered low due to the distance to known active faults and long recurrence intervals for earthquakes on these faults.</p>	<ul style="list-style-type: none"> <li>. Proposed site development would comply with applicable seismic design code.</li> <li>. Alternative 1 or 2 would be required to comply with the Cle Elum Municipal Code and structural design provisions of the International Building Code.</li> <li>. Alternative 3A or 3B would be required to comply with the Kittitas County-adopted version of the Uniform Building Code (KCC 17A.06.010).</li> </ul>



Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>Ground-disturbing activities during construction would increase erosion potential on the site. If stripped of vegetation, the erosion hazard of most natural surface soils on the property is considered moderate to severe, particularly on most steep slopes along the south site boundary and in drainage courses.</p>	<ul style="list-style-type: none"> <li>. Best Management Practices required by Ecology’s 2004 <i>Stormwater Management Manual for Eastern Washington</i> (SWMMEW) will be implemented to control erosion potential during earthwork activities on the site.</li> </ul>
<p>Excavation dewatering may be required where shallow groundwater is present, causing water to be temporarily discharged to the ground surface. If improperly managed, construction dewatering activities could result in erosion.</p>	<ul style="list-style-type: none"> <li>. Conditions of erosion from the site during construction would be mitigated by compliance with applicable State and local regulations, including a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General permit issued by Ecology.</li> <li>. Elements of the NPDES permit would include a site-specific Temporary Erosion and Sedimentation Control Plan (TESCP), and installation of stormwater management measures in compliance with Ecology’s 2004 SWMMEW.</li> </ul>
<p>Road and utility crossings of drainage courses in the developed condition of the site could be at risk of impact due to debris flows in these channels. Stream A (Balmers Canyon) and Stream B (Deer Creek) were observed to have the greatest potential for debris flows.</p>	<ul style="list-style-type: none"> <li>. Stabilization of site soils and construction of a coordinated stormwater management system would eliminate areas where erosion presently occurs on the property. The proposal includes regrading and stabilization measures in the Stream C and Stream D drainage courses.</li> <li>. Under Alternative 1 or 2, the Development Agreement to be negotiated between the City of Cle Elum and the project proponent could specify larger setbacks from drainage courses through the site.</li> </ul>
<p>Uncollapsed areas of underground mines would have the potential to affect construction activities if earth stability is compromised. Construction activities near abandoned mine openings and in the vicinity of shallow mine workings could be impacted by voids. Proposed Development Area E is underlain by mine workings that range from exposed at the ground surface to 150 deep. Some portions of Development Area E are identified as not suitable for development at this time.</p>	<ul style="list-style-type: none"> <li>. The <i>Coal Mine Hazards Risk Assessment</i> identifies six categories of Coal Mine Hazard Areas (CMHAs) on the City Heights site, formulates development criteria appropriate for each level of hazard, and describes additional potential mitigation for site development in areas with these characteristics. Mitigation measures include additional proof-drilling in some areas to confirm the absence of remnant voids, or drilling and grouting to fill identified voids that would otherwise pose a risk of settlement in the developed-condition of the project. The findings and recommendations of the <i>Coal Mine Hazards Risk Assessment</i> are described in detail in Draft EIS Section 3.1.4. The proposal includes complying with these recommendations.</li> <li>. If additional geotechnical investigations to be conducted during the design phase discover abandoned mine hazards not previously identified, specific geotechnical investigation of these features may be warranted.</li> <li>. The City of Cle Elum has no adopted regulations regarding development above abandoned coal mine areas that would apply to Alternative 1 or 2. King County guidelines are included for reference in Appendix A to the <i>Coal Mine Hazards Risk Assessment</i>.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
	<ul style="list-style-type: none"> <li>. Site-specific investigation performed to determine the development potential of each area of the site would satisfy the requirements of Kittitas County for reviewing development applications under Alternative 3A or 3B if either of these alternatives is selected for implementation.</li> <li>. Qualified Geotechnical/Civil Engineering consultant services could be retained to develop and implement closure designs for abandoned mine features in Sections 25, 26 and 27 of Township 20 N, Range 15 E, WM.</li> </ul>
<p>Coal waste rock areas with a significant percentage of coal content would provide a weak subgrade for pavements, utilities or structures. Coal waste rock occurs up to 20 feet deep in proposed Development Area A at the west end of the site. The <i>Coal Mine Hazards Risk Assessment</i> indicates that this area is not at risk of mine subsidence, but requires investigation, stability analysis, evaluation and design by a qualified Geotechnical/Civil Engineer before its development potential can be confirmed.</p>	<ul style="list-style-type: none"> <li>. Prior to submitting permit applications for proposed Development Area A, additional geotechnical investigations shall be performed to determine best construction practices and engineering solutions to strengthen soils or transmit structural loads to the underlying native soil.</li> </ul>
<p>Composite samples of coal washing waste rock in proposed Development Area A were submitted for laboratory analysis. Low concentrations of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) that slightly exceed the human health screening level of 1 mg/kg were found in the Area A coal waste pile. This concentration was below the screening level standard for risk of leaching into groundwater (2 mg/kg). Arsenic, barium, chromium and lead were detected in the Area A samples, but not at levels that present an environmental risk. Total Organic Carbon (TOC) content was evaluated as a means to estimate the coal content of the material, as materials with high coal content present potential risks for methane gas generation, spontaneous combustion, and/or settlement of soils as the material degrades. The Area A TOC content in composite samples was 45%. There is no evidence and there have been no reports that combustion has occurred in this material since it was deposited approximately 50 years ago.</p>	<ul style="list-style-type: none"> <li>. The open space proposal under Alternative 1, 2, or 3A includes park features along the east side of proposed Development Area A2. At such time as development is proposed in this area, it will be important to confirm that soils in public park or public amenity areas do not contain levels of coal waste with unacceptable levels of cPAHs for direct human contact, or for these areas to be cleaned up for park use. Clean up may involve excavation and removal of the material from the site in areas where direct human contact would be of concern, or capping in-place with coal-free soil and revegetating these areas.</li> <li>. The applicant proposes to comply with the recommendations of the Geotechnical consultant with regard to handling, disposal, compaction, and/or capping (as necessary) coal waste deposits on the site.</li> <li>. Capping would be consistent with both the Washington State Model Toxics Control Act (MTCA) remediation requirements and coal mine waste reclamation practices. Alternatively, this material may be excavated and disposed off-site as a non-hazardous waste at a Subtitle D landfill.</li> <li>. Strategies to minimize the potential for spontaneous combustion of the coal washing waste rock will focus on minimizing airflow, erosion, and infiltration of precipitation. Typical measures include compaction, grading slopes to minimize erosion potential, and/or capping with coal-free soil and installing plantings to stabilize these soils.</li> <li>. If structures are proposed in areas where coal waste rock remains on the site, engineered controls will be installed to prevent potential methane gas accumulation.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b>Potential Impacts</b>	<b>Mitigation Measures</b>
	<ul style="list-style-type: none"> <li>. The 45% TOC content of the coal washing waste rock in proposed Development Area A further reinforces the geotechnical recommendation that measures should be taken during the construction of roads, utilities and structures to minimize or eliminate the risk of settlement.</li> </ul>
<p>Chemical concentrations in the Red Rock area coal slag (distinguished from the Red Rock area waste rock discussed above) were below all environmental screening levels; therefore, this material does not pose any identifiable environmental risks. The TOC content was 27%, indicating a potential for settlement in this material due to degradation of the organic (coal) content over time.</p>	<ul style="list-style-type: none"> <li>. Development in the Red Rock area coal slag will either be avoided, or the applicant will comply with the recommendations of the Geotechnical consultant to implement measures that would minimize or avoid settlement in areas where roads, utilities or structures are proposed.</li> </ul>
<p><b>Significant Unavoidable Adverse Impacts:</b> Site development would result in some permanent modifications to topography to achieve design grades for the construction of roads, utilities, and home sites. It is not expected that these modifications would constitute significant adverse impacts. To the extent that site development complies with applicable regulations and accepted engineering design standards, the recommendations of the <i>Coal Mine Hazards Risk Assessment</i>, and prudent construction practices, no significant unavoidable adverse impacts to geology, soils, erosion, abandoned mine features, or potentially hazardous substances would be expected to occur.</p>	
<p><b>AIR QUALITY</b></p>	
<p>During construction there would be localized increases in suspended particulate matter (i.e., dust) as a result of excavation and grading.</p>	<ul style="list-style-type: none"> <li>. Construction contractors would be required to comply with Ecology regulations requiring that reasonable precautions be taken to minimize fugitive dust emissions that could adversely affect off-site locations.</li> </ul>
<p>Construction activities would generate land-clearing debris.</p>	<ul style="list-style-type: none"> <li>. WAC 175-425 would prohibit burning land-clearing debris on the site. Therefore, the proposal includes chipping this material, or having it removed from the site for composting at an off-site facility.</li> </ul>
<p>There would be emissions to the air from construction-related vehicles and equipment operating on the site, though there is little or no danger that such emissions would result in pollutant concentrations that would represent a health risk.</p>	<ul style="list-style-type: none"> <li>. A condition could be imposed in construction contracts to require measures to minimize on-site diesel engine idling and to locate combustion-fueled equipment as far as possible from newly-built on-site residences or nearby off-site residences.</li> </ul>
<p>There would be odors associated with some phases of construction (such as paving activities); however, these would be short-term and unlikely to significantly affect the nearest residents.</p>	<ul style="list-style-type: none"> <li>. Construction contractors would be responsible for complying with Ecology regulations that require use of recognized good practice and procedures to reduce odors to a reasonable minimum if such odors were to interfere with an owner's use and enjoyment of their property (WAC 173-400-040).</li> </ul>
<p>Residential wood burning for space heating or aesthetic effects would produce carbon monoxide and fine particulate matter (PM<sub>10</sub> and PM<sub>25</sub>). The only potential for this impact to occur would be with Alternative 3B.</p>	<ul style="list-style-type: none"> <li>. The proposal includes prohibiting installation or use of residential wood-burning appliances under Alternative 1, 2, or 3A, to be enforced by the Homeowners' Association through the Covenants, Conditions &amp; Restrictions (CC&amp;Rs) of the development. Natural gas appliances would be installed instead. The City will further enforce these restrictions through plat conditions and/or building permit conditions.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b>Potential Impacts</b>	<b>Mitigation Measures</b>
A review based on U.S. Environmental Protection Agency (EPA) guidance regarding potential air quality impacts from transportation sources indicated that project traffic conditions at full build-out and occupancy in 2022 would be unlikely to result in significant air quality impacts for any of the conceptual land use alternatives.	. No mitigation is required for emissions to the air from project traffic in the developed-condition of the site.
Some types of neighborhood commercial use could be a potential source of odor in the developed-condition of the site (such as restaurants or a dry cleaner).	. On-site commercial activities would be subject to applicable ambient air quality standards (WAC 173-470 through 173-475) and air quality nuisance rules (WAC 173-400-040[4]) to minimize odor that could be annoying to neighbors.
A greenhouse gas (GHG) emissions analysis was prepared for the City Heights conceptual land use alternatives based on embodied emissions in building materials and processes, post-development energy usage, and transport sources. There are as yet no means in Washington State to gauge whether these emissions would constitute an impact in terms of their potential effect on climate.	. There are as yet no specific GHG emission reduction requirements or targets in Washington State that apply to land use projects. Guidance in this area at the time the GHG emission analysis was performed indicated an intent to compile data for later discussions of this issue at the State level.
<b>Significant Unavoidable Adverse Impacts:</b> With implementation of controls required by State and Federal regulations, and Best Management Practices to be specified in construction contracts to minimize prolonged exposure of nearby people to construction-related emissions, no significant unavoidable adverse impacts to air quality would be anticipated during site development. The proposal to prohibit residential wood burning under all conceptual land use plans except Alternative 3B would minimize emissions to the air in the developed-condition of the project. No other emissions to the air would rise to a level of significant unavoidable adverse impact.	
<b>WATER RESOURCES</b>	
Construction activities have the potential to impact groundwater resources through accidental releases of pollutants from construction equipment, and/or infiltration of contaminated stormwater (if any).	. The proposal includes addressing the potential for construction-related impacts to groundwater quality or quantity through Best Management Practices (BMPs) and stormwater management measures to be implemented in accordance with Ecology’s 2004 <i>Stormwater Management Manual for Eastern Washington</i> (SWMMEW). . A National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit will be required for the project, to be issued and administered by the Department of Ecology. The proposal includes complying with the conditions of this permit.
Short-term dewatering of saturated, unconsolidated soils during construction (such as during trenching and installation of utilities) would also have the potential to impact groundwater quality.	. Stormwater pre-treatment BMPs such as gravel filter berms and sediment ponds could be used to reduce the potential for construction-related impacts to groundwater quality. . Construction dewatering could be minimized by limiting these activities to drier months of the year when groundwater levels would be lower or not present.
Under any conceptual land use alternative, the 28 acres of the City Heights site presently within the City limits would be provided with water by the City of Cle Elum from its existing water supply. The unallocated portion of the City’s existing water supply is adequate to serve this area without adverse impact.	. No mitigation would be required for the City to provide water supply to the area of the site already within the City limits. . The project would be required to construct an on-site water distribution system and to pay hook-up fees. . Individual homeowners would be required to pay monthly water service fees.

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>Under the City’s water policy, the project proponent may either contribute water to the City in sufficient quantity to serve the number of equivalent residential units (ERUs) in the 330 acres to be annexed, or may purchase water from the City’s excess supply at a rate of \$3,500 per ERU. Northland Resources, LLC is in the process of seeking approvals from Ecology to procure and transfer new water rights (from a pre-1905 water right) to the City sufficient to meet the expected annual demand for up to 875 ERUs within the development. Northland may purchase water from the City to serve up to 250 ERUs.</p>	<ul style="list-style-type: none"> <li>. The City Heights proposal includes two options for a “water-budget-neutral” approach to the provision of water supply to Alternative 1, 2, or 3A of the development. These are described in Draft EIS Section 3.3.</li> <li>. The terms of the water supply agreement to serve City Heights under Alternative 1 or 2 will be negotiated in a Development Agreement between the City and the project proponent.</li> </ul>
<p>The new water right would likely specify the City’s existing surface water intake on the Yakima River as the point of diversion, although use of one or more groundwater supply wells to be operated by the City may also be considered. New groundwater wells may be drilled on-site or nearby to be used as the source of water.</p>	<ul style="list-style-type: none"> <li>. The City’s Yakima River intake structure and raw water pumping system was replaced and upgraded in 2004. These existing facilities have the capacity to pump the additional water supply to serve City Heights (if required).</li> <li>. It may be possible to increase the size of these pumps in the future if additional growth generates a demand for additional pumping capacity at the Yakima River intake.</li> <li>. New wells to serve City Heights would need to be approved by the Washington Department of Ecology. Ecology will consider impacts to other potentially affected water users in the area as part of their approval process.</li> </ul>
<p>The water distribution system to be built for the City Heights development would be tied-in to the existing City of Cle Elum water treatment and distribution system. If groundwater wells are utilized, on-site treatment would be utilized instead of the City’s treatment plant.</p>	<ul style="list-style-type: none"> <li>. Based on current water usage and projected water usage for the City Heights project, the City’s existing treatment facility would be capable of serving the water needs of the City Heights project through development of the first 300 to 400 ERUs. In the event that a water treatment capacity trigger point is reached prior to that, it is the responsibility of the City of Cle Elum to construct an expansion to the water treatment plant.</li> </ul>
<p>The water supply requirements of the City Heights conceptual land use alternatives would range from a total average daily demand of approximately 279,704 gallons per day (gpd) with Alternative 1, to approximately 175,000 gpd with Alternative 3B. Water supply requirements are discussed in more detail in Draft EIS Section 3.18.1 <i>Water Service</i>.</p>	<ul style="list-style-type: none"> <li>. As a water conservation measure, the proposal under Alternative 1 or 2 includes the use of low-flow faucets, toilets and similar fixtures.</li> <li>. Under any alternative, the developer could be encouraged to include in the CC&amp;Rs of the development a preference for landscaping with plants that would require minimal irrigation (i.e., xerophytic plantings).</li> </ul>
<p>If Alternative 3B is selected for implementation, it may rely on water right permit-exempt wells to provide water supply.</p>	<ul style="list-style-type: none"> <li>. Under Ecology’s temporary moratorium on new permit-exempt wells in Upper Kittitas County (Chapter 172-539A), use of these wells would require a plan for mitigating the consumptive use in order to remain “water-budget-neutral.”</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>If Alternative 3A or 3B is selected for implementation, on-site sewage disposal systems (OSDS) would have the potential to impact groundwater quality over the long-term depending on how well these systems were maintained.</p>	<ul style="list-style-type: none"> <li>. If OSDS are installed on the site under Kittitas County’s jurisdiction, the project would be required to comply with Kittitas County Code Chapter 13.04 and Washington State Administrative Code Chapter 246-272A regulations governing the design, construction, operation and maintenance of these systems.</li> <li>. Perpetual maintenance and management of OSDS would be required under the responsibility of a management system approved by Kittitas County.</li> </ul>
<p>Developed-condition stormwater runoff has the potential to affect groundwater quantity due to the introduction of impervious surfaces (structures, roads, parking areas and sidewalks). However, because the groundwater recharge rate through low-permeability bedrock underlying the City Heights site is expected to be low (i.e., most stormwater presently leaves the site in the form of surface water runoff), changes in recharge due to the addition of impervious surfaces is not expected to constitute a significant adverse impact.</p>	<ul style="list-style-type: none"> <li>. Ecology’s 2004 SWMMEW requires, to the maximum extent practicable, that stormwater runoff from the site be discharged in the same manner, at the same location, and at the same flow rate and volume as under the conditions that existed prior to development (Core Element #4). Additional engineering analysis to be performed during design of the on-site stormwater management system will determine whether shallow groundwater, a sensitive aquifer, or other concerns will affect design choices for the project.</li> </ul>
<p>Stormwater runoff from developed areas, if not treated prior to infiltration, may contain petroleum product residues, sediment, metals, pesticides, herbicides, or fertilizers that would have the potential to impact groundwater quality.</p>	<ul style="list-style-type: none"> <li>. Stormwater quality treatment facilities and source controls will be designed and constructed on the site in accordance with Ecology’s 2004 SWMMEW.</li> <li>. Ownership and maintenance responsibility for on-site stormwater management facilities will be determined through the Development Agreement to be negotiated between the City and the project proponent with Alternative 1 or 2, or through conditions of approval if the project is developed within Kittitas County (Alternative 3A or 3B).</li> </ul>
<p>The 330 acres of the City Heights site currently designated as a City of Cle Elum Urban Growth Area but within unincorporated Kittitas County is not within a designated critical aquifer recharge area under the County’s jurisdiction (KCC Chapter 17A.08).</p>	<ul style="list-style-type: none"> <li>. If Alternative 1 or 2 is selected, the City would conservatively assume that the 330 acres to be annexed are within an aquifer recharge area, subject to design standards in Cle Elum Municipal Code Title 18, Section 18.01.140 for the protection of these areas.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> Provided that stormwater Best Management Practices are implemented and properly maintained during construction and in the developed-condition of the project, no significant unavoidable adverse impacts to groundwater quantity or quality would be expected to occur. No significant unavoidable adverse impacts to groundwater quantity would be expected from the water supply proposal due to the “water-budget-neutral” mitigation proposal that would be approved by Ecology prior to authorization of the water rights transfer to serve the project.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>WETLANDS AND STREAMS</b>	
<p>Potential construction impacts to wetlands could include the operation of machinery in and around wetlands, compaction of soils within wetlands, erosion of soil and sediment deposition in wetlands if construction Best Management Practices (BMPs) were not used. Clearing in and around wetlands and their associated buffers could result in changes to the hydroperiod or hydrologic regime of wetlands if earthwork were to alter surface or subsurface migration of water to wetlands.</p>	<ul style="list-style-type: none"> <li>. Construction BMPs and stormwater management facilities to be installed during construction and in the developed-condition of the project, to be implemented in accordance with Ecology’s <i>Stormwater Management Manual for Eastern Washington</i> (SWMMEW), would minimize or avoid potential water quality and water quantity impacts to wetlands.</li> <li>. Contractors will be required to comply with all applicable local and State permit conditions to avoid inadvertent clearing or compaction within wetlands and their associated buffers.</li> <li>. Prior to the start of construction, delineated wetlands will be flagged and silt fencing will be installed to alert contractors to the “no disturbance” requirement for these areas.</li> </ul>
<p>Direct, permanent impacts (fill on the order of 2,000 to 6,000 sf total) to Wetlands B, C, and E would be likely with implementation of Alternative 1, 2, or 3A due to proposed road construction and road widening.</p>	<ul style="list-style-type: none"> <li>. The conceptual layout of roads was selected to avoid and preserve wetlands to the maximum extent practicable.</li> <li>. The applicant proposes that wetland fill would be the minimum necessary to construct proposed road crossings.</li> <li>. Compensatory mitigation will be quantified at the time permit applications are prepared, and will be regulated by local, State, and Federal agencies with jurisdiction. Provisions for buffer averaging may be used.</li> </ul>
<p>The developed-condition of the site also has the potential to impact wetland hydrology (depth and duration of inundation) if surface water runoff and/or shallow groundwater flow is altered by the introduction of impervious surfaces, depending on provisions made in the on-site stormwater management system. If wetland hydrology is altered, it could affect wetland vegetation and wetland functions and values.</p>	<ul style="list-style-type: none"> <li>. The proposal to comply with Ecology’s SWMMEW would take into account guidelines for the discharge of stormwater to existing jurisdictional wetlands (Core Element #4). These guidelines recommend avoidance of direct or conveyance system discharge to wetlands unless the wetland receives surface runoff from the existing site, in which case a surface hydrology source would be maintained.</li> <li>. If possible, only stormwater from landscape and roof areas should be discharged to wetlands.</li> <li>. Measures shall be implemented to assure that wetlands receive the same level of water quality protection in stormwater discharges as other waters of the State.</li> </ul>
<p>Potential indirect impacts to wetlands in the developed condition of the site may include human intrusion into wetlands (such as children at play), and possible stormwater discharge to wetlands. Additional noise and light sources in close proximity to wetlands could diminish their habitat value.</p>	<ul style="list-style-type: none"> <li>. Consideration could be given to installing fencing around wetlands to discourage intrusion.</li> <li>. Lights and noise-generating uses could be located away from wetlands to minimize habitat impacts associated with glare and sound.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>If on-site sewage disposal systems (OSDS) are used in Alternative 3A or 3B, there could be a potential for nutrient input to wetlands or streams over the long-term if OSDS fail and result in groundwater contamination and migration.</p>	<ul style="list-style-type: none"> <li>. OSDS in Alternative 3A or 3B would be required to comply with Kittitas County and Washington State Department of Health regulations for the proper design, construction, operation and maintenance of these systems to avoid leaking inadequately-treated wastewater into the groundwater system.</li> <li>. OSDS should be sited to avoid potential shallow groundwater flow toward wetlands or streams in the event of unanticipated septic system failure.</li> </ul>
<p>If groundwater wells are developed on the site, drawdown for the consumptive use of water could affect wetland hydrology.</p>	<ul style="list-style-type: none"> <li>. The impairment analysis performed to determine the potential effects of groundwater wells on other users in the basin also evaluates potential effects on shallow groundwater hydrology that sustains existing wetlands in the basin.</li> </ul>
<p>Potential construction impacts to streams could include the operation of machinery in and around stream channels, disturbance of gravels and stream bed materials, erosion of soil and sediment transport, or incidental discharge of machinery fluids into streams if construction BMPs were not used.</p>	<ul style="list-style-type: none"> <li>. The proposal includes installing and maintaining a stormwater management system on the site during construction and in the developed-condition of the project in compliance with Ecology's 2004 SWMMEW.</li> <li>. Construction contractors will be required to comply with all applicable permit conditions for the protection of streambeds, stream banks, and stream water quality.</li> </ul>
<p>If access to the west end of the City Heights site from SR 903 is developed through the Cle Elum Pines property, Alternative 1 could result in impacts to the Crystal Creek buffer as a large bridge span would be used for the crossing to avoid direct impacts to the channel.</p>	<ul style="list-style-type: none"> <li>. Cle Elum Municipal Code Sections 18.01.160 through 18.01.200 would regulate potential impacts to riparian corridors if Alternative 1 or 2 is selected for implementation.</li> <li>. Kittitas County Code Section 17A.07 would regulate riparian habitat if Alternative 3A or 3B is selected.</li> <li>. Either City or County Code would require revegetation with native species following construction disturbance in riparian areas.</li> </ul>
<p>Development under conceptual land use Alternative 1, 2, or 3A would result in impacts to Streams A, B, C, and D to construct proposed road crossings.</p>	<ul style="list-style-type: none"> <li>. In addition to applicable City or County Codes, the Washington Department of Fish &amp; Wildlife Hydraulic Code Rules (Chapter 220-110) would regulate construction activities that may impact the bed or banks of streams.</li> <li>. Culverts approved by WDFW would be required at stream crossings, and stream enhancement or restoration work would be required by conditions of permit approval.</li> </ul>
<p>Potential developed-condition impacts to streams could include an increased volume of surface water runoff, potential contaminants in stormwater runoff from paved surfaces used by vehicles, and reduced vegetative cover if there were no coordinated stormwater management system on the site.</p>	<ul style="list-style-type: none"> <li>. Stormwater quantity and quality would be controlled by temporary and permanent stormwater management systems to be installed on the site in accordance with Ecology's 2004 SWMMEW.</li> <li>. Any proposed alteration to vegetative cover adjacent to streambanks (i.e., riparian corridors) would be regulated by City or County Code (at a minimum), depending on the conceptual land use alternative selected for implementation.</li> </ul>



Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b>Potential Impacts</b>	<b>Mitigation Measures</b>
<p><b>Significant Unavoidable Adverse Impacts:</b> The proposal to limit wetland fill to the minimum necessary to construct road crossings would minimize the potential for direct impacts to wetlands as a result of site development. Compensatory mitigation will be required through applicable local, State and Federal regulations. With construction activity that may impact streams to be controlled through City or County Codes and WDFW Hydraulic Project Approval, and with the proposal to construct, operate, and maintain an on-site stormwater management system in compliance with all applicable State and local regulations, no significant unavoidable adverse impacts to wetlands or streams would be expected as a result of site development.</p>	
<p><b>WILDLIFE AND HABITATS</b></p>	
<p>The site does not contain habitats of local importance as defined in the Cle Elum Municipal Code (CEMC 18.01.210). The Washington Department of Natural Resources Natural Heritage Program database includes no recorded rare plants or high-quality ecosystems on the City Heights property. State and Federal data bases and mapping resources do not identify any listed species of concern or protected species presence on the site. Although elk commonly use the City Heights site, the Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species database does not include the City Heights site in an area designated as having regular concentrations of elk, overwintering habitat, or any other special designation as high-value elk habitat.</p>	<p>. No mitigation is required by regulation for designated, high-value habitats or protected species on the site, as none are known to occur on the City Heights property.</p>
<p>Stream D (Deer Creek) adjacent to Montgomery Road is identified by WDFW as having priority fish presence (rainbow trout observed in July 2001).</p>	<p>. Measures described above in the Wetlands and Streams section for the protection of streams and riparian corridors would also be protective of fish and fish habitat in Deer Creek and other water courses.</p>
<p>The construction phasing proposal includes clearing and grading approximately 25 to 125 acres of the site for development at any one time, which would result in transitional loss of habitat from the site over the 6- to 12-year projected development period. Most of the habitat to be removed is thinned pine forest that was cleared (by others) and impacted by logging activities. Clearing would remove the regrowth of forage, browse, and cover vegetation for numerous species of wildlife that presently utilize the property.</p>	<p>. It will not be possible to fully mitigate wildlife impacts under any conceptual land use alternative. The Urban Growth Area designation of the City Heights site indicates a policy decision that the priority use for this area is a residential neighborhood to support a human population.</p> <p>. The landscaping proposal and restoration plantings could be used to augment vegetation in open space areas to be retained, and in stream and wetland buffers in order to improve habitat that would be preserved on the site in these areas. The applicant proposes to use native vegetation to the extent practicable. This would partially compensate for the loss of wildlife habitat. Target species beneficial as food sources for wildlife are listed in Draft EIS Section 3.5.</p> <p>. The City (or County, depending on the alternative selected) will require preparation of a landscaping plan for review during the site development permitting process.</p> <p>. Invasive species to be avoided in landscaping are listed in Draft EIS Section 3.5.</p> <p>. The Kittitas County Weed Control Board may require a weed control plan for the site as it undergoes development.</p>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>A total of approximately 108 to 205 acres of the 358-acre site (depending on the conceptual land use alternative selected for implementation) would be cleared and developed. Wildlife displaced from this area would have to relocate, or may perish if adjacent habitats are at capacity. Adjacent habitat to the north includes more than 1,000,000 acres of commercial forest and wilderness area. Landscaping to be introduced in developed areas of the site would re-establish vegetative cover to a limited extent around homes, commercial areas and parks, and along roadways.</p>	<ul style="list-style-type: none"> <li>. Approximately 43% to 45% of the site would be retained in open space under Alternative 1, 2, or 3A.</li> <li>. Wildlife habitat that will remain in the east-west power line corridors, north-south stream corridors, and the proposed 20- to 80-ft wide natural buffer along the south boundary. These areas include shrub and grassed habitats, forested riparian areas adjacent to streams, and open pine forest in transitional areas between City Heights, existing developed areas to the south, and the vast contiguous forest to the north.</li> <li>. Riparian corridors are of high importance for wildlife, and would be regulated by Cle Elum Municipal Code (Sections 18.01.160 through 18.01.200) or Kittitas County Code (17A.07), depending on the alternative selected for implementation.</li> <li>. Consideration could be given to placing nest boxes within undeveloped open space areas to be preserved, for use by cavity-nesting birds and bats.</li> </ul>
<p>Nocturnal construction (if any) involving artificial lighting could temporarily disrupt wildlife use of adjacent, undeveloped property, particularly large mammals. Noise associated with construction is less likely to impact wildlife within adjacent undeveloped areas to the north, as they would either move away from the noise or become accustomed to it.</p>	<ul style="list-style-type: none"> <li>. Proposed, required, and other possible mitigation measures for noise and water quality described in Draft EIS Sections 3.9 and 3.18.3 would also be of benefit to fish and wildlife habitat conditions on the site.</li> <li>. Normal construction hours should be limited to daytime hours. If special circumstances would require nocturnal work with bright, artificial lighting, shields should be provided to prevent fixed lighting from shining into non-construction areas.</li> </ul>
<p>Increased noise, light, and habitat fragmentation as a result of introducing a human population on the site can be expected to disturb wildlife (particularly the less common species) and to reduce the value of remaining habitat on the property. Common species likely to move into the completed condition of the project would habituate to a persistent, non-threatening human presence.</p>	<ul style="list-style-type: none"> <li>. It will not be possible to fully mitigate wildlife impacts under any conceptual land use alternative.</li> <li>. Proposed and other possible measures to preserve and restore areas of the site for wildlife that would be compatible with the resident population are described among the mitigation measures listed above.</li> </ul>
<p>It is likely that human/animal encounters would increase with the introduction of residential development into areas presently used by wildlife as habitat. Examples include bears and raccoons foraging in garbage cans, dumpsters, vegetable gardens, fruit trees, mulch piles, bird feeders that use suet, barbeque grills, and pet food; deer and elk grazing and trampling grasses areas, gardens, and landscaping; and predation on domestic pets by large predators like cougar and bobcat. Predators that use the fringes of the City at the present time would be likely to continue to do so. Interactions between humans in a residential neighborhood and animals like deer, elk, bear and cougar could have an undesirable and potentially dangerous outcome.</p>	<ul style="list-style-type: none"> <li>. The applicant proposes to use the Covenants, Conditions and Restrictions (CC&amp;Rs) to be enforced by the Homeowners' Association under Alternative 1, 2, or 3A to inform residents of wildlife in the area and how to minimize sources of conflict. For example, garbage cans should have tight-fitting lids, and garbage storage areas can be required to include animal-exclusion features.</li> <li>. The CC&amp;Rs should include a pet leash law to minimize predation by domestic pets on small mammals and birds on the property, as well as to control these pets to minimize their availability as prey for large native predators.</li> <li>. Pets should be fed indoors. Pets and small children should not be outside between dusk and dawn.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b>Potential Impacts</b>	<b>Mitigation Measures</b>
	<ul style="list-style-type: none"> <li>. Certain types of landscaping could be discouraged to prevent conflicts with wildlife, such as grassed lawns, fruit trees, and berry bushes.</li> <li>. Shrubs and landscaping should be pruned several feet off the ground to eliminate hiding places.</li> <li>. Additional measures that could be included in the CC&amp;Rs to minimize the potential for conflicts with wildlife are listed in Draft EIS Section 3.5.</li> <li>. The Washington Department of Fish and Wildlife discourages creating situations that would result in conflicts between wildlife and resident human populations that would require commitment of resources and/or enforcement actions by WDFW personnel.</li> </ul>
<p>In general, urban development of the site would be a significant deterrent to terrestrial wildlife movements into and across the property. If wildlife corridors were intentionally provided through the project (such as along the north-south riparian corridors), these species could be encouraged to wander further into the City with nowhere to go except toward urban populations and heavily-traveled State highways.</p>	<ul style="list-style-type: none"> <li>. Because the northern boundary of City Heights would represent a new boundary between the City and the expansive forested area to the north, it may be desirable to deter access into and through the site by large terrestrial mammals and predators. Draft EIS Figure 3.5-3 illustrates a possible fence configuration to direct large mammals east-west past the site.</li> <li>. Consideration could also be given to installing fences along riparian corridors to help limit conflicts with wildlife, though these barriers could be designed to allow small, compatible species of wildlife to pass through.</li> </ul>
<p><b>Significant Unavoidable Adverse Impacts:</b> A total of approximately 108 to 205 acres of the site would be cleared and developed, with a corresponding loss of this much habitat and disturbance in remaining habitat due to the presence of a human population in the developed-condition of the site. No priority habitats or species, or State- or Federally-listed species, would be displaced. A land use policy decision was made at the time the site was designated as an Urban Growth Area that the priority use for this property would be a residential neighborhood.</p>	
<p><b>ENERGY AND NATURAL RESOURCES</b></p>	
<p>The electrical energy and natural gas requirements of the City Heights conceptual land use alternatives in relation to existing and planned Puget Sound Energy and Kittitas County PUD #1 facilities are described below and in the Utilities section of the Draft EIS (Sections 3.18.4 and 3.18.5). The rate of growth projected with the City Heights development in this location is anticipated in the long-range planning of either electrical utility service provider.</p>	<ul style="list-style-type: none"> <li>. Homes and commercial buildings to be constructed within the City Heights development will comply with the most current energy conservation measures specified in applicable codes at the time building permits are applied for and issued.</li> <li>. The project proponent also proposes to encourage builders to include provisions for the use of solar energy as this technology advances.</li> <li>. To the extent that builders may choose to construct “built green” homes within City Heights, this method of construction could improve energy efficiency through well-designed heating, cooling, ventilation, and hot water systems; building envelopes; lighting and appliances.</li> </ul>
<p><b>Significant Unavoidable Adverse Impacts:</b> Based on communications with Puget Sound Energy and Kittitas County PUD #1, no significant unavoidable adverse impacts to energy or natural resources would be anticipated as a result of the 6- to 12-year build-out and occupancy of the City Heights Planned Mixed-Use development.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>RELATIONSHIP TO PLANS AND POLICIES</b>	
<p>The 330 acres of the City Heights site presently within the City’s Urban Growth Area (UGA) would develop at an urban residential density of 4 to 9 dwelling units per net acre under Alternative 1, 2 or 3A. The lower residential density of Alternative 3B (less than 3 dwelling units per net acre) would likely irretrievably commit the site to suburban residential development.</p>	<p>. Alternatives 1, 2, or 3A would be consistent with Washington State Growth Management Act (GMA) policies that advocate a minimum of 4 dwelling units per net acre within UGAs, with densities sufficient to accommodate growth projections for the City or County issued by the Washington State Office of Financial Management (OFM). Kittitas County Code (KCC 17.11.050) also specifies a minimum residential density of 4 dwelling units per net acre within UGAs.</p>
<p>In compliance with the City’s Planned Mixed-Use (PMU) designation, the project under Alternative 1 or 2 would create attractive pedestrian-oriented neighborhoods; use architectural design and building materials harmonious with the rural, small town mountain character of the Cle Elum area; incorporate a variety of street standards; provide on-site employment opportunities; provide neighborhood commercial uses that would not compete with downtown core businesses; and preserve a substantial percentage of open space on the site.</p>	<p>. The Development Agreement to be negotiated between the City and the project proponent if Alternative 1 or 2 is selected will specify development standards and mitigation requirements to assure that development of a character desired by the City will occur on the site, and to assure that the project pays its proportionate share of services and utilities required by the development.</p>
<p>If Alternative 3A or 3B is selected, the City would have little or no control over development standards for the project, as there is no interlocal agreement with Kittitas County at the time of this writing with respect to development within the City’s UGA on property that remains within the County (i.e., not annexed to the City). No direct on-site employment opportunities would be created with Alternative 3B, as there would be no neighborhood commercial development.</p>	<p>. The County would impose conditions of approval on City Heights development Alternative 3A or 3B through the provisions of the Planned Unit Development zone (KCC 17.36) or Performance-Based Cluster Platting code (KCC 16.09). The County would likely coordinate mitigation requirements for impacts on City streets, for example, but the City would have little or no influence over development standards for the project.</p>
<p><b>Significant Unavoidable Adverse Impacts:</b> No significant unavoidable adverse impacts would be anticipated with Alternative 1 or 2 in the form of the relationship of the proposal to existing City of Cle Elum plans, policies, and regulations, as the Development Agreement to be negotiated between the City and the project proponent would assure compliance with the City’s intent as well as land use requirements. If Alternative 3A or 3B is selected for implementation in the County, the City might find the inability to influence or regulate development of the site a significant adverse impact.</p>	
<b>LAND USE</b>	
<p>Construction of the City Heights Planned Mixed-Use development would result in the conversion of approximately 108 to 205 acres of vacant land to urban uses: residential, neighborhood commercial, parks, trails and public amenities (depending on the alternative selected for implementation). Construction of urban land uses and the associated infrastructure would occur in phases, in response to market demand.</p>	<p>. The City’s Capital Facilities Plan would be updated during the 6- to 12-year build-out of the project under Alternative 1 or 2.          . The County’s Capital Facilities Plan would be updated during build-out of Alternative 3A or 3B, though some urban services (such as water distribution and treatment, and sewage collection and treatment) would not be available from the County.</p>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>The City Heights development would change the character of the City of Cle Elum by creating an additional large population center north of the existing, established community. This would extend urban development further north in proximity to rural lands that border the incorporated area. Proposed development would be most compatible with existing and proposed uses by others in the vicinity of the west end of the site.</p>	<ul style="list-style-type: none"> <li>. The City Heights proposal is consistent with City of Cle Elum and Kittitas County Comprehensive Land Use Plans for urban residential development to accommodate 20-year population growth projections.</li> <li>. The purpose and objectives of the proposal indicate an intent to integrate the project with the existing community consistent with City of Cle Elum Comprehensive Plan land use goals, and with the purpose and objectives of the City's Planned Mixed-Use zone.</li> <li>. If Alternative 1 or 2 is selected for implementation, the City would enter into a Development Agreement with the project proponent that would include development standards and conditions for the purpose of achieving a project of the character and quality the City desires to add to the community.</li> <li>. If Alternative 3A or 3B were selected, Kittitas County would likely impose conditions through their Planned Unit Development or Performance-Based Cluster Platting procedures related to land use compatibility; however, these would not likely be as specific as the City would impose to protect its own interests related to this contiguous development.</li> </ul>
<p>Annexation of the City Heights 330 acres would create contiguity with the City limits for the 348-acre Cle Elum Property Partners site to the north. This contiguity and road access improvements could stimulate development of this adjacent property.</p>	<ul style="list-style-type: none"> <li>. The potential cumulative effects of the City Heights development are discussed in Draft EIS Section 1.5. No development proposal for the Cle Elum Property Partners site has been submitted to the City of Cle Elum.</li> </ul>
<p>The closest point of the east end of the City Heights site to the Cle Elum Municipal Airport is approximately 0.25 mile from the Outer Safety Zone, and the same distance from the 5,000 foot Traffic Pattern Zone.</p>	<ul style="list-style-type: none"> <li>. There would be no Cle Elum Municipal Airport Overlay Zone restrictions at the east end of the City Heights project.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> Planned Mixed-Use development of the City Heights site has been anticipated in the City's Comprehensive Plan since 2004; therefore, no significant unavoidable adverse impacts to land use within the City of Cle Elum or its Urban Growth Area would be anticipated as a result of this project.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>NOISE</b>	
<p>There would be temporary increases in sound levels during construction associated with the operation of conventional types of equipment such as bulldozers, hoe rams, rippers, excavators, loaders, backhoes, highway and off-road trucks, graders, compactors, and pavers. Sound levels associated with these types of equipment operating at a distance of 50 feet from the receiving source range from 76 to 89 dBA. The increase in sound levels would depend on the type(s) of equipment being used, the amount of time it was in-use, and the soft or hard surface on which the equipment was operating.</p>	<ul style="list-style-type: none"> <li>. Noise associated with construction is exempt from regulation under the Washington State Environmental Noise Limits (WAC 173-60); however, the City of Cle Elum could regulate nuisance noise (with Alternative 1 or 2) through Cle Elum Municipal Code Chapter 8.12, as needed.</li> <li>. Kittitas County could regulate nuisance noise (if Alternative 3A or 3B is selected) through Chapter 9.45 of the County Code.</li> <li>. Noise associated with nighttime construction could be avoided by adhering to hours of construction indicated in the Washington State Environmental Noise Limits. If unusual circumstances require occasional nighttime construction, the contractor could be required to notify adjoining property owners in advance.</li> <li>. To the extent that discretionary practices for minimizing air quality impacts during construction are implemented by the contractor (like using only equipment and trucks that are maintained in good operational condition, limiting the idling of construction equipment and vehicles to a maximum of 15 minutes, and locating construction equipment and staging areas as far away from people as practicable), construction noise impacts to sensitive receivers could also be limited by these practices.</li> </ul>
<p>Due to the large size and linear configuration of the City Heights site, it is expected that it would be a relatively infrequent occurrence for construction equipment to be working within 50 feet of sensitive receivers on adjacent properties, with the exception of trucks accessing or leaving the site on public roadways.</p>	<ul style="list-style-type: none"> <li>. Noise associated with motor vehicles operating on public roadways is exempt from regulation under the Washington State Environmental Noise Limits (WAC 173-60); however, the City of Cle Elum or Kittitas County (depending on the alternative selected) could regulate nuisance noise under local codes.</li> <li>. The City could consider specifying construction access routes to the site that would minimize noise, vibration, and dust impacts along roadways that are presently used predominantly for access to residential neighborhoods.</li> </ul>
<p>If mechanical means of excavating bedrock on the site prove to be ineffective, blasting may be required to remove boulders and bedrock obstructions in areas planned for the construction of roads, utilities and home sites. (See the description of potential blasting requirements and measures to be implemented in Draft EIS Section 3.1.1 and the summary of Earth impacts and mitigation measures above.)</p>	<ul style="list-style-type: none"> <li>. Daytime blasting is exempt from the Washington State Environmental Noise Limits (WAC 173-60-050[c]).</li> <li>. Blasting (if any) shall be performed consistent with the requirements of the Washington Department of Labor and Industries, Washington Administrative Code (WAC 296-52), and other regulatory agencies, as applicable.</li> <li>. Blast monitoring shall be performed as necessary according to WAC 296-52 to record vibration and sound levels.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b>Potential Impacts</b>	<b>Mitigation Measures</b>
<p>The completed condition of the project will alter the natural environment of the site and create a residential neighborhood in which typical noise sources would include vehicles traveling on local streets, yard maintenance equipment, recreational equipment, children at play, and other voices. No unusual or notable sources of noise would be expected.</p>	<p>. The proposal includes maintaining an existing natural buffer in an area 20 to 80 feet wide along most of the south boundary of the site, between site development and the City’s existing residential neighborhood. This buffer may help dampen noise generated within the project.</p>
<p><b>Significant Unavoidable Adverse Impacts:</b> No significant unavoidable adverse noise impacts would be anticipated with the development.</p>	
<b>POPULATION</b>	
<p>It can be anticipated that between 10 and up to 150 constructions workers may be employed on the City Heights site at any one time. Given the projected 6- to 12-year build-out of the development and other potential projects in the area that may be concurrently under construction (such as the Bullfrog UGA and Suncadia), most of these workers will likely be residents from nearby locations. Some may commute on a daily basis or on weekends. However, some construction workers employed on the site may become new temporary residents in the Cle Elum area. It would be speculative to estimate this number.</p>	<p>. Contractors could be encouraged to hire construction workers who reside within daily commuting distance of the project, to the extent practicable, to minimize the increase in a temporary population of construction workers (and associated demand for temporary housing) within the community.</p>
<p>The full build-out population of each conceptual land use alternative was calculated using a household size factor of 2.33 persons per single-family detached home, and 2.1 persons per attached dwelling unit (see Draft EIS Section 3.10). If all units were permanently occupied, the resident population could range from approximately 1,150 to 2,207 persons depending on the alternative selected for implementation. The applicant estimates 50% to 65% permanent occupancy; however, for the purpose of impact analysis, 90% permanent occupancy was assumed, in which the resident population would range from approximately 1,035 to 1,987 persons (depending on the alternative selected).</p>	<p>. The City Heights resident population projections are within the range of anticipated population growth within the City of Cle Elum Comprehensive Plan and the Kittitas County Comprehensive Plan; therefore, no mitigation for population growth would be required.</p>
<p>The City of Cle Elum Comprehensive Plan Housing Element forecasts a resident population of 10,034 persons within the City limits by the year 2025 – an increase of 8,199 persons over the 2007 population. If this occurs, City Heights residents would account for approximately 24% of this growth under Alternative 1, or approximately 21% of this growth under Alternative 2.</p>	<p>Same as above.</p>
<p>The population of Kittitas County is projected to grow by 14,510 persons by the year 2025. If this occurs, City Heights residents would account for approximately 12% of this growth under Alternative 3A, or approximately 7% of this growth under Alternative 3B.</p>	<p>Same as above.</p>
<p><b>Significant Unavoidable Adverse Impacts:</b> From a long-range planning perspective, the City Heights project would result in no significant unavoidable adverse impact to the resident population of the City or County.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>HOUSING</b>	
<p>There is limited to no temporary housing in Cle Elum at the time of this writing to accommodate the projected number of construction workers described in the Population section above. Since the number of workers potentially requiring temporary housing in the area is speculative, it would also be speculative to estimate the number and type of accommodations for which there may be a demand.</p>	<ul style="list-style-type: none"> <li>. Contractors could be encouraged to hire construction workers who reside within daily commuting distance to the project, to the extent practicable, to minimize the demand for temporary housing in the area.</li> <li>. If a “hire local” policy is not practical, the City could request construction contractors to estimate their work force requirements and to investigate local temporary housing opportunities at the start of each phase of construction.</li> <li>. Construction contractors could ask the workers they hire to indicate what arrangements they propose to make for temporary housing in the area while they are under contract to work on the project.</li> </ul>
<p>The City of Cle Elum Comprehensive Plan Housing Element forecasts a need for an additional 3,540 housing units within the City limits by the year 2025 to serve projected population growth. City Heights Alternative 1 or 2 would provide approximately 27.8% to 24.7% of the total number of additional homes forecast to be needed by the end of the City’s current 20-year planning period.</p>	<ul style="list-style-type: none"> <li>. The City Heights residential construction proposal is within the range of the number of additional housing units identified in the City of Cle Elum Comprehensive Plan as needed to serve projected population growth within the current 20-year planning period. Therefore, the proposal would help the City meet this demand and no mitigation would be required for constructing the proposed number of housing units under Alternative 1 or Alternative 2.</li> <li>. The result of the City Heights development would be a mix of housing types, styles, densities and values in order to provide housing that is affordable to people of various income levels.</li> <li>. The City of Cle Elum does not presently have an adopted definition of what constitutes “affordable housing,” as this varies based on the median income of an area. A definition of affordable housing and the amount to be provided within City Heights will be an element of the negotiated Development Agreement between the City and the project proponent.</li> </ul>
<p>The Kittitas County Comprehensive Plan forecasts a need for an additional 6,460 housing units by the year 2025 to serve projected population growth within the unincorporated area. City Heights Alternative 3A or 3B would provide approximately 13.5% to 7.7% of the total number of additional homes forecast to be needed by the end of the County’s current 20-year planning period.</p>	<ul style="list-style-type: none"> <li>. The City Heights residential construction proposal is within the range of the number of additional housing units identified in the Kittitas County Comprehensive Plan as needed to serve projected population growth in the unincorporated area within the current 20-year planning period. Therefore, the proposal would help the County meet this demand and no mitigation would be required for constructing the proposed number of housing units under Alternative 3A or 3B.</li> </ul>
<p><b>Significant Unavoidable Adverse Impacts:</b> From a long-range planning perspective, with an intent to serve projected population growth, the City Heights development would result in a beneficial rather than a significant unavoidable adverse impact to housing supply within the City or County.</p>	



Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>LIGHT AND GLARE</b>	
<p>There would be temporary sources of light and glare on construction sites within the City Heights property during site development, such as nighttime security lighting or illumination from the headlights of vehicles or construction equipment during early morning or late afternoon hours. Potential sources of glare may include reflections from vehicle windshields or from plastic used to cover stockpiles and construction materials.</p>	<ul style="list-style-type: none"> <li>. If construction is limited to daytime hours, this would have the secondary effect of minimizing nighttime illumination on the site during project development.</li> </ul>
<p>The developed-condition of the site would introduce several sources of light and possible sources of glare, such as interior and exterior residential lighting, neighborhood commercial areas, street lights, windows and vehicle windshields, the lights of vehicles traveling on project roadways, and pedestrian-oriented lighting along sidewalks and in public amenity areas. These effects would likely be most visible from across the valley (south of the Yakima River).</p>	<ul style="list-style-type: none"> <li>. The proposal to retain an existing natural buffer 20 to 80 feet wide along much of the south boundary of the site, with development set back from the top of the slope in many areas, should minimize light and glare effects in existing residential neighborhoods down-slope from the City Heights development (see Figure 3.13-12 in Draft EIS Section 3.13).</li> <li>. Areas with higher residential densities and nodes of commercial development are proposed to be centrally-located on the upper plateau, furthest from existing single-family home neighborhoods.</li> <li>. A specific lighting proposal is not yet available at the time of this writing; however, the applicant proposes to minimize the amount of glare, light trespass, and sky glow generated by lighting within the development through representative measures listed in Draft EIS Section 3.12.</li> </ul>
<p>Over the 6- to 12-year build-out of the City Heights development, there would be an increase in nighttime sky-glow associated with increasing urbanization of the site and within the City of Cle Elum as a whole.</p>	<ul style="list-style-type: none"> <li>. Lighting plans for the development will be evaluated by the City or County (depending on the alternative selected for implementation) during review of site-specific development proposals.</li> <li>. If Alternative 1 or 2 is selected, Cle Elum Municipal Code Chapter 17.45 will require a lighting plan that provides sufficient illumination without significantly diminishing the ambient darkness of the rural setting. Required elements of the lighting plan are listed in Draft EIS Section 3.12.</li> </ul>
<p><b>Significant Unavoidable Adverse Impacts:</b> Development of the City Heights Planned Mixed-Use development would substantially increase the amount of light and potential sources of glare on the property. The impact of this change would likely be interpreted differently by different observers, with some objecting to the increase in light and glare where there was little or none before. Others may be accepting of this effect associated with growth and increased vitality within the community, provided it is implemented with as much sensitivity to surrounding the environment as practicable. The City Heights property is within the Cle Elum Urban Growth Area and thus is anticipated to develop as an urban residential neighborhood whether at this time or in the foreseeable future.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>AESTHETICS</b>	
<p>Clearing and grading for the construction of roads and building sites would alter the appearance of the site and temporarily create conditions that may be unsightly to some observers.</p>	<ul style="list-style-type: none"> <li>. The proposal to retain an existing natural buffer 20 to 80 feet wide along much of the south boundary of the site, with development set back from the top of the slope in many areas, should minimize the visibility of on-site construction activity for most observers from established residential neighborhoods and the downtown area below (see Figure 3.13-12 in Draft EIS Section 3.13).</li> <li>. Existing coniferous trees stands would be protected during construction, to the extent practicable, in areas designated to be retained in open space.</li> <li>. Landscape plantings that will be introduced to restore cleared areas of the site will, at maturity, augment retained vegetation to provide additional screening of the City Heights development.</li> </ul>
<p>As a result of the project goal to integrate City Heights with existing development within the City of Cle Elum, some homes would be visible from established neighborhoods and the town below.</p>	<ul style="list-style-type: none"> <li>. The majority of housing proposed near the south boundary of the site would be of low- and/or moderate-density design for the most compatibility with existing neighborhoods.</li> </ul>
<p>Neighborhood commercial areas, surrounded by higher-density residential development, are proposed on the upper plateau of the site.</p>	<ul style="list-style-type: none"> <li>. The proposal to locate the highest residential densities and neighborhood commercials on the upper plateau will result in these uses being screened by topography from viewpoints in established neighborhoods or the town below (see Figure 3.13-12).</li> </ul>
<p>Changes in the appearance of the site would be most visible to rural residential properties to the north, east, and across the valley to the south. Schematic “built views” of the project are provided in Draft EIS Section 3.13. Due to the topography of the site, the eastern portion of the development has the potential to be most visible from downtown Cle Elum and from the I-90 corridor (traveling westbound).</p>	<ul style="list-style-type: none"> <li>. The Covenants, Conditions and Restrictions (CC&amp;Rs) for the project, and standards to be enforced through the Development Agreement with the City (if Alternative 1 or 2 is selected for implementation), will include architectural standards for building character, exterior materials and colors; lighting, restoration plantings and screening requirements; and road standards that include provisions for landscaping and pedestrians.</li> <li>. The CC&amp;Rs would also impose measures for the maintenance and upkeep of parks and common areas within the development (if these remain privately owned), and measures that would minimize the visual impacts of construction, upgrades, or repairs within the development.</li> </ul>
<p><b>Significant Unavoidable Adverse Impacts:</b> Development of the City Heights site would substantially remove existing vegetative cover and alter the existing topography to more level grades for the construction of roads, infrastructure, and building sites. In place of the coniferous tree stands, shrubs and meadows, an urban residential neighborhood would be created, permanently altering the existing character of the site. The aesthetic impact of this change would likely be interpreted differently by different observers; i.e., it may be pleasing to some and objectionable to others. Site planning includes measures to create the most compatibility and provide the most screening at the boundary between the proposed development and established areas within the City. The City Heights site is within the Cle Elum Urban Growth Area, and thus is anticipated to develop as an urban residential neighborhood whether at this time or in the foreseeable future.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>PARKS, RECREATION AND OPEN SPACE</b>	
<p>There could be temporary effects related to use of the Coal Mines Trail during construction of the west access to serve the City Heights development. If access to SR 903 is constructed through the Cle Elum Pines property, construction of a high-level bridge crossing above the trail could result in temporary closures of this trail segment for safety precautions. If improvements are made to Alliance Road to serve as the west access to City Heights, there could be temporary trail closures at the existing Alliance Road crossing of the Coal Mines Trail during road widening.</p>	<p>. The developer would work with the City to publish and post advance notice to trail users in the event that there may be temporary disruptions to use of segments of the Coal Mines Trail during construction.</p>
<p>The City Heights proportionate-share of new parks, open space and trails identified in the City of Cle Elum Comprehensive Plan as needed to serve the projected year-2025 population of the City as a whole would be 17% to 20% (depending on whether Alternative 1 or 2 is selected for implementation).</p>	<p>. If the City’s total population in 2025 differs from the OFM projection of 10,034 persons, with the result that the City Heights population constitutes some different percentage of the total, the park, open space and trail needs identified in Draft EIS Table 3.14-4 could differ from these estimates.</p> <p>. The acreage of parks and open space, and the length of trails to be developed within the project for public use will be specified in the Development Agreement to be negotiated between the City and the project proponent, with guidance from the goals and policies of the City of Cle Elum Comprehensive Plan: Parks, Recreation, and Open Space Element (2007).</p>
<p>Assuming 90% occupancy of City Heights at full build-out, the project’s proportionate-share of new active-use parks within the City would range from 3.6 to 4.3 acres.<sup>2</sup></p>	<p>. Under either Alternative 1 or 2, the total land area to be set aside for parks shown on the conceptual land use plans is 7.8 acres. The extent of improvements to parks would depend on the alternative selected for implementation, to be specified in the Development Agreement to be negotiated between the City and the project proponent. The park proposal is described in detail in Draft EIS Section 3.14.</p>
<p>Assuming 90% occupancy of City Heights at full build-out, the project’s proportionate-share of additional open space within the City would range from 1.5 to 1.8 acres.</p>	<p>. The objectives of the City Heights proposal include several priorities for retaining a significant amount of open space on the site, both to preserve unique features of the property, and to provide recreational opportunities for residents of the project and the community as a whole. The Alternative 1 conceptual land use plan includes retaining approximately 155 acres (43%) of the site in permanent open space. With Alternative 2, the open space proposal is approximately 161 acres (45% of the site) – considerably more than the project’s proportionate share of the City’s goal for serving its 2025 total population.</p>

<sup>2</sup> If the 10-acre Four Seasons Aquatic Center is removed from the City’s inventory of existing active-use parks (Comprehensive Plan Parks Element Table 1.2), thereby increasing the City’s projection of future needs for this type of park (Comprehensive Plan Parks Element Table 1.7), this could increase the City Heights proportionate share of active-use parks to 6.28 acres with Alternative 1, or 5.34 acres with Alternative 2

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>Assuming 90% occupancy of City Heights at full build-out, the project’s proportionate-share of additional tracks, trails and connections within the City would be approximately 6.5 to 7.6 miles.</p>	<ul style="list-style-type: none"> <li>. Alternative 1 would provide the most diversity and improvements to approximately 9 miles of trails within the development. Three types of paths are shown on the Alternative 1 conceptual land use plan: multi-use path/bike access (3.2 miles), walking paths (3.4 miles), and hiking trails (2.5 miles). Distinctions between these types of trails are described in Draft EIS Section 3.14.</li> <li>. With Alternative 2, only the 3.2-mile multi-use path is proposed (less than the project’s proportionate-share of the City’s goal for the provision of tracks, trails and connections to serve the City-wide population in 2025).</li> <li>. Trail corridors within the development may be made available for recreational enthusiasts and stakeholders to cooperate and participate in making improvements, such as hiking and biking associations, and local groups such as the Cle Elum Improvement District or the Kittitas County Parks and Recreation District. To the extent that grant funds or other resources are available, trail improvements through the site connecting with the Coal Mines Trail, Flagpole Park, and Centennial Park could be implemented sooner.</li> <li>. Approximately 3 miles of the possible route of the Cle Elum Skyline Trail is shown through the City Heights property on a map in the City of Cle Elum Comprehensive Plan Parks, Recreation, and Open Space Element. As possible mitigation for the tracks, trails and connections requirement to serve the projected year-2025 population of the City as a whole, consideration could be given to dedicating this land or entering into a public use agreement to complete this link of the trail.</li> </ul>
<p>Under Alternative 3A, approximately 161 acres of open space would be preserved on the site, with no improvements and no public amenities. If a trail system were developed in Alternative 3A, it would be dependent upon user groups providing the labor and funding for trail improvements. Under Alternative 3B, no open space, public amenities, or trail system is proposed.</p>	<ul style="list-style-type: none"> <li>. The Alternative 3A or 3B open space proposal and/or requirements would be evaluated by Kittitas County in relation to the Performance-Based Cluster Platting code (KCC Chapter 16.09), or Planned Unit Development requirements (KCC Chapter 17.36). There is no specific quantitative requirement for open space under the County’s PUD regulations.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> Given the large amount and percentage of open space to be retained within the City Heights development under Alternative 1, 2, or 3A; the range of possible scenarios for park, open space and trail improvements; and the mechanisms in-place in either the City or County (depending on the alternative selected for implementation) to require these amenities associated with new development, it is anticipated that – with the possible exception of Alternative 3B – increased demand generated by project residents would be satisfied by project additions to the parks, open space and trails system of the City or County.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>HISTORIC AND CULTURAL RESOURCES</b>	
<p>The conceptual land use plan for any City Heights development alternative shows development proposed in Areas A and D2 where historic coal slag features were identified in the <i>Archaeological Review and Inventory</i> of the site.</p>	<ul style="list-style-type: none"> <li>. The cultural resources consultant who prepared the <i>Archaeological Review and Inventory</i> of the site noted that it is unlikely that important information could be derived from the coal slag deposits on the site; therefore, construction effects on this mining debris would not be detrimental to this resource.</li> <li>. The possibility exists that the coal slag piles in Areas A and D2 of the City Heights site may be eligible for nomination to the Cle Elum register of historic places under the criteria of the City's Historic Preservation Ordinance (CEMC Chapter 15.22, Section 15.22.050[A]). However, the City Heights site does not encompass the entire historical mining district. Rather, it lies between two areas of mining activity that occurred further up the slope and beneath downtown Cle Elum.</li> <li>. Mitigation for the two areas of historic coal slag deposits on the site would consist of the next level of recordation with the Washington State Department of Archaeology and Historic Preservation.</li> </ul>
<p>Potential exists for buried or otherwise hidden cultural features to be encountered during construction earthwork on the site.</p>	<ul style="list-style-type: none"> <li>. A thorough surface reconnaissance of the site and a limited number of shovel test probes were conducted on the site for the purpose of environmental review. No cultural resources were identified during the course of this survey.</li> <li>. If at any time during project development human or unknown bones are uncovered, or deeply buried cultural deposits are encountered, work would be stopped in this area of the site and a professional archaeologist would be contacted to evaluate these findings. State of Washington procedures for inadvertent discovery would be followed. These are listed in Draft EIS Section 3.15.</li> </ul>
<p><b>Significant Unavoidable Adverse Impacts:</b> With the understanding that State of Washington procedures for inadvertent discovery would be followed in the event that unanticipated human remains or suspected archaeological materials are encountered during earthwork on the site, no significant unavoidable adverse impacts to cultural resources are anticipated as a result of the project. If the coal slag piles in Areas A and D2 are avoided until the next level of recordation were completed, there would be no direct effects to potential historic resources on the site.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>TRANSPORTATION SYSTEM</b>	
<p>Construction truck trips to haul unsuitable or excess material away from the site and to import select fill are estimated to range from 18 to 36 truck trips per day with Alternative 1, or 16 to 32 truck trips per day with Alternative 2 or 3A during a 6-month construction period each year over the course of the 6- to 12-year development period. Construction haul routes would depend on the location of disposal sites for excess material to be removed from the site, and the location of quarry sources of fill to be imported.</p>	<ul style="list-style-type: none"> <li>. Haul routes for construction traffic would be addressed with the City of Cle Elum Public Works Director prior to the initiation of any construction activity under Alternative 1 or 2.</li> <li>. Provisions will be made in the Development Agreement to be negotiated between the City and the project proponent for restoration of road surfaces damaged by construction traffic (if any).</li> </ul>
<p>The internal roadway system of the City Heights development would connect the site to existing City of Cle Elum streets, as well as to the regional roadway network: SR 903, SR 970, and I-90. Some of the proposed access points would provide regional connections that do not require circulation through the downtown core of Cle Elum; others would provide direct connection into the established areas of the City, providing circulation between the project site and commercial, recreational and civic activities within the City. Proposed access points to serve each conceptual land use alternative, and the improvements required to each, are described in Draft EIS Section 3.16. These include west access through the Cle Elum Pines property or via Alliance Road, Stafford Avenue/Summit View Road, East and West 6th Street, Montgomery Avenue, and Columbia Avenue.</p>	<ul style="list-style-type: none"> <li>. Proportionate-share mitigation for project impacts to the transportation system, and the relative timing for these improvements, will be negotiated as an element of the Development Agreement between the City and the project proponent. The City Heights proportionate share will be calculated by dividing project traffic volumes by the sum of project traffic plus background traffic volumes.<sup>3</sup></li> <li>. The proposal includes reconstructing the substandard curve east of the Summit View/W 6th Street intersection to improve sight distance and roadway width.</li> <li>. If Alternative 3A or 3B is selected for implementation, several intersections within the City would be impacted even though development would occur within Kittitas County. Therefore, a mechanism for proportionate-share cost responsibility would likely be required through SEPA mitigation.</li> </ul>
<p>The number of vehicle trips per day that would be generated by the City Heights development at full build-out and 90% occupancy (in approximately the year 2022) is estimated to range from 8,650 with Alternative 1 to 4,470 with Alternative 3B.</p>	<ul style="list-style-type: none"> <li>. It is typical for proportionate-share mitigation for the impact of project traffic to intersections that would operate below LOS D at full build-out to be negotiated in the context of PM peak hour trips, discussed below.</li> </ul>
<p>The number of vehicle trips during the PM peak hour<sup>4</sup> at full build-out and 90% occupancy (in approximately the year 2022) is projected to range from approximately 839 with Alternative 1 to 468 with Alternative 3B. Trip distribution by intersection during the PM peak hour is shown on Draft EIS Table 3.16-8 for Alternative 1.</p>	<ul style="list-style-type: none"> <li>. Off-site improvements are identified by the traffic consultant in Draft EIS Section 3.16 to mitigate PM peak hour trips and level of service impacts to facilitate negotiations between the City and the project proponent. These recommendations are listed below.</li> </ul>
<p>The number of vehicle trips during the AM peak hour<sup>5</sup> at full build-out and 90% occupancy (in approximately the year 2022) is projected to range from approximately 607 with Alternative 1 to 346 with Alternative 3B.</p>	<ul style="list-style-type: none"> <li>. Since it is typical for proportionate-share mitigation for the impact of project traffic to be negotiated in the context of PM peak hour trips, no separate mitigation would be required for AM peak hour trips.</li> </ul>

<sup>3</sup> Background traffic is defined as growth in traffic that will occur independent of development on the City Heights site.

<sup>4</sup> PM peak hour trips are defined as the highest volumes during a one-hour period between 4:00 PM and 6:00 PM on weekdays. A small number of PM peak hour trips would occur within the City Heights project site, and/or could occur using transportation modes other than a vehicle; however, to be conservative, the traffic analysis assumed that all PM peak hour trips would originate from or be destined to off-site areas.

<sup>5</sup> AM peak hour trips are defined as the highest volumes during a one-hour period between 7:00 AM and 9:00 AM on weekdays.

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>With planned transportation improvements identified in the <i>City of Cle Elum Draft Transportation Plan</i> (May 2009), all <u>signalized</u> intersections within the transportation study area are forecast to operate at LOS B<sup>6</sup> or better in the year 2022 with the addition of City Heights traffic (if Alternative 1 is selected for implementation): Oakes Avenue/W 2nd Street. W Cemetery Road/W 1st Street, S Cle Elum Way/W 1st Street/Stafford Avenue, Oakes Avenue/W 1st Street, Pennsylvania Avenue/W 1st Street, and N Stafford Avenue/W 2nd Street (SR 903).</p>	<ul style="list-style-type: none"> <li>. The traffic consultant recommends that City Heights participate in mitigation for the intersection of Oakes Avenue/W 2nd Street as PM peak hour traffic generated by Alternative 1 would constitute about 30% of total traffic through this intersection in the year 2022. With Alternative 2, the project percentage of impact to this intersection would be approximately 50%.</li> <li>. The traffic consultant recommends that City Heights participate in mitigation for the intersection of W Cemetery Road/W 1st Street as PM peak hour traffic generated by Alternative 1 would constitute about 10% of total traffic through this intersection in the year 2022.</li> <li>. The traffic consultant recommends that City Heights participate in mitigation for the intersection of N Stafford Avenue/W 2nd Street (SR 903) as PM peak hour traffic generated by Alternative 1 would constitute about 29% of total traffic through this intersection in the year 2022.</li> </ul>
<p>The following <u>unsignalized</u> intersections are forecast to operate below LOS D in the year 2022 with the addition of City Heights traffic (if Alternative 1 is selected for implementation): the southbound approach of Columbia Avenue/E 1st Street, the northbound approach of SR 903/SR 970, the southbound approach of SR 903/Bullfrog UGA/City Heights Alternative 1 west access (through the Cle Elum Pines property), and the northbound left-turn and southbound approach of the Alliance Road/SR 903 intersection.</p>	<ul style="list-style-type: none"> <li>. The traffic consultant recommends that City Heights participate in mitigation for the southbound approach to the intersection of Columbia Avenue/E 1st Street, as project PM peak hour traffic under Alternative 1 would constitute approximately 20% of total traffic through this intersection in the year 2022.</li> <li>. The WSDOT <i>Route Development Plan</i> for SR 970 includes improvements to the intersection of SR 903/SR 970 that would upgrade the Exit 85 interchange overall, potentially alleviating before the year 2022 the need for mitigation attributable to City Heights full build-out traffic.</li> <li>. The additional traffic generated by City Heights Alternative 1 would not be enough to warrant a traffic signal at the SR 903/City Heights west access through the Cle Elum Pines property, or at SR 903/Alliance Road. Delays may occur for project traffic trying to turn onto SR 903; however, this would not affect the main flow of traffic on SR 903. Therefore, no mitigation is recommended for these two intersections.</li> </ul>

<sup>6</sup> Traffic operations are evaluated using level of service (LOS) analysis. LOS A is the best condition and represents good traffic operations with little or no delay to motorists. LOS F is the worst condition and indicates poor traffic operations with long delays. As of January 2010, the City of Cle Elum uses LOS D as its standard for acceptable intersection operations. Kittitas County has adopted LOS C for rural facilities and LOS D for urban facilities.

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>Roadways internal to the City Heights development would be designed to accommodate emergency vehicles and Cle Elum-Roslyn School District buses. Emergency vehicle access during construction and in the developed-condition of the project would be provided along Main Access Roads and Collector Roads to each proposed Development Area (described in Draft EIS Section 2.9.4.3). Under Alternative 2 or 3A, Montgomery Avenue would be used for emergency vehicle access only.</p>	<ul style="list-style-type: none"> <li>. Project roads to serve Alternative 1 or 2 would be designed to City of Cle Elum standards. Project roads to serve Alternative 3A or 3B would be designed to Kittitas County standards.</li> <li>. Compliance with WSDOT standards would be required for intersection improvements to SR 903 or any other State routes.</li> <li>. If the Alliance Road/SR 903 intersection is modified to implement the Alternative 2 or 3A west access, these modifications should be coordinated with the School District, as the south leg of this intersection is the main entrance to the Cle Elum-Roslyn School campus.</li> <li>. Emergency vehicle access to the site would be enhanced by the connectivity provided by project roads to be improved within the power line easements.</li> <li>. Signage would be installed to indicate routes to various locations within the project, and up-to-date maps would be provided to emergency service providers – initially by the developer, and subsequently by the Homeowners’ Association.</li> <li>. If Montgomery Avenue is used only for emergency vehicle access to City Heights with on-site road improvements made within the power line corridor, a gate at the intersection of the power line corridor with Montgomery Avenue would be keyed for access in a manner suitable to emergency service providers.</li> <li>. Any improvements proposed within the PSE and BPA power line easements would be coordinated with appropriate departments within each of these agencies.</li> </ul>
<p>Snow removal from project roads would be the responsibility of the entity that owns the roads; i.e., the City Heights Homeowners’ Association if the roads remain private, the City of Cle Elum if the roads are accepted by the City under Alternative 1 or 2, or Kittitas County if the roads are accepted by the County under Alternative 3A or 3B.</p>	<ul style="list-style-type: none"> <li>. Snow plowing policies will be defined in the Development Agreement to be negotiated between the City and the project proponent if Alternative 1 or 2 is selected, or in conditions of project approval to be imposed by Kittitas County if Alternative 3A or 3B is selected.</li> <li>. Building setbacks will be designed to provide sufficient snow storage areas so that snow piles would not block intersection sight lines or emergency vehicle access.</li> </ul>
<p>City Heights traffic at full build-out is not expected to increase the number of traffic incidents within the study area other than in proportion to the affect of additional cars on City streets and WSDOT highways.</p>	<ul style="list-style-type: none"> <li>. Project roads and access connections to the City of Cle Elum street system and WSDOT State routes would be designed to minimize vehicle speeds through design principles, and to provide adequate sight distance at intersections.</li> </ul>
<p>Parking would be provided on-site for residential units, neighborhood commercial uses, parks and public amenities in accordance with applicable City or County code requirements (depending on the alternative selected for implementation).</p>	<ul style="list-style-type: none"> <li>. Site area is sufficient to provide all required on-site parking during construction and in the developed-condition of the project.</li> </ul>
<p>The provision of public transportation service (or lack thereof) would not be altered by the City Heights development.</p>	<ul style="list-style-type: none"> <li>. To the extent that the City Heights population would add to the population base within the service area, it may become more viable in the future for transit service to be considered in the Cle Elum area.</li> </ul>



Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>Alternative 1 would provide the most opportunity for non-motorized circulation on the site with connections to existing trails and the developed area of the City of Cle Elum. Approximately 9 miles of walking paths, hiking trails, and a multi-use path with bike access are proposed with this alternative. Due to reduced resources with lower density alternatives, there would be considerably less or no trail improvements within the development with Alternative 2, 3A or 3B.</p>	<ul style="list-style-type: none"> <li>. Trail corridors within the development may be made available for recreational enthusiasts and stakeholders to cooperate and participate in making improvements, such as hiking and biking associations, and local groups such as the Cle Elum Improvement District or the Kittitas County Parks and Recreation District. To the extent that grant funds or other resources are available, trail improvements through the site connecting with the Coal Mines Trail, Flagpole Park, and Centennial Park could be implemented in alternatives other than Alternative 1.</li> </ul>
<p>Possible road standards illustrated in Draft EIS Section 2.9.4.3 include some configurations with sidewalks on one side only, or no sidewalks.</p>	<ul style="list-style-type: none"> <li>. Options will be weighed during consideration of road design standards for the project between the desired character of the neighborhood to be created, minimizing the introduction of impervious surfaces, and adequate provisions for pedestrian circulation within the development.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> The City Heights development would increase traffic in Cle Elum under any conceptual land use alternative. Features incorporated into the design plus additional off-site mitigation measures to be negotiated through the Development Agreement with the City for Alternative 1 or 2 (or through conditions of project approval that would be imposed by Kittitas County if Alternative 3A or 3B were selected) would alleviate significant adverse impacts associated with project traffic. Therefore, City Heights is forecast to have no significant unavoidable adverse impacts to the study area transportation system.</p>	
<p><b>PUBLIC SERVICES: PUBLIC WORKS AND GENERAL SERVICES</b></p>	
<p>Planning, permitting, the design and construction of infrastructure, and the design and construction of proposed uses within City Heights would increase the work load of the Community Development and Public Works Departments of the City of Cle Elum or Kittitas County (depending on the alternative selected for implementation). In the developed condition of Alternative 1 or 2, City administrative and financial services would have hundreds of additional utility accounts to maintain and utility customers to serve.</p>	<ul style="list-style-type: none"> <li>. The City and County each have a fee structure in-place that would require the applicant to pay for development review and inspection services.</li> <li>. The Development Agreement to be negotiated between the City and the project proponent will address project costs for these and other general government services to assure that the development would pay for the cost of services it requires.</li> <li>. Utility charges to be paid by City Heights customers include the cost of administrative billing services.</li> </ul>
<p>The project would also create new roads, street signs, street lights and planter strips; parks and trails; water, sewer, and stormwater system infrastructure to be maintained. Snow removal from project roads during winter months would be a significant issue for whichever entity has this responsibility, and is critical to site access for emergency services. Maintenance responsibility had not yet been confirmed at the time of this writing, but could affect the Cle Elum Public Works Department under Alternative 1 or 2, the Kittitas County Public Works Department under Alternative 3A or 3B, or the Homeowners' Association of the development.</p>	<ul style="list-style-type: none"> <li>. It is the intention of the City (with Alternative 1 or 2) to require the project to bear the costs of all improvements associated with public infrastructure (water, sewer, stormwater, and road improvements) by enforceable requirements to be stipulated in the Development Agreement. These mitigations may take the form of one-time or periodic cash payments, or other means of providing a funding mechanism.</li> <li>. The <i>Fiscal Analysis</i> reasonably calculates that annual tax revenues would generate a net surplus in revenue to the City or County compared to the operational requirements of the development (see Draft EIS Tables 3.19-11 and 3.19-13).</li> <li>. Estimated annual tax revenues generated for the City's Transportation budget are reasonably calculated to be sufficient to fund two additional Public Works staff positions.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
	<ul style="list-style-type: none"> <li>. The City Public Works Department may require a maintenance budget and confirmation of the revenue source to support it.</li> <li>. If the City or County does not choose to accept maintenance responsibility for roads, utilities, parks and trails within the development, the Homeowners' Association would be required to arrange for these maintenance services.</li> </ul>
<p>The resident population to be introduced on the site could be expected to increase the number of law enforcement and criminal justice cases to be addressed in the City or County court system, depending on the alternative selected.</p>	<ul style="list-style-type: none"> <li>. The terms of the Development Agreement with the City, or conditions of approval that would be imposed by the County, will address provisions for the project's proportionate-share cost responsibility for law enforcement and criminal justice services. Also see the summary of Public Services: Police Protection and Law Enforcement section below.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> If Alternative 1 or 2 is selected for implementation, the City and project proponent will enter into a Development Agreement to define as accurately as practicable, proportionate-share cost responsibilities to assure that the City Heights development will pay for the cost of services it will require. Similar negotiations would occur with Kittitas County if Alternative 3A or 3B is selected for implementation, so that fair-share capital and operating cost responsibilities would become conditions of development approval. Efforts would be made to avoid significant unavoidable adverse impacts in the form of the cost of public services required to serve the development.</p>	
<p><b>PUBLIC SERVICES: FIRE PROTECTION</b></p>	
<p>Possible safety hazards on the site during construction, and a potential increase in the risk of wildland fires, may require fire protection and emergency medical aid response. Depending on the alternative selected for implementation, the City Heights site would be within the service area of the Cle Elum Fire Department (Alternative 1 or 2), or Kittitas County Fire Protection District (KCFPD) #7 (Alternative 3A or 3B). With the mutual aid agreements in-place between these agencies, it is likely that both would respond to calls on the property during construction.</p>	<ul style="list-style-type: none"> <li>. The <i>Fiscal Analysis</i> of the proposed development shows that one-time revenues generated during an estimated 10-year construction period would more than offset the lag in City or County collection of property tax revenues to cover the interim cost of public services, including Fire and Emergency Services (see Draft EIS Tables 3.19-11 and 3.19-13).</li> <li>. Firewise procedures should be implemented to minimize the potential for structural and wildland fires within and adjacent to the development. Representative measures include: cleaning up the construction site on a daily basis, and removing construction debris and rags.</li> </ul>
<p>At full build-out and approximately 90% permanent occupancy, the project could approximately double the size of the existing population within Cle Elum, potentially requiring an increase in manpower, equipment and operating budgets to maintain the existing level of fire protection and emergency medical aid service whether the site develops within the City or County. Based on the number of calls per 1,000 population in 2009, the City Heights resident population may generate in the range of 325 to 370 calls within the Cle Elum Fire Department service area (Alternative 1 or 2), or up to 101 to 171 calls within the KCFPD #7 service area (Alternative 3A or 3B).</p>	<ul style="list-style-type: none"> <li>. The <i>Fiscal Analysis</i> of the proposed development shows that tax revenues would generate a net surplus in revenue to the City or County compared to operational requirements (see Draft EIS Tables 3.19-11 and 3.19-13).</li> <li>. Estimated annual revenues allocated to Fire and Emergency Services in the City's budget would fund the cost of approximately 20 additional volunteer fire fighters/EMTs and a portion of the cost of a full-time Fire Chief.</li> <li>. The Development Agreement to be negotiated between the City and the project proponent if Alternative 1 or 2 is selected, or conditions of project approval that would be imposed by the County if development occurs under Alternative 3A or 3B, will establish the terms of the project's proportionate-share cost of capital and operating expenditures for Fire and Emergency Services.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>The increase in call volume to serve Alternative 1 or 2 could affect the existing 50-member limit of the City of Cle Elum volunteer fire department. It may also increase the workload of the volunteer chief/command and training staff. Existing equipment may not be adequate to provide required services to the development.</p>	<p>. The Cle Elum Fire Department would prepare or require a detailed analysis to determine capital facilities and equipment needs, operational budget requirements, distance between the development and existing fire stations, and the adequacy of volunteer membership to provide fire protection and emergency medical service to a larger incorporated area and approximately double the number of homes and residents within the community. Also see mitigation measures described above.</p>
<p>Lack of connection to a municipal water system in Alternative 3A or 3B could result in less adequate pressure for fire suppression.</p>	<p>. Kittitas County development review would identify requirements for on-site firefighting water supply, water pressure and other measures to be implemented to ensure adequate fire protection for the Alternative 3A or 3B development plan (if either of these is selected for implementation).</p>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> No significant unavoidable adverse impacts are indicated by the <i>Fiscal Analysis</i> of the development, which reasonably calculates a surplus of revenues in relation to the projected cost of Fire and Emergency Services during construction and in the developed condition of the project.</p>	
<p><b>PUBLIC SERVICES: EMERGENCY MEDICAL AID</b></p>	
<p>As with the fire protection service providers, Upper Kittitas County Medic One and Kittitas County Hospital District 2 would anticipate an increase in call volume for services to the City Heights site during construction.</p>	<p>. The <i>Fiscal Analysis</i> of the proposed development reasonably calculates that one-time revenues generated during an estimated 10-year construction period would more than offset the lag in City or County collection of property tax revenues to cover the interim cost of public services, including Emergency Services (see Draft EIS Table 3.19-16).</p>
<p>In the completed condition of the development, it is estimated that the City Heights resident population could generate a demand for emergency medical services at a ratio of approximately 70 calls per 1,000 population, which would result in the range of 73 to 140 calls per year depending on the alternative selected. The two main areas of potential impact to Upper Kittitas County Medic One and Kittitas County Hospital District 2 would include the need for additional coverage if concurrent calls become more frequent, and potential acceleration of the medic unit replacement schedule. The <i>Fiscal Analysis</i> of the development indicates that existing Hospital District facilities should be able to accommodate services that may be required by City Heights residents (see Draft EIS Table 3.19-16).</p>	<p>. Hospital District 2 is authorized to collect ambulance charges and impact fees.                  . The Development Agreement to be negotiated between the City and the project proponent if Alternative 1 or 2 is selected, or conditions of project approval that would be imposed by the County if development occurs under Alternative 3A or 3B, will establish the terms of the project's proportionate-share cost of capital and operating expenditures for Emergency Services.</p>
<p>Medic One service providers identified a high importance for vehicular access to the west end of the City Heights site to minimize response times to calls within the development. All alternatives except Alternative 3B show a west access route that would be developed to the standards of a Major Access Road or Collector Road, as described in Draft EIS Section 2.9.4.3.</p>	<p>. The Alternative 1, 2, or 3A conceptual land use plans show points of access to the west end of the site from SR 903 through the Cle Elum Pines property, or from Alliance Road.                  . Road standards that would support the weight and turning radius of emergency vehicles, road maintenance including snow removal during winter months, signage and maps to be provided to public service agencies to facilitate error-free access would also be beneficial to emergency medical response.</p>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<p><b>Significant Unavoidable Adverse Impacts:</b> The <i>Fiscal Analysis</i> of the development reasonably calculates that property tax revenues and cost recovery through charges for ambulance calls would fund the estimated requirements of City Heights residents for emergency medical aid services with no significant adverse impact on Hospital District 2.</p>	
<p><b>PUBLIC SERVICES: POLICE PROTECTION AND LAW ENFORCEMENT</b></p>	
<p>Law enforcement officers in either the City or County anticipate an increase in the call volume both on the City Heights site and in the general area once construction begins, as construction workers tend to have more impact on law enforcement services than the general population. If the anticipated increase in call volume occurs, it would impact existing police manpower and equipment and result in increased communication costs, increased court proceedings and case loads, and increased jail costs. Construction periods also tend to generate more off-site traffic incidents and traffic management issues for law enforcement officers, both due to construction truck traffic and the personally-owned vehicles of construction workers.</p>	<ul style="list-style-type: none"> <li>. The City or County could ask construction contractors to impose a condition on construction workers that if they are arrested and charged with a crime in the local area, they will be fired. Enforcing this condition of employment could be a deterrent to subsequent potential offenders.</li> <li>. The developer and/or Homeowners' Association could consider employing a security firm as a short-term alternative to law enforcement during construction.</li> <li>. Deterrents to theft and burglaries on the construction site could include sufficient lighting of the area, the ability to lock/close off areas after work hours, and the use of publicized surveillance cameras.</li> <li>. Construction workers should be made aware of on-site requirements for securing/locking up locations, tools, and equipment.</li> <li>. The Sheriff's Department encourages planners responsible for formulating conditions of project approval to acquire a security survey and security plan for the development, and to apply best management practices such as Crime Prevention through Environmental Design (CPTED) to minimize visual obstacles, maintain visual surveillance corridors, and avoid places of concealment.</li> </ul>
<p>If it is assumed that the ratio of calls per 1,000 population for City Heights would be approximately comparable to the 2008 call volumes of the Cle Elum/Roslyn/South Cle Elum Police Department and Kittitas County Sheriff's Department (which include the impacts of travelers on I-90 and recreational visitors to the area), the project could generate in the range of 2,205 to 1,943 calls per year for the City Police Department (Alternative 1 or 2), or 2,169 to 1,283 calls for the Sheriff's Department (Alternative 3A or 3B) at full build-out and 90% permanent occupancy.</p>	<ul style="list-style-type: none"> <li>. The Development Agreement to be negotiated between the City and the project proponent if Alternative 1 or 2 is selected, or conditions of project approval that would be imposed by the County if development occurs under Alternative 3A or 3B, will establish the terms of the project's proportionate-share cost of capital and operating expenditures for Law and Justice services.</li> <li>. The <i>Fiscal Analysis</i> of the development reasonably calculates that tax revenues generated by City Heights would result in a net surplus in revenue compared to the operational requirements of either the Cle Elum/Roslyn/South Cle Elum Police Department or the Kittitas County Sheriff's Department (see Draft EIS Tables 3.19-11 and 3.19-13).</li> <li>. Estimated annual revenues that would be allocated to the City's Law and Justice budget with Alternative 1 or 2 would fund the cost of four full-time-equivalent officers and approximately \$140,000 per year for jail and dispatch costs. These revenues would also approximately double the City's budget for Municipal Court services.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
	<ul style="list-style-type: none"> <li>. Estimated annual revenues that would be allocated to the County’s Law and Justice budget with Alternative 3A or 3B would be sufficient to fund 3.4 additional fully-equipped officers within the Sheriff’s Department.</li> </ul>
<p>Animal control requirements within the service area of the Cle Elum/Roslyn/South Cle Elum Police Department would likely increase with the introduction of a resident population on the City Heights site.</p>	<ul style="list-style-type: none"> <li>. Until such time as the City or County adopts animal control regulations, animal control measures could be addressed in the Covenants, Conditions and Restrictions (CC&amp;Rs) of the City Heights development to be enforced by the Homeowners’ Association.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> Neither the Cle Elum/Roslyn, South Cle Elum Police Department or the Kittitas County Sheriff’s Department identified any significant unavoidable adverse impacts to law enforcement associated with the proposed City Heights development, provided that provisions are made for sustained funding to address increased manpower, equipment and facilities over time.</p>	
<p><b>PUBLIC SERVICES: SCHOOLS</b></p>	
<p>The Cle Elum-Roslyn School District would serve the City Heights development under any alternative. Student population projections (based on number of housing units by type, and assuming 90% permanent occupancy at full build-out in 2022) range from approximately 228 with Alternative 1 to approximately 121 with Alternative 3B.</p>	<ul style="list-style-type: none"> <li>. Given that the actual student population of the development will vary from these estimates, it may be necessary to evaluate the actual projected capital impact on classroom capacity on an annual basis.</li> <li>. The School District can effectively fund the operational impacts of additional students through property tax revenues. The City Heights development would generate a larger tax base over which to spread the fixed cost of bond repayment.</li> </ul>
<p>There is currently available capacity to accommodate some portion of City Heights students at the elementary and middle school levels; however, the development could – over the long term – generate a need for additional school building capacity.</p>	<ul style="list-style-type: none"> <li>. When it becomes clear that school building capacities will be reached, the optimal solution would be to implement the District’s Long-Range Facilities Plan; specifically, to embark on a capital improvement and expansion program with voter approval of a bond measure.</li> <li>. Other options to accommodate the additional students such as adding classrooms to the existing facilities or utilizing modular units to accommodate expansion would result in lower costs. These options could be funded by impact fees.</li> <li>. The City and County are authorized to impose impact fees on behalf of the School District. These could take the form of a per-lot payment or a per-student payment at the time actual development occurs.</li> <li>. The Development Agreement to be negotiated between the City of Cle Elum and the project proponent with implementation of Alternative 1 or 2 would provide for funding options satisfactory to the School District to provide a means to finance the facilities needed to accommodate the growth in student population attributable to City Heights.</li> </ul>
<p>While school bus route design and transportation logistics are difficult to project, it is possible that approximately 60% of students within City Heights would require school bus transportation. It is estimated that these students may generate a demand for the capacity of up to 1.8 additional school buses.</p>	<ul style="list-style-type: none"> <li>. The project’s proportionate-share capital cost responsibility for school buses will be addressed in the Development Agreement or conditions of project approval.</li> <li>. Main Access Roads and Collector Roads within the development would be designed to accommodate school buses.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
	<ul style="list-style-type: none"> <li>. Bus stops would be designated at appropriate locations without pull-outs, as it would be safer for buses to stop in-lane and hold all approaching and following traffic while students embark and disembark.</li> <li>. If areas under construction have the potential to temporarily affect school bus routes within the project, the developer would be responsible for implementing measures to assure safe and reliable passage.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> Because the Development Agreement to be negotiated between the City and the project proponent (if Alternative 1 or 2 is selected), or conditions of approval to be imposed by Kittitas County if Alternative 3A or 3B is selected, would provide for capital facilities funding options satisfactory to the School District, there should be no significant unavoidable adverse impacts to schools.</p>	
<p><b>UTILITIES: WATER SERVICE</b></p>	
<p>Construction of a new or expanded water distribution system would be required through the City Heights development within public rights-of-way or utility easements located under or adjacent to public or private roads. Construction impacts would include truck trips; noise, dust and increased erosion potential associated with trench excavations and backfilling; a need to coordinate construction with other underground utilities; possible temporary disruptions in service to some customers; possible temporary traffic lane closures; and road restoration.</p>	<ul style="list-style-type: none"> <li>. Best management practices would be implemented during the construction of utilities to minimize noise, dust and erosion potential.</li> <li>. Construction contractors should be required to notify existing water system customers well in advance of temporary interruptions to service (if any) during construction of connections to the City’s existing water distribution system.</li> <li>. Water system design and construction would comply with applicable City of Cle Elum or Kittitas County standards and specifications, depending on the alternative selected for implementation.</li> </ul>
<p>The 28 acres of the City Heights site presently within the City limits would be served with City water from the City’s existing supply, treatment, storage, and distribution system. The remaining 330 acres of the City Heights site is not presently included within the City of Cle Elum Retail Service Area and the Critical Water Supply Service Area boundaries.</p>	<ul style="list-style-type: none"> <li>. Prior to the start of any design or construction of the City Heights project, the water service area boundaries need to be updated to include the project site. This process has commenced.</li> </ul>
<p>There are two options for providing City water to the site under Alternative 1 or 2: the developer can either procure and transfer water rights to the City in sufficient quantity to serve the proposed number of equivalent residential units (ERUs) within the project, or may purchase water from the City’s excess supply at the rate of \$3,500 per ERU. If a portion of the City Heights project were served through purchase of water from the City of Cle Elum, this would reduce the amount of water held in reserve by the City for future needs.</p>	<ul style="list-style-type: none"> <li>. Northland Resources has initiated the process with the Department of Ecology to transfer water rights to serve up to 875 ERUs within the development, for the area presently outside the City limits. If there is any shortfall in the amount of water Northland Resources can transfer to the City, Northland may purchase water from the City to serve up to 250 ERUs. Final amounts to be determined after negotiations with Ecology will be included in the terms of the Development Agreement to be negotiated with the City.</li> <li>. If Northland Resources purchases water from the City to serve a portion of the needs of the City Heights development, the City could use the funds to secure additional water rights, or to improve service throughout the system.</li> </ul>
<p>The Alternative 1 or 2 water system requirements of the City Heights development would increase the workload of City Public Works staff and the cost of water system maintenance for miles of distribution mains to be constructed, booster station(s), pressure reducing stations, and reservoir(s).</p>	<ul style="list-style-type: none"> <li>. Potential mitigation measures for impacts to Public Works staff and City general services are discussed in the Public Services section, above.</li> <li>. Increased operating and maintenance costs would be recovered through utility rates paid by the actual City Heights users of the water system.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>It is anticipated that the City would supply water from its existing sources to any public space within the City Heights development that it owns or agrees to serve in the future under Alternative 1 or 2, such as parks, street landscaping, open space and public amenities.</p>	<ul style="list-style-type: none"> <li>. Ownership and maintenance responsibilities for parks, street landscaping, open space and public amenities would be negotiated in the Development Agreement between the City and the project proponent.</li> </ul>
<p>If Alternative 3A or 3B is selected for implementation, the City of Cle Elum would not provide water service for the 330 acres of the City Heights site outside the City limits. For these alternatives (to be developed in the County), water would be supplied by independent Group A community water systems operating with water right permits, or through individual water right permit-exempt wells. It is expected that multiple wells throughout the site would be required to meet the residential demands of either Alternative 3A or 3B.</p>	<ul style="list-style-type: none"> <li>. Water to serve either Alternative 3A or 3B could be supplied from the Northland Resources water right, in which case the “water budget neutral” mitigation proposal would be implemented as required and approved by the Washington Department of Ecology.</li> <li>. New wells would need to be approved by the Washington Department of Ecology. Ecology will consider impacts to other potentially affected water users in the area as part of their approval process.</li> </ul>
<p>Average daily water demand factors used to estimate residential and neighborhood commercial demand within the City Heights development are described in Draft EIS Section 3.18.1. The total City Heights water supply demand (with a 7.5% contingency) is projected to range between approximately 0.28 million gallons per day (mgd) and 0.26 mgd if Alternative 1 or 2 is selected for implementation within the City limits.</p>	<ul style="list-style-type: none"> <li>. The proposed development under Alternative 1 or 2 would incorporate low-flow faucets, toilets and similar fixtures to minimize domestic water supply requirements.</li> <li>. The Covenants, Conditions and Restrictions (CC&amp;Rs) of the development could require homeowners to install only drought-tolerant (i.e., xeric) landscaping to minimize irrigation requirements.</li> <li>. The proposal includes water right change procedures to convert an existing water right formerly used for irrigation to a domestic water supply use (described in Draft EIS Section 3.3).</li> <li>. It is anticipated that an agreement will be created between the City of Cle Elum and the project proponent to indicate that the cost of improvements required within the City’s water system to serve Alternative 1 or 2 of City Heights and all on-site improvements required to supply water to the project will be paid by the project proponent and not directly by the City of Cle Elum. Payment could take the form of direct payment by the project proponent through some form of City-sponsored financing such as a Local Improvement District sponsored by Cle Elum (completely paid for by the project proponent, not with City funds), or through grant money secured by the City (with the costs of application and procurement funded by the project proponent and not the City).</li> </ul>
<p>Under Alternative 1 or 2, if water is delivered to the City Heights project from the existing City of Cle Elum water treatment plant, a water transmission line would need to be constructed from the plant to City Heights. A portion of this construction would occur within the WSDOT SR 903 right-of-way. A portion of the water transmission line may also be constructed in the PSE and/or BPA power line easements.</p>	<ul style="list-style-type: none"> <li>. Extension of a water transmission line in a WSDOT right-of-way would be required to comply with WSDOT design and construction standards.</li> <li>. Design and construction of a water transmission line (if any) within a power line easement would require coordination with PSE or BPA.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
	<ul style="list-style-type: none"> <li>. Based on current water usage and projected water demand associated with the City Heights project, the City’s existing water treatment facilities could be capable of serving the water needs of the project through development of the first 300 to 400 ERUs. In the event that a treatment capacity trigger point is reached prior to that, it is the responsibility of the City to construct an expansion to the water treatment plant.</li> </ul>
<p>The maximum fire flow requirement in the City of Cle Elum is 480,000 gallons for a demand of 4,000 gallons per minute for a 2-hour duration. Residential fire flow requirements are 120,000 gallons for a demand of 1,000 gallons per minute for a 2-hour duration. These requirements would be the same for either Alternative 1 or 2.</p>	<ul style="list-style-type: none"> <li>. Fire suppression systems under any alternative will be required to meet International Fire Code standards and Department of Health requirements for fire flow and pressure. Specific building designs will determine these requirements at the time building permit applications are submitted to the City.</li> <li>. Depending on how Alternative 1 or 2 development is phased and connected into the City’s existing water system, City Heights may utilize the City’s existing water storage facilities to meet fire flow requirements. Additional facilities for fire flow may be required.</li> <li>. Fire flow storage would be provided at the start of vertical construction of any residential or commercial structure.</li> </ul>
<p>The operational water storage requirements of the City Heights development would range from approximately 20,500 gallons to 19,080 gallons if Alternative 1 or 2 is selected for implementation within the City limits.</p>	<ul style="list-style-type: none"> <li>. If the water storage requirements of the City Heights development require the construction of one or more new reservoirs, all reasonable efforts will be made to locate these facilities with minimal visual impacts.</li> </ul>
<p>Kittitas County uses the same guidelines for the design of water systems; therefore, it is assumed that the average daily water demand, fire flow requirements, operational storage and standby storage to serve Alternative 3A would be the same as Alternative 2 if the project is developed within the City.</p>	<ul style="list-style-type: none"> <li>. Either a Satellite Management Agency or a Homeowners’ Association (HOA) would become a certified operator of Group A community water system(s) under Alternative 3A. If an HOA became the certified operator, three trained employees would be required to manage the system.</li> </ul>
<p>Alternative 3B would operate on a non-municipal water system for which the average daily demand (ADD) factor for single-family homes is higher (350 gpd per connection). Total estimated ADD for 500 homes in Alternative 3B would be approximately 0.175 mgd.</p>	<ul style="list-style-type: none"> <li>. Multiple water systems under multiple ownerships in Alternative 3B would be required to comply with Department of Health and Kittitas County regulations for water treatment, storage, and fire flow (depending on the capacity of the source for the individual systems).</li> <li>. The potential effects on other water users within the basin of individual wells to serve Alternative 3B will have been considered by Ecology in the process to approve the Northland Resources water right transfer, regardless of which City Heights alternative is selected for implementation.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> No net loss of water would be anticipated in the basin as a result of Ecology’s review and acceptance of the Northland Resources water bank proposal (described in Draft EIS Section 3.3). No significant unavoidable adverse impacts to the operation and maintenance of the City of Cle Elum water system or to existing City water system customers is anticipated with Alternative 1 or 2. The Development Agreement to be negotiated between the City and the project proponent will specify developer cost responsibilities for capital improvements to the system. New users within City Heights will be required to pay connection fees and monthly service fees established by the City. The development would have independent responsibility for operating one or more water systems to serve Alternative 3A or 3B, with no impact to the County.</p>	



Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>UTILITIES: SEWER SERVICE</b>	
<p>Construction of an on-site sewage collection system and individual connections to serve homes and businesses within City Heights would occur within public rights-of-way or utility easements located under or adjacent to public or private roads. In addition, pipeline construction would be required from the site to the point of connection to the City’s existing sewer trunk line and/or directly to the WWTP (or to other alternative treatment facilities). Construction impacts would include construction truck trips; noise, dust and increased erosion potential associated with trench excavations and backfilling; a need to coordinate construction with other underground utilities; possible temporary disruptions in service to some customers; possible temporary traffic lane closures; and road restoration. If on-site sewage disposal systems were constructed to serve Alternative 3A or 3B, there would be earthwork for drainfield construction, but no potential disruption in service to other customers.</p>	<ul style="list-style-type: none"> <li>. Best management practices would be implemented during the construction of utilities to minimize noise, dust and erosion potential.</li> <li>. Construction contractors should be required to notify existing sewer system customers well in advance of temporary interruptions to service (if any) during construction of the City Heights connections to the Cle Elum sewer trunk line.</li> <li>. Sewage collection system design and construction would comply with applicable City of Cle Elum or Kittitas County standards and specifications, depending on the alternative selected for implementation.</li> </ul>
<p>The 28 acres of the City Heights site presently within the City limits is within the regional sewer system service area; however, the City’s existing wastewater treatment plant (WWTP) capacity is fully allocated to existing parties to the Sewer Agreement: the City of Cle Elum, the Bullfrog UGA properties, the Town of South CleElum, the City of Roslyn, and the Suncadia Resort. The remaining 330 acres of the City Heights site is not presently included within the regional sewer system service area.</p>	<ul style="list-style-type: none"> <li>. The 330 acres of the City Heights site presently outside the City limits would be included within the regional sewer service area upon annexation to the City of Cle Elum.</li> <li>. Five options for overcoming the current situation in which the City of Cle Elum has fully allocated the capacity of its existing WWTP are examined in the EIS. Resolution will be reached in the Development Agreement to be negotiated between the City and the project proponent if Alternative 1 or 2 is selected for implementation.</li> </ul>
<p>Three potential methods of handling wastewater generated by the project are evaluated in the Draft EIS: <i>Public System</i> – connection to the City of Cle Elum wastewater collection, treatment and disposal system; <i>MBR System</i> – construction of a new membrane bioreactor plant on the City Heights site; or <i>On-Site Sewage Disposal Systems (OSDS)</i> – construction of community OSDS (with Alternative 3A) or individual OSDS (with Alternative 3B).</p>	<ul style="list-style-type: none"> <li>. If expansion of the City’s existing wastewater treatment plant is necessary to serve City Heights Alternative 1 or 2, required upgrades may include adding screening at the effluent station, or may involve more substantial upgrades such as adding a third sequencing batch reactor (SBR) in an available cell, headworks modifications, ultraviolet light disinfection system upgrades, and outfall modifications.</li> <li>. Developer cost responsibilities for capital improvements to the WWTP and outfall would be negotiated through the Development Agreement with the City if conceptual land use Alternative 1 or 2 is selected.</li> <li>. If improvements are required to the City’s wastewater collection and treatment system, these would be designed and constructed in accordance with applicable standards set forth by the City of Cle Elum, the Department of Health, and Ecology. The City may be required to prepare and submit a Sewer Comprehensive Plan to these State agencies to address the addition of the new development to the existing regional sewer system.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
	<ul style="list-style-type: none"> <li>. If significant WWTP upgrades are required to serve City Heights, the Sewer Parties may want to consider a different treatment process to upgrade the technology from the Sequencing Batch Reactor (SBR) process. Newer processes could improve efficiency, capacity, and the level of treatment while simultaneously reducing maintenance costs.</li> <li>. If the <i>On-Site Option</i> or the <i>Third Street Option</i> were selected to serve Alternative 1 or 2, construction of a new trunk line from City Heights to the City’s existing WWTP would require permits and approvals from several local, State and Federal agencies, including the City of Cle Elum, the Washington Department of Fish and Wildlife, Ecology, WSDOT, the BNSF Railroad, and the U.S. Army Corps of Engineers.</li> <li>. If an MBR system were selected to serve Alternative 1, 2, or 3A, this system would be designed, constructed, and operated in accordance with the manufacturer’s specifications and standards for reclaimed water jointly developed by the Department of Health and Ecology.</li> <li>. An outfall discharge to the Yakima River from the MBR option would be required to obtain permits from the City of Cle Elum, the Washington Department of Fish and Wildlife, Ecology, WSDOT, the BNSF Railroad, the U.S. Army Corps of Engineers, and the Washington Department of Natural Resources.</li> </ul>
<p>The Alternative 1 or 2 wastewater collection and treatment system requirements of the City Heights development would increase the workload of City Public Works staff and the cost of sewer system maintenance for miles of collection mains to be constructed, pump stations, WWTP and outfall upgrades.</p>	<ul style="list-style-type: none"> <li>. Potential mitigation measures for impacts to Public Works staff and City general services are discussed in the Public Services section, above.</li> <li>. Increased operations and maintenance costs would be recovered through utility rates paid by the actual City Heights users of the wastewater collection and treatment system.</li> </ul>
<p>Total average daily wastewater flow from Alternative 1 or 2 would range from approximately 212,834 gallons per day (gpd) to 192,834 gpd based on 80% of the water usage projection. Winter peak hour flows would range from approximately 931,148 gpd to 843,649 gpd. At the time of this writing, the City of Cle Elum had fully-committed its existing WWTP capacity to the parties to the existing Sewer Agreement.</p>	<ul style="list-style-type: none"> <li>. The project proponent is exploring options with the City of Cle Elum and the Sewer Parties to determine whether an arrangement can be made for existing unused capacity in the wastewater collection and treatment system to be allocated to City Heights. Any costs associated with allocating unused capacity to City Heights would be imposed through the Development Agreement, requiring the project proponent to reimburse costs as lots were developed and connected to the City’s infrastructure.</li> <li>. If the <i>Borrow Option</i>, <i>Purchase Option</i>, or <i>Infiltration/Inflow Option</i> for the wastewater collection system were selected, existing capacity would be rented or purchased and the compensation would be negotiated between the parties.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
	<p>. If a permanent transfer of unused capacity cannot be arranged through one of these options, then wastewater collection, treatment and disposal system upgrades would be required to serve City Heights. The initial capital investment costs would be paid for by the project proponent and not directly by the City of Cle Elum. Payment could take the form of direct payment by the project proponent, through some form of City-sponsored financing such as a Local Improvement District (completely paid for by the project proponent, not with City funds), or through grant money secured by the City of Cle Elum (with costs of application and procurement funded by the project proponent, not the City). Under no circumstance would costs to provide sewer service to City Heights be borne directly by the City of Cle Elum or existing sewer service customers.</p>
<p>Total average daily wastewater flow from Alternative 3A or 3B would range from approximately 192,834 gpd to 103,758 gpd. The City's Capital Facilities Plan does not presently include a policy that would allow extending sewer service to the 330 acres of the City Heights site within the UGA if it were to remain outside the City limits.</p>	<p>. On-site sewage disposal systems (OSDS) could be used to serve Alternative 3A or 3B. When these systems are properly designed, installed and maintained in accordance with applicable regulations, they would not be a source of impact to the environment until they no longer functioned property and required upgrade or replacement.</p> <p>. Design, construction, operation and maintenance of OSDS to serve Alternative 3A or 3B would be required to comply with Department of Health, Ecology and Kittitas County regulations.</p> <p>. Community OSDS to serve Alternative 3A would require perpetual maintenance and management under the responsibility of a management system approved by Kittitas County.</p>
<p><b>Significant Unavoidable Adverse Impacts:</b> If it is necessary to upgrade and expand the City's wastewater collection and treatment system to serve full build-out of City Heights Alternative 1 or 2, the Development Agreement to be negotiated between the City and the project proponent will specify developer cost responsibilities to avoid adverse impacts to the City or existing sewer system customers. New users within City Heights will be required to pay connection fees and monthly service fees established by the City. For all of these reasons, no significant unavoidable adverse impacts to the operation and maintenance of the system, or to existing sewer system customers would be anticipated. If an MBR system or OSDS were selected as the means of wastewater treatment to serve Alternative 3A or 3B, and if these systems were properly design, constructed, operated, and maintained in accordance with all applicable regulations, no adverse impacts to the environment would be anticipated.</p>	

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>UTILITIES: STORMWATER MANAGEMENT</b>	
<p>There could be potential stormwater impacts during construction if surface water runoff were not managed during vegetation removal and earthwork activities, in particular. Sediment-laden water from exposed soils could enter seasonal stream courses through the site and Crystal Creek, unless proper protective measures are implemented.</p>	<ul style="list-style-type: none"> <li>. Temporary erosion/sedimentation control (TESC) measures will be installed on the City Heights site during construction in accordance with local regulations and the Washington Department of Ecology (Ecology) <i>Stormwater Management Manual for Eastern Washington</i> (SWMMEW).</li> <li>. Construction Best Management Practices (BMPs) will be implemented to convey, collect, treat and control the release of construction stormwater runoff. Representative measures include installing silt fencing to delineate the limits of work/construction zones, utilizing vegetated or rip-rapped roadside ditches and check dams for conveyance, creating sedimentation ponds and/or sediment traps for collection and treatment of stormwater runoff prior to release from the site, installing silt fences or straw wattles for treatment, and installing proper piping and outfall protection inside the limit of work areas for controlled release of construction stormwater runoff.</li> <li>. Prior to any on-site construction activity, a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit will be obtained from Ecology. Contractors working on the site will be required to comply with the conditions of this permit.</li> <li>. The site will be subject to inspection during construction by agencies with jurisdiction to assure that stormwater management facilities are properly installed, properly functioning and maintained.</li> <li>. Stormwater Pollution Prevention Plans (SWPPP) will be prepared to provide guidance to contractors regarding how to deal with varying degrees and types of runoff problems to prevent sediment-laden water and wind-blown particles from leaving the target area, as well as how to manage accidental spills in the event that this were to occur. The SWPPPs will also address protection of adjoining properties and on-site features to be protected (such as wetlands, steep slopes, and drainage courses).</li> <li>. Snowfall that occurs in the Cle Elum area between approximately late fall and late spring each year will limit ground-disturbing activities to the drier months of the year. The actual months of construction may vary from year to year depending on when snowfall occurs.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>Site development would introduce in the range of 119.47 acres to 71.6 acres of impervious surface area on the site (structures, road and parking areas) depending on the alternative selected for implementation. There would be a corresponding decrease in the amount of pervious area (forest, shrub and meadows), thereby increasing the amount of surface water runoff. The estimated range in the volume of runoff from the developed condition of the site (if unmitigated) is 394.94 cubic feet per second (cfs) to 373.55 cfs depending on the alternative selected.</p>	<ul style="list-style-type: none"> <li>. The proposal includes complying will all applicable local, State and Federal regulations to construct and maintain a stormwater management system that would avoid or minimize potential adverse effects associated with City Heights stormwater quantity and quality.</li> <li>. The developed-condition stormwater management system would include drainage conveyance systems properly designed and constructed in accordance with Ecology’s 2004 SWMMEW, including a stormwater collection and conveyance system, catch basins equipped with sediment filters, vegetative and/or rip-rapped swales and check dams, detention/retention facilities, control structures equipped with oil-water separators, infiltration facilities (if groundwater levels allow), properly-sized culverts at stream crossings designed in accordance with WDFW Hydraulic Code Rules, and proper outfall/runoff discharge protection and energy dissipation.</li> <li>. If more current local and State manuals for guidance on stormwater management design are adopted by the City of Cle Elum, Kittitas County (if Alternative 3A or 3B is selected), or Ecology, these may be followed at the time of each site development application.</li> <li>. To protect stream morphology, detention facilities are proposed throughout the project site, based on separate basins (the boundaries of which will be refined during final design). Sufficient preliminary engineering analysis has been done to confirm the approximate site area required and available for stormwater management improvements.</li> <li>. Where development patterns and topography allow, small localized drainage facilities would be provided to implement a “low impact development” approach to stormwater management that would more closely mimic the pre-development hydrology of the site.</li> <li>. It is anticipated that stormwater management facilities within the development would be owned and maintained by the developer during the early stages of site development, with this responsibility to be transferred to the Homeowners’ Association after construction is complete and lots are legally platted.</li> </ul>
<p>Existing drainage facilities downstream from the project site do not have enough capacity to convey increased volumes of runoff from the developed-condition of City Heights, with the result that downstream flooding conditions could become worse (if uncontrolled).</p>	<ul style="list-style-type: none"> <li>. Flow control and channel stabilization measures will be implemented throughout the project site in compliance with Ecology’s 2004 SWMMEW standards, especially near existing critical areas such as wetlands and streams to minimize both existing conditions of erosion and sediment transport and conditions that have the potential to be made worse as a result of the City Heights development. Representative BMPs for flow control and channel stabilization are listed in Draft EIS Section 3.18.3.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b>Potential Impacts</b>	<b>Mitigation Measures</b>
<p>If surface water runoff from the site were not treated prior to release, this runoff could convey pollutants to receiving waters in the form of petroleum product residues and heavy metals associated with the operation of motor vehicles on the site; and sediments, pesticides, fertilizers and pet wastes from landscaped areas.</p>	<p>. Stormwater quality treatment facilities will be constructed on the site in accordance with Ecology’s 2004 SWMMEW. Based on the types of treatment required, terrain configuration, and site layout, Biofiltration Treatment Facilities have been identified as the primary features to be used for stormwater quality treatment.</p>
<p><b>Significant Unavoidable Adverse Impacts:</b> Given that the proposal will comply with all applicable stormwater management regulations during construction and in the developed condition of the site, no significant unavoidable adverse storm drainage impacts would be anticipated. Further, while Ecology’s SWMMEW requires detaining the 25-year storm event, the proposal includes detaining the 100-year storm event based upon past flooding experiences in the area. Stormwater runoff effects from the site as a result of a storm and/or flood event of greater magnitude than the 100-year storm would be considered a significant unavoidable adverse impact.</p>	
<p><b>UTILITIES: ELECTRICAL SERVICE</b></p>	
<p>Both Puget Sound Energy (PSE) and Kittitas County PUD hold franchise agreements with the City and County to install and maintain power lines in the area of the City Heights site. They compete for the opportunity to provide this service, subject to Washington State bid laws. The difference in municipal jurisdiction between the conceptual land use alternatives (i.e., Alternative 1 or 2 to be developed within the City, Alternative 3A or 3B to be developed within the County) is inconsequential to the electrical service providers.</p>	<p>. Density and projected electrical load will determine the feasibility of the project for the electrical service provider to invest in distribution system improvements within the developing area.</p>
<p>Either electrical service provider would need 5 to 10-ft wide easements within the City Heights development for the extension of power lines to serve the project, unless these corridors could be located within public rights-of-way (such as City streets).</p>	<p>. Design and installation of electrical service requirements to serve the City Heights development will be coordinated with the Engineering and Construction Departments of the selected service provider during the preparation of construction documents for the project.</p>
<p>PSE (if selected) would anticipate serving the City Heights project from three access points along Third Street: Billings Avenue, Montgomery Avenue, and Columbia Avenue.</p>	<p>. Some PSE electrical distribution line improvements would be required, as well as space required for two pad-mounted 34-12 kV step-down transformers.</p>
<p>If Kittitas County PUD is selected to provide electrical service to the development, they would prefer overhead main feeders in the utility corridors (underground is possible at higher cost), and overhead or underground installations for all taps off the main feeder line(s). The PUD would need to expand the Teanaway Substation sooner than presently scheduled (2018), or find a property and tap location near existing electrical transmission lines to meet the demands of this project.</p>	<p>. Joint use of trenches with other utility providers would be acceptable to the PUD for the on-site extension of electrical service, with 12 inches of vertical and horizontal separation.                  . It would be helpful to Kittitas County PUD (if selected as the electrical service provider for City Heights) for some property to be set aside or zoned for an electrical substation or electrical switchyard within the Cle Elum service area.</p>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>The City Heights conceptual land use plans show project roads and trail improvements within and/or across the Puget Sound Energy and Bonneville Power Administration electrical transmission line easements through the property.</p>	<ul style="list-style-type: none"> <li>. The construction, operation and maintenance of roads, utilities, and/or trail improvements within the overhead electrical transmission line easements granted by the property owner to PSE and BPA will be coordinated in advance with these entities. Three departments require review before construction activity takes place: Engineering, Total Energy System Planning, and Electric First Response.</li> </ul>
<p>The estimate of electrical demand to serve City Heights, based on a 60% diversity factor,<sup>7</sup> would range from approximately 5,080 kW with Alternative 1 to 2,750 kW with Alternative 3B. If all dwelling units and neighborhood businesses within the development were served with natural gas for heat and hot water, the electrical demand estimates would be lower.</p>	<ul style="list-style-type: none"> <li>. It is the preference of the project proponent to have natural gas service installed throughout the development to serve all homes and neighborhood commercial uses, provided that it is cost-effective to do so.</li> <li>. Washington Utility and Transportation Commission (WUTC) tariffs will specify cost responsibility for electrical and natural gas line extensions, some portion of which may be a developer expense.</li> <li>. The developer will encourage builders to incorporate “built green” features and additional energy conservation measures to the extent practicable. Representative measures are described in Draft EIS Section 3.6.</li> </ul>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> Construction and occupancy of the City Heights development would result in the consumption of a significant amount of electrical energy; however, this demand would occur regardless of where within the City of Cle Elum and/or Kittitas County development occurs to provide for projected population growth during the current 20-year planning period. The vast majority of electrical energy conveyed by PSE originates from hydropower, a renewable source. Based on communications with PSE and Kittitas County PUD, neither utility would anticipate significant unavoidable adverse impacts to their ability to provide electrical service in the Cle Elum area as a result of phased development of the City Heights project.</p>	
<p><b>UTILITIES: NATURAL GAS SERVICE</b></p>	
<p>Natural gas lines extended through the City Heights development would be located within public rights-of-way or designated utility easements, with ease of access for inspection and repair.</p>	<ul style="list-style-type: none"> <li>. The design and installation of natural gas service to the City Heights development (if requested by the project proponent) would be coordinated with PSE Engineering and Construction Departments during construction document preparation.</li> <li>. PSE would construct the natural gas system using one of its authorized contractors to perform the work. The contractor would be required to work with the City or County (depending on the alternative selected for implementation) to provide traffic control measures during work within road rights-of-way adjacent to operational roadways.</li> </ul>
<p>PSE would likely extend natural gas service to the City Heights project from the same three access points along Third Street as those identified for electrical service extension: Billings Avenue, Montgomery Avenue, and Columbia Avenue.</p>	<ul style="list-style-type: none"> <li>. Phased extension of the natural gas system through the City Heights site (if requested by the developer) may or may not coincide with phased development of the project. PSE would make cost-effective and system operational decisions for its own construction project.</li> </ul>

<sup>7</sup> The diversity factor is based on an assumption that some homes would use natural gas for heat and hot water, and some homes would be all-electric. It also accounts for loads peaking at different times.

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
Natural gas load demand estimates for the City Heights development range from approximately 100.1 million cubic feet (cf) per year with Alternative 1 to approximately 50 million cf/year with Alternative 3B. <sup>8</sup>	. Homeowners, commercial property owners and tenants could be encouraged through the CC&Rs of the development to utilize energy-efficient practices.
	. Minimum pressure delivery in distribution systems is approximately 15 pounds per square inch gauge (psig). If the City Heights demand for natural gas service were to cause design pressures to fall below 15 psig, there are several methods PSI could implement to increase pressure in the distribution system: loop the distribution and/or supply lines; install mains parallel to existing mains to supplement the supply, replace or upsize existing pipelines to increase volume.
<b><i>Significant Unavoidable Adverse Impacts:</i></b> Based on communications with Puget Sound Energy, no significant unavoidable adverse impacts to their natural gas service system would be anticipated with phased development of the City Heights Planned Mixed-Use development.	
<b>UTILITIES: TELECOMMUNICATIONS SERVICE</b>	
The City Heights site is not presently served by a telecommunications provider; therefore, the project proponent can choose which provider they would like to use: Qwest or Inland Telephone. The selected provider would design an infrastructure that would have the capacity to serve every customer and a variety of telecommunication needs. The character of proposed land use and range in development density between the conceptual land use alternatives would result in an approximately equivalent demand for telecommunications service.	. In order to minimize the potential for construction conflicts, the developer would provide the local engineering office of the selected telecommunications provider with detailed plat designs and a schedule for development as early as possible following development approvals. . The telecommunications provider would require a contract with the project proponent prior to the construction of additions to their network. . Telecommunications installation will follow the regulated requirements of each provider. Underground installation may use the same trenches as electrical power installation, and precede the extension of natural gas. This sequencing will require typical coordination between all underground utility service providers. . “Bubble easements” (approximately 20 feet x 20 feet in area, preferably adjacent to a roadway) may be requested at telecommunications vault locations.
<b><i>Significant Unavoidable Adverse Impacts:</i></b> Based on available information, the telecommunications service providers have indicated that they have networks with capacity to provide service to the City Heights development without adverse impact.	

<sup>8</sup> For the purpose of the natural gas load demand estimates, no distinction was made between single-family detached homes and attached dwelling units, and no reduction was made for units that may be only seasonally occupied; therefore, this estimate is conservatively high.



Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<i>Potential Impacts</i>	<i>Mitigation Measures</i>
<b>UTILITIES: SOLID WASTE COLLECTION SERVICE</b>	
<p>Site clearing for the construction of roads, utilities and building sites will generate a significant amount of biomass (trees, stumps, and general land clearing debris) for disposal.</p>	<ul style="list-style-type: none"> <li>. The proposal includes grinding wood waste and stumps on-site to create woodchips for use in temporary site stabilization and permanent landscaping.</li> <li>. Waste Management of Ellensburg can provide containers for excess land clearing debris to be transported to the company’s processing facility in Woodinville, Washington.</li> <li>. Trees with rootwads could be made available for stream diversification/habitat enhancement projects if a source is identified to receive this material.</li> </ul>
<p>The City Heights development at full build-out could approximately double the number of existing solid waste collection accounts in the Cle Elum area. This amount of growth is within the range anticipated by Waste Management of Ellensburg within their service area over the projected 6- to 12-year build-out of the project.</p>	<ul style="list-style-type: none"> <li>. The Waste Management District Manager does not anticipate a need to add manpower or equipment to serve phased build-out of City Heights, but the company has the resources available if needed.</li> </ul>
	<ul style="list-style-type: none"> <li>. The project developer and/or City would notify Waste Management of Ellensburg at the time each new phase of development is proposed within City Heights in order to coordinate the provision of services that may be required during construction, and to give the company advance notice of the forthcoming increase in the number of customers to be served.</li> <li>. Residential and neighborhood commercial customers would be required to establish individual accounts with the company that has the franchise agreement for solid waste collection services in the area: Waste Management of Ellensburg.</li> </ul>
<p><b>Significant Unavoidable Adverse Impacts:</b> Waste Management of Ellensburg does not anticipate any significant unavoidable adverse impacts to their operations as a result of the City Heights development, due to the gradual rate of growth predicted to occur over 6 to 12 years.</p>	
<b>FISCAL IMPACTS</b>	
<p>The City or County (depending on the alternative selected) would experience requirements for general public services, public works services, law and justice services, fire protection and emergency services upon commencement of construction on the City Heights site.</p>	<ul style="list-style-type: none"> <li>. The <i>Fiscal Analysis</i> of the development calculates that the City would receive one-time tax revenues in the amount of approximately \$350,000 per year with Alternative 1, or approximately \$294,000 per year with Alternative 2 (in \$2009) over the course of an assumed 10-year construction period (see Draft EIS Table 3.19-11). These revenues are reasonably calculated to offset the projected cost of City services required by the development during the construction period.</li> <li>. The <i>Fiscal Analysis</i> calculates that the County would receive one-time revenues in the amount of approximately \$390,000 per year with Alternative 3A, or \$270,000 per year with Alternative 3B (in \$2009) over an assumed 10-year construction period (see Draft EIS Table 3.19-13). These revenues are reasonably calculated to offset the projected cost of County services required by the development during the construction period.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>In the developed condition of the project, the City or County (depending on the alternative selected) would experience on-going requirements for general public services, public works services, law and justice services, fire protection and emergency services throughout the useful life of the development. The operating impact analysis may vary over time due to laws that affect property tax limits, growth in property tax revenues at a lower rate than expenses, and other factors.</p>	<ul style="list-style-type: none"> <li>. It is the intention of the City (with Alternative 1 or 2) to require the project to bear the costs of all improvements associated with public infrastructure (water, sewer, stormwater, and road improvements) by enforceable requirements to be stipulated in the Development Agreement. These mitigations may take the form of one-time or periodic cash payments, or other means of providing a funding mechanism.</li> <li>. In the developed condition of Alternative 1 or 2, the City of Cle Elum is projected to collect a surplus in operating revenues on the order of approximately \$29,000 or \$4,600 per year (in \$2009), respectively (see Draft EIS Table 3.19-11).</li> <li>. In the developed condition of Alternative 3A or 3B, Kittitas County is projected to collect a surplus in operating revenues on the order of approximately \$210,000 or \$200,000 per year (in \$2009), respectively (see Draft EIS Table 3.19-13).</li> </ul>
<p>If City Heights Alternative 3A or 3B is selected for implementation, Kittitas County Fire Protection District (KCFPD) #7 would be the first-response agency for fire protection and emergency services.</p>	<ul style="list-style-type: none"> <li>. The <i>Fiscal Analysis</i> of the development reasonably calculates that increased property tax revenues attributable to City Heights would slightly exceed operating expenses of KCFPD #7 (see Draft EIS Table 3.19-15). The <i>Fiscal Analysis</i> notes, however, that property tax revenues (under the existing 1% per year limit) will probably grow more slowly than expenditures.</li> </ul>
<p>Kittitas County Hospital District 2 and Upper Kittitas County Medic One would serve the new resident population on the City Heights site under any alternative.</p>	<ul style="list-style-type: none"> <li>. The <i>Fiscal Analysis</i> of the development shows that the District would be likely to experience an operating surplus, as increased tax collections and ambulance charges are reasonably calculated to exceed the incremental costs of services (see Draft EIS Table 3.19-16). The <i>Fiscal Analysis</i> notes, however, that property tax revenues (under the existing 1% per year limit) will probably grow more slowly than expenditures.</li> </ul>
<p>There is capacity in the City’s wastewater collection and treatment system to accommodate proposed City Heights development only if agreement can be reached with one of the Sewer Parties not presently using all capacity allocated to it for development that has not yet occurred.</p>	<ul style="list-style-type: none"> <li>. If agreement can be reached for City Heights to be served by the City’s existing wastewater collection and treatment system, the <i>Fiscal Analysis</i> of the development reasonably calculates that the projected increase in revenues (at current rates) would greatly exceed the projected increase in cost (see Draft EIS Table 3.19-12).</li> </ul>
<p>The City’s water distribution, storage and treatment system would require expansion to serve City Heights. City records do not provide a level of detail for water system costs that would enable a cost analysis comparable to that performed for the wastewater collection and treatment system.</p>	<ul style="list-style-type: none"> <li>. The <i>Fiscal Analysis</i> of the development projects that the increase in revenue vs. cost effects of serving City Heights with the municipal water system (with additional water rights to be brought to the City by Northland Resources) would be similarly positive to that calculated for the wastewater collection and treatment system.</li> </ul>

Table 1.4-1. Summary matrix of environmental impacts and mitigation measures associated with the City Heights Planned Mixed-Use development, *continued*.

<b><i>Potential Impacts</i></b>	<b><i>Mitigation Measures</i></b>
<p>The City Heights development would generate a larger tax base over which to spread the fixed cost of Cle Elum-Roslyn School District bond repayment.</p>	<p>. The City Heights proportionate share contribution to School District bond repayment (in \$2009 at current tax rates) is estimated to range from approximately \$190,600 with Alternative 1 to approximately \$113,200 per year with Alternative 3B (see Draft EIS Table 3.19-14).</p>
<p>The City Heights student population may create the need for additional school capacity over time.</p>	<p>. When needed, additional classrooms and support facilities could be provided through the construction of new facilities, the expansion of existing facilities, or utilization of modular facilities.</p> <p>. The lower-cost options could be financed through impact fees imposed and collected on behalf of the School District by the City or County (depending on the City Heights alternative selected for implementation). These fees could take the form of a per-lot payment or a per-student payment at the time actual development occurs.</p> <p>. The optimum solution desired by the District would be to implement their Capital Facilities Plan; specifically, to embark on a capital improvement and expansion plan with voter approval of a bond measure.</p>
	<p>. The Development Agreement to be negotiated between the City of Cle Elum and the project proponent with Alternative 1 or 2 (or conditions of approval that would be imposed by Kittitas County with Alternative 3A or 3B) will provide for funding options satisfactory to the School District to provide a means to finance the facilities needed to accommodate the growth in student population attributable to City Heights.</p>
<p><b><i>Significant Unavoidable Adverse Impacts:</i></b> The projected revenue and expense analysis prepared for the project identified no significant unavoidable adverse fiscal impacts to the City of Cle Elum, Kittitas County, or public service providers. Inherent in any growth, however, is the possibility that not all costs can be foreseen. There may be short-term lags in the early stages of development between the need for service and the receipt of revenue. Efforts will be made through the terms of the Development Agreement to be negotiated between the City and the project proponent (Alternative 1 or 2), or through Kittitas County conditions of project approval (Alternative 3A or 3B) to provide mechanisms for bridging potential short-term gaps.</p>	



## **1.5 Cumulative Effects**

The Washington State Environmental Policy Act (SEPA) Rules limit the scope of environmental review to impacts that are probable (WAC 197-11-782) and significant (WAC 197-11-794), with attention to impacts that are likely, not merely speculative (WAC 197-11-060[4][a]). The SEPA Rules do not specifically define cumulative effects but indicate that those effects resulting from growth outside the boundaries of the proposed project but caused by the proposed project, as well as the likelihood that the project would serve as a precedent for future actions shall be addressed in environmental documents required under SEPA (WAC 197-11-060[4][d]). Extending a road and/or utilities to a site boundary that adjoins a presently unserved property would be representative examples of what might result in a cumulative effect caused by the City Heights proposal, if these precedent actions would enable the adjoining property to annex or develop whereas it could not without this contiguity with the City limits and access to urban services.

The City and the applicant are aware of three properties adjacent to the City Heights site for which the owners have engaged in informal discussions of plans for future development. These include the Central Cascades Land Company west of the site, the Cle Elum Pines (Deneen) property between the west end of the site and SR 903, and the Cle Elum Property Partners, LLC (Olson brothers) property north of the west end of City Heights (see Figure 1.5-1).

### **Central Cascades Land Company**

The Central Cascades Land Company ownership consists of four parcels north and west of the former City of Roslyn sewage lagoons (see Figure 1.5-1). This site has access from Alliance Road regardless of whether development occurs on the City Heights site, and is not contiguous with City Heights. On January 23, 2008, Central Cascades Land Company submitted an application to the City of Cle Elum requesting annexation of 90 acres of land to be developed for light industrial uses. This property is within the City of Cle Elum Urban Growth Area, but has not yet demonstrated proof of water availability to serve light industrial development of the site. Annexation has not occurred, and no conceptual land use plan or development application has been submitted to the City. If development occurs on the Central Cascades Land Company site at some future time, and if City Heights uses Alliance Road for its west access (as described with conceptual land use Alternative 2 or 3A), there would be cumulative traffic impacts on Alliance Road and at the intersection of Alliance Road with SR 903. Trip directions would be opposite for employment on the light industrial site compared to residential development on the City Heights site; i.e., City Heights trips would be predominantly outbound during the AM peak hour and inbound during the PM peak hour, whereas employment trips on the Central Cascades Land Company site would be primarily inbound during the AM peak hour and outbound during the PM peak hour. It would be speculative at this time to project the number of trips that might be generated by light industrial development on the Central Cascades Land Company site. If there is a future development proposal for this site, it will be required to undergo environmental review at the time of application, and to consider cumulative effects to which it may contribute at that time.

### **Cle Elum Pines Property**

The Cle Elum Pines property (Patrick Deneen, owner) is two parcels totaling approximately 28.44 acres on the north side of SR 903, between the State highway and the west end of the City Heights site (see Figure 1.5-1). Informal communications between the City Heights applicant and the Cle Elum Pines owner indicate that he has future plans for a mixed commercial and residential project of this property. These communications also indicated that access to SR 903 to serve the Cle Elum Pines development would be constructed at the same location regardless of whether it would be intended to also serve as the

west access to City Heights. If City Heights develops its west access through the Cle Elum Pines property (as described with conceptual land use Alternative 1), there would be cumulative traffic impacts on this access road and at the intersection with SR 903, opposite the Bullfrog UGA business/commercial area access road. It would be speculative at this time to project the number of trips or other impacts that might be generated by commercial and residential development of the Cle Elum Pines property. If there is a development proposal for these parcels at some future time, it will be required to undergo environmental review of the application, and to consider cumulative effects to which it may contribute at that time.

### **Cle Elum Property Partners**

The Cle Elum Property Partners site is approximately 348 acres in size, adjacent to the northern boundary of the western portion of the City Heights site (see Figure 1.5-1). The Cle Elum Property Partners site has existing access from Alliance Road and Summit View Road regardless of whether development occurs on the City Heights property. Improved access might be facilitated by the City Heights internal road system. If Alternative 1 or 2 of the City Heights development is selected for implementation, City Heights would be annexed to the City of Cle Elum and City utilities and services would be extended throughout the site, to the common boundary with the Cle Elum Property Partners site. Contiguity with the City Heights site would create an opportunity for the Cle Elum Property Partners to petition for annexation. Annexation is a SEPA-exempt action. There is currently no known development proposal for the Cle Elum Property Partners site, and no application on file with the City of Cle Elum; therefore, it would be speculative to address the cumulative effects of future development on that property. As with the Central Cascades Land Company and Cle Elum Pines properties, the Cle Elum Property Partners site would be required to undergo environmental review and analysis of cumulative effects at the time of application for development.

Given the criteria that the impact analysis shall not be merely speculative, it is not possible at the time of this writing to evaluate the potential cumulative effects of facilitating development on adjacent properties, as there are no current applications pending with the City of Cle Elum for these properties.

The Draft EIS does take into account projections of growth in traffic volumes without the City Heights project through the year 2029 as presented in the City of Cle Elum *Draft Transportation Plan* (May 2009), and compares City Heights proportionate-share volumes at full build-out in 2022 to this projected “background growth” (see Draft EIS Section 3.16) With the exception of the known development proposal for the Bullfrog UGA business/commercial area opposite the west end of the City Heights site, the *Draft Transportation Plan* does not identify specific parcels to which future trips were estimated. Draft EIS Section 3.16 describes the assumptions that were made for the purpose of the City Heights impact analysis.

The City of Cle Elum Comprehensive Plan (2007) *Housing Element* and *Parks/Recreation/Open Space Element* include growth and demand projections for the City as a whole through the year 2025 to which the proportionate-share impacts of the City Heights development are compared in Draft EIS Sections 3.10, 3.11 and 3.14.

**Insert Figure 1.5-1. Adjacent Properties with Future Development Potential (11 x 17 color)**





## **1.6 Major Issues, Significant Areas of Controversy and Uncertainty, and Issues to be Resolved**

The major issue of concern to the community is the increased demand for and cost of public services to respond to the needs of the City Heights population that would approximately double the size of the existing population of Cle Elum over the projected 6- to 12-year build-out of the project. Other growth is projected to occur in this same timeframe, as well. The City's current fiscal condition is depressed largely a result of a slowdown in development activity; therefore, new development will stimulate the City's economy over the long term in the form of increased revenues during construction and in the developed condition of the project. Revenue sources will include sales tax on construction materials and services, business and occupation tax, revenues generated by lot sales and home sales, on-going property tax collections, revenues generated by employment and spending within the community, and utility charges.

It is not possible to precisely identify the probable fiscal impacts, either positive or negative, from a development the scale of City Heights given the myriad of possibilities about the timing of development, the types of residential units to be built within the development, and the ultimate population growth that will result. Inherent in any growth is the possibility that not all costs can be foreseen. Many benefits, both quantitative and qualitative, are derived to a community from well-planned growth. All known potential costs will be addressed and all revenue sources and benefits to the community will be considered when evaluating appropriate mitigations to be provided by the project. It is the intention of the City to create a mechanism within a Development Agreement that will provide for enforceable incremental mitigation to be provided by the project at various key trigger points that will reimburse the City for costs directly associated with the impacts of this development. These mitigations will take into account both capital costs (such as Public Works, Police and Fire equipment) and operational costs, such as the cost of staffing for the Police Department, Fire Department, and City Hall. Every attempt will be made for mitigation measures to be provided in anticipation of costs rather than after their occurrence. If Alternative 3A or 3B is selected, similar negotiations would occur with Kittitas County and public service providers within the unincorporated area.

It is a significant utility issue that if City Heights Alternative 1 or 2 is selected for implementation, available capacity in the City of Cle Elum wastewater collection and treatment is fully allocated to existing parties in the Upper Kittitas County Regional Wastewater Treatment Facilities Project Agreement. Several options for sewer service to the development are described and analyzed in this Draft Environmental Impact Statement, including *Borrow*, *Purchase*, *Infiltration/Inflow*, *On-Site*, and *Third Street Options*, or some combination of these (see Draft EIS Chapter 2, Section 2.9.3; or Chapter 3, Section 3.18.2). At the time of this writing, however, it is presently unclear how the project will be served. Some of the alternative sewer service options may require additional technical analysis, if selected.

It is the intention of the City of Cle Elum (if Alternative 1 or 2 is selected) to require the project to bear the costs of all improvements associated with public infrastructure (wastewater, water, stormwater and road improvements) by enforceable requirements stipulated in the Development Agreement associated with the project. These mitigations may take the form of one-time or periodic cash payments or other means of providing a funding mechanism.

The negotiated Development Agreement will be available for review by City decision makers prior to action being taken on the City Heights request for annexation, adoption of land use and zoning designations for the 330 acres to be annexed, and development approval for Planned Mixed-Use development of the site.

