



LOWER TAYLOR CREEK RESTORATION PROJECT



Public Access Options Analysis Report

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 Public
Utilities

and

 **EnviroIssues**

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List of Acronyms

ADA – *Americans with Disabilities Act*

CPTED – *Crime Prevention Through Environmental Design*

CDWAC – *Creeks, Drainage, and Wastewater Advisory Committee*

DON – *Department of Neighborhoods*

Parks – *Seattle Parks and Recreation Department*

SDOT – *Seattle Department of Transportation*

SPD – *Seattle Police Department*

SPU – *Seattle Public Utilities*

RBCC – *Rainier Beach Community Club*

RBCEC – *Rainier Beach Community Empowerment Coalition*

RBMA – *Rainier Beach Merchants Association*

RBMF – *Rainier Beach Moving Forward*

RBNA – *Rainier Beach Neighborhood Association*

WHCA – *West Hill Community Association*

WSDOT – *Washington State Department of Transportation*



LOWER TAYLOR CREEK RESTORATION PROJECT

EXECUTIVE SUMMARY

Taylor Creek is located near the south end of Lake Washington in southeast Seattle. The creek originates in unincorporated King County and passes through a natural area ravine known as Deadhorse Canyon within Lakeridge Park. It then flows through residential yards and a culvert under Rainier Ave S before discharging into Lake Washington. The condition of the Rainier Ave S culvert, along with other barriers in the creek, prevents fish passage upstream to good quality habitat in Deadhorse Canyon. The lower stream is also confined in a small channel that produces poor habitat conditions and occasionally floods.

In 2011, Seattle Public Utilities (SPU) and Seattle Parks and Recreation (Parks) began engaging the nearby community in discussions about habitat restoration at the site. Those discussions identified a number of concerns about how public access could affect the surrounding residential neighborhood. SPU determined that an open, collaborative process was needed to examine different options for public access to the site and the associated benefits and challenges. This “Public Access Options Analysis Report” is the product of that process. This report documents the analysis process, detailing the evaluation of public access and collaboration between SPU, Parks, the Interdepartmental Team, and the broader community, and provides a staff-level access recommendation.

SPU considered five public access options – No Access, Viewpoint, Scheduled Access, Limited Access, and Open Access – and evaluated each based on six criteria – *Habitat Improvements; City Cost, Operations and Maintenance; City Safety and Liability; Community and Neighborhood Amenities; Potential Neighborhood Impacts; and Traffic Safety and Mobility.*

Based on these criteria, City of Seattle staff recommends providing some form of Open Access to the lower Taylor Creek site, contingent upon further investigation and design around issues raised from the community during this process. This option is recommended because it is consistent with City Comprehensive and Shoreline Management goals and policies and provides broader community benefits (e.g., increased shoreline access, additional open space, education and stewardship opportunities).

There are concerns about how public access may affect the stream and surrounding habitat, the immediate neighborhood, and traffic in the area. The recommendation for some form of Open Access is contingent upon designing a project that:

- Protects the restored habitat conditions and the fish and wildlife living in the area;
- Assures safe access for pedestrians, bicyclists and vehicles to the site and through the area;
- Balances project costs with environmental and social benefits and is within budgeted resources;
- Minimizes adverse neighborhood changes and maximizes neighborhood amenities;
- Provides Americans with Disabilities Act (ADA) accessibility as required;
- Avoids and minimizes impacts to playfield uses; and
- Promotes positive use of the space.

PROJECT BACKGROUND

Taylor Creek is located near the south end of Lake Washington in southeast Seattle. The creek originates in unincorporated King County and passes through a natural area ravine known as Deadhorse Canyon within Lakeridge Park, through residential yards and a culvert under Rainier Ave S before discharging into southern Lake Washington.

The culvert under Rainier Ave S is composed of privately and publicly owned segments, some of which are deteriorating. In addition, the Rainier Ave S culvert and additional barriers in the lower creek prevent fish passage upstream to good quality habitat in Deadhorse Canyon. The lower stream is also confined in a small channel with poor habitat conditions which can flood during larger storm events.



Figure 1. Taylor Creek Watershed and the lower Taylor Creek project area.

In 2010 and 2011, SPU purchased properties at the mouth of Taylor Creek. This introduced an opportunity for SPU, in coordination with Parks, to:

- Replace the public culvert under Rainier Ave S to ensure public safety and mobility;
- Remove the last fish passage barriers between Lake Washington and Deadhorse Canyon;
- Improve the stream channel and surrounding habitat, particularly for Chinook salmon; and
- Address storm-related flooding and sediment deposition at the mouth of the creek as possible.

THE PUBLIC ACCESS OPTIONS ANALYSIS

Between 2010 and 2012, SPU began developing stream improvement concepts and discussing those concepts with the community near lower Taylor Creek. Adjacent neighbors were concerned about the potential for the lower Taylor Creek project site to shift from a private residential property to a publicly accessible space. SPU, in partnership with Parks, undertook a collaborative process with the community to evaluate, recommend, and ultimately decide on the type of public access that would be allowed at the project site.

Early Community Input

In August 2011, SPU hosted a meeting at the project site for nearby neighbors to learn about SPU's preliminary habitat restoration concepts and provide their feedback on the design concepts. Following this initial meeting, SPU held an informational public meeting in February 2012 with the broader community.

During these early conversations, nearby community members raised concerns about negative impacts associated with the property becoming accessible to the public. These concerns ranged from the potential of increased traffic on the private drive and undesirable activities taking place on the new City property, to decreased pedestrian safety for users crossing Rainier Ave S. While community members generally supported the habitat improvements, particularly for endangered salmon, they were also uneasy about the project potentially affecting the neighborhood in a negative way.



Figure 2. Current conditions at lower Taylor Creek.

Undertaking the Public Access Options Analysis

SPU began a Public Access Options Analysis in early 2013, in partnership with Parks, which may eventually own and manage the site. The purpose of this process (Figure 3a) was to evaluate a variety of options for public access at the lower Taylor Creek site using six criteria. The analysis included several opportunities for the community to provide feedback. This public input was incorporated into the analysis and informed the staff-level recommendation.

The Public Access Options Analysis process involved a variety of stakeholders and City department staff to balance project goals with the needs and interests of the City, all Seattle residents, the surrounding community, and the immediate neighborhood. Figure 4 describes those involved in the Public Access Options Analysis process and their roles.

In August, based upon issues raised by the community throughout the Public Access Options Analysis process, SPU decided to adjust the process and delay the final decision on public access (Figure 3b). This delay will allow SPU to complete preliminary engineering and investigate a number of design concerns raised by the community. The Director of SPU and Superintendent of Parks will make a final decision after the preliminary engineering stage, expected in late 2014.

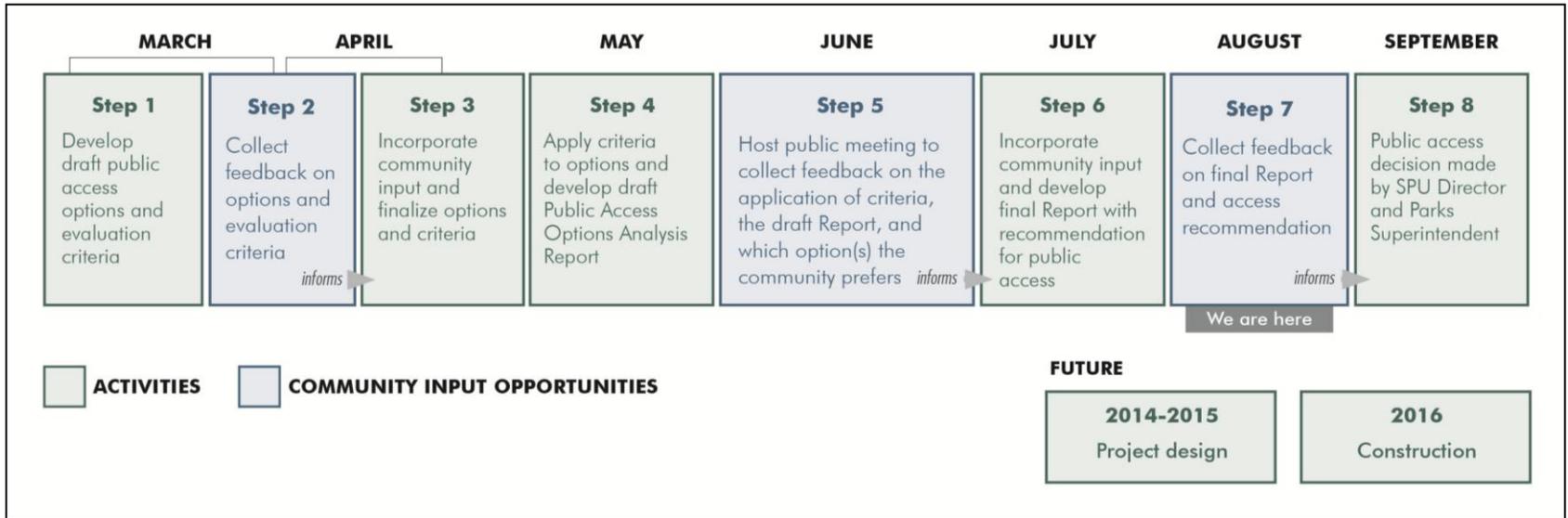


Figure 3a. Original process and schedule for the Public Access Options Analysis.

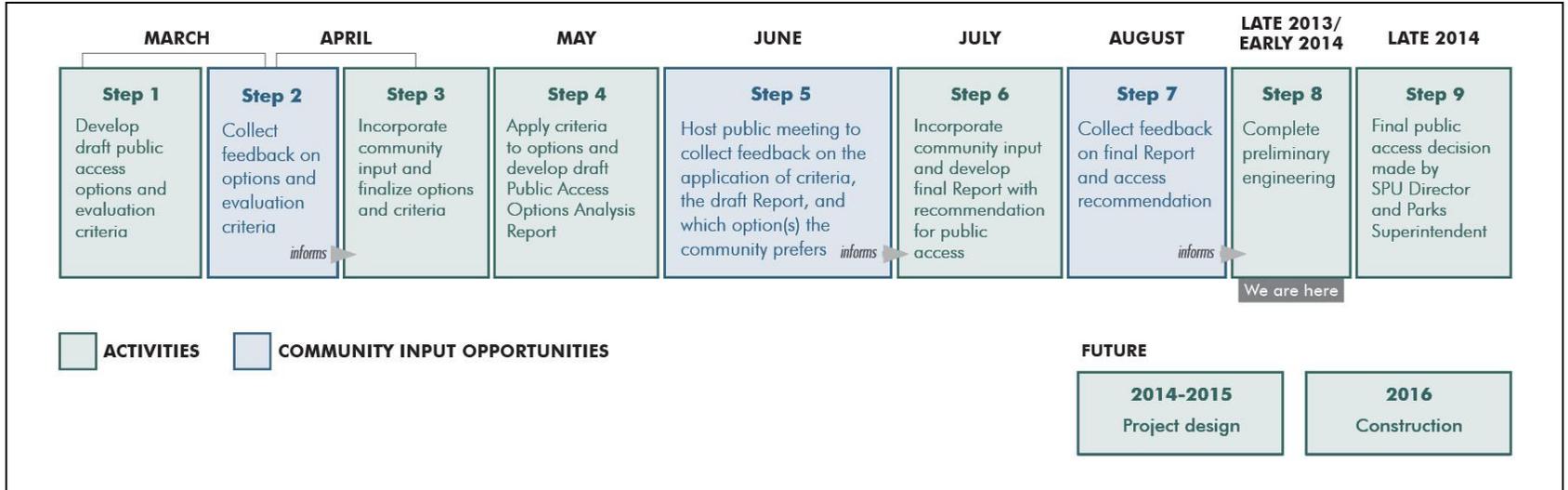


Figure 3b. Revised process and schedule for the Public Access Options Analysis.

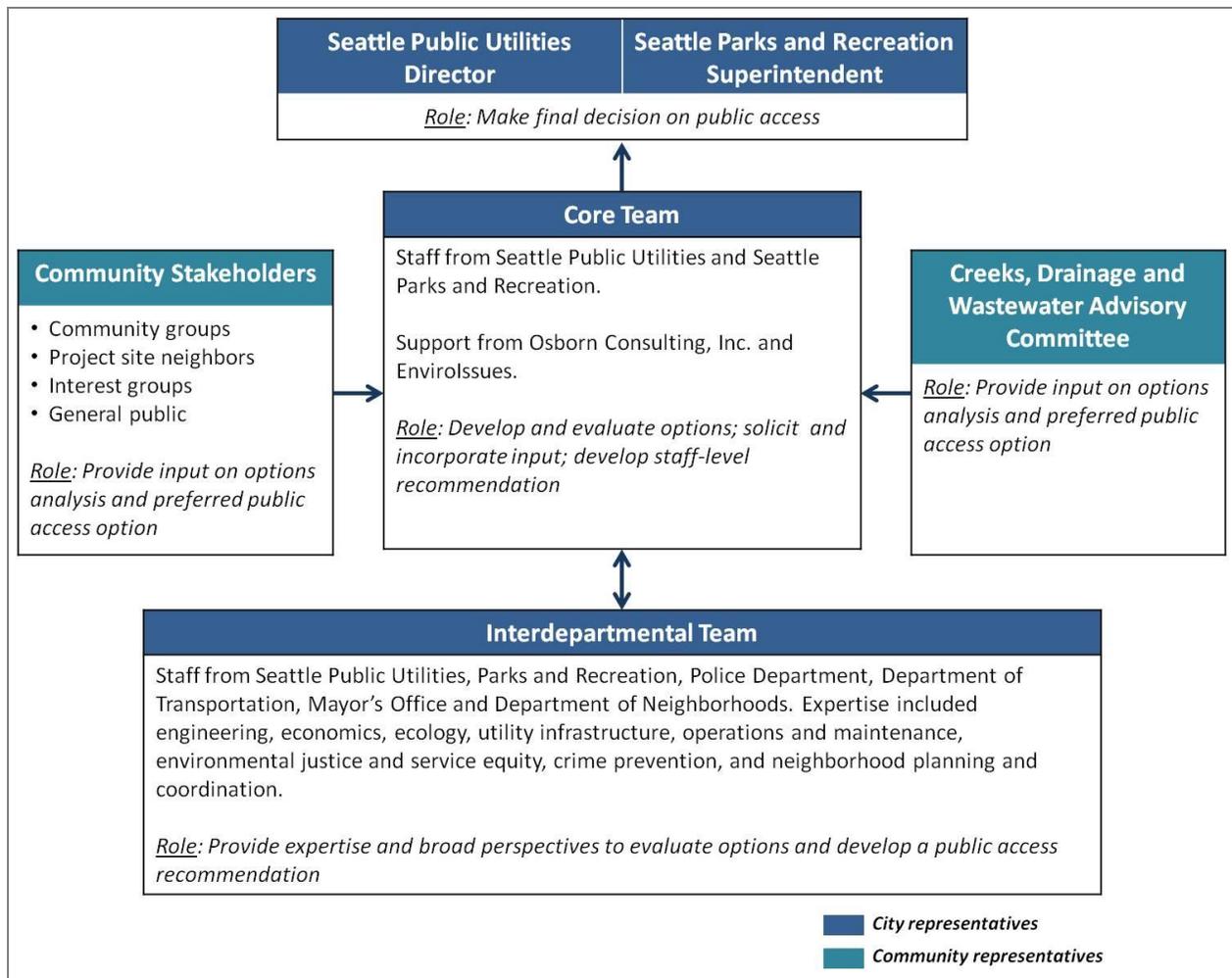


Figure 4. Participants in the Public Access Options Analysis and their roles.

Core Team

The Core Team was composed of SPU and Parks staff, with consultant support provided by Osborn Consulting, Inc. and Envirolssues. The Core Team’s responsibilities included designing and carrying out the Public Access Options Analysis process, developing public access options, identifying criteria to evaluate the options, applying the evaluation criteria to the options, soliciting and incorporating input from the community, convening the Interdepartmental Team, developing the recommended public access option, and briefing SPU and Parks management.

Interdepartmental Team

An Interdepartmental Team was convened to draw upon expertise in various departments within the City of Seattle during the evaluation of the public access options. The Interdepartmental Team included staff from the Mayor’s Office, Seattle Police Department (SPD), Department of Neighborhoods (DON), Seattle Department of Transportation (SDOT), SPU’s Environmental Justice and Service Equity and Economics divisions, and SPU’s Field Operations and Maintenance branch.

The Core Team met with the Interdepartmental Team three times during the analysis process. The first team workshop, held in February 2013, focused on developing the public access options and evaluation

criteria. The second team workshop, held in April 2013, focused on applying the criteria to each of the options. The purpose of the third and final team workshop, held in July 2013, was to discuss the input from the community, weigh the benefits and challenges associated with each option, and make a staff-level recommendation for public access at the lower Taylor Creek site. The Interdepartmental Team was successful in bringing together representatives with different, sometimes conflicting, City perspectives and priorities to ensure a balanced evaluation. Summaries for the Interdepartmental Team workshops can be found in the Supporting Documents section.

Community Opportunities for Input

The Public Access Options Analysis process was built around providing meaningful and timely opportunities for public input. Three opportunities were provided for community members, nearby neighbors, and the general public to provide feedback during the analysis process (Figures 3a and 3b).

Community Input Opportunity #1 – March and April 2013

As a first step in the Public Access Options Analysis, SPU and Parks developed draft public access options and evaluation criteria to assess those options. To ensure the project team did not overlook any potential options or criteria, the options and criteria were released for public review and feedback through a survey that was distributed via mail and email to over 1,300 nearby businesses and residents. Additionally, SPU and Parks reached out to neighborhood community groups and organizations, offering briefings about the project and/or soliciting their participation in the survey.

Community groups contacted included:

- Friends of Deadhorse Canyon
- Rainier Beach Community Club (RBCC)
- Rainier Beach Community Empowerment Coalition (RBCEC)
- Rainier Beach Merchants Association (RBMA)
- Rainier Beach Moving Forward (RBMF)
- Rainier Beach Neighborhood Association (RBNA)
- West Hill Community Association (WHCA)
- Southeast District Council
- South Lake Improvement Committee
- Forterra
- Seattle Parks Foundation
- Washington Water Trails Association

The survey was open for three weeks. More than 90 people submitted responses. The survey asked:

1. *Are there other options for public access you believe we should include?*
2. *Are there additional criteria we should consider to evaluate the options for public access?*
3. *Do you have any other comments you would like to share with us?*

A detailed summary of the results, including answers to common questions and a full report of responses, can be found in the Supporting Documents section.

Highlights of the survey results include:

- Public access options: Approximately 73 percent of participants agreed with the five access options SPU was proposing and did not feel additional options should be considered. Additional options suggested were more related to design of the site (e.g., boat launches, signage, etc.) than access to the site.
- Evaluation criteria: Approximately 59 percent of participants thought SPU should consider additional evaluation criteria, including educational potential for the site, rights and interests of the taxpayers, preservation of native cultural resources that might be present at the site, and comparison to similar street ends projects.
- Options preference: While the survey did not explicitly ask participants for their preferred access option, many participants shared their opinion about which option they would like to see implemented. Approximately 26 percent of responses were in favor of Open Access, 7 percent for Scheduled/Limited Access, and 25 percent for No Access. The other 42 percent of participants did not explicitly state a preferred option.

The Core Team reviewed the community's feedback and incorporated criteria suggestions. Educational potential was added as a consideration in the *Community Amenities* criterion. Taxpayer costs were accounted for in the *Project Goals* criterion for construction costs and in the *City Operations and Maintenance* criterion for site operation staff time. During project design and the environmental permitting process, SPU and Parks will assess the cultural resource potential of the site and research waterfront street end sites for lessons that can be applied to this project. No additional public access options were identified through Community Input Opportunity #1.

Community Input Opportunity #2 – June and July 2013

Following Community Input Opportunity #1, SPU and the City applied the evaluation criteria to the five public access options that were carried forward in the analysis. In early June, the preliminary evaluation was released, and an open house and neighborhood drop-in session were held. The purpose of this second community input opportunity was to solicit a critique of the evaluation and preferred public access option. Over 65 community members attended the open house and/or the neighborhood drop-in session.

Participants submitted comments in one of three ways – with in-person submission of comment forms at the June open house or neighborhood drop-in session, via a mail-returned comment form, or through an online survey. Comments were collected between June 10 and June 28. A detailed summary of the results, including answers to common questions and a full report of responses, can be found in the Supporting Documents section.

Highlights of the survey results include:

- Over 90 community members participated in the Preliminary Evaluation of Public Access Options survey.
- More than 80 percent of survey participants believed the evaluations presented were fair. The most agreed-upon evaluation was *City Cost, Operations, and Maintenance* with about 91 percent of respondents in favor of the evaluation. The least supported evaluation was *Traffic Safety and Mobility* with approximately 81 percent of respondents in agreement. People were very concerned about traffic conditions on Rainier Ave S (and along 68th Ave S

to a lesser extent) and want to see improved pedestrian safety, especially if public access is provided to the Taylor Creek site.

- Approximately 70 percent of participants expressed a preference for Open Access at the site. The most commonly cited reasons in support of this option were educational benefits, the potential for stewardship opportunities, the ability to offset maintenance costs, and the existing shortage of open spaces and access to Lake Washington in the neighborhood.
- Approximately 11 percent of participants expressed a preference for No Access. The most commonly cited concerns included the potential for increased crime and nuisance activity in the neighborhood, cost to the City and taxpayers for operations and maintenance of an open site, negative impacts to salmon habitat, and traffic/pedestrian safety.

Feedback from Community Input Opportunity #2 was used to refine the option evaluation as a point of information for the project team in developing the staff-level recommendation, and assisted the project team in developing additional considerations for the project as it moves into the design phase.

Community Input Opportunity #3 – August and September 2013

Following Community Input Opportunity #2, the Interdepartmental Team met to discuss community input received during the previous two community input opportunities and to develop a staff-level recommendation about public access.

Consistent with the City of Seattle’s Comprehensive and Shoreline Management plans, the team recommended some form of Open Access due to the larger community benefits provided by an accessible site. Additionally, Open Access received the greatest public support during the analysis process, and was the preferred option for the broader community and stakeholder groups.

The team acknowledged the community’s concerns about how Open Access may affect the stream and surrounding habitat, the immediate neighborhood, and traffic in the area. As such, the Open Access recommendation was contingent upon the need for additional traffic and engineering studies, and integrating specific elements into the project's design.

As part of Community Input Opportunity #3, participants were asked to review the recommendation and contingencies within a draft version of this report and share any final thoughts with the project team. This was the third and final opportunity for community members to provide feedback specific to the topic of public access.

Participants could submit comments online or via email. Comments were collected between August 23 and September 8. A detailed summary of the results can be found in the Supporting Documents section.

Highlights of the survey results include:

- 13 people completed the Staff-level Recommendation survey.
 - Eight participants agreed with the staff-level recommendation for some form of Open Access.
 - Three participants disagreed with the staff-level recommendation for some form of Open Access.

- Two participants did not explicitly state whether they agreed or disagreed with the staff-level recommendation.
- Nearly all participants agreed that additional traffic studies are needed to determine what safety improvements can be made for drivers, bicyclists, and pedestrians on Rainier Ave S where it meets the private drive, Cornell Ave S and 68th Ave S.

Creeks, Drainage, and Wastewater Advisory Committee

SPU charters three Community Advisory Committees that align with its three Lines of Business: Drainage and Wastewater, Solid Waste, and Water. They are responsible for providing advice, recommendations and targeted analysis on SPU's projects, policies and services, and report to the SPU Director. Committee members work to ensure that SPU's policies and services serve all of Seattle's communities. The Creeks, Drainage, and Wastewater Advisory Committee (CDWAC) focuses on SPU's drainage and wastewater-related work.

The Public Access Options Analysis and staff-level recommendation was presented to CDWAC on July 10, 2013 after a tour of the site. Overall, the group was very supportive of the project. Members were concerned about how the different public access options could affect salmon habitat and use of the area by other wildlife. The group did not identify one favored option, but preferred options that had less chance of impacting habitat and use by fish and wildlife (e.g., Viewpoint and/or Scheduled Access). One CDWAC member lives close to a street end and voiced concerns over how traffic and parking changes from Open Access could impact immediate neighbors and pedestrian safety.

Members also provided suggestions for protecting habitat if some form of public access was provided to the project site. Suggestions included using fencing around the stream (e.g., Piper's Creek), closing the park during certain times (e.g., Fourth of July, spawning season), and examining small street end parks in Seattle for design and implementation lessons. Members also liked the idea of monitoring the site if public access is allowed and making adjustments, as needed, to protect the restored habitat.

THE PUBLIC ACCESS OPTIONS

At the start of the Public Access Options Analysis process, SPU and Parks identified the range of public access options for the lower Taylor Creek site. The options ranged from sale of the property into private ownership once restoration is complete, to a fully-developed park with parking and other public amenities (Figure 5).



Figure 5. The range of possible options for ownership, access and facilities at the lower Taylor Creek project site that were discussed as part of the Public Access Options Analysis process.

The Core and Interdepartmental teams considered accessibility to the site in terms of:

- Geographic elements – Access to the site could be limited to certain portions of the site (e.g., varying elevations).
- Physical elements – Access to and around the site could be limited and/or directed by paths, gates, fences and vegetation.
- Temporal elements – Access to the site could be limited to certain days and hours.

Ultimately, seven public access options were identified. For cost and feasibility reasons, two options were eliminated from consideration. Five options were carried forward for this analysis (Figure 6).

Options Removed from Consideration

Initial discussions led to elimination of two options at the extreme ends of the spectrum for further consideration:

Sale of the property into private ownership

Private ownership of the site was not pursued as an option in this analysis for the following reasons:

- Protecting restoration investments – Future development at the site could reduce the restoration benefits of the project.
- Public safety – Properties at the site have experienced flooding and sediment deposition. While the restoration project will address sediment deposition and flooding to some extent, these are natural processes that will continue to occur. In order to prevent the impacts of future flooding, SPU purchased the properties to restore natural habitat and stream processes at the site.
- Limited development potential – Once the restoration project is complete, there will be constraints on how the site is used due to Seattle’s Environmental Critical Area ordinance.

Developed park with public amenities

A developed park site would have facilities such as playgrounds, parking lots, restrooms, bridges, and in-water structures like docks or bulkheads. This option was removed from further consideration for the following reasons:

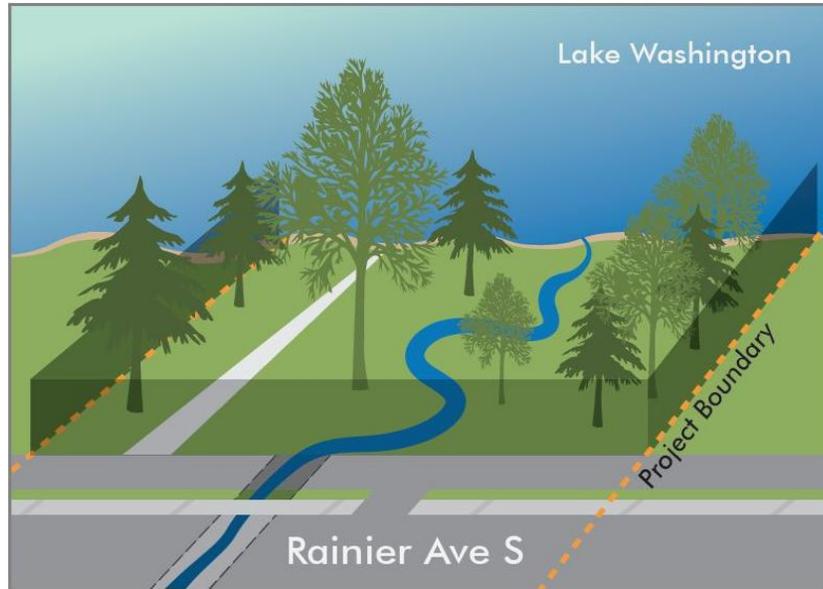
- Severely limits restoration value – The intent of the project is to restore habitat for fish and wildlife in the area and ensure mobility at the Rainier Ave S crossing. The stream-related improvements need to be sized appropriately and will occupy the bulk of the site. Park amenities are incompatible with habitat needs and there is little space for them.
- Increased operation and maintenance costs – Park facilities would increase maintenance and operational needs at the site, such as maintaining play equipment and structures, cutting the lawn, cleaning bathrooms, and other maintenance activities.
- Redundancy with nearby amenities – Lakeridge Playfield is directly across the street from the project site and contains some of the park amenities mentioned above.

Public Access Options Evaluated

Five public access options are evaluated in this report and described below (Figure 6). Each public access option differs in terms of who has the ability to access the site and at what days and/or times it can be accessed. Table 1 compares elements of the public access options. Some design elements are consistent among all of the options, including:

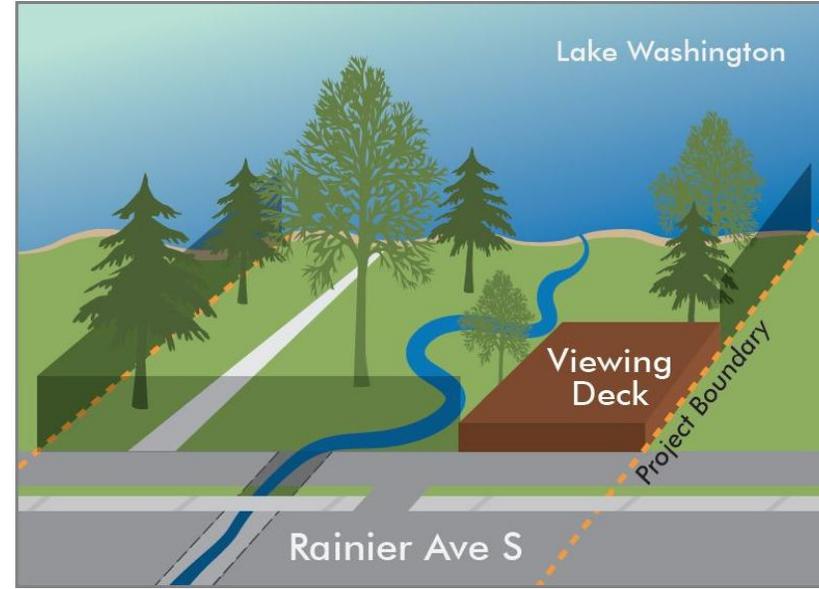
- Permanent fences will be installed on the eastern and western sides of the property.
- Public parking will not be provided at the site.
- Vehicle access to the site will be permitted for City maintenance personnel only.
- Use of the site to walk or exercise dogs will be limited or perhaps prohibited to protect salmon and their restored habitat.
- Only native streamside forest community plants will be used, including coniferous and deciduous trees, shrubs and groundcovers.
- No facilities of any sort, such as docks, mooring buoys or swimming buoys, will be included.

Figure 6. The five public access options evaluated in this report.



1. No Access

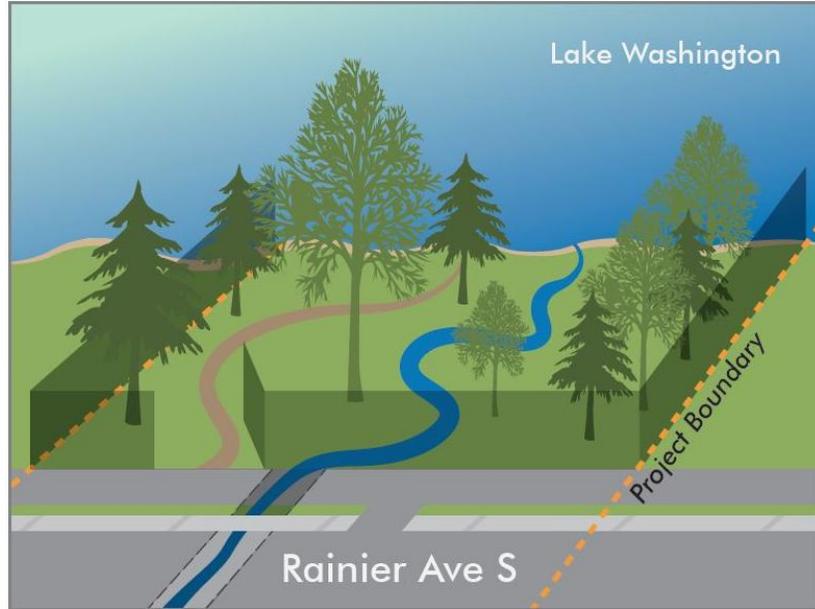
This option was the most restrictive option evaluated. The site would be enclosed by a permanent fence on the Rainier Ave S side of the property, and only City employees would be allowed to open the fence and enter the site. A maintenance trail would provide access for care of vegetation and site monitoring.



2. Viewpoint

This option would provide a public viewing platform overlooking the site but would not allow public access onto the site or to the shoreline. Apart from the viewing platform, the site would be enclosed by a permanent fence on the Rainier Ave S side of the property. Only City employees would be allowed to open the fence and enter the site. A maintenance trail would provide access for care of vegetation and site monitoring.

Figure 6 (continued). *The five public access options evaluated in this report.*

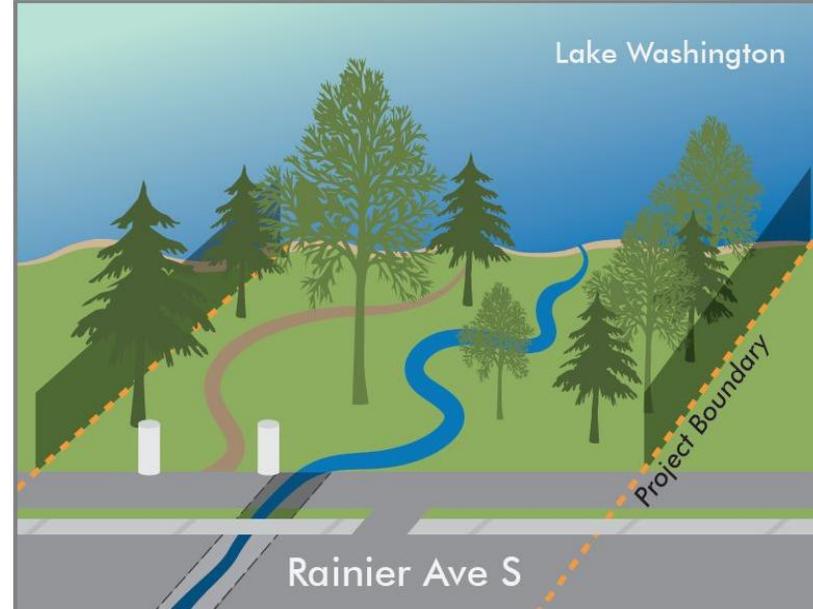


3. Scheduled Access

This option would provide group access via a pedestrian pathway for educational or stewardship purposes. Access to the site would be allowed by appointment only. The site would be enclosed by a gated fence on the Rainier Ave S side of the property. Access would be managed by City employees opening/closing the gate as needed.

4. Limited Access

This option is similar to Scheduled Access, except that there would be access for the general public during specified days/times only (e.g., weekdays from 12 to 4 p.m.).



5. Open Access

This option was the least restrictive option evaluated. The site would serve as a natural area for passive recreation. Visitors would access the site and Lake Washington via a pedestrian pathway during daytime hours only (sunrise to sunset). Fencing would not be installed on the Rainier Ave S side of the property. Bollards at the entrance would restrict vehicle access to the site and signage would limit use to daylight hours.

Table 1. Comparison of public access options.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Option description	No public access is allowed to the site; only City employees can enter the area.	A viewpoint overlooks the site.	The site serves as a natural area that provides passive recreational enjoyment <i>by appointment only</i> .	The site serves as a natural area that provides passive recreational enjoyment <i>during specific days/times only</i> .	The site serves as a natural area that provides passive recreational enjoyment; access to the site is provided during daytime hours (sunrise to sunset).
Who can access the site and Lake Washington?	<ul style="list-style-type: none"> City employees only 	<ul style="list-style-type: none"> City employees General public access to viewing deck only 	<ul style="list-style-type: none"> City employees Community, school and organized groups by appointment only 	<ul style="list-style-type: none"> City employees General public during specific days/times only 	<ul style="list-style-type: none"> City employees General public during daylight hours
How will fencing be used? <i>Note: Fences will be installed on the east and west property boundaries for all options.</i>	<ul style="list-style-type: none"> Fence at southern end of property, opened by City staff only 	<ul style="list-style-type: none"> Fence at southern end of property, opened by City staff only Viewpoint area open at all times 	<ul style="list-style-type: none"> Gated fence at south end of the site to allow pedestrian access Access managed by City personnel opening and closing the gate 	<ul style="list-style-type: none"> Gated fence at south end of the site to allow pedestrian access Access managed by City personnel opening and closing the gate 	<ul style="list-style-type: none"> No gate at southern end of the property Pedestrian-only access limited by bollards Signs limiting use to daylight hours only
What are the main access design features?	<ul style="list-style-type: none"> Maintenance trail 	<ul style="list-style-type: none"> Maintenance trail Public viewing deck overlooking the site 	<ul style="list-style-type: none"> Pedestrian pathway to the lake Gated entrance 	<ul style="list-style-type: none"> Pedestrian pathway to the lake Gated entrance 	<ul style="list-style-type: none"> Pedestrian pathway to the lake Bollards and signage at entrance
What types of vegetation and trees will be planted? <i>Note: All options include typical streamside forest community plants native to the Pacific Northwest, such as coniferous and deciduous trees (e.g., cedar, Douglas fir, maple), shrubs (snowberry, Oregon grape), and groundcovers (ferns, salal).</i>	Vegetation planted for maximum habitat benefit and without concern for maintaining sightlines through the site	Vegetation planted to provide some sightlines through the site to view the stream and lake	Vegetation planted for maximum habitat benefit and without concern for maintaining sightlines through the site	Vegetation more strategically and thinly planted to maintain sightlines through the site – this can mean fewer plants overall and targeted pruning to allow open views 3-6 ft. off the ground	Vegetation more strategically and thinly planted to maintain sightlines through the site – this can mean fewer plants overall and targeted pruning to allow open views 3-6 ft. off the ground

EVALUATING THE PUBLIC ACCESS OPTIONS

Preliminary Evaluation Results

The options analysis was conducted by the Interdepartmental Team from SPU, Parks, SDOT, and the SPD. The team qualitatively discussed the benefits and the potential drawbacks and challenges that each access option presents, relative to the proposed evaluation criteria (Table 2). The discussion also highlighted design elements or actions that may be able to mitigate for or limit specific risks and challenges. The following sections, organized by criterion, contain the final evaluation results with feedback collected during Community Input Opportunity #2 incorporated.

Table 2. Evaluation criteria used in the Public Access Options Analysis.

Evaluation criteria	How does each public access option affect the following considerations?
1. Habitat Improvements¹	<ul style="list-style-type: none"> ▪ Ability to improve fish and wildlife habitat
2. City Cost, Operations and Maintenance²	<ul style="list-style-type: none"> ▪ Total design and construction costs³ ▪ Staff time, costs and safety related to operations and maintenance
3. City Safety and Liability⁴	<ul style="list-style-type: none"> ▪ City liability for the site ▪ Ability to enforce rules at the site
4. Community and Neighborhood Amenities	<ul style="list-style-type: none"> ▪ Access to the lake shoreline ▪ Connectivity between public open spaces ▪ Environmental justice and service equity ▪ Educational and stewardship opportunities
5. Potential Neighborhood Impacts⁵	<ul style="list-style-type: none"> ▪ Crime related to property damage, theft or personal injury ▪ Nuisance behavior ▪ Property values/rental property changes ▪ Neighborhood character and privacy ▪ Impacts to neighboring businesses
6. Traffic Safety and Mobility	<ul style="list-style-type: none"> ▪ Cars, pedestrians, and bicyclists ▪ Traffic and pedestrian hazards accessing/along the private drive ▪ Parking

¹ This criterion was originally titled *Project Goals*; however, it was determined that public access would not affect the City's ability to replace the Taylor Creek culvert at Rainier Ave S and would only have an effect on fish and wildlife habitat improvements. Therefore, this criterion was renamed to more accurately reflect the condition being evaluated.

² Design and construction costs associated with the public access options were added to the *City Operations and Maintenance* criterion based on comments received during Community Input Opportunity #1.

³ Design and construction costs of various options will be further developed through Preliminary Engineering. A final decision about public access is contingent upon a cost that balances social and environmental benefits and is within the allocated budget.

⁴ Each public access option may present different levels of legal liability and public safety risk for the City of Seattle. This assessment was conducted separate from this analysis, working with the City's Law Department.

⁵ This criteria focuses on the potential for negative impacts. Positive aspects are accounted for in the *Community and Neighborhood Amenities* criterion. Many of the potential negative impacts were noted during early outreach of the project and throughout the analysis process.

Habitat Improvements

This criterion evaluates how each option affects the ability to improve fish and wildlife habitat (Table 3). The considerations discussed for this criterion include:

Reduced area for stream and surrounding habitat improvements

Paths and viewpoints take up space in the project footprint that could otherwise be used for the stream, stream floodplain, and plantings that provide shade and habitat for land-based wildlife. Pathways will need to consider ADA accessibility, which could increase the footprint of the path.

Vegetation and plantings

Generally, urban spaces with public access are designed to facilitate visibility, based upon Crime Prevention Through Environmental Design (CPTED) principles. If public access to the site is provided, vegetation would be installed to provide sightlines through the site (e.g., open views between three and six feet off the ground). To create these conditions, the types and numbers of plants are carefully considered and designed. Fewer plants overall would be expected on the site with more open public access.

Habitat disturbance

As more people access the site, there will be increased disturbance to fish and wildlife, as well as impacts to habitat in and around the stream and shoreline. Dogs may also cause damage to habitat, especially if they enter the stream and lake while salmon are present (e.g., during spawning, egg incubation, and/or early life rearing).

Although there is a potential for people to damage habitat, there are instances within Seattle parks where salmon and people interact successfully and respectfully, such as at Carkeek Park. Design elements can be incorporated to reduce human impacts, including establishing designated areas where people can observe the stream. This would direct foot traffic to specific areas and limit possible habitat damage. In addition, temporary access restrictions could be implemented to protect habitat during key stages of the salmon life cycle, such as during spawning season. Dogs are also a concern, particularly when owners do not keep them on a leash to prevent them from disturbing sensitive habitat.

Site stewardship can also play an important role in protecting fish and wildlife and their habitat. There are active stewardship and community groups near the project site (e.g., Friends of Deadhorse Canyon, Rainier Beach Community Club), as well as interested educational organizations (e.g., IslandWood's Homewaters program) that can help promote respectful use of the site.

Table 3. Habitat Improvements evaluation: how each public access option affects potential habitat benefits.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Habitat area available	Slight decrease for maintenance path.	Footprint for viewpoint will reduce habitat area, likely largest reduction among all the options.	Slight decrease for maintenance/ADA-accessible pedestrian path.	Slight decrease for maintenance/ADA-accessible pedestrian path.	Slight decrease for maintenance/ADA-accessible pedestrian path.
Vegetation	Vegetation can be planted to maximize habitat benefits.	Plant type and location may need to accommodate views to stream and lake.	Vegetation can be planted primarily to maximize habitat benefits, small modifications to facilitate visiting groups.	Plant type and location will need to accommodate sightlines, using CPTED principles, in addition to habitat benefits.	Plant type and location will need to accommodate sightlines, using CPTED principles, in addition to habitat benefits.
Habitat disturbance	Maintenance staff only on site, producing little disturbance.	Visitors limited to viewpoint only; maintenance staff only on site producing little disturbance.	Periodic disturbance when groups on site; will need to focus activities in specific areas through design.	Periodic disturbance when site is open; will need to focus activities in specific areas through design.	Most frequent disturbance; will need to focus activities in specific areas through design.
Criterion summary	Habitat benefits can be maximized.	Some reduction in habitat benefits: reduced area from viewpoint and modified plantings for views.	Slight reduction in habitat benefits from occasional disturbance.	Greater reduction in habitat benefits from frequent visitors and modified plant type and locations.	Greater reduction in habitat benefits from frequent visitors and modified plant type and locations.
Design concepts to maximize habitat value	<ul style="list-style-type: none"> Carefully design plantings for habitat, visual connections, and sightlines. Direct visitors to specific areas of the site and consider possible barriers, seasonal closures, and limiting dogs to minimize/limit extent of habitat disturbance. 				

City Cost, Operations, and Maintenance

This criterion evaluates how each option affects the City's costs to design and build the project, as well as the City's ability to operate and maintain (O&M) the site (Table 4). The considerations discussed for this criterion include:

Costs for design, permitting and construction

Each public access option has different design, permitting, and construction costs and feasibility. All project elements include fences on the east and west sides of the property and a maintenance and/or pedestrian path through the site. Cost increases can be related to additional pathways, structures, and/or complicated design elements.

This analysis only compares relative costs at a conceptual level, as accurate estimates are not able to be developed with the information currently available. Cost estimates for design and construction of the project, as well as the various public access options, will be developed through Preliminary Engineering. A final decision about public access is contingent upon a cost that balances social and environmental benefits, and is within the allocated budget.

Site maintenance and monitoring

This includes staff time for the care of plants, clearing culvert debris, removal of trash and illegally dumped items, and repairs to paths, fences, and other structures. The site will also have some level of monitoring to ensure that it is being used and respected appropriately. Options with little or no access will have fewer staff time requirements since sightlines and structures will not need to be maintained and there will be little trash to clean up. The No Access and Limited Access options also reduce the chance for invasive plant introductions, reducing maintenance needs. Under all options, fences will need to be maintained.

Stewardship can offset site maintenance and monitoring costs. The Friends of Deadhorse Canyon is a stewardship group that works upstream of the project site. They have done an excellent job caring for the native forest and removing invasive species in Lakeridge Park, providing benefits for fish and wildlife and reducing City expenses. For this analysis, it is assumed that more public access will create greater opportunities for community stewardship of the site, helping to offset maintenance costs. The benefits associated with stewardship are further discussed under the *Community and Neighborhood Amenities* section.

Table 4 does not include time spent by the police to monitor the site or respond to situations at the site. Please see the *Potential Neighborhood Impacts* section for a discussion of how future site conditions are predicted to change police response in the area.

Providing access

Two public access options, Limited Access and Scheduled Access, would require a gate that would need to be opened and closed for visitors. Limited Access would require that the gate be opened at specific days/times. Scheduled Access would be more onerous for City staff, as there would need to be coordination in advance of the scheduled visits, as well as a staff person present at the time of the event to open the gate and allow access to the site. In addition to challenges for City staff, Scheduled Access could result in creating more barriers and/or limitations to historically underserved populations due to potential language barriers and schedule capacity of individuals or families seeking to use the area.

Maintenance crew safety

The crews maintaining City property sometimes encounter conditions that can pose a safety risk. Safety risks can be related to physical conditions of a site (e.g., steep slopes, high stream flows) as well as human behaviors and interactions. The Interdepartmental Team did not anticipate differences in crew safety among the public access options.

Table 4. *City Cost, Operations, and Maintenance evaluation: how each public access option affects the City’s costs to design, construct, operate and maintain the Lower Taylor Creek Restoration project and site.*

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Project costs*	Slight cost increase for fence on Rainier Ave S side of site.	Increased cost for elevated structure; possible increase in permit requirements.	Slight cost increase for fence/gate on Rainier Ave S side of site.	Slight cost increases for fence/gate on Rainier Ave S side of site and to maintain sightlines and focus visitor use.	Slight cost increase for design to maintain sightlines and focus visitor use.
Site maintenance/ monitoring	Minimal staff time requirement: ensure fence in good condition, minimal plant care. Little stewardship opportunity to offset costs.	Modest staff time requirement: ensure viewpoint/fence in good condition, prune vegetation for views.	Minimal staff time requirement: ensure fence/gate in good condition, minimal plant care.	Moderate staff time requirement: ensure fence/gate in good condition, prune vegetation for sightlines. Greater stewardship opportunity to offset costs.	Moderate staff time requirement: ensure fence in good condition, prune vegetation for sightlines. Greater stewardship opportunity to offset costs.
Providing access	No additional staff time needed.	No additional staff time needed.	Staff time needed to schedule visitors and open gate.	Staff time needed to open gate at regularly scheduled times.	No additional staff time needed.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Criterion summary	<p>Minimal cost increases for gate.</p> <p>Fewer maintenance needs, but little opportunity to offset costs with stewardship.</p>	<p>Small cost increase to design/build viewpoint.</p> <p>Modest staff requirements for maintenance.</p>	<p>Minimal cost increase for fence/gate.</p> <p>Modest staff requirements for maintenance, but some opportunity for stewardship.</p> <p>Moderate staff requirements for providing access.</p>	<p>Minimal cost increase for gate and view/use designs.</p> <p>Moderate staff requirements for maintenance and providing access.</p> <p>Some opportunity for stewardship.</p>	<p>Minimal cost increase for access design.</p> <p>Moderate staff requirements for maintenance.</p> <p>Greatest opportunity to offset costs with stewardship.</p>
Design concepts to reduce O&M needs	<ul style="list-style-type: none"> • Use CPTED principles for plantings and maintaining sightlines. • Direct users to specific areas of the site to manage maintenance needs. 				

**The design and construction cost of the various options will be further developed through Preliminary Engineering. A final decision about public access is contingent upon a cost that balances social and environmental benefits and is within the allocated budget.*

Community and Neighborhood Amenities

This criterion evaluates how each option affects community and neighborhood amenities near and adjacent to the lower Taylor Creek project site. The considerations discussed for this criterion include:

Access to the lake shoreline

The City of Seattle Comprehensive Plan has a Shoreline Access Goal (LUG44) to “provide for the optimum amount of public access – both physical and visual – to the shorelines of Seattle.” Shoreline Access Policies in the Comprehensive Plan include:

- Increase opportunities for substantial numbers of people to enjoy the shorelines, by permitting non-water-dependent uses providing public access to locate in waterfront areas less suited for water-dependent uses, and by requiring public access on public property. (LU235)
- Promote public enjoyment of the shorelines through public access standards by requiring improvements that are safe, well designed, and offer adequate access to the water. (LU236)

Public access requirements are specified in the Seattle Shoreline Master Program, which regulates “development, uses and shoreline modifications of the shorelines of the City in order to:

1. Protect the ecological functions of the shoreline areas;
2. Encourage water-dependent uses;
3. Provide for maximum public access to enjoyment of the shorelines of the City; and
4. Preserve, enhance, and increase views of the water...provide for maximum public access to enjoyment of the shorelines of the City.” (SMC 23.60A.002 B)

The regulations also state that “regulated public access shall be provided and maintained on all publicly owned and publicly controlled waterfront development sites whether leased to private lessees or not, except if the site is submerged land that does not abut dry land.” (SMC 23.60A.164 B)

Shoreline access in Seattle is generally provided through either park property or street ends that reach the water (Figure 7). The lower Taylor Creek project site is located 0.9 miles from Chinook Beach Park, the nearest shoreline park. This park is a shoreline restoration area that features a small beach with informal access to the water. Beer Sheva Park is located 1.25 miles north of the project site on the shore of Lake Washington and provides large grassy areas, a children's play area, picnic tables, restrooms, and a motorized boat launch.

There are a number of street ends that exist close to the project site. Currently none of these street ends provide clear public access to view the lake or touch the water. However, Parks and SDOT are working together to improve two street ends on Lake Washington south of the project site in 2013:

- 72nd Ave S: This site has a low bank and steep access to the water. Proposed improvements include a bench or table.
- 75th Ave S: This site sits high on a high bank with a tree-covered slope. Proposed improvements include a bench and overlook with a hand-rail.

Connectivity between public open spaces

The lower Taylor Creek site is across Rainier Ave S from Lakeridge Playfield and within walking distance of Deadhorse Canyon/Lakeridge Park (Figure 8). An existing trail network in Lakeridge Park allows people

to walk from the upper Taylor Creek watershed (e.g., Skyway area) through the natural area park to 68th Ave S/Holyoke Way S, then down 68th Ave S to Rainier Ave S and the playfield. A publicly accessible lower Taylor Creek project site could connect with these spaces to enhance recreational enjoyment of the Taylor Creek corridor and connections with the natural environment, fellow neighbors, and other site users.

Environmental Justice and Service Equity (EJSE)

The City of Seattle is committed to providing equitable service delivery to all Seattle residents. SPU efforts are guided by the City of Seattle's Race and Social Justice Initiative, which is aimed at ending race-based disparities in our community and providing equitable service to the community.

Southeast Seattle, which includes the project site, is more ethnically diverse than most areas of Seattle.⁶ Based on 2010 census data, Seattle on average is about 70 percent white. In contrast, southeast Seattle is not dominated by any one ethnic group. Those of Asian descent make up 32 percent of the area's population, followed by non-Hispanic whites (28 percent), non-Hispanic blacks (25 percent), Hispanic (8 percent) and multi-racial (6 percent).

Previous assessments have indicated that southeast Seattle and the project area provide less open space and shoreline access per capita when compared to other portions of the City of Seattle. The Parks report *An Assessment of Gaps in Seattle's Open Space Network: the 2011 Gap Report Update*⁷ reported that gaps in single family usable open space occur at the very southwest and southeast portions of the city. An assessment by the Duwamish River Cleanup Coalition/Technical Advisory Group in 2012 found that the zip code 98178, which includes the project site, has fewer square feet of park area per resident, compared to other zip codes in the Seattle area.⁸

The Scheduled or Limited access options could favor certain users over others. For example, a working family would not be able to use the site if it was only open on weekdays during normal office hours (which would be easiest for the City to staff). Alternatively, groups who do not speak English as a first language may be less inclined to schedule a visit. The degree of community benefit and inclusiveness will be dependent on when (days and times) and to whom (school groups, environmental groups, etc.) access is granted. Equitable access can also be affected by visitors' primary mode of transportation and the ease with which they can get to the project site.

If public access is allowed, the City will need to ensure that:

- The project design provides access to all potential users. It does not prevent, reduce, or create barriers to historically underserved populations from amenities as a result of the project.
- The use of the site is inclusive and provides equitable access to all users, whether a general visitor or coming to the site for educational or stewardship opportunities. The area should be designed and operated based on environmental, economic, and social benefits for the affected community.

⁶ Based on 2010 U.S. Census Bureau data, 98118 ZCTA

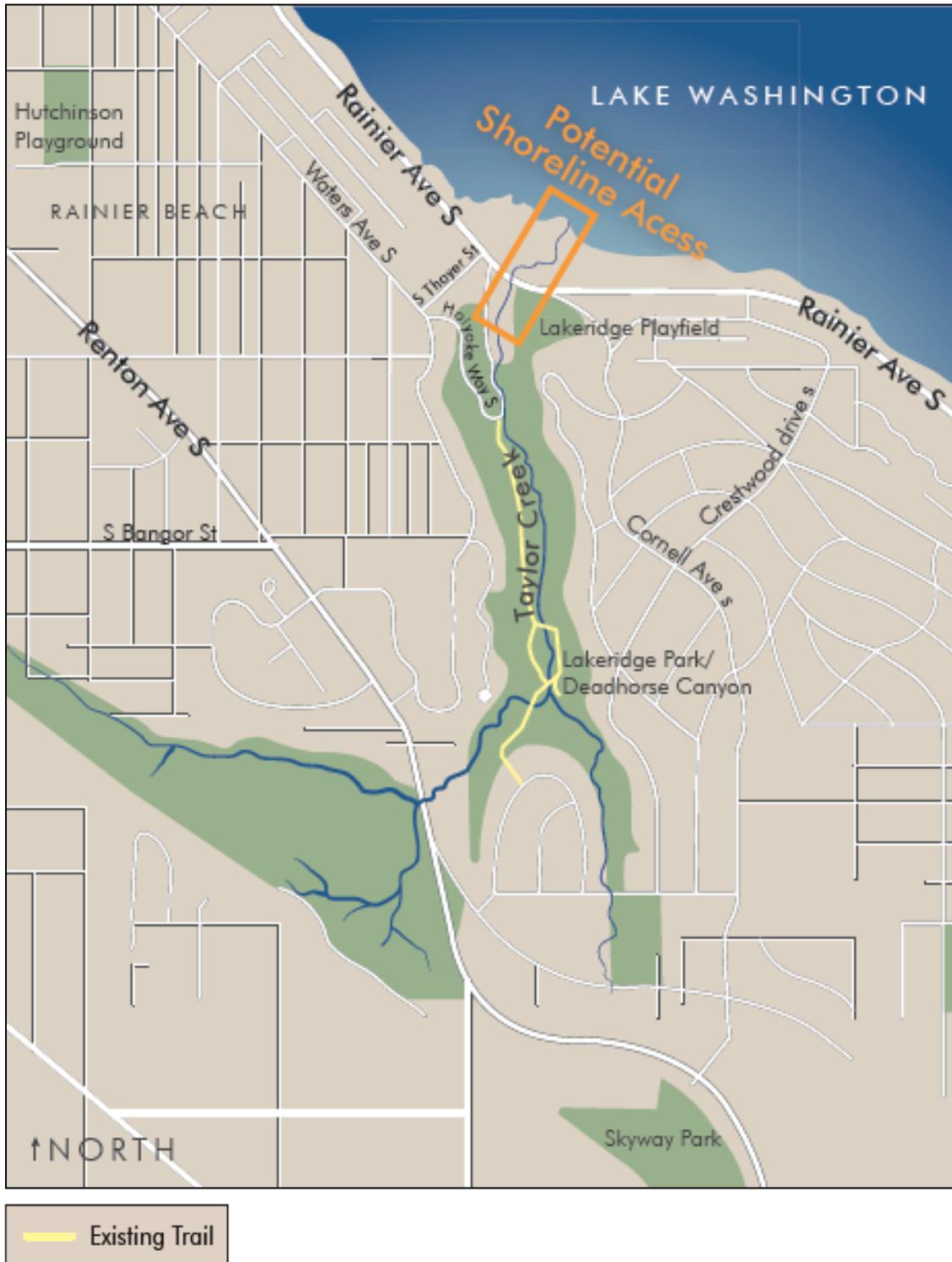
⁷ www.seattle.gov/parks/publications/GapReport.htm

⁸ Gould L, Cummings BJ. *Duwamish Valley Cumulative Health Impacts Analysis*. Seattle, WA: Just Health Action and Duwamish River Cleanup Coalition/Technical Advisory Group. March 2013.

Figure 7. Lake shoreline access opportunities in the Lower Taylor Creek Restoration Project vicinity.



Figure 8. Map of existing open spaces, natural areas, and parks near lower Taylor Creek that could potentially connect recreational users in the area to the new open space and Lake Washington shoreline.



Educational opportunities

The habitat restoration improvements provide an opportunity to educate school and community groups about urban streams and shorelines, the habitat they provide for fish and wildlife, and ways to protect and improve stream and shoreline environments. The benefits of this awareness extend beyond the educational site – they engage students and parents, increase awareness about how their choices affect water quality and habitat in our local waters, and can lead to a long-term positive impact on our natural resources.

These opportunities will be dependent on if and how the site is accessed. Several stakeholder groups and community organizations, including Rainier Beach Moving Forward and IslandWood, expressed interest and support for Open Access specifically for the unique salmon education opportunities it would provide.

Stewardship opportunities

City-owned areas, particularly natural areas, benefit from having local stewards engaged and active in maintaining the site. Stewards are able to care for native plants and remove invasive ones, which can help reduce City-staff time for maintenance work. Stewardship also helps connect people to the space and their community, as well as discourages nuisance activities.

Allowing access to the site would provide an opportunity for community-based groups to serve as stewards of the site, assisting the City with protection and maintenance of the habitat improvements. Specifically, Friends of Deadhorse Canyon has led stewardship efforts in Lakeridge Park for many years. Members of the group have expressed interest in expanding their stewardship opportunities to the Taylor Creek site if the area is open and easily accessible to the public.

Table 5. Community and Neighborhood Amenities evaluation: expected community and neighborhood benefits from each of the public access options.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Shoreline access	No increase in shoreline access.	Visual access to shoreline only.	Increased shoreline access through scheduled opportunities only.	Increased shoreline access open to all during specified days/times.	Increased shoreline access open to all during daylight hours.
Connectivity between open spaces/parks	No increase in connectivity.	Connectivity between playfield and viewpoint only; no connection to shoreline.	Connectivity between playfield and shoreline; limited to scheduled groups only.	Connectivity between playfield and shoreline; limited to specified days/times.	Connectivity between playfield and shoreline.
Improving Environmental Justice and Service Equity	No increase in equitable access to open space and shoreline.	Slight increase in open space available.	Increased access to open space and shoreline; access may not be equally available.	Increased access to open space and shoreline; access may not be equally available.	Increased access to open space and shoreline; access more equally available.
Educational opportunities	Groups not able to interact with site.	Groups able to use viewpoint; marginal opportunity given that users cannot closely observe/interact with the stream or shoreline.	Groups able to interact with site; use limited by need to schedule visit.	Groups able to interact with the site; use limited to days/times the site is open to the public.	Groups able to interact with the site during daylight hours; increased flexibility and opportunity.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Stewardship opportunities	Negligible stewardship opportunity due to a closed site. Least opportunity for stewards to interact with/feel ownership of the site.	Marginal stewardship opportunity given limited area accessible.	Marginal stewardship opportunity given need to schedule visit.	Moderate stewardship opportunity due to increased access during open hours.	Strong stewardship opportunity due to open access. Largest opportunity for stewards to interact freely with/feel ownership of the site.
Criterion summary	Very little community benefit.	Marginal community benefit as viewpoint and visual shoreline access is only amenity.	Fair community benefit from ability to access site; however, users may be discouraged by need to schedule a visit.	Moderate community benefit with regular open hours at the site.	Largest community benefit due to shoreline access, connectivity to nearby open spaces/parks, and easiest access for education and stewardship groups.
Considerations	<ul style="list-style-type: none"> Public access, if provided, will carefully consider providing equitable access to all Seattle residents. 				

Potential Neighborhood Impacts

A number of concerns have been voiced by nearby neighbors about how public access to the lower Taylor Creek site could affect their neighborhood and properties. Concerns include the potential for trespassing, property damage, loud music, public drinking, fireworks, dumping/littering, drug use and camping.

While there is a variety of community and neighborhood benefits associated with open public spaces, as noted in the *Community and Neighborhood Amenities* section, it was important for the project team to also assess potential neighborhood impacts. As such, the Seattle Police Department completed a Public Safety Analysis that examined specific site conditions that are known to promote or discourage criminal and nuisance behaviors, compared those conditions to what is expected at the lower Taylor Creek site, and then predicted the likelihood of unwanted behaviors to occur. The full SPD analysis can be found on the project website.⁹ The SPD analysis was based on Crime Prevention Through Environmental Design principles, SPD data, and applicable studies, both locally and nationally. In some cases, design elements and other helpful actions were identified during the analysis to further discourage undesirable behaviors.

It is important to note that there is not a large body of data or many relevant studies that exist on relationships between public spaces and incidence of nuisance and criminal behaviors. As such, reasonable judgments were made based on expertise from SPD, Parks, and using applicable information that was found. The text below summarizes that analysis of potential negative impacts. Positive aspects are addressed in the *Community and Neighborhood Amenities* section above.

Likelihood of increased nuisance behaviors

Nuisance activities are unwanted behaviors that reduce the enjoyment of the space for others users, but are not considered major crimes (although they may be illegal and dangerous). Examples of nuisance activities include loud music, unruly groups, fireworks, littering, and public drinking. Factors that contribute to nuisance activities include the availability of parking and large open spaces, such as grassy areas or pavement, and the presence of park facilities, such as bathrooms, swimming beaches, trail networks, and picnic sites. These factors do occur at Lakeridge Playfield and a number of 911 calls have been made in response to these nuisance behaviors. Fireworks in particular are of primary concern to many in the immediate vicinity of the playfield and have caused several fires in the recent past.

Parking, large grassy or pavement areas, and park facilities will not be offered at the Taylor Creek project site, decreasing the potential for nuisance behaviors at the site. However, there are nuisance behaviors at the nearby playfield and there is a potential for those activities to “spill over” into the Taylor Creek natural area. That potential will be affected by how easy it is to cross Rainier Ave S and take picnic equipment and supplies along. The presence of positive users of the space helps to deter nuisance activity.¹⁰

Likelihood of increased property damage

Property crime includes activities that damage private property, including vandalism, graffiti, burglaries, and car prowls. The incidence of these activities is related to foot access, perceived vigilance of the

⁹ www.seattle.gov/util/TaylorCreek

¹⁰ Wolf, K.L. 2010. *Crime and Fear - A Literature Review*. In: Green Cities: Good Health (www.greenhealth.washington.edu). College of the Environment, University of Washington.

property owners and neighbors, seclusion, and visibility. Vandalism, burglaries and car prowls are most likely to occur when there is seclusion and someone can go unnoticed because of visual barriers or absence of people. Conversely, graffiti is more prevalent in areas that offer up a “canvas” with high visibility so the work can be seen. As with nuisance activities, neighborhood awareness and community involvement can be a strong deterrent against potential property damage. In addition, some research has found that residential areas with adjacent green spaces tend to have fewer incidents of crime.¹¹

Graffiti and car prowls are rather prevalent in Seattle and do occur in the project area. There are a number of relatively easy practices that can strongly discourage vandalism, graffiti, car prowls and burglaries, which include well placed lighting, open visibility, and good property upkeep that indicates that property owners and neighbors are observant. Car prowls can be further reduced by parking in garages or driveways close to homes.

Likelihood of other criminal behaviors

These behaviors include drug dealing and use, prostitution, urban camping, illegal dumping, and assault. The largest factor that promotes the occurrence of these activities is vehicle access and availability of parking, since people are able to carry out their actions with and/or in their cars. The proximity to city centers, seclusion, and the reputation of an area (e.g., being known as a place to purchase drugs) can also encourage these behaviors. The number of people using a site will affect the likelihood of these activities, as well as other unwanted actions, occurring. Research has found that people committing crimes or engaging in other undesirable activities avoid well-used residential areas where their activities might be easily observed.⁶

The future site conditions are not predicted to increase the likelihood of criminal activities. The project site will not have parking or vehicles access under any of the public access options, which will deter many activities, including drug dealing and illegal dumping. Additionally, the project site is not located close to a city center, nor does it have a reputation as referenced above. The close proximity of homes to the lower Taylor Creek site and the existing views from the homes and the private drive entrance onto the site minimize opportunities for seclusion.

Changes to neighborhood character

A single-family, residential area surrounds the lower Taylor Creek site. Residents live on a quiet private drive that is somewhat isolated from the activity on Rainier Ave S. Depending on the level of public access, the project may introduce more people to the area – potentially affecting the character of the immediate area. It is likely that the adjacent neighbors will feel the greatest change as a result of public access than those that live further from the site. It is possible that public access at the site will increase customers for local businesses, notably the restaurant at the corner of Rainier Ave S and 68th Ave S.

Under all public access options, four homes will be removed at the site and many native trees and shrubs will be planted. These changes will improve site aesthetics for adjacent properties, but will also alter view corridors of the lake (however, no complete view blockages are expected given the layout of the lots, homes and shoreline). Depending on the level of public access, the adjacent homes will have a different level of privacy than what exists now, given the removal of homes on the project site.

¹¹ Brunson, L. 1999. *Resident Appropriation of Defensible Space in Public Housing: Implications for Safety and Community*. Unpublished Doctoral Dissertation, University of Illinois, Champaign-Urbana, IL.

The extent of neighborhood changes will depend on the number of people that use the lower Taylor Creek project site and how that use is structured. The Interdepartmental Team discussed the type of use that would be expected if public access was allowed. Because the Taylor Creek site is rather small and lacks park facilities (e.g., parking, bathrooms, picnic tables, docks, trail systems), the expected users are primarily nearby neighbors and community members coming from Deadhorse Canyon and Lakeridge Playfield. As a small natural area, the site is unlikely to be a regional draw or see the same number of users that developed shoreline parks receive, such as Seward Park. Design elements, including fencing, signage, and path entrances can direct visitors into appropriate areas and reduce the potential for adverse character changes in the neighborhood. Project-related improvements, including reduced flooding, fish passage and possible traffic changes, as well as positive users, such as school groups, stewardship organizations and families, could enhance the areas surrounding the project site.

Likelihood of changes in property values and rent

Predicting changes in property values and rental costs is difficult and dependent on a variety of factors. If nuisance or criminal behavior were to occur due to public access, it is reasonable to believe that property values could decrease. However, local studies have found that public open spaces are often seen as valuable to the community and have a positive impact on property values (*Trust for Public Land, 2011*).¹² SPU's recent experience selling a property adjacent to the Taylor Creek project site in March 2013 is consistent with the Trust for Public Land's conclusions, as the site sold above asking price within one week of listing. Additionally, potential buyers were provided full disclosure about the restoration project and the potential for public access at the site. Having a publically accessible open space nearby may also affect rental properties and their residents. Therefore it is difficult to provide any conclusions as to whether the project would have a negative, positive, or neutral impact on property values.

¹² The Trust for Public Land. 2011. *The Economic Benefits of Seattle's Park and Recreation System*. <http://cloud.tpl.org/pubs/ccpe-seattle-park-benefits-Report.pdf>

Table 6. *Potential Neighborhood Impacts evaluation: how each public access option affects the likelihood of potential neighborhood impacts near the project site given contributing factors and expected future site conditions. It is important to note that the evaluation examined specific site conditions that are known to promote or discourage criminal and nuisance behaviors, compared those conditions to what is expected at the lower Taylor Creek site, and then predicted the likelihood of unwanted behaviors to occur. The analysis also looked at SPD 911 calls and incident reports from January 2012 to July 2013. The ratings are relative to one another and experiences elsewhere in Seattle. See the Taylor Creek Project Area Public Safety Analysis (SPD, 2013) on the project website for additional detail. Positive aspects are addressed above in the Community and Neighborhood Amenities section.*

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Likelihood of nuisance behaviors	Negligible as site will not be accessible.	Low due to no parking on site; however viewpoint could provide area for groups to congregate.	Negligible as site will only be accessible to scheduled groups.	Low to moderate likelihood given no parking, open grass or concrete areas or facilities will be provided. There is potential for an overflow of people to spread from Lakeridge Playfield to project site.	Low to moderate likelihood given no parking, open grass or concrete areas or facilities will be provided. There is potential for an overflow of people to spread from Lakeridge Playfield to project site.
Likelihood of property crime	Negligible as site will not be accessible.	Low given small increase in site visitors. Viewpoint may encourage visitors to wander the private drive while trying to access the shoreline (compared with options allowing shoreline access). Observant neighbors can reduce likelihood.	Negligible as site will have a low number of visitors at scheduled times only.	Low to moderate likelihood for graffiti and car prowls in particular, although unclear that providing access would increase that likelihood. Observant neighbors/positive users paired with appropriate site design will reduce the likelihood.	Low to moderate likelihood for graffiti and car prowls in particular, although unclear that providing access would increase that likelihood. Observant neighbors/positive users paired with appropriate site design will reduce the likelihood.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Likelihood of other criminal behaviors	Slightly increased chance of urban camping with closed site, due to opportunity for seclusion; however, site is not within close proximity to social services and adjacent neighbors provide regular observation of the site.	Small chance that people visiting viewpoint may try to access the rest of the project site. The site would offer some seclusion; however adjacent neighbors provide regular observation of the site.	Negligible given that the site would have occasional visitors.	Low likelihood given small size of site, close proximity to neighbors, and appropriate sightlines – little seclusion provided. Observant neighbors/positive users paired with appropriate site design will reduce the likelihood.	Low likelihood given small size of site, close proximity to neighbors, and appropriate sightlines – little seclusion provided. Observant neighbors/positive users paired with appropriate site design will reduce the likelihood.
Changes to neighborhood character	Moderate change in aesthetics from plantings and altered lake views. Negligible changes to neighborhood character expected.	Moderate change in aesthetics from viewpoint, plantings and altered lake views. Visitor use focused close to private drive, creating modest character change at the viewpoint.	Moderate change in aesthetics from plantings and altered lake views. Other possible changes modest due to scheduled visits only.	Moderate change in aesthetics from plantings and altered lake views. Increased visitors expected; users would be on the site and close to the stream/lake. Engage neighbors in relevant elements of site design.	Moderate change in aesthetics from plantings and altered lake views. Increased visitors expected; users would be on the site and close to the stream/lake. Engage neighbors in relevant elements of site design.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Criterion summary	Little likelihood of neighborhood impacts.	Slightly increased likelihood; however, greater visibility given location of viewpoint close to private drive.	Little likelihood of neighborhood impacts. Most changes would be to aesthetics.	Increased likelihood of neighborhood impacts, particularly graffiti, car prowls. Avoid/minimize with design elements, community engagement, and vigilant observation.	Increased likelihood of neighborhood impacts, particularly graffiti, car prowls. Avoid/minimize with design elements, community engagement, and vigilant observation.
Design and social concepts to deter unwanted activities	<ul style="list-style-type: none"> • If public access is allowed, activate space with positive users, such as stewards, neighbors, and educational organizations. • Limit/avoid visual barriers and provide sightlines through the site. • Limit/avoid solid, highly visible surfaces for graffiti. • Maintain fencing and gates in good condition. • Plantings should be designed to improve habitat conditions, while managing sightlines and lake view corridors. • Fencing, signage, path entrances, and other features should be designed to positively influence neighborhood character. • Encourage vigilance of the neighborhood – both nearby residents and site visitors. 				

Traffic Safety and Mobility

A number of concerns have been raised by members of the community regarding the current street configuration near the project site. This criterion considers pedestrians, bicyclists, and people in vehicles traveling on Rainier Ave S and associated side streets, and possible changes as a result of the different public access options (Figure 9). Currently there is no King County Metro bus service to this area via Rainier Ave S, Cornell Ave S or 68th Ave S.

While options allowing public access could increase the number of people in the area, the existing condition of the site (e.g., natural area, no parking or park facilities, small size of space) are expected to primarily attract the nearby community who can walk to the site. Visitors outside of the immediate community who are traveling by car will likely account for only a small number of the overall users.

However, traffic-related safety concerns were one of the most common issues mentioned by community members and nearby neighbors throughout public engagement on this project. SPU and SDOT are collaborating on a traffic and parking study in this area to better understand existing conditions and identify possible improvements that could occur in coordination with the lower Taylor Creek project.

Pedestrian and bike safety

The Seattle Department of Transportation studied southeast Seattle in their Southeast Transportation Study (2008).¹³ The report found that Rainier Ave S and Martin Luther King Blvd, as principal arterials, “act as obstacles to pedestrian travel across the study area in the east and west directions because of the lack of safe crossing points and the lack of signalized intersections.” The study also examined the intersection of Rainier Ave S and Cornell Ave S specifically, and found:

“The skewed angle of the intersection of Rainier Ave S and Cornell Ave S creates challenges for motorists, pedestrians and bicyclists. Although Rainier from Ithaca Pl S to the south city limit was converted from a 4-lane to 3-lane cross-section with bicycle lanes, the intersection still does not function optimally. Because of the skewed angle, southbound drivers on Rainier turning right onto Cornell can make the turn without slowing, creating an uninviting environment for bicyclists in the bicycle lane and for pedestrians walking along Rainier and crossing Cornell.

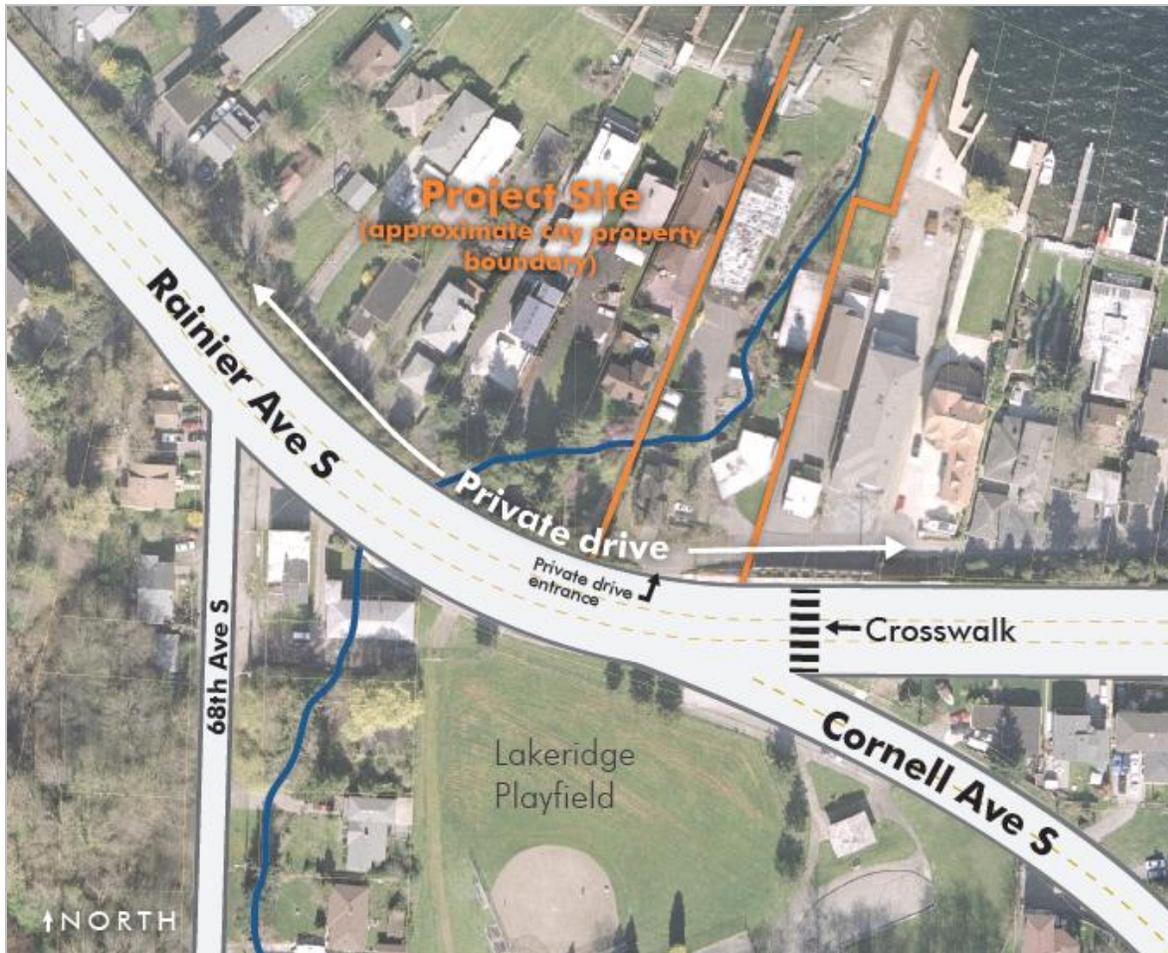
A parking lane on the west/south side of Rainier and the large gravel area on the south side of Cornell add to the conflicts for all users.

The marked pedestrian crossing on the north/west approach of Rainier conflicted with motorists turning left from Cornell and has been relocated to the south/east approach and median islands and curb ramps have been installed.

The pedestrian crossing of Cornell is nearly 150 feet long, partially through undefined gravel parking area; it is not handicapped accessible. The gravel parking area serves the adjacent Lakeridge Park and its baseball field. Motorists backing out of parking spaces conflict with fast-turning traffic from Rainier to Cornell. In addition, the gravel poses problems as it spills out onto the bicycle lane.”

¹³ www.seattle.gov/transportation/docs/SETsfinadec08.pdf

Figure 9. Map of the major arterials, side streets, private drive entrance, and the existing crosswalk near the project site. The project site outlined represents the general location of the habitat improvements downstream of Rainier Ave S and the approximate city property boundary.



SDOT has identified actions to improve safety at the intersection of Cornell Ave S and Rainier Ave S that includes adding sidewalks and making improvements to the crosswalk, curb area, and parking. If public access is provided at SPU’s project site, it is likely to increase the number of people crossing Rainier Ave S to some degree.

Community members have also expressed concerns about pedestrians walking on 68th Ave S. The roadway does not have a sidewalk or trail and people frequently walk on the road between Rainier Ave S and the trailhead for Lakeridge Park. Working from SDOT’s Pedestrian Master Plan, SPU will work with SDOT to investigate potential pedestrian improvements during project design.

Rainier Ave S is also used by bicyclists. If public access is allowed, it is possible that cyclists may visit the site, although the site is only expected to attract a modest number of visitors, mostly from the immediate area. SDOT’s draft Bicycle Master Plan calls for a cycle track on Rainier Ave S, which is a bike lane with some form of separation from vehicles.

Regardless of the public access chosen, SPU will continue to work with SDOT and their Neighborhood Traffic Operations Department during project design and construction to coordinate project and transportation-related improvements.

Vehicle traffic

Rainier Ave S is a principal north-south arterial. The roadway has three lanes, with one travel lane in each direction and a center turn lane that facilitates cross traffic from 68th Ave S, Cornell Ave S and the private drive. If public access is selected for the project site, there is a potential for increased vehicle trips into the area. Impacts from increased vehicle trips may be minimal. Given the small size of the site and the lack of park facilities, the site is not likely to draw significant numbers of people. However, a traffic study is planned for the near future that will help identify existing conditions and possible improvements.

Parking

Due to limited space at the site, parking will not be provided. There is existing public parking at Lakeridge Playfield and along Rainier Ave S, although there are concerns that existing parking is not adequate for demand and that access (if provided) to lower Taylor Creek could further stress the parking situation.

Private drive traffic

SPU's property is accessed via a private drive that connects to Rainier Ave S. The entrance is located on SPU's property and forks to provide access to homes east and west of the project site. SPU's property contains an easement, as do other properties along the drive, to provide access to homes in perpetuity.

Residents on the private drive are concerned about vehicle access to their homes and the safety of residents and children on the private drive. Vehicle access could be affected by additional vehicles or increased numbers of pedestrians, which can delay or impede cars moving through the area. Preliminary designs do not include parking or vehicle access at the project site, which should help prevent potential impacts in terms of access and pedestrian safety on the private drive. However, people may enter the private drive unaware that there is no parking, vehicle access, or public access (if that option is chosen).

Regardless of which public access option is chosen, signs or other measures should be developed and implemented to deter parking and vehicle access onto the private drive. Also, if public access is chosen, websites related to the project site should specify that there is no parking or vehicle access available on site. Pedestrian access, if allowed, should be designed to reduce any potential for creating traffic congestion on the private drive. For all options, maintenance vehicles will need to access the site occasionally.

The entrance to the private drive will need to be evaluated during project design. Currently there is little room for more than one vehicle at a time entering from and exiting to Rainier Ave S. It is unclear if the entrance is adequate for emergency vehicle access. Maintenance vehicles may also need a larger corridor to access the site than what currently exists. The new culvert is likely to run underneath the driveway entrance, which may provide an opportunity improve the entrance.

Table 7. Traffic Safety and Mobility evaluation: expected traffic safety and mobility changes under the different public access options.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Pedestrians and bicycles	Negligible change from current conditions.	Slight increase in pedestrians/bicyclists crossing Rainier Ave and on 68th Ave.	Slight increase in pedestrians/bicyclists crossing Rainier Ave and on 68th Ave.	Greater increase in pedestrians/bicyclists crossing Rainier Ave and on 68th Ave.	Greater increase in pedestrians/bicyclists crossing Rainier Ave and on 68th Ave.
Vehicle traffic	Negligible change from current conditions.	Slight increase from visitors to the viewpoint.	Minimal increase from scheduled visitors driving to site.	Some increase from increased visitation; a small portion of visitors are expected to drive.	Some increase from increased visitation; a small portion of visitors are expected to drive.
Parking impacts	Negligible change from current conditions.	Slight increase in parking demand possible; current supply appears adequate.	Slight increase in parking demand possible during scheduled visits; current supply appears adequate.	Some increase in parking demand possible; current supply appears adequate. Coordinate with SDOT during project design.	Some increase in parking demand possible; current supply appears adequate. Coordinate with SDOT during project design.
Private drive	Negligible change from current conditions.	Viewpoint will be adjacent to private drive; visitors will be in close proximity to private drive.	Slight increase in pedestrian crossings during scheduled visits. Expedite crossings through design features.	Some increase in pedestrian crossings during open hours. Expedite crossings through design features.	Increased pedestrian crossings during daylight hours. Expedite crossings through design features.

	No Access	Viewpoint	Scheduled Access	Limited Access	Open Access
Criterion summary	<p>Little change from existing conditions.</p> <p>Fewer opportunities to make improvements for traffic-related safety concerns.</p>	<p>Small increase in visitors to the area that may slightly affect traffic conditions.</p> <p>Avoid/minimize with design/SDOT coordination.</p>	<p>Small increase in visitors to the area that may slightly affect traffic conditions.</p> <p>Avoid/minimize with design/SDOT coordination.</p>	<p>Some increase in visitors to the area that may affect traffic conditions.</p> <p>Avoid/minimize with design/SDOT coordination.</p>	<p>Increased visitors to the area that may affect traffic conditions.</p> <p>Avoid/minimize with design/SDOT coordination.</p>
Design concepts to improve safety and mobility	<ul style="list-style-type: none"> • Initiate a traffic and parking study with SDOT to better understand existing conditions and identify possible improvements. • Regardless of the access option chosen, coordinate with SDOT on their plans for pedestrian, bike, and vehicle improvements in the project area. • During project design, consider additional pedestrian, bicycle, or parking improvements, as needed, to address possible public access concerns. • If public access is selected, provide guidance to visitors on the City’s website regarding parking conditions and ways to responsibly visit the project site. • During design, work with nearby neighbors to discuss design elements of the private drive entry, possible signage, and other features that can facilitate their access. 				

RECOMMENDATION FOR PUBLIC ACCESS AT LOWER TAYLOR CREEK

The Interdepartmental Team, which included staff from multiple City departments and areas of expertise (see Figure 4), met in July 2013 to discuss the input received on the preliminary evaluation and develop a staff-level recommendation. The team recommends some form of Open Access for the lower Taylor Creek site, contingent upon further investigation and preliminary engineering.

Staff recommends the Open Access option because:

- It is consistent with the shoreline goals and policies of the Seattle Comprehensive Plan, as well as the regulations of the Seattle Shoreline Management Act.
- It provides benefits for the broader community, including access to the Lake Washington shoreline and connection between the Taylor Creek open space and Lakeridge Park and Playfield.
- It provides an opportunity to expand city amenities in an area that has been historically underserved by the City.
- It provides the greatest opportunity for education and stewardship.

While the Interdepartmental Team came to a consensus decision to recommend some form of Open Access, the team's recommendation is contingent upon the following elements:

- **Protection of restored fish and wildlife habitat.** The project design should consider how the location and types of plants installed, and possibly low fences and other structures, can protect the restored areas while still allowing people to interact with the stream. Seasonal closures, prohibiting dogs, and/or strict enforcement of leash laws may be necessary as well.
- **Safe passage and crossing for pedestrians, bicyclists, and vehicles on Rainier Ave S.** SPU and SDOT will conduct a traffic study examining the different modes of travel and use of Rainier Ave S, 68th Ave S, Cornell Ave S, and the private drive entrance, and expected changes from providing access to the Taylor Creek project site. The study will identify possible traffic safety improvements that could be incorporated into the project design.
- **Reasonable project costs given environmental and social benefits.** Possible pedestrian and traffic safety improvements and other safety and access elements will increase project costs. These costs will need to be identified during preliminary engineering and evaluated with environmental and social benefits. The project team may also need to discuss cost-sharing with other City departments.
- **Continuing engagement with neighbors and City departments.** During design and construction, SPU will continue to engage with neighbors and coordinate with the Seattle Police Department and Parks to avoid and minimize any adverse neighborhood changes. CPTED principles and lessons learned from similar areas around Seattle will help guide project design choices.
- **ADA accessibility as required.** The difference in elevation between Rainier Ave S and the project site may present challenges to getting all visitors into the project site and needs to be further examined.
- **Avoiding and minimizing impacts to playfield uses.** Re-alignment of the stream through Lakeridge Playfield will require some park amenities to be adjusted. The ball field, in particular, will need to be modified. During project design, these potential modifications will need to be assessed and further discussed with Parks and affected users.

- **Building relationships with positive users.** SPU and Parks can build upon the engagement efforts to date for this project. The community has shown strong interest and support. Continuing to engage local community groups and interested residents can ensure that the project site is used and monitored by conscientious and respectful people.
- **Monitoring conditions and being ready to adaptively manage the site.** Although the project will be designed and constructed to promote certain conditions and avoid others, it is highly likely that some adjustments will be needed. SPU and Parks will need to plan for assessing the site and making any necessary changes, which could include restricting access if negative impacts occur.

CONCLUSION AND NEXT STEPS

The next steps in the Public Access Options Analysis process are:

- **Late 2013 – 2014:** Complete preliminary engineering and evaluating issues identified during this process.
- **Late 2014:** Final decision on public access made by the Director of SPU and Superintendent of Parks in conjunction with approval to proceed into formal project design.

The City of Seattle project team greatly appreciates the level of engagement and input received from the community during this process. Throughout the project, SPU will continue to provide updates via email and the project website (www.seattle.gov/util/taylorcreek). SPU looks forward to working together as the Lower Taylor Creek Restoration project is designed and constructed.



LOWER TAYLOR CREEK RESTORATION PROJECT

Supporting Documents

A number of documents prepared during this analysis process are listed below and are available at the project website: www.seattle.gov/util/TaylorCreek.

INTERDEPARTMENTAL TEAM WORKSHOPS

A. Team Workshop #1 – February 4, 2013

- a. Agenda
- b. Summary

B. Team Workshop #2 – April 22, 2013

- a. Agenda
- b. Option Evaluation Matrix
- c. Summary

C. Team Workshop #3 – July 8, 2013

- a. Agenda
- b. Summary

COMMUNITY INPUT OPPORTUNITIES

A. Community Input Opportunity #1 – March and April 2013

- a. Project folio and survey mailer
- b. Preliminary Public Access Options and Criteria survey summary and public comments received

B. Community Input Opportunity #2 – June and July 2013

- a. Preliminary Evaluation
- b. Open house display boards
- c. Open house comment form
- d. Open house summary
- e. Neighborhood drop-in session summary
- f. Preliminary Evaluation of Public Access Options survey summary and public comments received

C. Community Input Opportunity #3 – August and September 2013

- a. Staff-level Recommendation survey summary and public comments received

ANALYSIS REPORTS

A. Taylor Creek Project Area Public Safety Analysis (Seattle Police Department, 2013)