Chapter 11: Scenic Resources – Aesthetics, Light, and Glare

This chapter describes the scenic resources in the Cedar Hills Regional Landfill (CHRLF) vicinity, and the potential for affecting these resources by implementing any of the alternatives.

This environmental review determined that there would be no significant unavoidable adverse impacts to scenic resources during construction or operation of any of the alternatives.

11.1 Affected Environment

The CHRLF is visible from the surrounding areas to the north, south, east, and southwest. Most potential views of the landfill are obscured by topography, existing off-site vegetation, and the 1,000-foot-wide vegetated buffer surrounding the landfill. A large portion of the landfill can be clearly seen from two locations: 1) from a residential area approximately 3 miles to the north, and 2) from an industrial area to the south. The other views of the landfill are partial or screened views through vegetation or views in which the landfill summit appears in the distance as a grass-covered ridge line rising just above the trees. Some individual residents may have clearer views of the landfill from their properties.

11.1.1 On-Site Conditions

Past and current waste disposal at CHRLF has generally been limited to the northern three-quarters of the permitted solid waste disposal area. Auxiliary facilities are, for the most part, located in the southern end of the permitted solid waste disposal area and include maintenance and administration facilities, stormwater ponds, leachate collection lagoons, siltation ponds, and a landfill gas-to-energy facility. A flare station for landfill gas is located at the northern end of the permitted solid waste disposal area.

Topography of both the site and its surroundings is a critical element in determining the visibility of the landfill. The topography varies within the 1,000-foot-wide perimeter buffer, but is generally low and characterized by hummocks (rounded knolls). Ongoing waste disposal has resulted in large rolling landforms rising approximately 140 to 240 feet above the surrounding terrain, with a larger central hill rising to a maximum elevation of approximately 780 to 800 feet above sea level.

In addition to topography, vegetation, both within the buffer areas and in the revegetated solid waste area, is important in assessing visibility of the landfill. Vegetation is limited primarily to seeded grass within the inactive part of the landfill operation area. In the active disposal areas, exposed earth can be seen. The character of the vegetation within the perimeter buffer varies significantly by location, as described below:

- North: This buffer area comprises dense, mature second-growth mixed conifer and deciduous forest. Trees here reach heights of approximately 100 to 150 feet.
- East: The northern portion of the eastern buffer contains mature, second-growth mixed conifer and deciduous forest. In the southern portion of the eastern buffer, vegetation was cleared or thinned at the interior edge of the buffer to accommodate an alcohol treatment facility that is currently closed. The facility was recently approved for renovation as Passage Point, which will provide transitional housing and support to parents returning to the community after a period of incarceration who are reuniting with their children. Staff and residents of this facility will have a direct view of closed and covered areas of the landfill. The eastern buffer is also divided by a cleared power transmission corridor that runs from north to south.
- South: High-voltage electrical transmission lines running east to west divide the southern buffer. The area north of the transmission lines is covered by low, shrubby vegetation. A deciduous and conifer forest grows south of the transmission line easement in the remaining 700-foot-wide buffer area.
- West: The western buffer contains a mix of conifer and deciduous forest that has grown to a height of approximately 60 to 80 feet.

11.1.2 Off-Site Conditions

The CHRLF is located in the foothills of the Cascade Mountain Range. The complex and diverse topography of the area includes deep valleys, steep-sided peaks, plateaus, and rolling hills. Major topographic features in the vicinity include Squak Mountain to the north, Tiger Mountain to the northeast, and the Cedar River Valley to the south. Though there has been an increase in development in recent years, much of the area is still covered with mature second-growth conifer forest. Deciduous trees in the vicinity of the CHRLF also screen the facility from view during the growing season.

A variety of land uses are found in the vicinity of the landfill. Industrial facilities, including gravel mining and organic waste composting, operate south of the site. Residential development generally surrounds the landfill on the west, north, and east including single-family subdivisions, large lot properties, and small farms. The character of the residential subdivisions generally falls into one of three categories: 1) subdivisions in open, formerly agricultural valleys, such as in May Valley; 2) subdivisions in treed areas such as Mirrormont to the east of the CHRLF and Maple Hills to the west, where the tree cover has been either maintained or re-established, and 3) subdivisions on slopes where trees have been removed to open views to Mount Rainier or other scenic features, such as are found on the western slopes of Squak Mountain. While there are a few neighborhood businesses and convenience stores in the vicinity, there are no large commercial or retail developments.

11.1.3 Methodology for Assessing Views of the Landfill

Topography and vegetation determine the locations from which a person is able to view the landfill. Figure 11-1 (next page) identifies potential viewing areas of the landfill. Locations not shown as potential viewing areas are those where either landform or vegetation blocks all potential views of the completed project. Figure 11-2 illustrates the effects of topography and vegetation on views of the landfill. In most locations where there is a potential view, views would be screened by existing vegetation, both off-site and within the buffer. In each potential viewing area, people may or may not be able to see the landfill depending on the density of the vegetation and the season. The winter months allow more views of the landfill because deciduous trees have dropped their leaves. The following methodology has been used to determine the potential visual impacts.

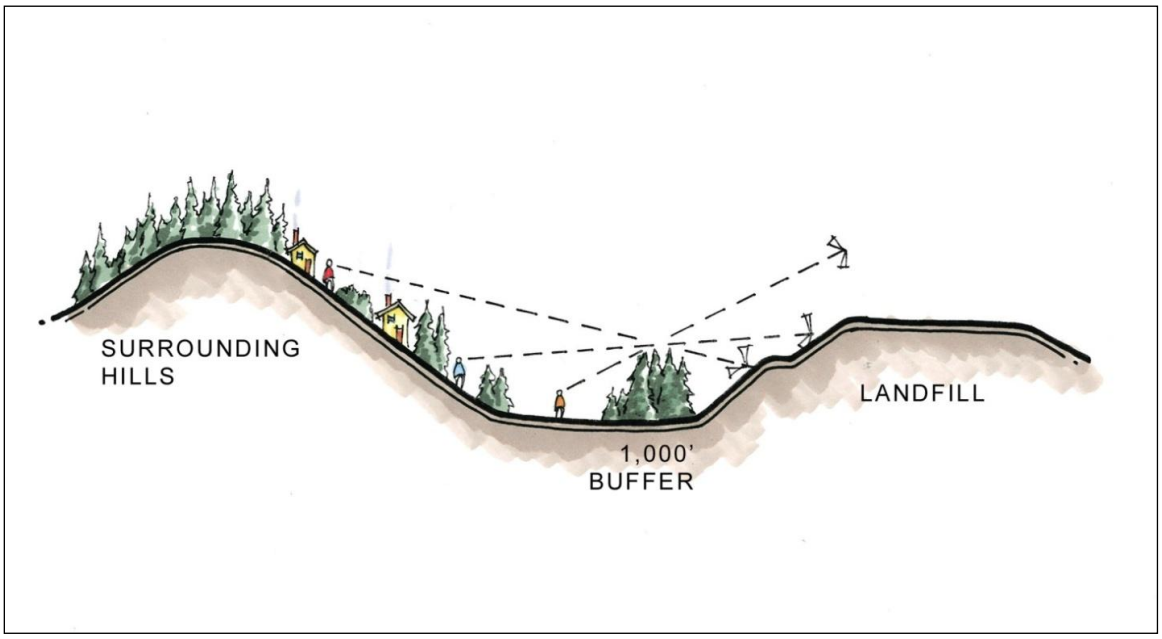


Figure 11-2. Illustration of Topographic Effects on Views

In 2009, KCSWD conducted a study to assess views of the landfill from surrounding areas. Viewing areas (as seen in Figure 11-1) and key viewpoints were selected by assessing topography and vegetation in the vicinity of the landfill to determine which areas could provide views of the landfill. Key viewpoints with the greatest potential for visual impacts were selected by the following methods:

- Observing the surrounding areas from the landfill summit to identify those residences and roads that may provide a view of the landfill.
- Canvassing the potential viewing areas to identify viewpoints.

Eleven key viewpoints were selected for analysis based on the following criteria (Figure 11-1):

- Will people be able to see significant visual change from the viewpoint?
- What would be the duration of the view?
- What are the expectations of the viewers?
- How far away is the landfill from the viewpoint?

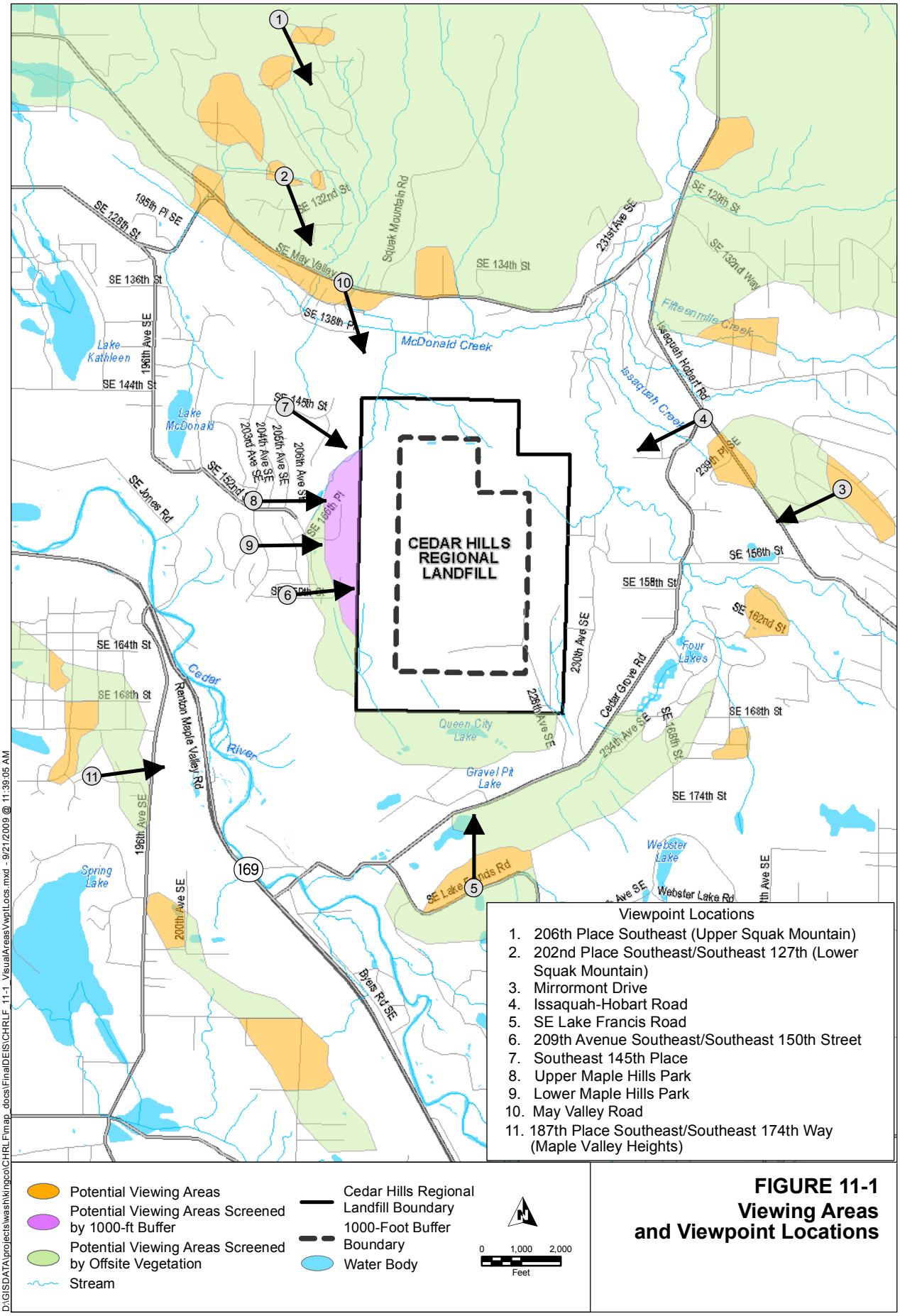


FIGURE 11-1
Viewing Areas and Viewpoint Locations

The landfill was then photographed from each viewpoint, and existing visual conditions were documented. Potential scenic resource changes and visual impacts experienced from each of the 11 viewpoints were assessed for each alternative. Visual simulations were prepared for those viewpoints likely to have the greatest visual impact, and potential mitigation measures were identified in this chapter.

11.1.4 Views of the Existing Landfill

Two viewpoints afford clear views of a large portion of the landfill. The first, Viewpoint 1 (Figure 11-3), is located high on the western slopes of Squak Mountain. From here, CHRLF can be seen in the distance, with Mount Rainier and the Cascade foothills visible in the background. The second, Viewpoint 5 on SE Lake Francis Road, south of site (Figure 11-4), offers a clear view of the top of the landfill.



Figure 11-3. Existing Viewpoint 1 from 206th Place SE, Looking Toward the Southwest

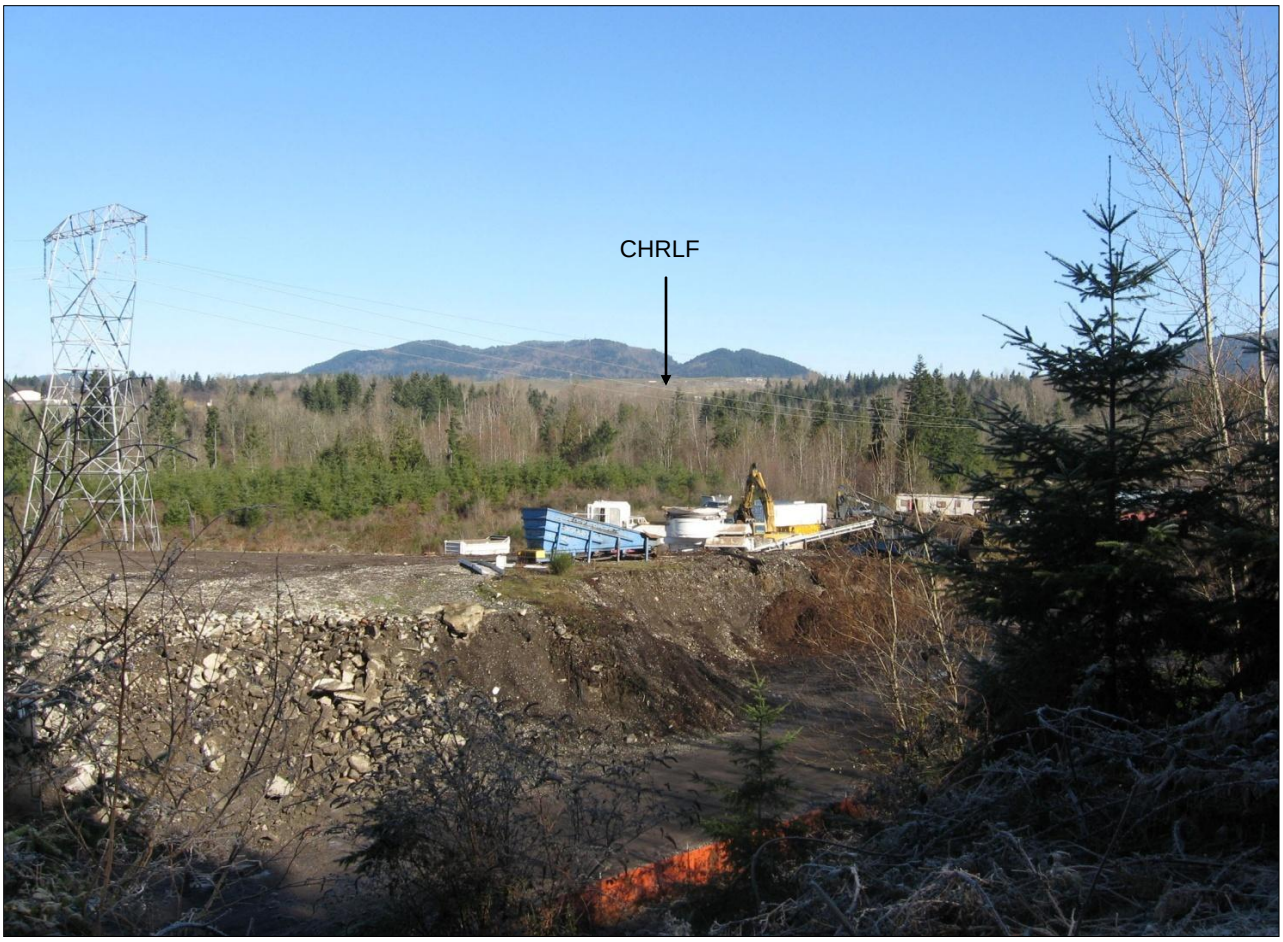


Figure 11-4. Existing Viewpoint 5 from SE Lake Francis Road, Looking North

Residents in the Maple Valley Heights community about 1.5 miles west of the site have partial views of the landfill, with Tiger Mountain and the Cascade foothills in the background. Elsewhere, views of the existing landfill are limited to small, constricted portions of the landfill summit due to breaks in topography and/or tree cover. Areas that have constricted views of the landfill include the Maple Hills neighborhood, Issaquah–Hobart Road, and May Valley Road (Figure 11-1). In all views of the landfill, the landfill appears as a grass-covered hill or ridgeline that, due to color and texture, stands in contrast to the surrounding tree-covered hills.

11.1.5 Light and Glare

Landfilling operations at the CHRLF typically begin at 6:00 a.m. and conclude at 7:00 p.m. on weekdays. On weekends, operations begin at 6:30 a.m. and end at 5 p.m. Portable lighting and equipment lights are used to illuminate working areas when natural light is not sufficient for worker safety. Trucks travel to and from the CHRLF from 6:00 a.m. to 9:30 p.m., lighting roadways along their travel routes. Additionally, maintenance staff members are on site from 5:00 a.m. until 11:00 p.m., requiring lighting in administrative and maintenance facility areas when natural light is not adequate. The flare station at the landfill gas treatment facility operates intermittently, as needed.

Light from landfilling operations is visible from a number of viewpoints, depending on where the working area is located. The portable light standards are relatively low and the lighting is focused so that light dispersion is modest, but noticeable in a rural setting. The lighting from the administrative and maintenance areas is less intense and located at a lower elevation than landfill operations lighting, so it produces a less obvious glow in the near distant sky. Lighting from trucks is intermittent and localized to the vicinity of the roadway.

11.1.6 Litter

KCSWD uses both fully enclosed trailers and top-loaded trailers to transport waste to the CHRLF from the King County transfer stations. The fully enclosed trailers significantly limit the potential of litter from the transfer trailers. Top-loaded transfer trailers are covered with mesh screens for the trip to CHRLF. During the trip, it is possible for some solid waste to escape through the screens and become litter. KCSWD monitors the truck route along Cedar Grove Road and 228th Avenue SE (site entrance road) for litter. When litter is identified, a litter cleanup crew or utility crew is dispatched to remove it.

11.2 Environmental Impacts

11.2.1 Direct Impacts

Factors Creating Visual Change to Scenic Resources

All of the action alternatives include elements that would result in short- and long-term visual changes to the landfill. These elements include soil surcharging, soil stockpile relocation, new landfill areas, and relocation of maintenance and administrative facilities. The short- and long-term visual impacts caused by these elements would vary by alternative and viewpoint.

Under all of the alternatives, the central area of the landfill, including portions of Areas 5, 6, and 7 (see Figure 1-3 in Chapter 1), would be surcharged to provide additional capacity. Soil surcharging involves placement of stockpiled soil on previously landfilled areas to help increase settlement in these areas, allowing additional waste to be landfilled without exceeding the elevation of 780 to 800 feet above mean sea level. Surcharging would add bulk to the sides of the central hill and increase the elevation of some areas to the maximum allowable.

Surcharging would result in minimal short-term visual change in all the viewpoints with views of the top of the landfill. Surcharging would require trucks and earthmoving equipment to transport and spread stockpiled soil in all surcharge areas. New active landfill areas would be opened in surcharge areas to add additional waste after settlement occurred. As practiced currently, the working face where waste disposal would be taking place would be kept to a minimum. The daily operation would move around the surcharge areas and could be expected to create temporary effects.

Surcharging would result in only minimal long-term visual change. While surcharging would add bulk and increase the elevation of some areas of the landfill, it would not increase the maximum elevation of the landfill. None of the alternatives include increasing the landfill elevation above the existing 780 to 800 feet above mean sea level. Moreover, surcharged

soil will gradually be used as daily cover as landfilling progresses, reducing the visible landfilling activity. After surcharging and additional waste placement, the disturbed surcharge areas would receive final cover and grass seeding. The appearance would be similar to the existing closed landfill areas.

All of the action alternatives include partial or complete relocation of the current landfill main soil stockpile area (see Figure 1-3 in Chapter 1). All of the alternatives would relocate the existing main soil stockpile and soil from landfill cell excavation to Areas 5, 6 and 7 for surcharging. Short-term visual changes would include the activity of trucks and earthmoving equipment in the new stockpile areas as well as large areas of exposed earth, as noted above. Soil stockpile relocation would not result in long-term visual change because soil stockpiles would be removed for use as daily or final cover.

All of the action alternatives include relocation of the contaminated stormwater (CSW) pond and southwest siltation pond into the western portion of the South Solid Waste Area (SSWA) and Bonneville Power Administration (BPA) easement to the south. The relocations would not result in either short- or long-term visual change because none of the analyzed viewpoints offer a view of these features or their proposed functions. Trees within the 1,000-foot-wide buffer obscure views of the existing ponds and the site of their proposed relocation.

The action alternatives would have different impacts on the buffer. All alternatives would include removal of solid waste from the south and potentially east sections of the buffer and partial restoration of the buffer. Alternatives 3 and 5 may include partial or complete relocation of maintenance and administrative facilities to the south and/or east to make room for new landfill areas.

Facilities relocation may result in both short- and long-term visual change because tree removal in the buffer may open up filtered views of previously screened landfill areas from viewpoints in the industrial area south of the landfill. No impact to tree cover would be anticipated in the buffer to the east; however, relocation of facilities in the SE Pit Refuse Area may have slight visual impacts on the residents of the Issaquah-Hobart Road areas during the winter, as this buffer area is thinly covered with trees and vegetation. Maintenance and administrative facility relocation is not included in Alternatives 1 and 2. KCSWD recommended Alternative 2 as the preferred alternative. No visual impact in the SE Pit Refuse Area is anticipated under this alternative.

All the action alternatives include new landfill areas of varying extent south of the surcharge area (Areas 5, 6, and 7). Alternative 1 proposes the smallest new landfill area. The extent of the new landfill area increases with each successive alternative. Short-term visual change would result from trucks and earthmoving equipment that would be active in the vicinity of daily operations in new landfill areas. The daily operation area, where exposed soils and waste may be observed, is approximately 5 acres in size. The actual working face where waste disposal would be taking place would be considerably smaller. The daily operation would move around the new landfill areas in the southern portion of the site. Long-term visual change due to new landfill areas would be minimal. New landfill areas would increase the bulk and height of the landfill in these areas, but would not exceed 780 to 800 feet above mean sea level. After landfilling is complete, new landfill areas would receive final cover and grass seeding and would appear similar to existing closed areas of the landfill.

All the alternatives have the same potential viewing areas since the location of the alternative elements is fairly consistent for all the alternatives. In all the action alternatives, surcharging

would occur in the center of the site and new landfill areas would be located south of the surcharge area. Facilities to be relocated would be relocated south and east of the new landfill area.

Visual Effects by Viewing Areas and Key Viewpoints

Squak Mountain

Much of the south side of Squak Mountain is too steep for development. Where development has occurred, home builders have cleared the thick forest to provide views to Mount Rainier and the Cascades. Depending on location, residents may view the existing landfill in the middle ground from an elevation above, at, or below the existing landfill. Residents at or above the elevation of the existing landfill could see visual change as a result of all the action alternatives, depending on how much existing vegetation screens views of the site. Viewpoint 1, high on Squak Mountain and approximately 2.8 miles from the landfill summit (Figure 11-3), affords residents a full view of the northern face and summit of the landfill. Residents in this area would likely see surcharging activity, an increase in landfill bulk, and some soil stockpile relocation common to all the action alternatives. Views of the new landfill areas, relocated maintenance and administrative facilities, and most of the soil stockpile relocation would be limited at most, since they are on the southern faces of the landfill and would be mostly obscured by the landfill's central hill. At 2.8 miles away, visual changes would be softened by distance and atmospheric conditions. With increased distance, access roads and active landfill areas become less prominent and equipment becomes difficult to discern.

From homes lower on Squak Mountain, visual change would be apparent on a smaller scale since views of the landfill from this area are limited by vegetation. Residents near Viewpoint 2 (Figure 11-5) have a partial view of the landfill's northwestern face and summit. Residents here may see some surcharging activity and soil stockpile relocation. New landfill areas and relocated maintenance and administrative facilities would not be visible due to obstruction of views by the landfill's central hill.



Figure 11-5. Existing Viewpoint 2 from 202nd Place SE, Looking Southeast

Tiger Mountain

The physical components of the Tiger Mountain viewing area are very similar to those of the Squak Mountain viewing area. Much of the area is too steep for development. Residents at elevations at or above the landfill elevation could see surcharging activities, but soil stockpile and maintenance and administrative facility relocation under all alternatives would likely be obscured by the landfill's central hill. There are a number of public access recreation trails in this viewing area. The view of the landfill from the trails would be at a distance of 2 or more miles, and the appearance of the landfill would be softened by distance, existing vegetation, and atmospheric conditions.

Mirrormont

The Mirrormont residential community is sited on a steep, treed hillside where residents have maintained much of the existing mature Douglas fir forest cover. Some residents have constricted views to the existing landfill through this tree cover as seen from Viewpoint 3 (Figure 11-6). From this location, the existing landfill appears as a grass-covered ridgeline. The ridgeline would remain between 780 and 800 feet above mean sea level for all alternatives, leaving the existing horizon line intact. Residents within this area would be able to see surcharging activity and possibly relocation of a portion of the soil stockpile to Area 6 under Alternatives 2, 3, and 5. Residents in Mirrormont may also be able to see some of the new landfill areas and associated activity to the southeast of the central hill in Alternatives 3 and 5. Relocation of the maintenance and administrative facilities under Alternatives 3 and 5 would likely not be visible due to the lower elevation of these elements and screening by trees in the buffer. The increase in surcharged soil areas and soil stockpiles would likewise not be visible from this viewing area.



Figure 11-6. Existing Viewpoint 3 from Mirrormont Drive, Looking West

Issaquah Creek Valley

Within the Issaquah Creek Valley viewing area, the existing landfill can be seen from only a few locations. For example, the existing landfill can be viewed from Issaquah–Hobart Road near its intersection with Cedar Grove Road at Viewpoint 4 (Figure 11-7). Viewed from within this area, the landfill appears in the distance through the trees as a grass-covered ridge. The only likely visual change to views from this area would be due to surcharging activity. The ridgeline would remain between 780 and 800 feet above mean sea level for all alternatives, leaving the existing horizon line intact. Soil stockpile relocation, new landfill areas, the increase in landfill bulk, and maintenance and administrative facility relocation would not likely be visible.

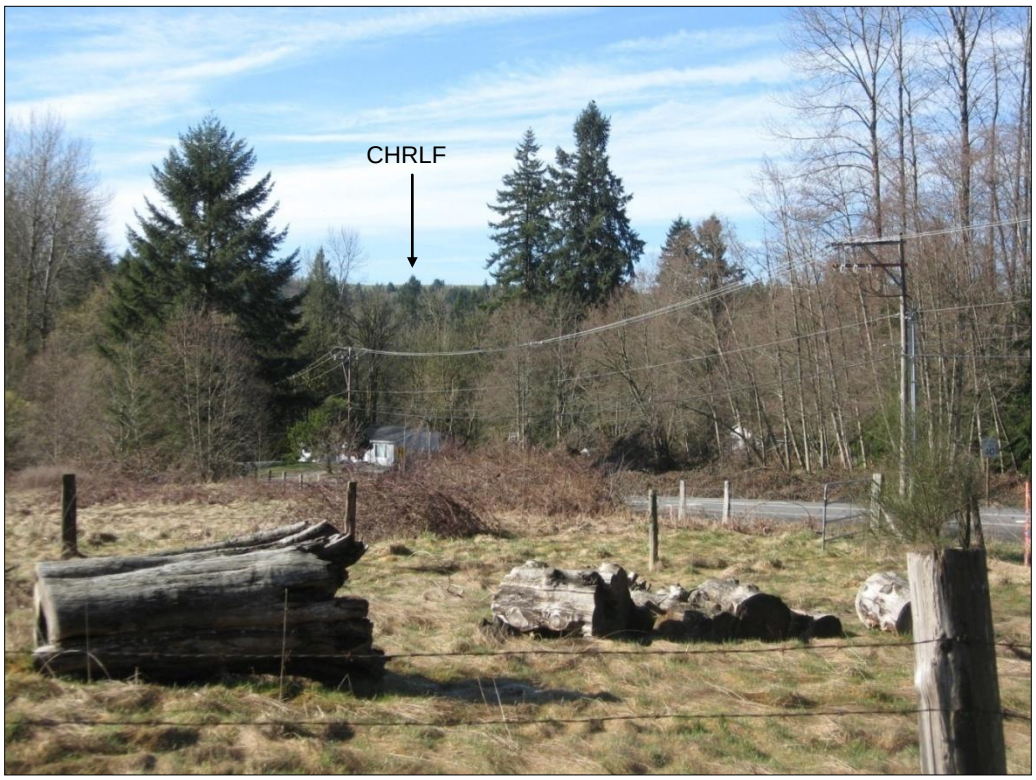


Figure 11-7. Existing Viewpoint 4 from Issaquah–Hobart Road, Looking West

SE Lake Francis Road

Viewpoint 5 is on SE Lake Francis Road (see Figure 11-4). This viewpoint affords a clear view of the upper south face of the landfill. Under all of the alternatives, the southern face of the existing landfill would undergo the greatest visual change. From this industrial area, the landfill appears in the middle ground as a low, grass-covered ridge. Viewers, primarily those traveling SE Lake Francis Road, would see surcharging activity on the central hill common to all the alternatives. Viewers would also see the soil stockpile relocation to Areas 4 and 5 under Alternative 1 and soil stockpile relocations to Areas 5, 6, and 7 under Alternatives 2, 3, and 5. All new landfill areas would be apparent from this viewpoint. The visual impact of new landfill areas would be lowest in Alternative 1 and increase in each successive alternative. The mechanically stabilized earthen (MSE) wall included to retain the new landfill areas in Alternative 3 may also be visible. Alternatives 3 and 5 include removal of

trees in the buffer to make room for relocated facilities. This may open up filtered views to new landfill areas from this viewpoint.

Maple Hills

Maple Hills is primarily a residential community located on rolling terrain west of the landfill site. The neighborhood is heavily treed with both native and ornamental species. The existing landfill is within the foreground and near middle ground viewing distance of the neighborhood (1/4 to 3/4 mile). However, most residents may not be able to see the existing landfill from the Maple Hills community largely due to the density of vegetation between Maple Hills and the landfill. Viewpoint 9 (Figure 11-8) is located within Maple Hills Park, the largest clearing at the highest elevation in this community. The landfill is not visible from this location. The landfill is likewise not visible from Viewpoints 6, 7, and 8.

If there are viewpoints in Maple Hills from which the landfill is visible, visual change would likely be minimal. The ridgeline would remain between 780 and 800 feet above mean sea level for all alternatives, leaving the existing horizon line intact. Surcharging activity may be apparent, as may the soil stockpile relocation to Areas 4 and 5 under Alternative 1 and to Areas 5, 6, and 7 under Alternatives 2, 3, and 5. New landfill areas would not likely be apparent under any of the alternatives, nor would relocation of the maintenance and administrative facilities under Alternatives 3 and 5.



Figure 11-8. Existing Viewpoint 9 from Lower Maple Hills Park, Looking West (CHRLF not visible)

May Valley

In the May Valley viewing area, people may be able to see the existing landfill from some homes and from some locations along May Valley Road. These views are, for the most part, limited to small, constricted views between trees and houses. Viewpoint 10 (Figure 11-9) along May Valley Road offers an example of a constricted view of the landfill. The existing landfill appears as a grass-covered ridgeline rising above the trees. This ridge line would remain between 780 and 800 feet above mean sea level for all alternatives, leaving the existing horizon line intact. Surcharging activity would be apparent, but soil stockpile relocation, new landfill areas, and maintenance and administrative facility relocation would be obscured by the landfill's central hill.



Figure 11-9. Existing Viewpoint 10 from May Valley Road, Looking Southeast

Maple Valley Heights

Maple Valley Heights is a mix of newer and older residential development located approximately 2.3 miles from the existing landfill summit. In many areas, existing native forest and ornamental plantings screen potential views of the landfill site. Where the landfill is visible between houses or vegetation, it appears in the middle ground as the top of a grass-covered ridge, as shown in Viewpoint 11 (Figure 11-10). The elevation of most of the viewing location is at or slightly above the landfill elevation. Relocation of the soil stockpile to Areas 5, 6, and 7 under Alternatives 2, 3, and 5 may also be visible. Surcharging of the central hill would be apparent. From this angle, and at this distance, visual impacts would be minimal. New landfill areas, the increase in landfill bulk, and maintenance and administrative facility location would not likely be visible.

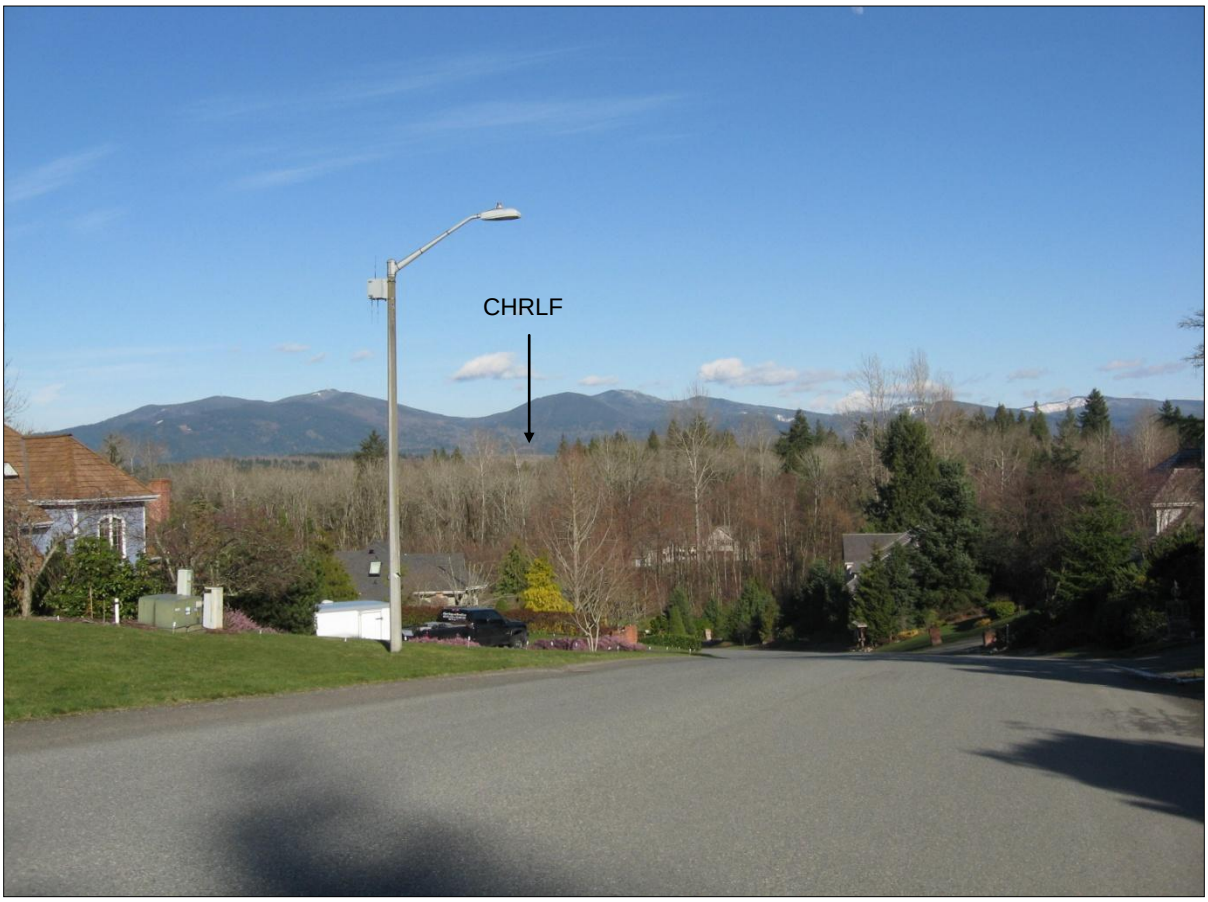


Figure 11-10. Existing Viewpoint 11 from 187th Place SE, Looking Northeast

Short- and Long-Term Visual Impacts

Short-term visual impacts for all the alternatives would generally be minor. For all of the action alternatives, people in some of the potential viewing areas may observe short-term visual disturbances resulting from surcharging activities. Most would also be able to view soil stockpile relocation common to all alternatives. The impact of these activities would be lessened by distance, the transitory nature of the activity, and limited views due to vegetation. The daily landfill operation associated with new landfill areas would be visible primarily from viewpoints in the non-residential area to the south of the landfill. The extent of these new landfill areas would increase from Alternative 1, where new landfilling would be limited to the area southwest of the central hill, to Alternative 5, where new landfilling would stretch from the western edge of the buffer to the eastern edge of the buffer. Relocation of maintenance and administrative facilities in the southern end of the site would not be apparent from most other potential viewing areas, due to their lower elevation and screening by deciduous and evergreen trees in the buffer.

Under all of the action alternatives, the potential viewing areas where the visual impacts would likely be most perceptible are Squak Mountain (Viewpoint 1) and SE Lake Francis Road (Viewpoint 5). From Viewpoint 1, the whole of the northern half of the landfill can be seen by many residents. In the short term, all surcharging and soil stockpile relocation activity would be apparent. However, new proposed landfill areas and maintenance and administrative facility relocation would not be apparent because they would occur on the south end of the site, and would be obscured by the landfill's central hill. Short-term impacts as seen from Viewpoint 1 would be lessened by distance and atmospheric conditions. Long-term impacts as viewed from Squak Mountain would be minimal. Though there would be an apparent increase in landfill bulk, the horizon line would not be affected because the elevation at the summit of the landfill would not increase and scenic views beyond the landfill would remain intact. See Figure 11-11 for a simulation of the visual impacts to Viewpoint 1.

From Viewpoint 5, the top portion of the south face of the landfill is in full view, and the short-term impacts of surcharging and soil stockpile relocation would be apparent as well as the new landfill areas that increase in extent in each successive alternative. Long-term impacts for Alternatives 1 and 2 would be minimal because the south buffer would remain intact. New landfill areas would be maintained as grass fields after they were closed and would have an appearance similar to the existing closed areas visible from SE Lake Francis Road. The horizon line would remain unchanged because the landfill summit would not be increased above 780 to 800 feet above mean sea level. Short- and long-term impacts for Alternatives 3 and 5 may be moderate because these alternatives may include removal of trees in the buffer to make room for relocated facilities. This may open up filtered views to previously screened portions of the new landfill areas. See Figure 11-12 for a simulation of visual impacts to Viewpoint 5 under Alternatives 3 and 5. The impact of these visual changes would be moderated by the industrial use of the viewing area. Viewers here would see the landfill in the context of surrounding industrial uses. The majority of viewers would see the landfill while traveling SE Lake Francis Road and, therefore, observe the landfill for a shorter period of time than those in other viewing areas with views of the landfill from their homes.



Figure 11-11. Impacts from Viewpoint 1 (After Expansion)



Figure 11-12. Impacts from Viewpoint 5 (After Expansion)

Visual Impacts from the No Action Alternative

Under the No Action Alternative, the final landfill elevation would be approximately 780 to 800 feet. Views from the west and northwest would be similar to those of the action alternatives.

Light and Glare

As the area around the CHRLF has become more suburban, light from residences, street illumination, and traffic has changed the nighttime visual character of the area and created less contrast between CHRLF and the surrounding community. As a result, light and glare impacts from CHRLF for the action alternatives, which for the most part would be a continuation of existing conditions, would become increasingly less obvious. These impacts would be relatively minor.

Under the No Action Alternative, closure construction activities would require lighting in work areas on the landfill, but only for the several years that construction took place. Security lighting in the administrative area would be expected to continue, as would light from operation of the gas flare. These impacts would be relatively minor.

Litter

As KCSWD continues to update its transfer stations, more waste will be transported in fully enclosed containers, which will eliminate the opportunity for solid waste to escape and litter roadways. The updating of transfer stations and conversion to enclosed trailers is expected to be complete in 2017.

Illegal dumping is likely to continue from time to time as is currently the case. KCSWD's litter cleanup crews will continue to remove this material for disposal at the landfill.

11.2.2 Indirect and Cumulative Impacts

Indirect impacts to scenic resources would not be anticipated because the alternatives would not change off-site land uses; therefore, the scenic views would remain relatively unchanged. Over time, the vegetation and trees surrounding the landfill (in the buffer zone area) would grow taller and thicker, possibly shielding more of the site from view by adjacent properties.

11.3 Mitigation Measures

Potential mitigation measures for the visual impacts of the action alternatives would be similar for all alternatives. Potential mitigation measures can be divided into short-term and long-term measures.

Short-term impacts include relocation of maintenance and administrative facilities and associated tree clearing in the 1,000-foot-wide buffer, soil stockpile relocation, an increase in landfill bulk, and new landfill areas. Potential short-term mitigation measures include the following:

- Seeding inactive soil stockpile areas with grasses
- Constructing vegetated berms for screening active landfill areas

All of the alternatives include the partial or complete relocation of soil stockpile areas. The new stockpile areas would be visible from viewing locations to the north and south. The short-term impacts caused by exposed earth in these areas could be mitigated by introducing a temporary vegetative cover of grasses. Soil stockpile areas would then have an appearance similar to closed portions of the landfill.

Active landfill areas and associated activities such as truck traffic and earthmoving equipment operation would be visible from viewpoints that have a clear view of the summit and south side of the landfill. Along with continued daily cover of waste, linear soil berms strategically located between affected viewpoints and active landfill areas and access roads would help screen landfill activity. Planting soil berms with fast-growing shrubs and trees would help to further screen landfill operations. Plants should be shallow-rooting and should be selected and sited to avoid creating habitat for unwanted birds and rodents.

There would be long-term impacts under each action alternative after the closing of the landfill. Alternatives 3 and 5 may include relocation of maintenance and administrative facilities to the south and/or east in the existing buffer, potentially providing filtered views of the landfill from the south previously obscured by vegetation. Care would need to be taken during site planning for the new facility areas to preserve as many trees as possible and to

integrate existing trees into the relocated facility areas where feasible. This would result in a filtered screen of mature trees, helping to mitigate the impacts to views from the south. After closure, previously active areas would be seeded with grasses and the landfill would appear as a large grass-covered hill crisscrossed by access roads. Due to differences in color and texture, the landfill would stand in contrast to the surrounding tree-covered hills.

Long-term impacts could be mitigated, where feasible, by restoring forest cover in the buffer, planting the landfill after closure with shrubs and trees, and selectively removing access roads that were no longer needed. A landfill landscape plan could be produced and implemented in phases. Planting of closed landfill areas not affected by the revised site development plans could begin immediately and active areas could be planted as soon as they were closed. Implementing a landfill landscape plan would reduce the existing contrast between the landfill and surrounding hills and help blend the landfill with its surroundings. See Figures 11-13 and 11-14 for simulations of planting on the landfill from Viewpoints 1 and 5.

No mitigation for light, glare, or litter is proposed.



Figure 11-13. Viewpoint 1 with Mitigation Planting

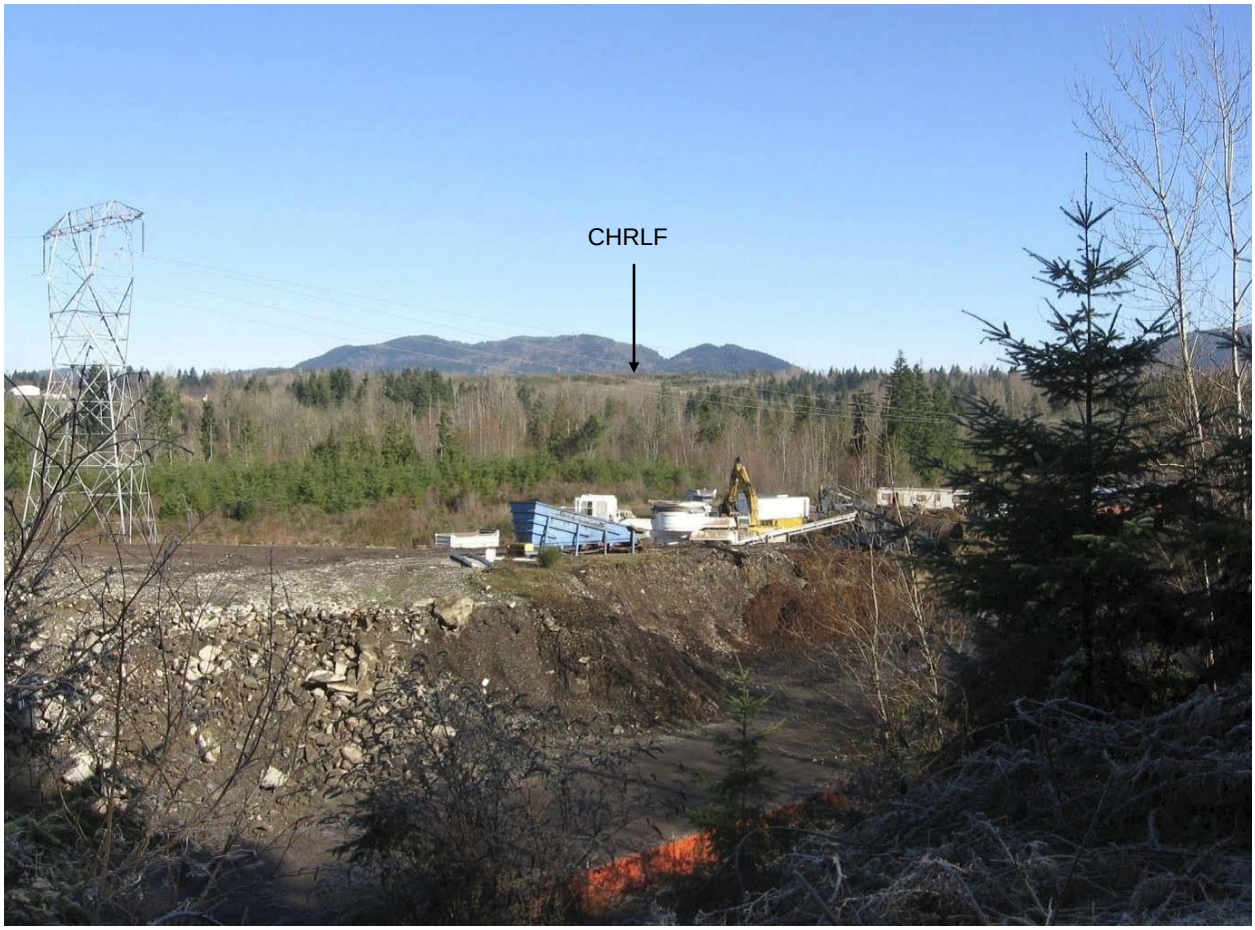


Figure 11-14. Viewpoint 5 with Mitigation Planting

11.4 Significant Unavoidable Adverse Impacts

Under all alternatives, soil surcharging and associated activity would cause short-term visual impacts from all viewpoints that offer a view of the top of the landfill. Because surcharging would occur over a relatively large area, as opposed to the much smaller active landfill areas, screening would be difficult. While the short-term visual impacts of surcharging would be unavoidable, the long-term impacts could be mitigated by revegetation of the surcharge area with grasses, shrubs, and trees after surcharging was complete. As such, no significant adverse visual impacts are anticipated due to proposed soil surcharging.

Under Alternatives 3 and 5, mature trees would potentially be removed from the buffer to clear space for facility relocation. This would reduce the ability of the buffer to screen views of the landfill from the south and result in both short- and long-term visual impacts. Although an effort would be made to preserve as much tree coverage as possible, short-term impacts would be unavoidable if facilities are located to the south. Long-term impacts could be lessened significantly by re-establishment of tall tree cover in the disturbed portions of the buffer.

The CHRLF is not visible from most locations within the potential viewing areas. Views of the landfill are primarily narrow and constricted views or views of the summit above existing trees. Two exceptions that provide clear views of the landfill are viewpoints from Squak Mountain to the north (Viewpoints 1 and 2) and from SE Lake Francis Road to the south (Viewpoint 5). Viewpoints to the north, south, east, and southwest would experience short-term visual impacts to varying degrees under different alternatives due to soil surcharging, an increase in landfill bulk, soil stockpile relocation, and new landfill areas. Short-term impacts would be minimal due to the effects of distance, settlement of the surcharged soil, screening by existing vegetation, and the transitory nature of the associated activity.

Short- and long-term impacts would affect views from the industrial area south of the landfill under the three alternatives that include removal of trees in the south buffer (Viewpoint 5). These impacts would be moderated by the industrial character of the area and by the short amount of time that viewers traveling SE Lake Francis Road would see the landfill. Because none of the alternatives include increasing the height of the landfill above the existing elevation, existing scenic views would remain intact for all viewpoints.