



APPENDIX A  
**Cost Table**



City of Stevenson

100% PRELIMINARY COST ESTIMATE / LINE ITEM SCHEDULE

Item No. / Description	Est. Quantity	Unit	Unit Price (numeric)	Extended Amount (Qty x Unit Price) (numeric)
<b>SM.1) Interactive Webpage</b>				
1	Create webpage with interactive map	1 page w/ software	1 EA	\$ 12,000.00 \$ 12,000.00
2	Ongoing support costs to maintain platform	1 page w/ software	1 YR	\$ 600.00 \$ 600.00
<b>Estimated Project Total</b>				<b>\$ 12,600.00</b>
<b>SA.1) SW Rock Creek Drive Pedestrian Improvements</b>				
1	Opt B: 6ft wide sidewalk w/ gutter, curb, planting strip, street trees on north side.	1,200 LF (0.23 mi)	1200 LF	\$ 178.32 \$ 213,981.82
2	Opt B: 6ft wide sidewalk w/ gutter, curb, on south side	1,200 LF (0.23 mi)	1200 LF	\$ 144.00 \$ 172,800.00
3	Landscape to be irrigated, approx.	7,000	7000 SF	\$ 2.25 \$ 15,750.00
4	Opt C: 12ft wide sidewalk w/ gutter, curb, planting strip, street trees.	1,200 LF (0.23 mi)	1200 LF	\$ 256.95 \$ 308,345.45
5	In-ground pavement markers	10	10 EA	\$ 1,500.00 \$ 15,000.00
6	Opt B & C: Re-paving and re-striping road	31-38 ft wide	940 LF	\$ 226.25 \$ 212,675.00
<b>Estimated Project Total</b>				<b>\$ 938,552.27</b>
<b>SA.4) Enhance Pedestrian Connections to Waterfront West End and Rock Creek</b>				
1	6ft wide sidewalk w/ gutter, curb, 6 ft planting strip, street trees	900 LF	900 LF	\$ 178.32 \$ 160,486.36
2	6' wide paved trail (Asphalt)	400 LF	400 LF	\$ 90.00 \$ 36,000.00
3	Landscape to be irrigated, approx.	5400 SF	5400 SF	\$ 2.25 \$ 12,150.00
4	Railroad Street Easement per assessor	1 EA	1 EA	\$ 400,000.00 \$ 400,000.00
5	Public Shoreline Easement per assessor	1 EA	1 EA	\$ 185,000.00 \$ 185,000.00
6	Rock Creek Drive ROW extension per assessor	1 EA	1 EA	\$ 545,000.00 \$ 545,000.00
<b>Estimated Project Total</b>				<b>\$ 1,338,636.36</b>
<b>SA.6) Enhance Pedestrian Connections to Waterfront East End, Kanaka Creek</b>				
1	6ft wide sidewalk w/ gutter, curb, 6 ft planting strip, street trees, 1st Street	600 LF	600 LF	\$ 178.32 \$ 106,990.91
2	6' wide paved trail (Asphalt) connection	200 LF	200 LF	\$ 90.00 \$ 18,000.00
3	Landscape to be irrigated, approx.	3600 SF	3600 SF	\$ 2.25 \$ 8,100.00
4	Resurfacing of existing road	800 LF	800 LF	\$ 135.00 \$ 108,000.00
5	Road signage	2 EA	2 EA	\$ 1,500.00 \$ 3,000.00
6	Design study for new pedestrian crossing on SR-14	1 EA	1 EA	\$ 125,000.00 \$ 125,000.00
<b>Estimated Project Total</b>				<b>\$ 369,090.91</b>

100% PRELIMINARY COST ESTIMATE / LINE ITEM SCHEDULE

Item No. / Description			Est. Quantity	Unit	Unit Price (numeric)	Extended Amount (Qty x Unit Price) (numeric)
<b>SA.5) Public Access to Lower Rock Creek, Vancouver Avenue</b>						
1	Demolition of structure	1 EST	1	EST	\$ 50,000.00	\$ 50,000.00
2	Gravel parking lot	400 SF	400	SF	\$ 7.50	\$ 3,000.00
3	LID stormwater feature	1 EST	1	EST	\$ 100,000.00	\$ 100,000.00
4	Picnic area and path, crushed rock	1 EST	1	EST	\$ 15,000.00	\$ 15,000.00
5	Creek cove creation	1 EST	1	EST	\$ 100,000.00	\$ 100,000.00
6	Landscape to be irrigated, approx.	2,000 SF	2000	SF	\$ 2.25	\$ 4,500.00
7	Remove armoring	1 EST	1	EA	\$ 10,000.00	\$ 10,000.00
8	In-ground pavement markers	5 EA	5	EA	\$ 1,500.00	\$ 7,500.00
<b>Estimated Project Total</b>						<b>\$ 290,000.00</b>
<b>SA.7) Public Pedestrian Access to Rock Creek Lower Falls, Piper Road Landslide</b>						
1	Piper Road & Cazare Lane Easement connection, per assessor	1 EA	1	EA	\$ 360,000.00	\$ 360,000.00
2	Easement Option 1, per assessor	1 EA	1	EA	\$ 1,650.00	
3	Easement Option 2, per assessor	1 EA	1	EA	\$ 1,500.00	
4	Easement Option 3, per assessor	1 EA	1	EA	\$ 3,300.00	
<b>Estimated Project Total</b>						<b>\$ 360,000.00</b>
<b>SA.2) Create Public Pedestrian Access to Rock Creek Upper Falls</b>						
1	12' wide accessible paved trail (Asphalt)	1,000 LF (0.19 mi)	1000	LF	\$ 270.00	\$ 270,000.00
2	Accessible paved overlook (12ft diameter)	1 EA	1	EA	\$ 5,000.00	\$ 5,000.00
3	Multi-use Trail (5ft width, compacted gravel, accessible trail)	1,350 LF / 0.26 mi	1350	LF	\$17.50	\$ 23,625.00
4	Trail steep slope ladder sections/special construction features to connect overlook to water edge	1 EST	1	EST	\$ 30,000.00	\$ 30,000.00
5	Gravel parking lot	3000 SF	3000	SF	\$ 7.50	\$ 22,500.00
6	Easements for trails	1 EST	1	EST	\$ 10,000.00	\$ 10,000.00
7	Easements to connect to Pipers landslide	1 EST	1	EST	\$ 1,000.00	\$ 1,000.00
<b>Estimated Project Total</b>						<b>\$ 362,125.00</b>
<b>SA.8) West Rock Cove Shoreline Trail easement extension and enhancement</b>						
1	12' wide accessible paved trail (Asphalt)	1,000 LF	1000	LF	\$ 180.00	\$ 180,000.00
<b>Estimated Project Total</b>						<b>\$ 180,000.00</b>

	Estimated Project Total	Estimated Construction Work*	Materials Tax	Contingency	Grand Total	Estimated Project Design	Estimated Project Permitting	Grand Total Incl. Design and Permitting
		40%	7.7%	50%		25%	15%	
<b>SA.1) SW Rock Creek Drive Pedestrian Improvements (Option B)</b>	\$630,207	\$252,083	\$48,526	\$441,145	\$1,371,960	\$342,990	\$205,794	\$1,921,000
<b>SA.2) Create Public Pedestrian Access to Rock Creek Upper Falls</b>	\$362,125	\$144,850	\$27,884	\$253,488	\$788,346	\$197,087	\$118,252	\$1,104,000
<b>SA.3) Explore partnership with Columbia Gorge Interpretive Center for shoreline access</b>	\$268,125	\$107,250	\$20,646	\$187,688	\$583,708	\$145,927	\$87,556	\$818,000
<b>SA.4) Enhance Pedestrian Connections to Waterfront West End and Rock Creek</b>	\$1,338,636	\$535,455	\$103,075	\$937,045	\$2,914,211	\$728,553	\$437,132	\$4,080,000
<b>SA.5) Public Access to Lower Rock Creek, Vancouver Avenue</b>	\$290,000	\$116,000	\$22,330	\$203,000	\$631,330	\$157,833	\$94,700	\$884,000
<b>SA.6) Enhance Pedestrian Connections to Waterfront East End, Kanaka Creek</b>	\$369,091	\$147,636	\$28,420	\$258,364	\$803,511	\$200,878	\$120,527	\$1,125,000
<b>SA.7) Public Pedestrian Access to Rock Creek Lower Falls, Piper Road landslide</b>	\$360,000			\$180,000	\$540,000			\$540,000
<b>SA.8) West Rock Cove Shoreline Trail easement extension and enhancement</b>	\$180,000	\$72,000	\$13,860	\$126,000	\$391,860	\$97,965	\$58,779	\$549,000
<b>SA.9) County Fairground Improvements</b>	\$35,000	\$14,000	\$2,695	\$24,500	\$76,195	\$19,049	\$11,429	\$107,000
<b>SM.1) Interactive Webpage</b>	\$12,600			\$6,300	\$18,900			\$19,000
<b>SM.4) Rock Cove Invasive Aquatic Vegetation Management</b>	\$35,000			\$17,500	\$52,500			\$53,000

**\*Note\***

Mobilization estimated at 20%  
 ESC estimated at 5%  
 Construction surveying estimated at 2.5%  
 Unknowns/unexpected changes 13.5%





APPENDIX B  
**Appraisal Report**





The content of Appendix B is confidential information and not being released publicly.



# APPENDIX C Public Engagement Plan



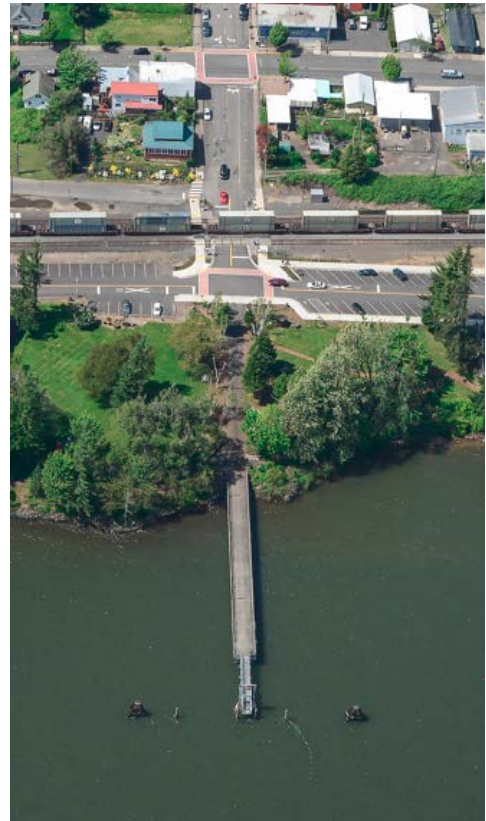


# STEVENSON INTEGRATED PUBLIC ACCESS & TRAILS PLAN CITY OF STEVENSON

February 9, 2023

Prepared for:

Ben Shumaker  
Planning Director  
City of Stevenson  
7121 E. Loop Road  
Stevenson, WA 98648  
(509) 472-5970  
ben@ci.stevenson.wa.us





*Title-page image: City of Stevenson, facing north along the Columbia River (via Department of Ecology Shoreline Oblique, 2017)*

All discussions, conclusions and recommendations reflect the best professional judgment of the author(s) and are based upon information available at the time the plan was developed. All work proposed within this document does not supersede the approved scope and fee. Deliverables described will be provided within the previously agreed upon scope, budget, and timeline. No other warranty, expressed or implied, is made.



750 Sixth Street South  
Kirkland, WA 98033

*p* 425.822.5242

*f* 425.827.8136

[watershedco.com](http://watershedco.com)

Reference Number: 220123

Contact: Alex Capron, AICP  
Amber Mikluscak, PLA, GISP  
The Watershed Company  
750 6<sup>th</sup> St S  
Kirkland, WA 98033

# Table of Contents

---

1	Introduction.....	1
1.1	Overview of Integrated Shoreline Public Access & Trails Project.....	1
1.1.1	Engagement Goals and Strategies .....	2
1.1.2	Documentation of Public Involvement Effort.....	2
1.2	Stakeholder Outreach and Engagement .....	3
1.2.1	Stakeholder Identification.....	3
1.2.2	Outreach Strategy .....	5



## List of Tables

---

Table 1. Summary of Documentation.....	3
Table 2. Summary of Demographic Engagement .....	4
Table 3. Preliminary Summary of Stakeholder Interest Groups.....	5
Table 4. Public Engagement Schedule .....	7

# 1 Introduction

---

The City of Stevenson's current public access and trails system along shorelines of the state (shoreline jurisdiction) including Rock Creek, Rock Cove and the Columbia River provide environmental, health, and aesthetic benefits to the entire community. Even with quality existing public access points and trails found along these shorelines, these trails do not connect in a seamless way. As such, the City desires to further the public access goals of the Shoreline Master Program (SMP) via an Integrated Public Access and Trails Plan, providing a roadmap for incentivizing public access in-tandem with or prior to future development. This plan aims to bring community stakeholders together in evaluating existing and potential public access within shoreline jurisdiction (roughly 200-foot landward of the ordinary high water mark), surrounding Rock Cove, Rock Creek and the Columbia River. The City applied for and received a Department of Ecology SMP competitive grant to conduct this effort.

Like many cities in the greater northwest region, the Stevenson community is also faced with the need to support growth and development and provide adequate amenities to both existing residence and the robust tourism industry's presence in Stevenson and greater Skamania County. This plan intends to provide public stakeholders with a roadmap for future public access improvements, providing the necessary documentation needed for the City to apply for future Recreation and Conservation Office (RCO) grants.

The public involvement effort will be a collaboration between the City and The Watershed Company (Watershed), in which the City will lead stakeholder identification, notification, and outreach. The City will also handle event and project promotions, incorporating messaging or content developed with Watershed, if needed. Watershed will facilitate select engagement events, in order to efficiently solicit stakeholder feedback relevant to the planning and design process. This Public Engagement Plan provides a preliminary outline of the public involvement effort.

## 1.1 Overview of Integrated Shoreline Public Access & Trails Project

The project comprises three distinct but overlapping tasks: (1) Public Access & Trail Planning, including a high-level review of the 2010 shoreline inventory and characterization report and updated constraints and opportunities analysis, (2) Draft SMP amendment, and (3) Public Involvement. Tasks 1 and 2 will yield concrete work products that are informed by the feedback and input received from the public involvement effort (Task 3). Public involvement will engage

stakeholders—both internal and external—to solicit feedback and document attitudes and perceptions about public access needs and improvements.

### 1.1.1 Engagement Goals and Strategies

The goals and strategies that will guide the public involvement effort are derived from the City's Shoreline Master Program Public Access Chapter 4.6, especially SMP public access policies 1-6 within section 4.6.2, described below:

- **Policy 1.** Continuous public pedestrian access should be provided along the City's shorelines, especially the Columbia River, Rock Cove, and Lower Rock Creek.
- **Policy 2.** The system of public physical and visual access to Stevenson's shorelines should be maintained, enhanced, and protected over time on both private and public lands.
- **Policy 3.** Public access and recreational facilities should be located in a manner that will preserve the natural characteristics and functions of the shoreline.
- **Policy 4.** Private property rights, public safety, and navigational rights should be considered when providing public access opportunities.
- **Policy 5.** New development should identify and preserve key shoreline views and avoid obstructing such views from public areas.
- **Policy 6.** The City's should develop a comprehensive and integrated public access and trail plan consistent with WAC 173-26-221(4) that identifies specific public access needs and opportunities to replace these site-by-site requirements. Such plan should identify a preference for pervious over impervious surfaces, where feasible.

Policy 6 gives clear direction in the SMP's direction towards completing an integrated public access and trail plan along and within shorelines of statewide significance. It is during this planning process through thoughtful engagement of project stakeholders and the public that the City intends to accomplish this planning effort.

### 1.1.2 Documentation of Public Involvement Effort

For the purpose of documenting community engagement and feedback for support of future funding applications, the following information will be collected throughout the public involvement effort.



Table 1. Summary of Documentation

Subject	Documentation Description	Responsible Party
Extent of outreach	<ul style="list-style-type: none"> <li>• An inventory of all outreach methods, such as posters, emails, mailings, etc., used to engage the public.</li> <li>• Approximate quantity of public contacts targeted per outreach method, such as number of households.</li> <li>• Extent of geographic area where outreach was conducted.</li> </ul>	City
Event participation	<ul style="list-style-type: none"> <li>• Number of participants/respondents, such as completed sign-in sheets from planned events or total of respondents to survey or other engagement exercise.</li> <li>• Summary of feedback received, such as formal responses received or written summary of participant discussion.</li> </ul>	Event facilitator (City or Watershed)

## 1.2 Stakeholder Outreach and Engagement

The following considerations are provided to assist the City with targeted outreach to key demographics and interest groups.

### 1.2.1 Stakeholder Identification

#### 1.2.1.1 *Demographics*

According to the Census.gov 2020 American Community Survey, Census Tract 9503, representing the City of Stevenson and a largely undeveloped area several miles to the north hosts a population of 1,898 residents across 824 households, with 792 employed. While stakeholder participation is encouraged broadly by any interested parties, the project team aims to capture feedback that reflects the specific demographics of the greater Stevenson community. Specifically, the following groups should be represented in the feedback received.

- **Working Families with School-Aged Children.** Several statistics captured by the 2020 American Community Survey conducted by the U.S. Census paint a picture of working families with school-aged children as a key demographic in Stevenson. Specifically, roughly one fifth of the population of Stevenson is under the age of 18 (17.1%) and the average persons per household is 2.25. Roughly half the population is in the civilian labor force (53.9%) and an overwhelming majority of persons over age 25 have at least a high school diploma (88.2%). Further, a large number of households have a computer with broadband internet (81.7% and 76%, respectively). Altogether, this suggests that

digital engagement and outreach to schools and workplaces could be effective means of outreach. Further, it suggests that a middle- to high-school reading level would be appropriate for use in outreach and engagement materials.

- Long-term Residents.** According to the U.S. Census data, the vast majority of residents lived in the same house a least 2 years prior to the census date (96.6%), with the largest influx of people moving into this area between 2015 and 2018 (30.9% of total residents). This is supported by the large number of owner-occupied housing units (64.1%), also captured by the Census. The number of long-term residents and owner-occupied housing units both support that direct mailing could be an effective outreach tool.
- Seasonal Residents and Tourists.** According to the U.S. Census data, approximately 15% of all residences within this census tract are vacant, denoting the potential presence of vacation rentals and/or seasonal residents. Further, numerous vacation accommodations (Skamania Lodge, for example) are located near shoreline areas and could benefit greatly from improved public access and increase public recreational amenities. Direct engagement of tourism-related businesses and organizations, such as through direct outreach or mailing, could be an effective means of engagement that could increase support for the trail planning effort.

Table 2. Summary of Demographic Engagement

Demographic Group	Potential Outreach Avenues, Liaisons, and Partners in Outreach
Working families with school-aged children	<ul style="list-style-type: none"> <li>○ Elementary, middle, and high schools</li> <li>○ Parent-Teacher organizations</li> <li>○ Youth advocacy and engagement organizations</li> <li>○ Community library and pool</li> </ul>
Long-term residents	<ul style="list-style-type: none"> <li>○ Neighborhood and community organizations</li> <li>○ Community destinations (e.g., grocery stores, retail centers, parks)</li> </ul>
Seasonal Residents and Tourists	<ul style="list-style-type: none"> <li>○ Lodging and hotel accommodations</li> <li>○ Tourism-related businesses</li> <li>○ Tourism bureaus and advocates</li> <li>○ Recreational user groups</li> </ul>



### 1.2.1.2 Interest Groups

The following is a list of preliminary stakeholder groups that may represent interests related to public access and trails along the City’s shorelines.

Table 3. Preliminary Summary of Stakeholder Interest Groups

Interest	Potential Stakeholders
Residential property owners	<ul style="list-style-type: none"> <li>○ Shoreline property owners</li> <li>○ Owners of short-term rentals (e.g., Airbnb, VRBO)</li> </ul>
Commercial, industrial, and institutional property owners	<ul style="list-style-type: none"> <li>○ Business owners and operators</li> <li>○ Commercial property management companies</li> <li>○ Lodging and Hotels (Skamania Lodge, for example)</li> <li>○ Port of Skamania County</li> <li>○ BNSF regional rail conductor</li> </ul>
Community and Recreational Groups	<ul style="list-style-type: none"> <li>○ Skamania County Lions Club</li> <li>○ Stevenson Eagles Club</li> <li>○ Columbia Gorge Running Club</li> <li>○ Skamania County Senior Services</li> </ul>
First Nations, Environmental groups and public agencies	<ul style="list-style-type: none"> <li>○ Tribes (Cowlitz Tribe, Yakama Nation and Confederated Tribes of Warm Springs)</li> <li>○ Underwood Conservation District</li> <li>○ Columbia Land Trust</li> <li>○ Washington Department of Natural Resources</li> <li>○ Columbia Basin Partnership Task Force</li> <li>○ Washington Department of Transportation</li> </ul>
Utility providers	<ul style="list-style-type: none"> <li>○ Skamania PUD</li> </ul>
Economic development groups	<ul style="list-style-type: none"> <li>○ Skamania County Chamber of Commerce</li> </ul>
City staff	<ul style="list-style-type: none"> <li>○ Planning, engineering, and development department staff</li> <li>○ Parks and recreation department staff</li> <li>○ Utility department staff</li> <li>○ Public Works department maintenance staff</li> </ul>

### 1.2.2 Outreach Strategy

The project will rely on the City’s existing network of public outreach and community engagement for project notifications. City staff will be encouraged to share opportunities for public participation through established channels and relationships, such as social media, email lists, community calendars, and other tools. Coordinated content, such as a City email blast,

graphic, or digital handout can be useful in disseminating information consistently. If desired, Watershed can assist the City with reviewing draft content or editing narrative information to engage a public audience.

### 1.2.2.1 *Stakeholder Meetings*

A series of stakeholder meetings will be held in 2023 through the design development and planning stages. Later in the project cycle, meetings will be held with the Planning Commission and City Council to discuss the draft and final planning documents, including potential code revisions and adoption. An overview of stakeholder meeting sequence and strategy is provided below.

#### **Stakeholder Meeting (1 of 3) – Public Open House**

- Attendees and format: Internal and external stakeholders, members of the public, in-person open public meeting
- Discussion: Project overview, including scope, schedule, background, purpose, and next steps of plan adoption and funding
- Watershed will develop exhibits and facilitate exercises designed to capture the following feedback:
  - Broad input from community members on existing conditions, including recreational amenities and assets, experiential assets, constraints and opportunities to inform subsequent planning efforts.
  - Community vision regarding shoreline access and identity.

#### **Stakeholder Meeting (2 of 3) – Stakeholder Charrette**

- Attendees and format: City staff and select stakeholders invited to participate in a second working session, invite-only in-person working charrette
- Discussion: Review of key takeaways and highlights from public open house, review and expansion of community vision, distill opportunities and constraints
- Watershed will develop exhibits and facilitate exercises designed to capture the following feedback:
  - Specific concerns and targets for shoreline access improvements.
  - Preliminary identification of key nodes, system gaps, and potential connections.

#### **Stakeholder Meeting (3 of 3) - Public Open House**

- Attendees and format: Internal and external stakeholders, members of the public, in-person open public meeting
- Discussion: Project update and progress, review of preliminary plan diagram and concepts, and next steps of plan adoption and funding



- Watershed will develop exhibits and facilitate exercises designed to capture the following feedback:
  - Qualitative feedback on preliminary plan diagram and concepts, including alignments, connections, design standards and recommendations, and proposed facilities.

Watershed will support City staff in preparing and presenting on project progress in support of plan review and adoption. Specifically, Watershed will support the following meetings:

- Planning Commission Virtual Meeting (1 of 2)
- Planning Commission Virtual Meeting (2 of 2)
- City Council Virtual Work Session Meeting (1)

#### 1.2.2.2 *Schedule of Public Engagement*

The following table summarizes the schedule of public engagement consistent with the overall project schedule and target for plan adoption by June 30, 2023.

Table 4. Public Engagement Schedule

<b>Date</b>	<b>Milestone / Notes</b>	<b>Responsible Party</b>
November 2022	○ Draft and finalize Public Engagement Plan (PEP)	Watershed/City
December 2022	○ Finalize date and location of first stakeholder meetings (first public open house and charrette) ○ Publish to city calendar and notify internal stakeholder ○ Send “save-the-date” or meeting invitation	City
January 2023	○ Promote public open house ○ Finalize date and location of second public open house, publish to city calendar, and send “save-the-date”	City
January 2023	○ Prepare draft meeting agenda ○ Prepare meeting materials	Watershed
February 2023	○ Facilitate Stakeholder Meetings 1 and 2	Watershed/City
February 2023	○ Promote second public open house	City
February 2023	○ Developing draft plan diagram and concepts ○ Prepare draft meeting agenda ○ Prepare meeting materials	Watershed
March 2023	○ Facilitate Stakeholder Meeting 3	Watershed/City

Date	Milestone / Notes	Responsible Party
March 2023	<ul style="list-style-type: none"> <li>○ Revise plan diagrams and concepts</li> <li>○ Advance trail plan report</li> </ul>	Watershed
April 2023	<ul style="list-style-type: none"> <li>○ Prepare for first Planning Commission Virtual Meeting</li> <li>○ Attend first Planning Commission Virtual Meeting</li> </ul>	Watershed/City
May 2023	<ul style="list-style-type: none"> <li>○ Prepare for second Planning Commission Virtual Meeting</li> <li>○ Attend second Planning Commission Virtual Meeting</li> <li>○ Receive recommendation from Planning Commission to forward SMP Amendments to Ecology, final review</li> </ul>	Watershed/City
June 2023	<ul style="list-style-type: none"> <li>○ Prepare for and attend City Council Virtual Work Session Meeting</li> <li>○ Deliver final documents for Ordinance and Integrated Shoreline Public Access &amp; Trails Plan</li> </ul>	Watershed/City
Project Completion	<ul style="list-style-type: none"> <li>○ Final Adoption by City Council</li> </ul>	City



## References

---

Census.gov, Census Tract 9503 (City of Stevenson and Vicinity).

<https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/> Accessed October 2022.

Skamania County Chamber of Commerce. Recreational Fitness Programs.

<https://skamania.org/adult-recreational-fitness-program/#1496978876836-ab450daa-3f91>



A photograph of a river flowing through a forested area. The river is in the foreground, with white water rapids and a rocky bed. The background shows a dense forest of evergreen trees under a grey sky. A semi-transparent grey box is overlaid on the top half of the image, containing the text 'APPENDIX D' and 'Project Scoring Methodology'.

APPENDIX D  
**Project Scoring Methodology**







## Introduction to Project Scoring

To determine an overall score for each proposed project, the team considered three main categories. The first category was the initial GIS analysis score. This score gave each project an objective rating based on factors such as ownership, physical constraints, and existing connectivity, for example. See Appendix for a complete description of the scoring methodology and data layers used for this analysis.

The second category was a score representing public support of the project. As described in more detail in Chapter 3, the first step of outreach was the Open House that was held for the public in February of 2023. This outreach event gave attendees the opportunity to propose project ideas. All proposed projects were supported by either public comments during the open house, via the online survey, or during stakeholder outreach by the city. The next outreach event was the in-person Charrette. Here, attendees were introduced to each project and asked to allot five votes for their preferred project(s). The results of the voting process became the category 2 score for the project.

The final category is a score for feasibility of construction. This score is determined by analyzing five different factors related to installation feasibility for each of the proposed projects. The team looked at: alignment with existing planning documentation, environmental impact, permitting and coordination requirements, timeframe for design and implementation, and cost.

Many of these factors were already considered in the initial project selection process. The proposed projects prevailed over other earlier suggestions from the open house because they align with existing planning documents, result in a net positive environmental impact, and permitting and coordination requirements were considered feasible. The scoring for feasibility of installation dives deeper into these factors to give a value to the alignment.

Feasibility is defined as being easier and faster to move forward with or implement. For example, a project is considered more feasible when it has public support (as defined by alignment with existing plans and/or public charrette score). A

project is considered more feasible if it costs less and therefore will be easier to fund. Cost is also considered a reflection of complexity. Less complex projects are also assumed to be faster and easier to implement. Projects that are ‘shovel ready’ are considered easier to implement. Related to timeframe is the consideration of permitting and coordination complexity. A project is considered more feasible if it does not require extensive coordination with multiple parties (indicating a longer time period and therefore more cost to accomplish) permitting approvals from multiple agencies that require extensive documentation and may need many months to review and approve.

Ratings or scores for each factor are shown in the list below:

**Alignment with existing planning documents.** This factor relates to feasibility in that we assume that if a project has already been mentioned or discussed in previous documents, it is more likely to have public support, has a higher probability of receiving funding, and may have more information available to begin the project with, thus providing savings in both time and money. Therefore, the more existing planning documents that align with a project, the higher the score the project will get. Proposed project:

- aligns with no existing planning document (Score = 0)
- aligns with at least one existing planning document (Score = 2)
- aligns with more than one existing planning documents (Score = 3)

**Environmental impact.** This factor considers feasibility as alignment with SMP goals, and that projects that meet those goals are preferred and will therefore be more readily supported by the public and installed. Our assumption is that when a project proposes to minimize its environmental impact, that equates to minimizing impervious surfaces and other built features. While all projects propose a net ecological lift to the site, some projects have a stronger environmental benefit than others by reducing impervious surfaces and restoring native vegetation to a greater extent. These projects are assigned a higher score than projects that propose to increase impervious

surfaces and will require more mitigation. Proposed project:

- Removes impervious surfaces and/or has a low impact on the environment = 3
- Proposes minimal built features such as a pedestrian trail only and/or has a medium impact on the environment = 2
- Adds new impervious surfaces and/or has a high impact on the environment (independent of mitigation) = 1

**Permitting and Coordination Requirements.** This factor considers feasibility with respect to the degree to which actions and approvals by parties outside of the city and residents will be necessary for the project to be implemented and succeed. We assume that if the city has minimal, city-only permits necessary, and is only required to coordinate within their own departments and residents, that project will be faster and more readily installed than other projects. The contrasting scenario would be a project that requires permits from local, state, and federal agencies, and requires extensive coordination within the city as well as with landowners, the county, or other parties to make decisions or fund the project. This type of project would be considered more difficult to install and would receive the lowest score. Proposed project:

- Has minimal permitting and coordination requirements (Score = 3)
- Has moderate permitting and coordination requirements (Score = 2)

- Has complex permitting and coordination requirements (Score = 1)

**Timeframe for design and implementation.** This factor considers how soon a project would be able to be developed and implemented. While coordination for all projects could begin immediately, some projects will require more extensive coordination time than others before implementation can occur. Based on the city's desire to have project ideas that can seek grant funding as soon as possible, projects that could be implemented sooner were scored higher than projects that will need more time to process. Proposed project:

- Design and construction phase can begin immediately (Score = 3)
- Design and construction phase can begin by 2030 (Score = 2)
- Design and construction phase can begin by 2040 (Score = 1)

**Cost.** The cost factor considers the approximate cost to implement the proposed project developed by the team, and assumes that the lower the cost, the more feasible it is that the project will be constructed. Cost also represents project complexity. Proposed project:

- Cost is less than \$50,000 (Score = 3)
- Cost is between \$50,000 and \$500,000 (Score = 2)
- Cost is greater than \$500,000 (Score = 1)

Table 1: Project Scoring Results

Number	Name	MEAN GIS Overall score	Public Charrette score	Alignment with			Permitting & Coordination Requirements (Min. = 3, Mod. = 2, Complex = 1)	Environmental Impact (Low = 3, Med = 2, High = 1)	Overall Score	Overall Score Rounded
				Cost (Less than 50K = 3, 50-500K = 2, 500K+ = 1)	Plans (No= 0, At least 1 = 1, More than 1 =2)	Timeframe for Construction/Design (Immediate = 3, 2030 = 2, 2040+ = 1)				
1.0	Interactive website	0	2	3	0	3	3	3	14	14
2.0	SW Rock Creek Drive	15.9	19	1	2	3	3	1	44.5	45
3.0	Enhance Waterfront West End	6.0	12	1	2	3	1	1	26.0	26
4.0	Enhance Waterfront East End	7.1	11	1	2	2	1	1	25.1	25
5.0	Lower Rock Creek Access	12.5	4	1	1	2	2	3	25.5	26
6.0	a. Lower Rock Creek Falls Option 1	5.4	8	2	0	2	2	2	21.4	21
6.1	b. Lower Rock Creek Falls Option 2	6.2	8	2	0	2	2	2	22.2	22
6.2	c. Lower Rock Creek Falls Option 3	4.7	8	2	0	2	2	2	20.7	21
6.3	d. Lower Rock Creek Falls - Linkage Trail	5.2	8	2	0	2	2	2	21.2	21
7.0	Upper Rock Creek Falls	7.1	21	2	0	1	2	2	35.1	35
8.0	Rock Cove Shoreline Trail Extension	5.3	4	3	1	2	3	2	20.3	20
9.0	Columbia Gorge Interpretive Center	7.1	10	3	1	2	1	2	26.1	26





APPENDIX E  
**GIS Scoring Methodology**





## Data Sources

### Physical

- Digital Elevation Model (DEM) – LiDAR 1-foot resolution
- SED Layer

### Parcels/Land Ownership

- Skamania County & City of Stevenson

## Land Use Analysis

In order to examine the most feasible locations for new trails and access, we performed a land use analysis that combined the physical features of the landscape and parcel usage. This analysis was performed entirely in ESRI's ArcGIS software.

### *Step 1: Physical*

The Lidar-based DEM provided by the City of Stevenson was used to derive a slopes raster, and the slopes layer was clipped to the study area. The slopes raster was reclassified into four different categories and assigned four decreasing values as follows:

- 0 to 10 degrees: 4
- 10 to 25 degrees: 3
- 25 to 50 degrees: 1
- 50+ degrees: 0

The building's vector was unioned (combined) with the study area. Values were assigned as follows:

- Building: 0
- Non-building: 1

The resulting vector was then converted into a raster.

The wetlands vector was also unioned with the study area. Values were assigned as follows:

- Wetlands: 0
- Non-wetlands: 1

The resulting vector was then converted into a raster.

An aquatic area vector was derived from the aquatic designation from the SED layer. This vector was also

unioned with the study area. Values were assigned as follows:

- Aquatic: 0
- Non-aquatic: 1

The resulting vector was then converted into a raster. Note, a flaw in this step is that it removed potential creek walking areas as potential trail connections.

The slopes raster, buildings raster, wetlands raster, and aquatic raster were multiplied together using the Raster Calculator. This resulted in a final physical raster layer in which cliffs (50+ degrees), buildings, wetlands, and aquatic areas were given a value of 0, indicating that they are unbuildable areas. The remaining values reflected the original slopes values.

### *Step 2: Parcels/Land Use*

Parcel ownership was derived from multiple data sources. Most of the data came directly from the city in the form of various GIS layers. A few parcels were assigned ownership based on an Excel table from the city. A few ROW areas were assigned ownership based on direct communications with the city.

Parcel ownership values were assigned as below:

- Class 1: 12 – Public City-Owned
- Class 2: 3 – Tax-Exempt Parcel
- Class 3: 4 – Other Public (e.g. County, Federal, State, Port of Skamania)
- Class 4: 1 – Private
- Class 4b: 1 – Private, Undeveloped
- Class 5: 2 – ROW BPA
- Class 6: 5 – ROW City-Owned
- Class 7: 4 – ROW Other
- Class 8: 1 – Other
- Class 9: 1 – In City Limits

City-owned ROW was weighted slightly higher versus County owned ROW. City-owned parcels were weighed significantly higher than other public properties, based upon more-direct decision making for this property type.

The resulting vector was then converted into a raster.

Park areas received a bump in their parcel score. Park areas were unioned with the study area. Values were assigned as follows:

- Parks: 3
- Non-parks: 0

The resulting vector was then converted into a raster.

The parcel and parks raster layers were summed together using the Raster Calculator. This resulted in final physical raster layer with values ranging from 1 to 15.

### *Step 3: Combined Parcels/ Land Use and Physical*

A modified physical raster was created from the original physical raster described above. All pixels that were valued 1, 3, or 4 were reclassified to 1, and all pixels that were valued 0 were left as 0. This gave us a raster with values assigned as follows:

- Buildings, Cliffs (50+ degree slopes), Wetlands, Aquatic areas: 0
- Everything else: 1

The original physical raster layer and the parcels/land use raster layer were summed together using the Raster Calculator. This resulted in a combined raster with values ranging from 1 to 19.

This combined raster was multiplied with the modified physical raster to assign values of 0 to areas where trails are unfeasible. The final resulting raster contained values ranging from 0 to 19.

### *Step 4: Zonal Statistics of Project Areas*

Each project area was analyzed against the raster analysis (using the Zonal Statistics tool) to derive an overall project score. Statistical fields calculated are: Min

- Max
- Range
- Mean
- Standard Deviation
- Median

## Existing Network Analysis

In order to highlight potential connections to the shoreline and to highlight potential improvements within the shoreline, two quick analyses were performed on the trail data.

### *Step 1: Good Walkability Near Shoreline*

First, we examined possible connections to the shoreline. We did this by combining the trails, sidewalks, and walkability (selecting 'agree' or 'strongly agree' from the Walkability attribute) features into a single walkable feature. Then, buffered distances were created from the shoreline edge (50, 100, 150, 200, 300, 400, 500, 750, 1000, and 1500 ft), and these values were applied to the walkable features. By symbolizing these buffer distances along a gradient, we were able to highlight paths close to the shoreline as prime candidates for connectivity projects.

### *Step 2: Poor Walkability Within Shoreline*

Second, we examined which trails/roads within the shoreline environment would be good candidates for improvements. This was accomplished by using the walkability data layer, and instead selecting for 'disagree' and 'strongly disagree' attributes. Again, buffers were applied to these unwalkable areas, highlighting areas within the shoreline environment classified as unwalkable, within 200 ft of the shoreline environment classified as unwalkable, and those beyond 200 ft of the shoreline environment classified as unwalkable. Mapping these paths identified potential improvements that could be made directly within the shoreline environment.





APPENDIX G  
**Recommended SMP  
Amendment**





3. Public access and recreational facilities should be located in a manner that will preserve the natural characteristics and functions of the shoreline.
4. Private property rights, public safety, and navigational rights should be considered when providing public access opportunities.
5. New development should identify and preserve key shoreline views and avoid obstructing such views from public areas.
6. The City's should develop a comprehensive and integrated public access and trail plan (consistent with WAC 173-26-221(4)) that identifies specific public access needs and opportunities to replace these site-by-site requirements. Such plan should identify a preference for pervious over impervious surfaces, where feasible.

#### **4.6.3 Regulations**

1. Consistent with legal/constitutional limitations, provisions for adequate public access shall be incorporated into all proposals for Shoreline Permits that have one or more of the following characteristics:
  - a. The proposed development or use will create a demand for, or increase demand for public access;
  - b. The proposed use is water-enjoyment, water-related, or non water-dependent, except for individual single-family residences not part of a development planned for 5 or more parcels;
  - c. The proposed use involves the subdivision of land into 5 or more parcels;
  - d. The proposed development or use will interfere with existing access by blocking access or discouraging use of existing access;
  - e. The proposed development or use will interfere with public use of waters of the state;
  - f. The proposed development or use will involve public funding or occur on public lands, provided that such access would not result in a net loss of ecological function. Public funding includes any funds from federal, state, municipal or local taxation districts.
2. Additional public access will not be required where suitable public access is already provided by an existing public facility on or adjacent to the site and the Planning Commission makes a finding that the proposed development would not negatively impact existing visual or physical public access nor create a demand for shoreline public access that could not be accommodated by the existing public access system and existing public recreational facilities in the immediate vicinity.
3. Public access will not be required where the applicant demonstrates it is infeasible due to at least one of the following:
  - a. Unavoidable health or safety hazards to the public exist that cannot be prevented by any practical means;
  - b. Inherent security requirements of the use cannot be satisfied through the application of alternative design features or other solutions;
  - c. The cost of providing the access, easement, or an alternative amenity are unreasonably disproportionate to the total long-term cost of the proposed development or other legal/constitutional limitations preclude public access;
  - d. Unacceptable environmental harm will result from the public access which cannot be mitigated;

**City of Stevenson  
Shoreline Master Program**

---

- e. Significant unavoidable conflict between the proposed access and adjacent uses would occur and cannot be mitigated.
- 4. To meet any of the conditions under Regulation 3 above, the applicant must first demonstrate to the satisfaction of the Planning Commission that all reasonable alternatives have been exhausted including, but not limited to, the following:
  - a. Regulating access by such means as maintaining a gate and/or limiting hours of use;
  - b. Designing separation of uses and activities (e.g., fences, terracing, use of one-way glazings, hedges, landscaping);
  - c. Provisions for access at a site geographically separated from the proposal such as a street end, vista or trail system;
  - d. Sharing the cost of providing and maintaining public access between public and private entities.
- 5. For projects that meet the criteria of Regulation 3 above, the City may consider off-site public access or, if approved by the Planning Commission and agreed to by the applicant, the applicant may contribute a proportional fee to the local public access fund (payment in lieu).
- 6. If the City determines that public access is required pursuant to Regulation 1 above, the City shall impose permit conditions requiring the provision of public access that is roughly proportional to the impacts caused by the proposed development or use. The City shall demonstrate in its permit decision document that any such public access has a nexus with the impacts of the proposed development and is consistent with the rough proportionality standard.
- 7. When required, public access shall:
  - a. Consist of a dedication of land or a physical improvement in the form of a walkway, trail, bikeway, corridor, viewpoint, park, deck, observation tower, pier, boat launch, dock or pier area, or other area serving as a means of view and/or physical approach to public waters and may include interpretive centers and displays, view easements, and/or decreased building bulk through height, setback, or façade limitations;
  - b. Include features for protecting adjacent properties from trespass and other possible adverse impacts;
  - c. Be fully developed and available for public use at the time of occupancy of the proposed use or activity;
  - d. Result in no net loss of shoreline ecological functions.
- 8. For required public access improvements that implement part of the City-approved Integrated Shoreline Public Access and Trails Plan, the City may allow the applicant to pay an amount equal to the construction cost of the required improvements in lieu of constructing the improvements at the time of development as part of a public/private partnership.
  - a. If the cost for providing public access at the level of the City-approved integrated system or plan is determined to be disproportionate to the cost of the development, the city may allow, as terms of the partnership, for a reduced payment, easement purchase or right-of-way acquisition for future public access.
- 8.9. When required, physical public access shall be constructed to meet the following requirements for location, design, operation and maintenance:
  - a. Public access sites shall be connected directly to the nearest public street or non-motorized trail through a parcel boundary, tract, or easement, wherever feasible;

**Commented [A1]:** Draft SMP Amendment for consideration.



- b. Signs indicating the public's right of access to shoreline areas shall be installed and maintained in conspicuous locations.
- c. Public access easements and permit conditions shall be recorded on the deed of title and/or on the face of a plat or short plat as a condition running in perpetuity with the land, provided, that the Planning Commission may authorize a conveyance that that runs contemporaneous with the authorized land use for any form of public access other than parallel pedestrian access. Said recording with the County Auditor's Office shall occur at the time of permit approval.
- d. Maintenance of the public access facility shall be the responsibility of the owner unless otherwise accepted by a public or nonprofit agency through a formal agreement approved by the City and recorded with the County Auditor's Office.
- e. Public access sites shall be made barrier-free for the physically disabled where feasible, and in accordance with the ADA.
- f. Any trail constructed shall meet the conditions described for shoreline areas in any trail or parks plan officially adopted by the City Council.

9.10. Views of the shoreline from public properties or substantial numbers of residences shall be protected through adherence to height and setback limits specified in this SMP. Where new development would completely obstruct or significantly reduce the aesthetic quality of views from public properties or substantial numbers of residences, mitigation shall be required as follows:

- a. The City may require administrative modifications to standard setbacks, clustering of proposed structures, and modifications to landscaping and building massing when the Planning Commission determines that such modifications are necessary to maintain public views of the shoreline.
- b. The City shall work with the applicant to minimize the economic impacts of view mitigation. While upper story setbacks and other changes to building placement and form may be required to provide view corridors, in no case shall the applicant be required to reduce the maximum building height for more than 30% of the building's width.
- c. The City may require specific public access improvements (e.g., public viewing decks, etc.) as mitigation in lieu of more significant modifications to site and building design when the Planning Commission finds such modifications would be an unreasonable financial burden on the applicant.

11. Height allowances in shoreline jurisdiction under SMP 5.3.2 may match the underlying zoning (above 35-foot limit) when the applicant provides public access along water's edge, unless a significant number of upland properties have views entirely blocked by the development.  
a. If access along water's edge is deemed infeasible, access to or feasibly close to water's edge must be provided.  
b. If constructing physical access is deemed disproportionate to the cost of development, a public access easement must be provided at a minimum for future public development, and a fee in lieu of improvement paid at time of development, consistent with SMP 4.6.3(8).

10.12. Where there is a conflict between water-dependent shoreline uses or physical public access and maintenance of views from public properties or substantial numbers of residences that cannot be resolved using the techniques in Regulation 9 above, the water-dependent uses and physical

Commented [A2]: Draft SMP Amendment for consideration.

public access shall have priority, unless the Planning Commission finds a compelling reason to the contrary.

11.13. Future actions by the applicant, successors in interest, or other parties shall not diminish the usefulness or value of the public access provided.

## 4.7 Water Quality & Non-Point Source Pollution

### 4.7.1 Applicability

This section shall apply to all projects which have the potential to affect the water quality or quantity of Stevenson shorelines by either changing the flow of surface waters or creating new discharges to Stevenson's shoreline waterbodies.

### 4.7.2 Policies

1. The quality of water in Stevenson's rivers, streams, lakes and their associated wetlands should be maintained and improved for the beneficial use of the City's citizens and aquatic & terrestrial wildlife.
2. All shoreline use and development should protect against adverse impacts to public health, to the land and its vegetation and wildlife, to the waters of the state and their aquatic life, and to stormwater and water quality.
3. New developments, expansions, or retrofits of existing developments should be required to assess the effects of additional stormwater runoff volumes and velocities, and mitigate potential adverse effects on shorelines through design and implementation of appropriate stormwater management measures.
4. Property owners should be encouraged to voluntarily install new, or retrofit existing, stormwater features per the most current edition of Ecology's Stormwater Management Manual for Western Washington, including using low impact development techniques.

### 4.7.3 Regulations

1. Design, construction and operation of shoreline uses and developments shall incorporate measures to protect and maintain surface and groundwater quality in accordance with all applicable laws, so that there is no net loss of ecological functions.
2. Design, construction and operation of shoreline uses and developments shall incorporate measures to protect and maintain surface and groundwater quantity and quality in accordance with all applicable laws, so that significant impacts to aesthetic qualities or recreational opportunities do not occur. A significant impact to aesthetics or recreation would occur if a stormwater facility and accessory structures (e.g., fences or other features) have the potential to block or impair a view of shoreline waters from public land or from a substantial number of residences per RCW 90.58.320, or if water quality were degraded so as to discourage normal uses (e.g., swimming, fishing, boating, viewing, etc.).
3. Shoreline development and uses shall adhere to all required setbacks, buffers, and standards for stormwater facilities.
4. All review activities shall comply with the applicable requirements of all applicable City stormwater, drinking water protection, and public health regulations and the *Stormwater Management Manual for Western Washington*, including using low impact development techniques whenever feasible.





APPENDIX H  
**Bibliography**



## Bibliography

- 1991 Stevenson, Washington Pedestrian and Bicycle Links, Walker & Macy.
- 1995 Stevenson Downtown Design Program: City of Stevenson, Washington, Spencer & Kupper.
- 1995 Fatal Flaw Analysis for Watercraft Recreation Sites, JD White Company, Inc.
- 1998 Waterfront Business Development Plan, Unknown & ED Hovee & Company.
- 2012 Stevenson Wayfinding Master Plan, Rock Cove Design.
- 2018 City of Stevenson Shoreline Restoration Plan, City of Stevenson.
- 2019 Downtown Stevenson Draft Interim Zoning Controls, City of Stevenson and Crandall Arambula.
- 2019 Port Waterfront Trail Improvements, Wallis Engineering.
- 2019 Planning Commission Presentation "Stevenson Gateway project", Covalent Architecture.
- 2021 Washington State Recreation and Conservation Office (RCO) Grant Manual. <https://rco.wa.gov/recreation-and-conservation-office-grants/apply-for-a-grant/>, Washington State RCO. Accessed January, 2023.
- 2022 Stevenson Comprehensive Plan, City of Stevenson.
- "Water Quality Grants and Loans – Washington State Department of Ecology." <https://ecology.wa.gov/About-us/Payments-contracts-grants/Grants-loans/Find-a-grant-or-loan/Water-Quality-grants-and-loans>, Dept of Ecology. Accessed May, 2023.
- "Salmon Recovery Funding Board Grants" <https://www.lcfrb.gen.wa.us/grants>, Lower Columbia River Fish Recovery Board. Accessed May, 2023.