Chapter 10: Land Use

This chapter describes land use patterns, zoning, and King County Comprehensive Plan designations and policies that apply to the Cedar Hills Regional Landfill (CHRLF) vicinity, and evaluates the potential for affecting land use by implementing any of the alternatives.

The environmental review determined there would be no significant unavoidable adverse impacts to land use during construction or operation of any of the alternatives.

10.1 Affected Environment

The CHRLF site includes the sanitary landfill operation and a 1,000-foot-wide buffer around the perimeter of the facility (Figure 1-3). The buffer separates the area of landfill activities from surrounding properties. Over the years, a number of additional uses have been allowed in the buffer, including the construction of the Cedar Hills Alcohol Treatment Center. The alcohol treatment center was constructed in 1966 and was closed in 2003. The site was recently approved for redevelopment by the YWCA for operation of its Passage Point facility, which will provide transitional housing and support to parents returning to the community after a period of incarceration who are reuniting with their children. KCSWD does not own or manage the area of the buffer zone on which the Passage Point facility will be located. Since 1997, the King County Parks Department has also operated a native plant nursery on approximately 6 acres of the former treatment center site.

Additional activities and uses within the buffer include an unpaved perimeter road just inside the fence along the outer property line, a non-potable water storage tank in the eastern buffer, and two leachate lagoons located approximately 600 feet from the south and west property lines in the southwest corner of the site. Aerial photographs taken in the 1970s and 1980s indicate that some landfilling occurred in the eastern and southern buffers; however, since that time all landfilling of refuse has occurred at least 1,000 feet from the site boundaries.

In addition to the activities and uses described above, several utility easements cross the CHRLF site. A 700-foot-wide Bonneville Power Administration (BPA) easement containing five electrical transmission lines crosses the southern portion of the site from east to west. Another electrical transmission line easement crosses north to south through the eastern buffer. In addition, a 75-foot-wide Williams Northwest Natural Gas Pipeline easement containing two natural gas pipelines parallels the BPA easement within the southern buffer.

10.1.1 Surrounding Land Use Patterns

The buffer immediately surrounding the CHRLF site is predominantly undeveloped forested land. Beyond the property line, current land use is predominantly single-family residences with the exception of land uses abutting the southern and southwestern sides of the landfill. Nonresidential land uses south of the CHRLF include the privately owned Queen City Farms hazardous waste remediation site and the privately owned and operated Cedar Grove composting facility. Nonresidential land uses southwest of the CHRLF site are Stoneway Rock & Recycling and Quality Rock Products, surface mining operations.

Within the 1-mile radius of the landfill site, approximately 35 additional low-intensity businesses or services are interspersed with predominantly residential land uses. None of these businesses has a direct relationship with the activities at the CHRLF.

The Special Permit for operations at the CHRLF issued in 1960 notes that the property abuts the Queen City Hog Farm and the Seattle Disposal Company's refuse disposal site and that all other surrounding property is undeveloped. Since 1960, residential land use in the vicinity has greatly increased. Figures 10-1 and 10-2 show the current distribution of land uses within 1 mile of the landfill. According to 2009 geographic information system (GIS) data (King County 2009a), approximately 1,260 residences are currently located within 1 mile of the CHRLF. King County 2006 GIS data (King County 2006) show that approximately 1,285 residences were located within 1 mile of the CHRLF at that time (the difference of 25 homes is partially due to parcel identification differences between the two calculations). Historical data prior to 2006 are not readily available for numbers of residences within the 1-mile radius of the CHRLF site; however, Figures 10-3 through 10-6 show the development through historical aerial photos for 1964, 1980, 1990, and 1998, respectively.

The residential land use near the landfill consists primarily of moderate- and low-density single-family development. Some higher density single-family developments are also located near the CHRLF site, constructed prior to enactment of the Rural Area (RA)-10 and RA-5 zoning described below. The Maple Hills community, which includes about 400 houses, lies just west of the landfill. Other nearby residential areas are located north of the CHRLF along and north of May Valley Road, and east of the landfill in the Four Lakes area adjacent to Cedar Grove Road.

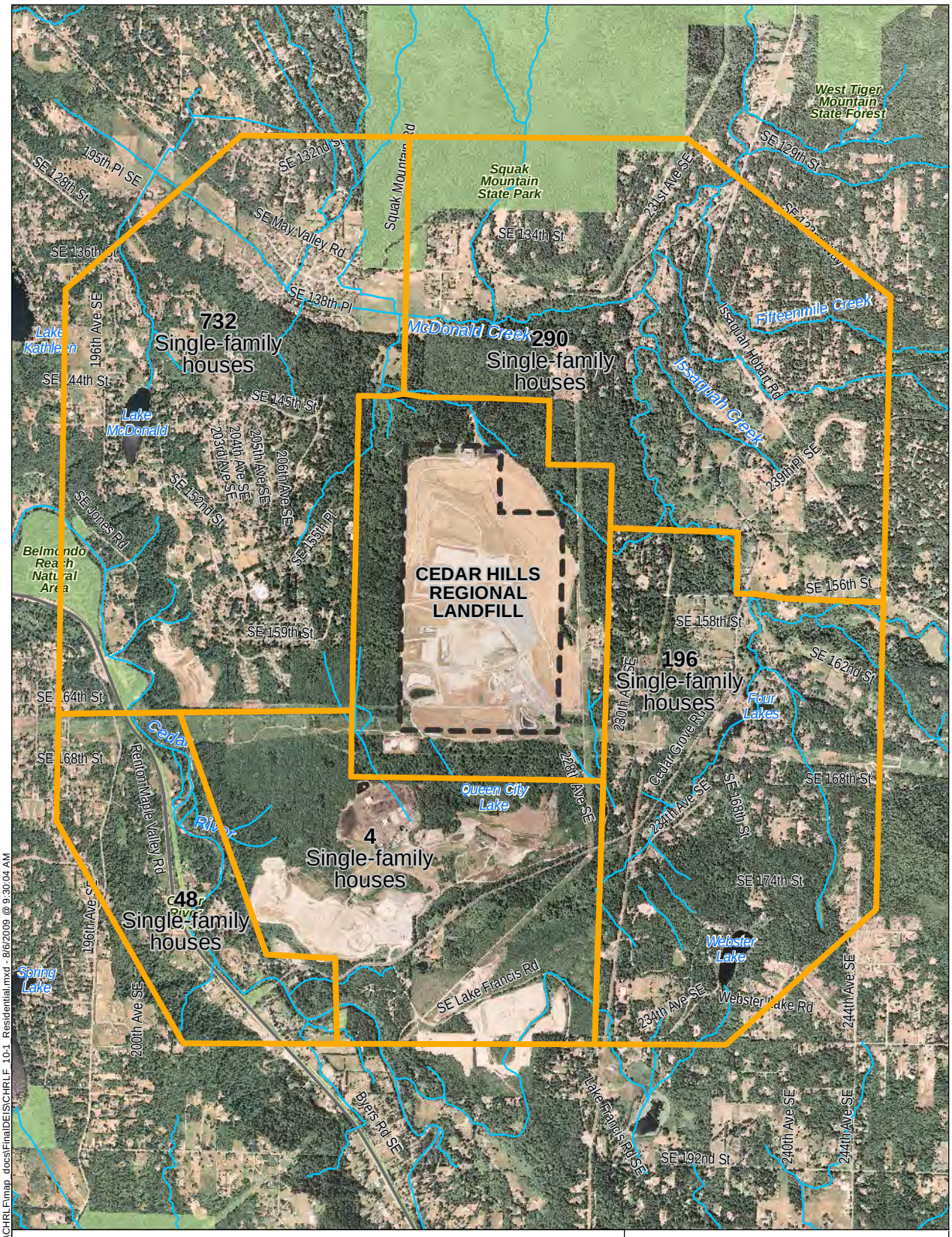
10.1.2 Zoning

All current zoning designations in the vicinity of the landfill are shown in Figure 10-7. According to the first King County Comprehensive Plan that was adopted in 1964, the rural areas of the county were zoned G for General, stipulating very few restrictions (King County 2009b). According to the King County Zoning Atlas (King County 2006), the entire CHRLF site is now zoned RA-10, with a minimum lot size of 10 acres. A landfill is permitted as a special use in this zone.

Properties immediately south of CHRLF, including the Queen City Farms and Cedar Grove composting sites, are zoned M, mineral, which allows mining, other resource extraction, and similar uses. King County has zoned much of the remainder of the area surrounding the landfill as residential, with densities of either 1 unit per 5 acres or 1 unit per 10 acres. Small areas of commercial zoning are located at the junction of Issaquah–Hobart Road and Cedar Grove Road, and along the Maple Valley Highway (State Route 169) near its junction with Cedar Grove Road. As noted in the figure, the map does not show special development conditions, or special district overlay information, which always results in a more restrictive allowed use, never a more lenient allowed use.

10.1.3 King County Comprehensive Plan Designations

To protect the quality of life in the Pacific Northwest, the Washington State Legislature passed the Washington State Growth Management Act (GMA) in 1990. The GMA directs the state's most populous and fastest-growing counties and their cities to prepare comprehensive land use plans that anticipate growth over a 20-year horizon.

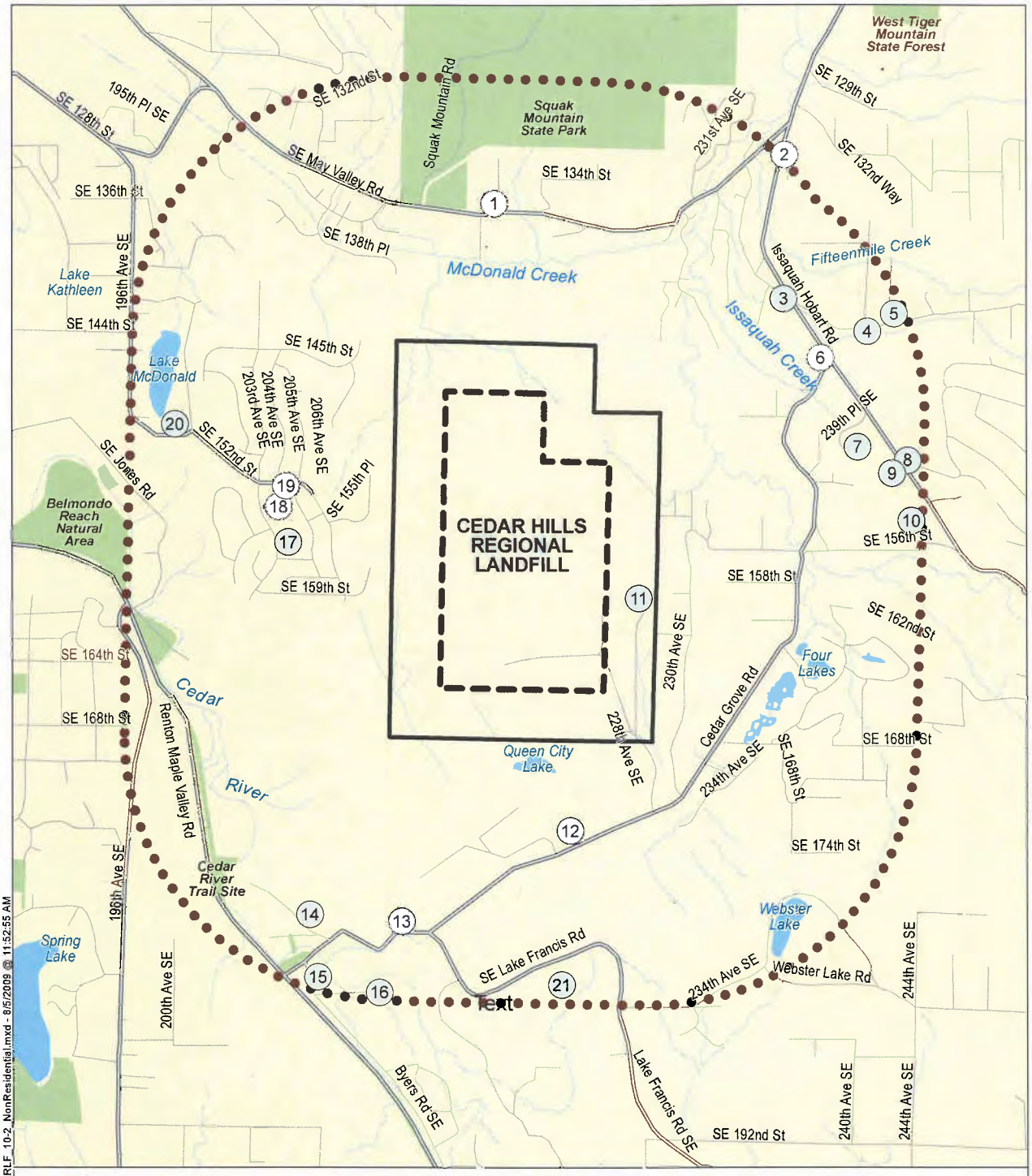


Neighborhood Boundary within One Mile of CHRLF
Cedar Hills Regional Landfill Boundary
1000-Foot Buffer Boundary
Stream
Park

0 1,000 2,000
Feet

FIGURE 10-1
Number and Locations of Single-Family Houses within One Mile of the Cedar Hills Landfill in 2009

D:\GISDATA\projects\wash\kingco\CHRLF\map_docs\FinalDEIS\CHRLF_10-1_Residential.mxd - 8/6/2009 @ 9:30:04 AM



NONRESIDENTIAL LAND USES WITHIN ONE MILE OF THE CEDAR HILLS REGIONAL LANDFILL

1. Equinox Farm – Boarding and Lessons
2. The Tranny Shop - Transmission Repair
3. B&J Well Drilling Co.
4. L.C. Keir Company
5. Tiger Mountain Kennel
6. Tiger Mountain Country Store
7. St. Savia Eastern Orthodox Church
8. Tiger Mountain Veterinary
9. Mirrormont Stables
10. Storybook Farm
11. Passage Point Facility
12. Cedar Grove Composting
13. Stoneway Rock & Recycling
14. J. Harper Construction, Inc.
15. Bre's Rental Equipment & Interior Demolition
16. YMCA Lions Youth Camp
17. Maple Hills Elementary School
18. Maple Hills Park
19. Eastside Fire and Rescue
20. Evergreen Community Church
21. Quality Rock Products

1-Mile Study Area Boundary
Cedar Hills Regional Landfill Boundary
1000-Foot Buffer Boundary
Park
Stream
Water Body
Arterial Road
Local Road

0 1,500 3,000 Feet

FIGURE 10-2
Nonresidential Land Uses Within One Mile of the Cedar Hills Regional Landfill

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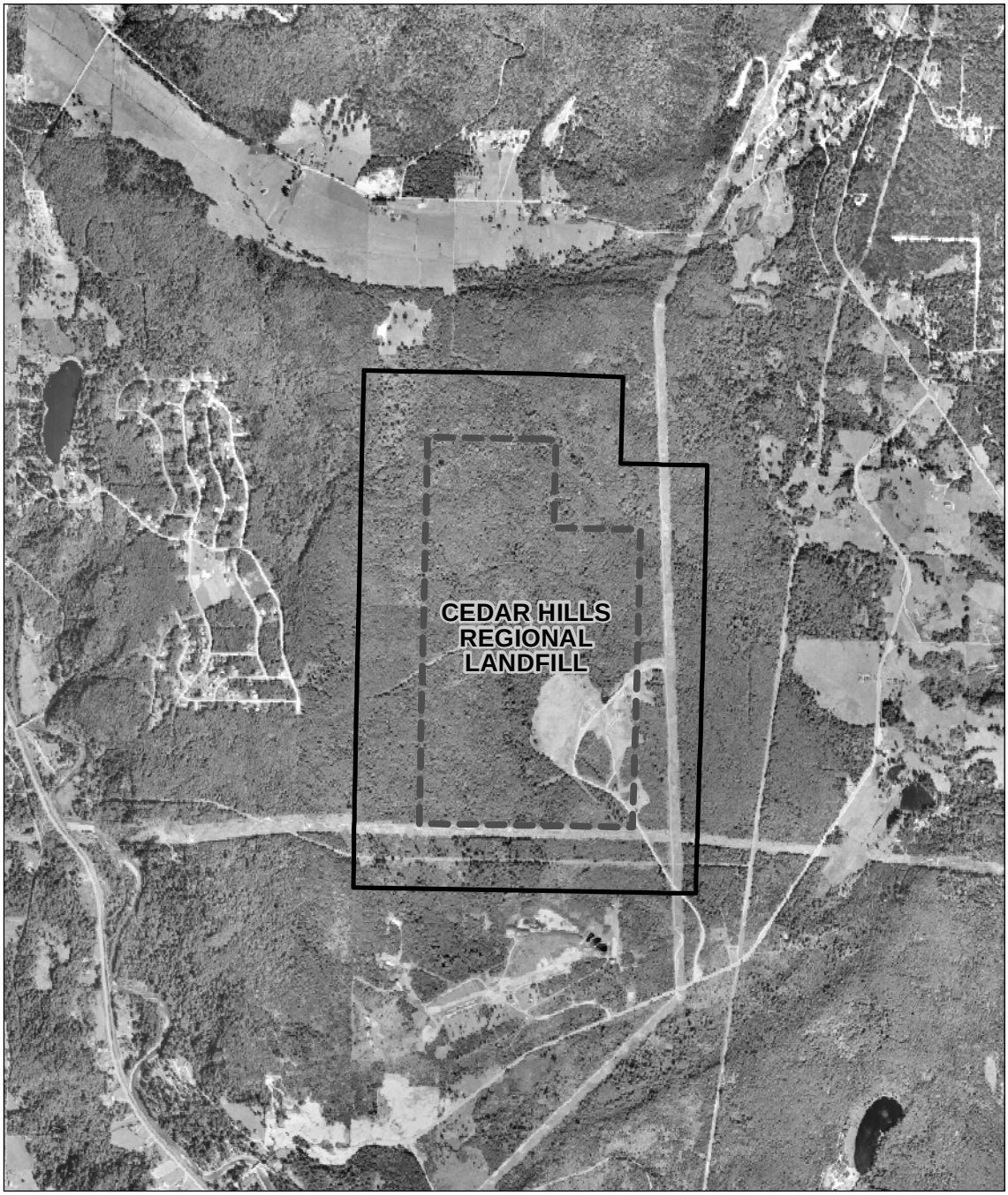
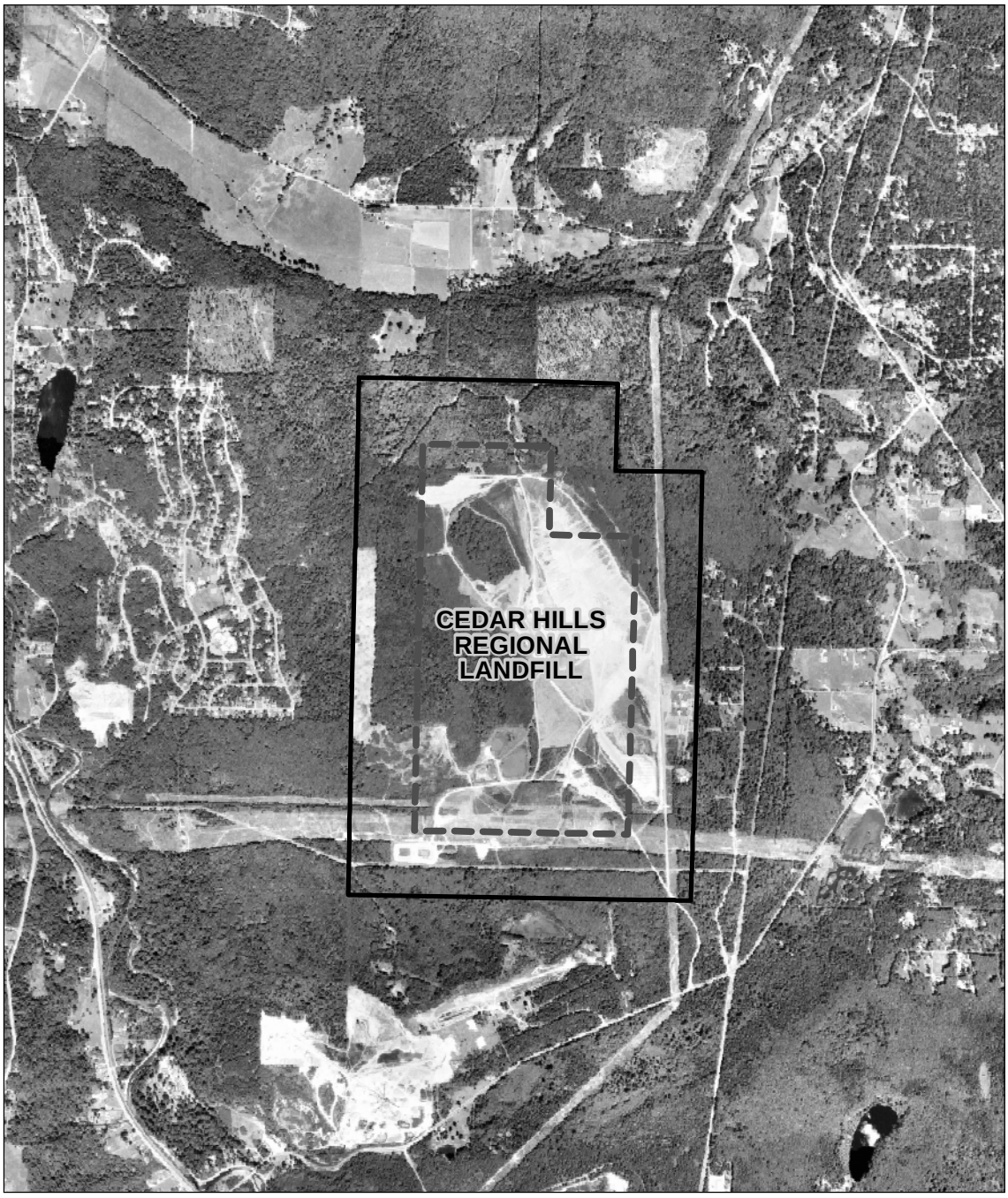


Cedar Hills Regional Landfill Boundary
1000-Foot Buffer Boundary

0 1,000 2,000
Feet

FIGURE 10-3
Historical Aerial Photo Showing Land Use in the Vicinity of the Cedar Hills Regional Landfill in 1964

D:\GISDATA\projects\wash\kingco\CHRLF\map_docs\FinalDEIS\CHRLF_10-3_1964LandUse.mxd - 8/5/2009 @ 9:56:14 AM



Cedar Hills Regional Landfill Boundary
1000-foot Buffer Boundary

N

0 1,000 2,000
Feet

FIGURE 10-4
Historical Aerial Photo Showing Land Use in the Vicinity of the Cedar Hills Regional Landfill in 1980

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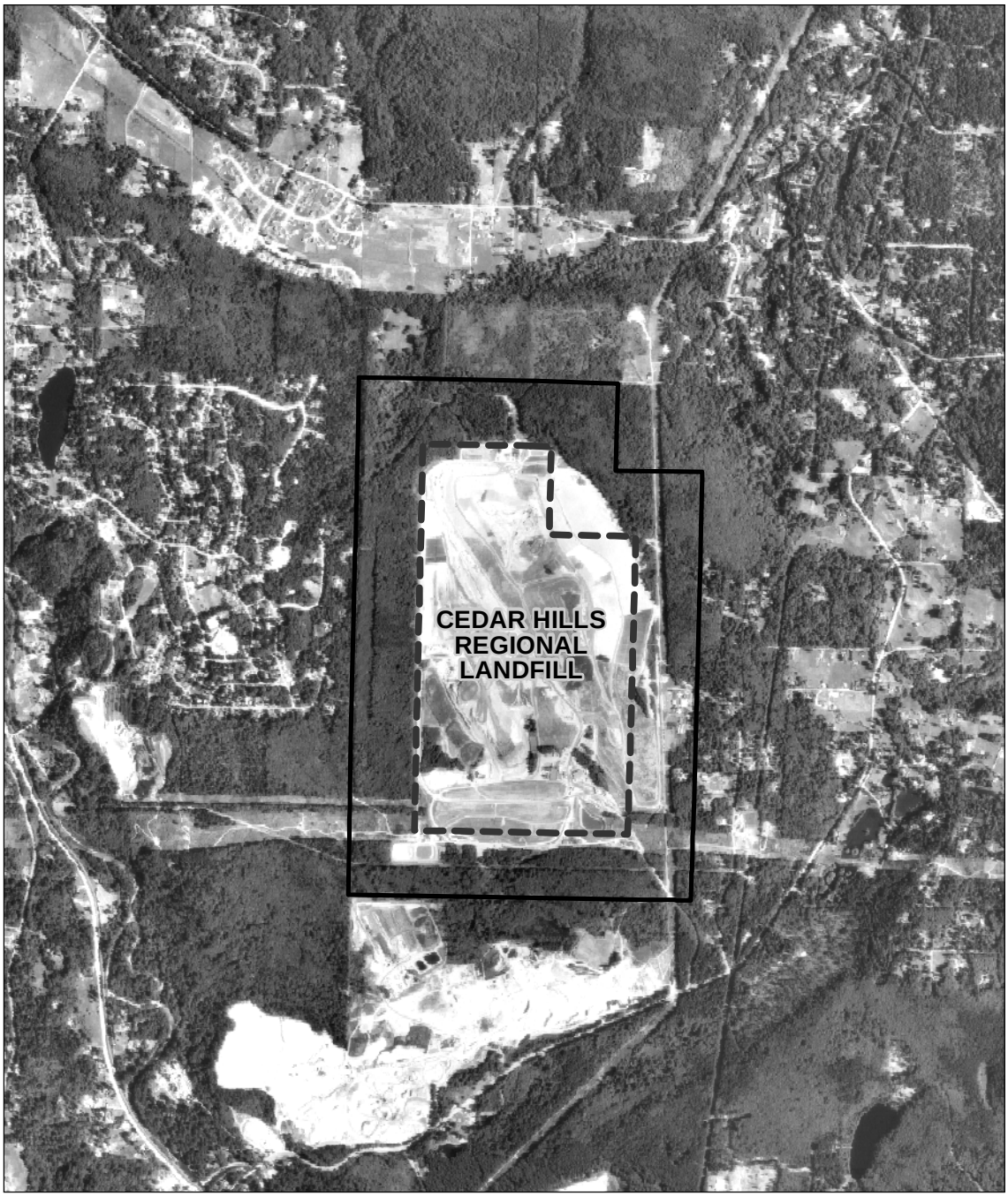
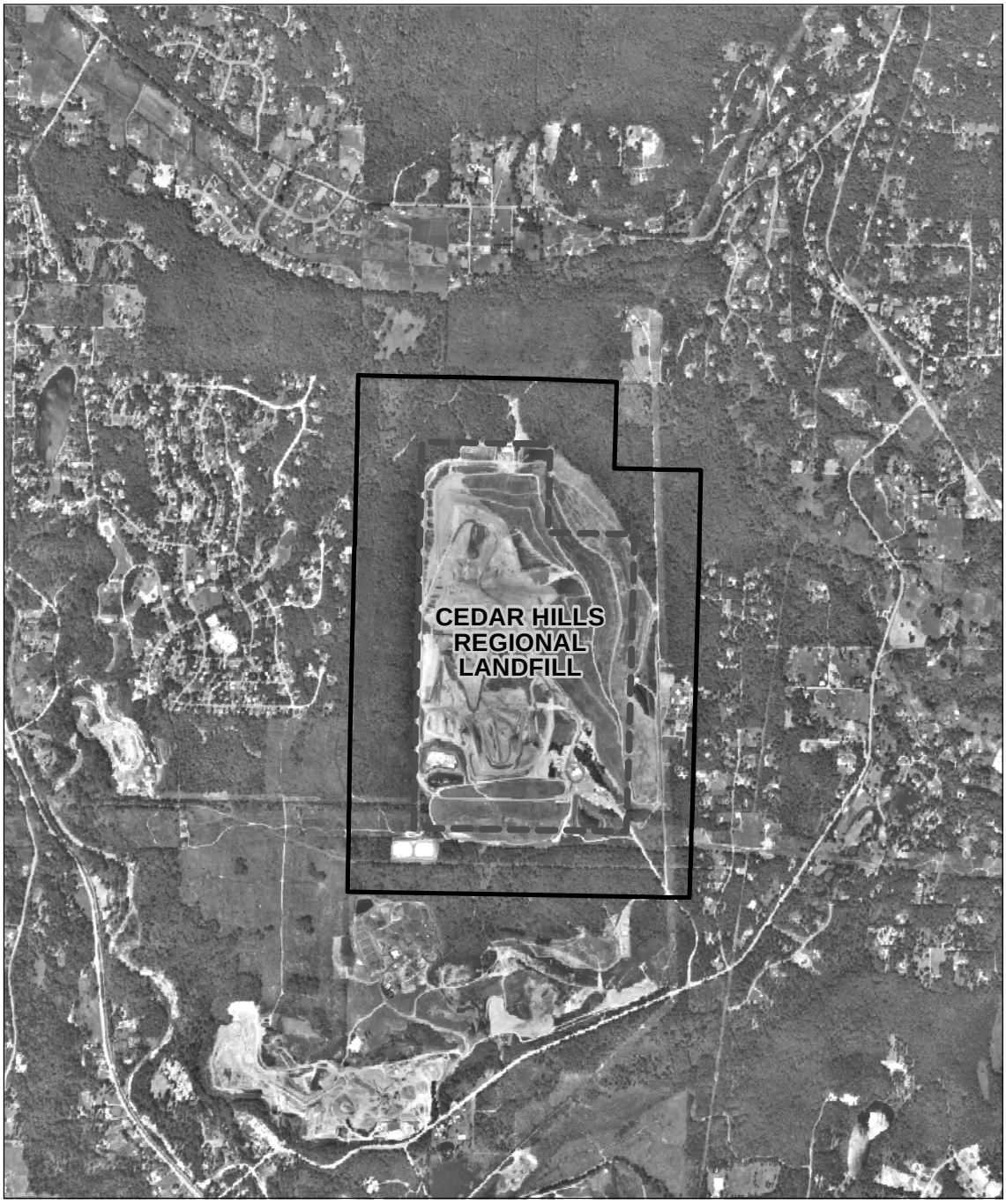


Cedar Hills Regional Landfill Boundary
1000-Foot Buffer Boundary

0 1,000 2,000
Feet

FIGURE 10-5
Historical Aerial Photo Showing Land Use in the Vicinity of the Cedar Hills Regional Landfill in 1990

D:\GISDATA\projects\wash\kingco\CHRLF\map_docs\FinalDEIS\CHRLF_10-5_1990LandUse.mxd - 8/5/2009 @ 9:58:36 AM



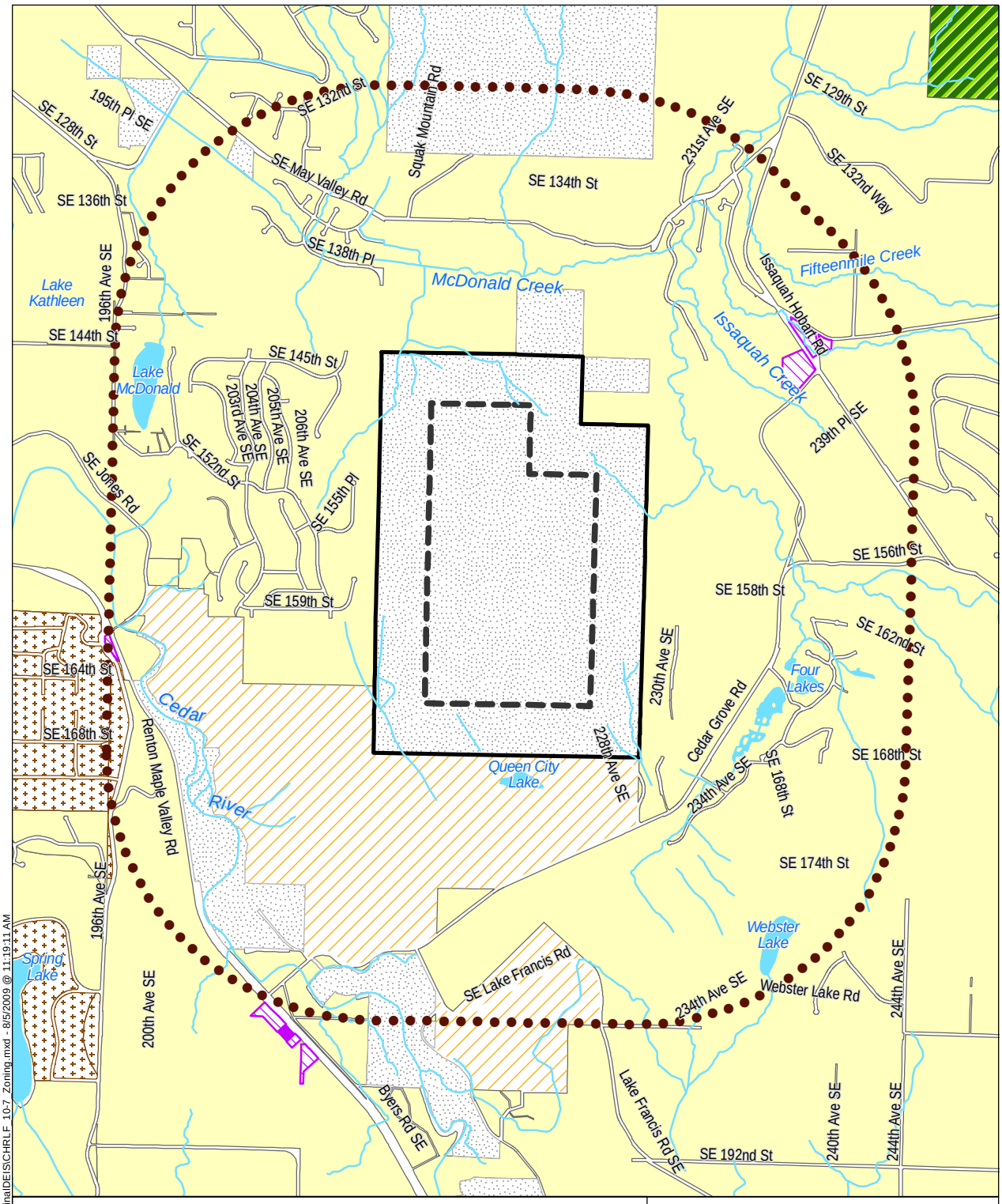
Cedar Hills Regional Landfill Boundary
1000-Foot Buffer Boundary

N

0 1,000 2,000
Feet

FIGURE 10-6
Historical Aerial Photo Showing Land Use in the Vicinity of the Cedar Hills Regional Landfill in 1998

D:\GIS\DATA\projects\wash\kingco\CHRLF\map_docs\FinalDEIS\CHRLF_10-6_1998LandUse.mxd - 8/5/2009 @ 9:58:38 AM



RA-2.5 - Rural Area one DU per 2.5 acres

RA-5 -Rural Area one DU per 5 acres

RA-10 - Rural Area one DU per 10 acres

Neighborhood Business

Mineral

Industrial

Forest

1-Mile Study Area

Cedar Hills Regional Landfill Boundary

1000-Foot Buffer Boundary

Stream

Water Body

DU - DWELLING UNIT

0 1,000 2,000 Feet

This map does not show special development conditions, such as P-suffix Conditions, Special Overlays, or potential zoning that apply to many properties in King County.

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FIGURE 10-7

Zoning Designations in Areas Surrounding the Cedar Hills Regional Landfill

Comprehensive plans adopted in accordance with the GMA must manage growth to direct development to designated urban areas and away from rural areas.

The county adopted its first comprehensive plan under the GMA in 1994. The King County Comprehensive Plan provides a legal framework for making decisions about land use in unincorporated King County. The comprehensive plan also establishes boundaries for urban growth pursuant to the GMA. According to the King County Comprehensive Plan Land Use Map (King County 2004), the CHRLF and adjacent properties are located on the rural side of the urban growth boundary. The area surrounding the CHRLF is designated Rural Residential.

10.1.4 King County Comprehensive Plan Policies

This section discusses the portions of the King County Comprehensive Plan (King County 2008) that address land use policies pertinent to extending the useful life of CHRLF.

In summary, continued use of the landfill at its existing location, and extension of its useful life beyond its currently projected closure in 2018 by an additional 3 to 13 years, is consistent with the county's comprehensive plan. The landfill is an essential public facility that was developed at its current location before the area was zoned rural and before much of the residential development occurred in the area (see Section 10.1.2 above on zoning and Figures 10-3 through 10-6). The landfill is now a special use allowed in the current rural zone of RA-10 (1 dwelling unit per 10 acres). With its 1,000-foot-wide buffer, the landfill is a use that can help preserve the rural character of the area by eliminating development of more than 400 acres into residential uses, as has occurred in areas surrounding the landfill property. In addition, the landfill is not a use that encourages urban growth or creates pressure for urban facilities and services.

Essential Public Facilities

Chapter 8, Section II, Subsection G of the King County Comprehensive Plan addresses Essential Public Facilities. It states, "The region will work cooperatively to site essential public facilities in an equitable manner. Essential public facilities are defined in the Growth Management Act and include large, usually difficult to site facilities such as prisons, solid waste facilities, and airports." This section of the comprehensive plan includes the following policies:

F-220 – Proposed new or expansions to existing essential public facilities should be sited consistent with the King County Comprehensive Plan. Listed existing essential public facilities should be preserved and maintained until alternatives or replacements for such facilities can be provided.

F-221 – King County and neighboring counties, if advantageous to both, should share essential public facilities to increase efficiency of operation. Efficiency of operation should take into account the overall value of the essential public facility to the region and the county and the extent to which, if properly mitigated, expansion of an existing essential public facility located in the county might be more economical and environmentally sound.

F-222 – King County should strive to site essential public facilities equitably so that no racial, cultural, or socio-economic group is unduly impacted by essential public facility siting or expansion decisions. No single community should absorb an inequitable share of these

facilities and their impacts. Siting should consider environmental equity and environmental, economic, technical and service area factors. The net impact of siting new essential public facilities should be weighted against the net impact of expansion of existing essential public facilities, with appropriate buffering and mitigation. Essential public facilities that directly serve the public beyond their general vicinity shall be discouraged from locating in the Rural Area.

F-223 – A facility shall be determined to be an essential public facility if it has one or more of the following characteristics:

a. The facility meets the Growth Management Act definition of an essential public facility;
b. The facility is on a state, county or local community list of essential public facilities;
c. The facility serves a significant portion of the county or metropolitan region or is part of a countywide service system; or
d. The facility is the sole existing facility in the county for providing that essential public service.

F-224 – Siting analysis for proposed new or expansions to existing essential public facilities shall consist of the following:

a. An inventory of similar existing essential public facilities in King County and neighboring counties, including their locations and capacities;
b. A forecast of the future needs for the essential public facility;
c. An analysis of the potential social and economic impacts and benefits to jurisdictions receiving or surrounding the facilities;
d. An analysis of the proposal's consistency with policies F-219 through F-222;
e. An analysis of alternatives to the facility, including decentralization, conservation, demand management and other strategies;
f. An analysis of economic and environmental impacts, including mitigation, of any existing essential public facility, as well as of any new site(s) under consideration as an alternative to expansion of an existing facility;
g. Extensive public involvement; and
h. Consideration of any applicable prior review conducted by a public agency, local government, or citizen's group.

Management of Solid Waste

Chapter 8, Section II, Subsection J of the King County Comprehensive Plan addresses management of solid waste. It includes the following policies:

F-255 – Solid waste should be handled and disposed of in environmentally sound ways that protect the quality of air, water and public health.

F-256 – King County shall divert as much material as possible from disposal to reduce the overall costs of solid waste management to county residents and businesses, conserve resources, protect the environment, and strengthen the county's economy.

F-257 – Solid waste management should be planned and disposal capacity provided on a regional basis.

F-258 – Solid waste handling facilities should be dispersed throughout the county in an equitable manner.

Rural Legacy Area and Natural Resources Lands

Chapter 3 of the King County Comprehensive Plan addresses Rural Legacy and Natural Resources Lands. The following policies from Sections II (Rural Designation), III (Rural Densities and Development), and IV (Rural Public Facilities and Service) of Chapter 3 pertain to the CHRLF, which is sited within the designated Rural Area of the county:

R-201 – It is a fundamental objective of the King County Comprehensive Plan to maintain the character of its designated Rural Area. The GMA specifies the rural element of comprehensive plans include measures that apply to rural development and protect the rural character of the area (Revised Code of Washington [RCW] Section 36.70A.070(5)). The GMA defines rural character (RCW 36.70A.030(14)). Rural development can consist of a variety of uses that are consistent with the preservation of rural character and the requirements of the rural element. Rural development does not refer to agriculture or forestry activities that may be conducted in rural areas (RCW 36.70A.030(15)). To implement GMA, it is necessary to define the development patterns that are considered rural, historical or traditional, and do not encourage urban growth or create pressure for urban facilities and service. Therefore, King County's land use regulations and development standards shall protect and enhance the following components of the Rural Area:

a. The natural environment, particularly as evidenced by the health of wildlife and fisheries (especially salmon and trout), aquifers used for potable water, surface water bodies including Puget Sound and natural drainage systems and their riparian corridors;
b. Commercial and noncommercial farming, forestry, fisheries, mining and cottage industries;
c. Historic resources, historical character and continuity including archaeological and cultural sites important to tribes;
d. Community small-town atmosphere, safety, and locally owned small businesses;
e. Economically and fiscally healthy rural cities and unincorporated towns and neighborhoods with clearly defined identities compatible with adjacent rural, agricultural, forestry and mining uses;
f. Regionally significant parks, trails and open space;
g. A variety of low-density housing choices compatible with adjacent farming, forestry and mining and not needing urban facilities and services; and
h. Traditional rural land uses of a size and scale that blend with historic rural development.

R-323 - Although low-density residential development, farming and forestry are the primary uses in the Rural Area, some compatible public and private uses are appropriate and contribute to rural character. Compatible uses might include small, neighborhood churches, feed and grain stores, and home occupations such as small day care facilities or veterinary services. In addition, it may be necessary to locate some public facilities in rural areas, such as utility installations that serve rural homes. Any allowed nonresidential uses should be designed to blend with rural residential development and resource uses.

Nonresidential uses in the Rural Area shall be limited to those that:

a. Provide convenient local services for nearby residents;

b. Require location in a Rural Area;

c. Support natural resource-based industries;

d. Provide adaptive reuse of significant historic resources; or

e. Provide recreational opportunities that are compatible with the surrounding Rural Area.

These uses shall be sited, sized and landscaped to complement rural character as defined in policy R-101, prevent impacts to the environment and function with rural services including on-site wastewater disposal.

R-231 – Rural development standards shall be established to protect the natural environment by addressing seasonal and maximum clearing limits, impervious surface limits, surface water management standards that emphasize preservation of natural drainage systems and water quality, groundwater protection, and resource-based practices. These standards should be designed to provide appropriate exceptions for lands that are to be developed for kindergarten through twelfth grade public schools and school facilities, provided that the school project shall comply at a minimum with the requirements of the King County Surface Water Design Manual.

R-233 – King County should work with residential builders and developers to encourage the use of low-impact development practices that protect native vegetation and soils and reduce impervious surface. King County should promote preservation of native vegetation and soils on rural-residential zoned parcels to the maximum extent practicable. Dispersion of runoff from impervious surfaces into native vegetation in accordance with the Surface Water Design Manual should be the preferred method of stormwater management in the Rural Area.

R-402 – Public spending priorities for facilities and services within the Rural Area should be as follows:

a. First, to maintain existing facilities and services that protect public health and safety; and

b. Second, to upgrade facilities and services when needed to correct level of service deficiencies without unnecessarily creating additional capacity for new growth.

10.2 Environmental Impacts

10.2.1 Direct Impacts

Impacts to the area surrounding the landfill would not differ among alternatives with regard to land use because activities are confined within the boundaries of the existing landfill site and the existing 1,000-foot-wide buffer. As discussed below, there are differences among the alternatives with regard to on-site land use within the buffer.

All Alternatives

The main effect on land use from continued operations at the landfill would be truck traffic into and out of the site, which would be expected to be similar among the action alternatives and to remain relatively constant throughout the duration of operations. Truck traffic associated with any of the alternatives would not be considered a significant impact on existing or future traffic conditions (see Chapter 13, *Transportation*). Adding years to the usable life of the landfill would not have an effect on land use in the surrounding area because operation of the landfill has been ongoing for more than 40 years, as other land uses have developed around it.

Similarly, construction impacts would not be likely to affect the viability of any existing uses or lead to a change in land use in the area. Construction activities would take place on the landfill property, with limited activity in the buffer. The periodic use of local roads by construction vehicles would not result in a significant increase in traffic in the area (see Chapter 13, *Transportation*).

Alternative 1 – Southwest Corner Development

Alternative 1 would extend the useful life of the landfill by approximately 3 to 4 years beyond that of the No Action Alternative, and no landfilling or new or relocated infrastructure would occur within the buffer. All proposed development under Alternative 1 is allowed under the existing Special Permit. For the reasons discussed above under *All Alternatives*, no impacts to land use in the surrounding area would be expected as a result of implementing Alternative 1.

Alternative 2 – Southwest Corner and Main Stockpile Development

Alternative 2 would extend the useful life of the landfill by about 5 to 6 years, and no landfilling or new or relocated infrastructure would be placed within the buffer. All proposed development under Alternative 2 is allowed under the existing Special Permit. For the reasons discussed above under *All Alternatives*, and similar to Alternative 1, there would be no impacts to land use in the surrounding area as a result of implementing Alternative 2.

Alternative 3 – South Area Development with Partial Wall

Alternative 3 would extend the useful life of the landfill by about 8 to 9 years, and no landfilling would occur within the buffer. Relocated facilities may be placed within the buffer. For the reasons discussed above under *All Alternatives*, and similar to Alternatives 1 and 2, there would be no impacts to land use in the area surrounding the landfill as a result of implementing Alternative 3. Facility relocation would require permitting through the appropriate regulatory agencies.

Alternative 5 – South Area Development Including Support Facility Area

Alternative 5 would extend the useful life of the landfill by about 12 to 13 years, and no landfilling would occur within the buffer. Facilities requiring on-site relocation could be placed in the southeast corner of the property, within the buffer. For the reasons discussed above under *All Alternatives*, and similar to Alternatives 1, 2, and 3, there would be no impacts to land use in the area surrounding the landfill as a result of implementing Alternative 5. Facility relocation would require permitting through the appropriate regulatory agencies.

No Action Alternative

The No Action Alternative includes landfilling in existing Areas 5, 6, and 7. Under the No Action Alternative, future development at CHRLF would be limited to those activities that are included in the current Site Development Plan, under which the CHRLF is estimated to reach capacity in 2018. Beyond that time, only closure construction, post-closure activities, and monitoring are planned at the site. All activity under the No Action Alternative is allowed under the existing Special Permit.

10.2.2 Indirect and Cumulative Impacts

Indirect impacts to land use during construction and operation would not be anticipated because the alternatives would not change off-site land uses. Cumulative impacts would not be anticipated because future land uses would be controlled by King County through application of the zoning code or conditions specified by a Special Permit regulating land use activities occurring in the vicinity.

10.3 Mitigation Measures

Because no impacts to land use would be anticipated as a result of implementing any of the alternatives, mitigation measures would not be necessary.

10.4 Significant Unavoidable Adverse Impacts

There would be no significant unavoidable adverse impacts to land use as a result of implementing any of the action alternatives.