

FINAL PLAN | DECEMBER 2012









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IN ASSOCIATION WITH:

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# FIRST CREEK ACTION PLAN

A Resource for Improving Conditions in the First Creek Watershed

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# FIRST CREEK ACTION PLAN

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### I. Introduction

### PURPOSE OF THE FIRST CREEK ACTION PLAN

The purpose of the First Creek Action Plan is to provide a framework for community action to establish First Creek as a healthy, valued natural asset and center of community in East Tacoma. In recent years, many community members have invested significant energy and resources to improve conditions in the First Creek Watershed. In 2011, neighbors and stewards partnered with the City of Tacoma to develop the First Creek Action Plan. This plan represents the next step in developing and implementing a coordinated strategy to address key First Creek issues and opportunities.

Included are a set of detailed actions for implementation by a variety of stakeholders, including the City of Tacoma, the Puyallup Tribe of Indians, Tacoma Housing Authority, community stewards and residents, and partner agencies and organizations such as neighborhood associations, local businesses, and county and regional conservation groups. Plan actions identified include both long-term (10 year) and short-term (immediate) goals. Areas for action include efforts to: improve access to and safety along First Creek; build a positive identity for First Creek; enhance natural habitat and water quality; encourage community stewardship; and make First Creek a venue for watershed and stormwater education.

This plan was developed collaboratively by multiple stakeholders, including community groups, the organizations that own and manage land within the corridor, other public agencies with purview over management issues, and not-for-profit organizations. The collaboration reflects the complexity of the issues at hand, and the need for a holistic approach that spans across land ownerships.

A key assertion is that management and enhancement will be most effective when First Creek is approached as a single, connected corridor. Making this mindset change is vital since the issues, like the creek itself, don't stop at property lines.

This plan is not just the City's, the Tribe's or Tacoma Housing Authority's plan – it is a shared vision for how all the stakeholders can contribute to achieving the collaborative vision. It is structured so that individual stakeholders can take actions, knowing that they fit into a shared vision. The plan and its actions should be reviewed collaboratively and updated as needed to keep pace with progress and changing needs.



Creek identification signs installed at Fairbanks Street





Stormwater infrastructure within First Creek

#### PROJECT AREA DESCRIPTION

The First Creek Watershed comprises approximately 2,110 acres in Tacoma, with an additional 570 acres located in Pierce County. First Creek consists of the main channel, located west of East T Street, and two tributaries: the West Tributary and the "West-West" Tributary. All three channels of First Creek are located in 20 to 30 foot deep ravines. The First Creek corridor is bordered by residential development, two schools (First Creek Middle School and Lister Elementary School), Portland Avenue Park and the Puyallup Tribe of Indians Emerald Queen Casino. Several City roads cross the creek, namely Fairbanks Street, E 34<sup>th</sup> Street and other key arterials connecting East and West Tacoma. This project area falls within the 1873 Puyallup Tribe Treaty Area, Department of Ecology's WRIA 10, and Tacoma's Lower Puyallup watershed.

First Creek and its tributaries function as part of the City of Tacoma's stormwater conveyance system and utility corridor, and are managed by the City of Tacoma Environmental Services Division. The corridor houses stormwater and sewer pipes and manholes, stormwater outfalls, and several access roads needed for utility system maintenance. In the 1990s, the City of Tacoma completed channel modifications to control erosion, which included rock armoring and piping in areas of unstable soils. Approximately 70 percent of the stream channel has been armored to reduce erosion. Approximately 60 percent of the system is open channel, and roughly 40 percent is storm pipe.

The First Creek corridor includes four distinct forest stands and a meadow. Forested areas along First Creek are dominated by fir and western hardwoods including big leaf maple, red alder, madrone and black cottonwood. In general, the First Creek corridor includes a well developed canopy cover, well developed sub-canopy layers, and minimal recruitment of young trees.

In certain areas, non-native invasive plant species comprise a significant portion of the understory vegetation. Common invasive plant species include policeman's helmet, Japanese knotweed, herb Robert, Armenian (Himalayan) blackberry and English ivy, among others.

First Creek is a non-fish bearing stream and has areas with perennial, or year-round, flow, and other areas with seasonal flow only. The creek system includes a number of associated wetlands. A number of wildlife species and habitats are associated with the First Creek Watershed. Threatened, endangered, sensitive and candidate species have not been observed in the First Creek system in recent years.

First Creek, its tributaries and associated wetlands are regulated by the City of Tacoma Critical Areas Preservation Ordinance (CAPO), Washington State Department of Fish and Wildlife (WDFW), Washington State Department of Ecology (Ecology) and the U.S. Army Corps of Engineers (USACE). Many of the actions described in this plan are meant to occur within critical areas and/or buffers and, as such, are subject to the provisions of the CAPO and may require authorization from other State and Federal agencies.

For more details on First Creek's natural environment, for specific habitat management and enhancement recommendations and priorities, and for an overview of the regulatory framework, refer to AHBL's *Forest Habitat Assessment and Restoration Report*, prepared for the City of Tacoma in October 2011.





Top – First Creek stakeholders tour 2011

Bottom – View from Salishan toward First Creek

## II. Issues and Opportunities

The collaborative process to develop this plan began in July 2011 and included a tour of the creek corridor, two plan stakeholder committee meetings, two community meetings, and a youth planning summit. All events focused on exploring issues and opportunities and identifying specific action items for First Creek.

Through this process and previous planning efforts, the City of Tacoma, First Creek neighbors and stewards, and other participants identified a number of issues and opportunities, including the need to:

- Improve safety, visibility and cleanliness of the Creek corridor;
- Strengthen community ownership of and pride in First Creek, and achieve greater recognition of First Creek as a unique and valued community asset;
- Create opportunities for recreation along First Creek and physical connections to the surrounding community;
- Establish a coordinated strategy for habitat restoration and wildlife management;
- Reconnect the Creek hydrologically and create a healthy flow regime;
- Measure and achieve water quality within First Creek that complies with the state's surface water quality standards.
- Explore multi-objective, low impact ways to improve the stormwater quality and increase the groundwater flow entering First Creek;
- Recruit and develop a new generation of environmental stewards to protect and advocate for First Creek and other important natural resources of the community; and
- Tell the Creek's story, including its cultural and historical role and significance for the Puyallup Tribe of Indians and the community's evolving attitude towards and use of First Creek as a component of its urban infrastructure and environment.

# III. First Creek Vision and Objectives

The following vision statement is based on desired future conditions as articulated by First Creek neighbors and stewards. Plan objectives were developed by the plan stakeholder committee, and serve as a framework for moving forward.

### **Community Vision for First Creek**

First Creek is a valued natural, cultural and educational resource and center of community in East Tacoma. The First Creek system is composed of healthy habitats with native plants and urban wildlife, clean fresh water, and a system of safe and well-used trails.

### **First Creek Action Areas**

- Access: Strengthen the community's physical access to First Creek.
- Safety: Make First Creek a safe place for recreation, education, and family and community activities.
- Identity: Create a positive identity for First Creek and strengthen the community's understanding of its importance socially, culturally and historically.
- **Habitat:** Enhance First Creek's valued natural habitats and communities.
- Water: Enhance water quality and improve creek hydrology to achieve a healthier, more continuous flow.
- Community: Broaden community awareness and participation in First Creek stewardship, events and celebrations.
- Education: Strengthen stormwater education and outreach throughout the watershed, and make First Creek programs and activities models for watershed science and education.



Lower reach of First Creek



Invasive Species: Policeman's Helmet, Impatiens glandulifera

### IV. How To Use This Plan

This plan provides a resource that is meant to guide the efforts of all agencies, neighbors, stewards, businesses and members of the greater community with an interest in improving conditions in the First Creek Watershed.

To help make First Creek a healthier natural, cultural and educational center of community, first read this section, and then review the list of actions beginning on page 11 and identify items that you are most interested in. Actions listed represent both immediate and long-term goals.

Actions are intended to inspire the involvement of groups and individuals with a variety of interests and skills. Many actions require as little as a couple of hours of focused activity to advance, while others will require dedicated, ongoing action. Many actions are most effective if done collaboratively, so talk to your neighbors and encourage them to join in!

If you have questions about recent and ongoing activities, or want to know what the City and other groups are currently working on, contact the City Environmental Services Division or visit: www.firstcreekwatershed.blogspot.com

### PLAN ACTIONS: A QUICK GUIDE

The next section includes a comprehensive menu of actions that has been refined and informally adopted by the City of Tacoma, First Creek Neighbors, Metro Parks Tacoma, Tacoma Housing Authority, Puyallup Tribe of Indians, and University of Washington Tacoma. All actions are recommendations developed in a collaborative way with stakeholder and public input. The public outreach effort included two community workshops in July and August of 2011 and a youth summit in August 2011. A stakeholder committee was also involved in drafting plan actions.

Additionally, the City completed a thorough review of existing plans to better understand how the plan actions can be carried out. These plans include:

- City of Tacoma Comprehensive Plan, particularly the Open Space Habitat and Recreation Element;
- 1996 T Street Gulch Plan;
- First Creek Stewards 2010 Plan;
- Tacoma Housing Authority Salishan Plans;
- Puyallup Tribe's longstanding plans and commitment to the area; and
- Metro Parks Tacoma's Swan Creek Master Plan.

The list of plan actions is organized by plan objective. However, the vast majority of actions help to achieve more than one objective. For example, neighborhood restoration events can build community and improve habitat conditions. Over time, community-based restoration can also help enhance water quality and, if an ongoing and visible activity, can change the community's perception of First Creek into one of a safe and cared for center of community.

While the community vision and objectives for First Creek (presented on page 5) reflect a desired future state and direction for action that is shared among those who participated in plan development, different organizations and individuals may have different priorities for improving the creek and the watershed. For this reason, action items have not been assigned a level of priority (with the exception of a short list "first steps" and highest priority actions listed in Section VI of this plan). Instead, to help the City and community determine which activities to focus on, each action has been identified as one or more of the following:



First Creek steward educating visitors about local flora



First Creek stakeholders tour 2011

- A necessary first step: An action that must be accomplished prior to advancing other action items needed to achieve a plan objective;
- A "quick win": An action that can be accomplished with minimal resources and limited coordination;
- High risk of inaction: An action that, if not accomplished, will result in further environmental degradation and/or continuing, negative impacts to the community with potential long-term consequences;
- An ongoing action: An action that can and should be implemented over time to prove most effective.

The feasibility of completing plan actions is dependent on the availability of funding and other resources. It will be important to consider the ongoing funding and maintenance requirements for each plan action before launching activities that represent larger or more involved initiatives.

#### PARTNER COLLABORATION

The dedication of the City of Tacoma, key agency partners, and the East Tacoma community will be critical to the success of the First Creek Action Plan. At the same time, the plan is flexible enough to allow for groups not formally identified as partners to play a leadership role or get involved, should the opportunity arise.

The following groups have been identified as critical to ensuring that First Creek becomes a valued natural, cultural and educational resource and center of community in East Tacoma. Specific roles may change and evolve over the life of this plan.

Note: Abbreviated names of the groups in parentheses are as they appear in Section V: Plan Actions.

### City of Tacoma:

- City Public Works Department, Environmental Services Division (City Env Svcs)
- City Open Space Program (City Open Space)
- Police Department (Police)
- Human Rights and Human Services (City Homeless Coordinator)
- Street Operations Division
- Code Enforcement/Tacoma CARES (Tacoma CARES)
- Tacoma City Council (City Council)

### Other governing agencies and entities:

- Puyallup Tribe of Indians (Puyallup Tribe)
- Tacoma Housing Authority (THA)
- Metro Parks Tacoma (Metro Parks)
- Pierce Conservation District
- Pierce Stream Team
- Pierce County
- Projects for Assistance in Transition from Homelessness Team (PATH Team)

#### Schools and universities:

- Tacoma School District (TSD)
- First Creek Middle School (FCMS)
- Lincoln High School
- University of Washington Tacoma (UWT)

#### Community and neighborhood groups:

- First Creek Neighbors
- Green Tacoma Partnership
- Salishan Homeowners Association (SHA)
- Eastside Neighborhoods Advisory Council of Tacoma (ENACT)
- Portland Avenue Business District
- Tacoma Eastside Action Membership
- Tahoma Audubon Society
- Washington Conservation Corps

In many cases, partners identified have expressed a commitment to seeing through a particular action. In other cases, partners are listed not because of an express commitment, but rather because they are in the best position (whether due to authority, expertise or available resources) to ensure action completion and success.



Native Big Leaf Maple, Acer macrophyllum

# V. Plan Actions

Access: Strengthen the community's physical and visual access to First Creek.

				Ob	ject	ives	5			Implem	entatio	1	
	Action Items	Iccess	afety	dentity	labitat	Vater	ommonity	ducation	Necessary First Step	"Quick Win"	High Risk of	Ongoing Action	Partners
A-1	Study other park and improvement models to help identify desired conditions and future improvements. Examples of parks to study include Longfellow Creek in Seattle and Hylebos Park.	•	•	•	•				<b>√</b>	<b>✓</b>			First Creek Neighbors, City Open Space, Metro Parks
A-2	Develop a comprehensive map of potential trails, trail connections and gateways and prioritize trail and gateway locations. Finalize plan before building new trails. Consider parking needs in conjunction with proposed trailheads or gateways. Consider availability of funding for stormwater and multi-objective management projects when prioritizing or establishing prioritization criteria to develop trails.	•	•		•				<b>✓</b>				City Open Space, Metro Parks
A-3	Plan and host a community trails design and Open Space charrette.	•					•						City Open Space, Metro Parks
A-4	Provide pedestrian access and trail connections to First Creek at strategic locations. Consider locations such as 29th St., 32nd St., 34th St., Fairbanks, Columbia, 51st St., Douglas fir forest zone, and the Wetlands area (boardwalk).	•										<b>√</b>	City Open Space, Metro Parks
A-5	Strengthen the physical connection between First Creek and Portland Avenue Park. Consider the development of a loop trail from the Portland Avenue Center through the creek area.	•					•						City Open Space, Metro Parks
A-6	Develop a trail to connect First Creek and Swan Creek Park.  Combine/coordinate improvements to the entrances to the First Creek and Swan Creek systems where they meet.	•		•									Metro Parks, THA, First Creek Neighbors
A-7	Construct bridge(s) spanning First Creek to connect strategic locations, including the East and West Salishan neighborhoods and the Pipeline trail.	•	•										THA, Metro Parks

				Ob	ject	ives	3			Implem	entatio	n		
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk of Inaction	Ongoing Action	Partners	
A-8	Use directional curb marking and signage to designate and identify urban trail connections that help create a complete and connected trail system.	•		•									Community members, Street Operations Division can assist with installation	
A-9	Continue to mow picnic area below 32nd Street bridge regularly, upon request.	•								✓		✓	Street Operations Division	
A-10	Improve picnic area below 32nd St. bridge with permanent facilities.	•					•						City Open Space, Metro Parks	
A-11	Create new picnic sites for regular access/use and/or establish additional areas in the corridor for regular community use and recreation.	•					•						City Open Space, Metro Parks	
A-12	Install natural benches and places for people to sit along the creek.	•								✓			City Open Space, Metro Parks	
A-13	Acquire easements across private properties as appropriate to facilitate public access and establish trail connections.	•					•						City Open Space	
A-14	Continue targeted vegetation management and removal at informal viewpoint locations, including E. 34th St. and Fairbanks. Regularly mow visible areas along creek street crossings. City Street Operations Division to mow twice annually.	•	•	•						<b>✓</b>		<b>✓</b>	First Creek Neighbors, Pierce Conservation District, Street Operations Division	
A-15	Consider installation of composting toilets at strategic creek access points.	•											City Open Space, Metro Parks	

## **Safety:** Make First Creek a safe place for recreation, education, and family and community activites.

				Ob	ject	ives	5		I	Implem	entatio	n	
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk of	f Ongoing Action	Partners
S-1	Actively encourage an "eyes on the creek" approach to improving First Creek safety, and share clear information about the roles the community can play in surveillance and prevention.	•	•				•		<b>✓</b>	<b>✓</b>			Tacoma CARES, First Creek Neighbors
S-2	Regularly report homeless encampments, dumping, vandalism and other health and safety issues to the City.	•	•		•				<b>✓</b>			<b>✓</b>	Community members, City Homeless Coordinator, PATH Team
S-3	Design and implement a coordinated, long-term strategy to address recurring homeless encampments within the creek corridor.	•	•	•	•	•							City Homeless Coordinator
S-4	Regularly monitor homeless encampments and enforce the City Nuisance Code.		•		•	•				✓		✓	Police, City Homeless Coordinator
S-5	Coordinate a neighborhood code enforcement training and develop specific strategies to resolve local issues.		•				•						Community members, Tacoma CARES
S-6	Cut trees and brush or create wider trails in problem areas to improve visibility and deter illegal use, with habitat and water quality goals in mind.	•	•										Tacoma CARES, THA, Puyallup Tribe
S-7	Install and remove fencing and natural barriers, as appropriate, to deter homeless encampments, dumping, and other illegal activities.		•										Tacoma CARES, THA, SHA, Puyallup Tribe

				Ob	ject	ives	5			Implem	entatio	n	
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk o	of Ongoing Action	Partners
S-8	Develop a coordinated strategy to eliminate dumping.		•										Tacoma CARES, THA, SHA
S-9	Add First Creek to Community Service Work Crew route. Regularly clean up garbage and debris along the creek corridor.		•	•	•	•						✓	Street Operations Division
S-10	Convert illegal dump sites and dead-ends into viewpoints.	•	•	•	•	•							City Open Space, Street Operations Division, Puyallup Tribe
S-11	Develop a coordinated viewpoint and edge management strategy for First Creek.	•	•	•	•								City Open Space, THA, Puyallup Tribe
S-12	Assess how vacant properties impact watershed conditions. Identify specific properties and articulate the direct impact that related activity has on watershed health. If direct impact exists, develop specific action items to address.		•		•					<b>✓</b>			Community members, Tacoma CARES
S-13	Start a Neighborhood Watch Program to improve overall watershed safety.												Community members

**Identity:** Create a positive identity for First Creek and strengthen the community's understanding of its importance socially, culturally and historically.

				Ob	ject	ives	5			mplem	n		
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk o	f Ongoing Action	Partners
I-1	Develop a coordinated interpretive plan and program for First Creek. Incorporate public art and interpretive amenities and displays into permanent improvements/installations. Include signage describing First Creek as a natural system, and its importance historically and culturally. Share information about its historical landscape, including historic infrastructure of community significance (i.e. historic footbridges).			•				•	✓				City Open Space, Metro Parks, First Creek Neighbors, Puyallup Tribe
I-2	Develop a distinct graphic or visual brand and identity for First Creek map and incorporate into community outreach and interpretive materials. Design an identifiable logo for First Creek.			•					✓				City Open Space, First Creek Neighbors, Community members, Puyallup Tribe
I-3	Initiate a kids design contest to create signage and/or interpretive designs for the Creek.			•			•	•					City Open Space, TSD, Puyallup Tribe, FCMS, SHA
1-4	Create a new creekshed map for First Creek. Design the map so it is relevant to multiple stakeholders and can be used or adapted for use in various education, outreach and interpretive materials.			•			•	•					City Open Space
I-5	Design and establish community gateways to First Creek that create a visually distinctive entry point to the system, consistent with a trails plan and coordinated interpretive plan.	•	•	•									City Open Space, Puyallup Tribe, Metro Parks Tacoma, SHA
1-6	Integrate First Creek and Swan Creek interpretive programs where there is opportunity to do so (e.g., "You're feet are in Swan Creek but this is a view of First Creek)			•				•					Metro Parks
I-7	Cultivate and maintain positive relationships with the media and promote First Creek events, programs and successes.			•			•	•				<b>√</b>	City Open Space, City Env Svcs, First Creek Neighbors

### Habitat: Enhance First Creek's valued natural habitats and communities.

				Ob	ject	ives	5		I	Implem			
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk o	f Ongoing Action	Partners
H-1	Study the feasibility of consolidating public ownership within the creek corridor.	•	•		•	•							City Open Space, City Env Svcs, Metro Parks, Puyallup Tribe
H-2	Implement a coordinated habitat enhancement plan for the First Creek corridor. Conduct work in phases, based on restoration goals and objectives and site management priorities. See AHBL's Forest Habitat Assessment and Restoration Report (Oct. 2011)	•			•	•	•					<b>✓</b>	City Open Space, Green Tacoma Partnership, First Creek Neighbors, Pierce Conservation District
H-3	Complete the appropriate Critical Areas Preservation Ordinance (CAPO) Permit submittal to facilitate ongoing habitat restoration in the corridor.				•	•	•		✓	✓			City Open Space
H-4	Create a database for tracking creek and habitat enhancement projects. Identify a lead entity and secure resources to maintain the database.				•	•	•						City Open Space, Green Tacoma Partnership
H-5	Establish an early detection and rapid response program to identify and target new infestations of invasive plant species. Integrate with interpretive signage in the corridor to enhance community awareness and achieve progress through citizen participation.				•	•	•	•					City Open Space, First Creek Neighbors
H-6	Conduct an inventory and eradication program focused on policeman's helmet and Japanese knotweed, beginning upstream and working downstream.				•	•					<b>√</b>		City Open Space, Pierce Conservation District, First Creek Neighbors
H-7	Remove and manage invasive species along the Creek corridor. Use AHBL's Forest Habitat Assessment and Restoration Report (Oct. 2011) to focus efforts by restoration area, based on recommendations for management and habitat restoration and site management priorities.	•			•	•	•				<b>✓</b>	✓	City Open Space, Street Operations Division (assign Community Service Work Crew), First Creek Neighbors, Community members, Green Tacoma Partnership, Pierce Conservation District
H-8	Plan and hold a knotweed bending party or multiple bending events along First Creek.				•	•	•						Pierce Conservation District, Green Tacoma Partnership

					ject	ives	5			Implem	entatio	า		
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win'	High Risk of Inaction	Ongoing Action	Partners	
H-9	Plant native trees, shrubs and herbaceous species along First Creek. Use AHBL's Forest Habitat Assessment and Restoration Report (Oct. 2011) to focus efforts by restoration area, based on recommendations for management and habitat restoration and site management priorities.				•	•	•					<b>✓</b>	Pierce Conservation District, Green Tacoma Partnership, First Creek Neighbors	
H-10	Develop a complete list of inventory and monitoring needs for wildlife, habitat, wetlands and water quality and hydrology.				•	•	•		<b>✓</b>	✓			City Open Space, City Env Svcs	
H-11	Create a comprehensive monitoring database that includes all monitoring data for First Creek. Alternatively, coordinate all inventory and monitoring efforts in the watershed with existing county and regional monitoring efforts, taking advantage of existing systems and programs.				•	•							City Open Space, City Env Svcs, UWT, FCMS, Pierce County, Green Tacoma Partnership	
H-12	Conduct a wetland inventory along the creek corridor to close the gaps in inventory data.				•	•							City Open Space, THA, Puyallup Tribe, TSD	
H-13	Seek opportunities to continue and expand wetland and vegetation enhancement adjacent to Salishan.				•	•				✓		✓	THA, SHA, Green Tacoma Partnership	
H-14	Organize a Christmas Bird Count in the watershed and contribute to the national database of distribution data for North American birds. Use data locally as one indicator of watershed health. Link with First Creek community building activities.			•	•		•	•					Tahoma Audubon Society	
H-15	Develop a priority list of property for City acquisition, if one does not exist.  Create/modify list using criteria that help determine the extent to which parcel acquisition helps to achieve Action Plan objectives.	•	•		•	•				<b>✓</b>			City Open Space	
H-16	Acquire open space parcels within the Creek corridor.	•	•	•	•	•						✓	City Open Space, City Env Svcs	
H-17	Participate in the City's Adopt-a-Spot program, and "adopt-a-spot" along First Creek. Look to the City's triage rating system and coordinated enhancment plan to help select adopt-a-spot locations.	•	•	•	•	•	•	•		<b>√</b>			Portland Avenue Business District, Community members	
H-18	Identify one or more stream segments and determine the level to which they must and feasibly can be restored to support healthy trout populations.				•	•							City Open Space, Pierce Conservation District, Green Tacoma Partnership	

## Water: Enhance water quality and improve creek hydrology to achieve a healthier, more continuous flow.

			Ob	ject	ives	;			Implem	entatio	n		
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win	High Risk of	Ongoing Action	Partners
W-1	Establish a baseline of water flow data for the purpose of watershed-wide restoration of hydrology. This could involve the installation of water flow/level measuring devices.				•	•			<b>✓</b>		<b>✓</b>		Pierce County, Pierce Conservation District, City Env Svcs, UWT
W-2	Conduct an inventory of First Creek's benthic macroinvertebrates. Share data and participate in the Puget Sound stream benthos monitoring and data management program (http://pugetsoundstreambenthos.org).				•	•							UWT, Pierce County, Pierce Stream Team
W-3	Survey and inventory vegetation and stormwater structures along the conveyance system corridor in order to identify areas where enhancement or maintenance is needed. Items to be noted include but are not limited to: dumping, illicit discharge, invasive species, dominant species, flow, potential projects, and erosion.				•	•		•	✓				City Env Svcs, Pierce County, UWT
W-4	Conduct routine water quality testing on a monthly or bi-monthly basis. Measure pH, temperature, turbidity, conductivity and dissolved oxygen.				•	•						✓	UWT, City Env Svcs
W-5	Continue to collect, analyze and manage data of water samples from First Creek once per season and during rain events. Take samples for nutrient and emerging contaminant analyses during seasonal community events planned throughout the year.				•	•		•		✓		<b>√</b>	UWT, FCMS, City Env Svcs
W-6	Install storm drain markers in the watershed, to raise community awareness about stormwater quality and watershed health.				•	•		•		<b>√</b>			First Creek Neighbors, SHA, Pierce Conservation District
W-7	Identify the First Creek Watershed as a focus area for improving stormwater quality and increasing infiltration by implementing multi-objective watershed scale actions.			•	•	•	•	•					City Env Svcs, City Council, Metro Parks
W-8	Participate in update and implementation of the City's Stormwater Management Plan (SWMP).					•	•					<b>√</b>	City Env Svcs, Community members, First Creek Neighbors
W-9	Regularly maintain stormwater management infrastructure and areas. Implement the City-prepared erosion control plan to stabilize the existing channel while protecting stormwater infrastructure and natural areas.					•				<b>✓</b>		<b>✓</b>	City Env Svcs

				Ob	ject	ives	;			Implem	entation	1	
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win'	High Risk of	Ongoing Action	Partners
W-10	Re-hydroseed the slope behind First Creek Middle School for bank/slope stabilization.	•	•			•	•			<b>✓</b>			TSD
W-11	Identify specific project (new and retrofit) opportunities where bioengineering and "softer" design solutions can be implemented, with multiple objectives in mind. Seek community input.				•	•			<b>✓</b>				City Env Svcs, Community members
W-12	Implement a highly visible stormwater pilot project near First Creek. Use to demonstrate cutting edge techniques or technologies, and educate the community about the role of First Creek in stormwater management.			•	•			•					City Env Svcs
W-13	Use a multi-faceted approach to improve water quality and water flow that would include use of: public education, low-impact development techniques, and Best Management Practices (BMPs). These techniques implemented within the watershed would benefit all hydrologically connected channels – the main channel, as well as the west and west/west channels.				•	•							City Env Svcs, City Open Space
W-14	Identify opportunities/locations (i.e. schools and public properties) to restore natural recharge and flow to the creek. Low impact development examples could include: rain gardens, pervious pavement, rain barrels, and bio swales.				•	•			<b>✓</b>				City Env Svcs
W-15	Provide financial and/or technical incentives for residents and developers to implement design and stormwater management best practices.				•	•	•	•					City Env Svcs
W-16	Participate in a community focused rain garden program for the benefit of water quality and water flow. Partner with neighbors to create clusters of rain gardens for the most stormwater benefit. The City of Tacoma rain garden program is currently under development. Other programs through Washington State University and Stewardship Partners currently exist.				•	•	•	•					Pierce Conservation District, City Env Svcs, Community members, SHA, Puyallup Tribe
W-17	Identify schools and public properties where raingardens and other LID measures should be implemented, and work with Stewardship Partners to establish raingardens.				•	•		•		<b>✓</b>			City Env Svcs, Pierce Conservation District

## **Community:** Broaden community participation in First Creek stewardship, events and celebrations.

				Ob	ject	ives	;			Implem	entatio	n	
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk o	of Ongoing Action	Partners
C-1	Expand the number of dedicated First Creek stewards through collaborative, focused outreach.				•		•		<b>✓</b>		✓	<b>✓</b>	First Creek Neighbors, City Open Space, Metro Parks, Green Tacoma Partnership
C-2	Maintain an active mailing list of property owners and residents along the creek. Use list to maintain regular contact and to share information about First Creek activities and stewardship opportunities. Encourage and support recruitment in the neighborhood.						•	•	<b>✓</b>			<b>✓</b>	City Open Space, First Creek Neighbors, Metro Parks
C-3	Share a regularly updated list of community resources with neighbors and stewards to encourage participation in action plan implementation. Examples of useful resources include enforcement and reporting hotlines, community-based grant opportunities, technical assistance programs and training opportunities.						•	•				<b>✓</b>	City Open Space, Metro Parks
C-4	Strengthen outreach to/coordination between the City, Metro Parks, Tacoma Housing Authority and other agencies and the Puyallup Tribe of Indians and create an active partnership focused on First Creek.	•	•	•	•	•	•	•	<b>√</b>			<b>✓</b>	City, Metro Parks, Puyallup Tribe
C-5	Conduct a tour of the First Creek Watershed with the Tribal Council, City Council, Parks Board and other elected officials.						•	•		<b>✓</b>			First Creek Neighbors, Puyallup Tribe, Metro Parks
C-6	Hire or designate a part-time "creek-keeper" to coordinate First Creek activities.	•	•	•	•	•	•	•			✓		City Env Svcs, City Open Space, Metro Parks, SHA, Green Tacoma Partnership
C-7	Continue to organize and host community picnics at the meadow at E. 32nd St. Expand participation and get attention from the press.			•			•	•				✓	First Creek Neighbors, Metro Parks

				Ob	ject	ives	5		Implementation				
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk of	f Ongoing Action	Partners
C-8	Conduct quarterly and/or annual community-based restoration events. Incorporate invasives removal as well as planting of native plants.			•	•	•	•	•				<b>✓</b>	Green Tacoma Parnership, Pierce Conservation District, Washington Conservation Corps, Street Operations Division (assign Community Service Work Crew), Metro Parks, FCMS, UWT
C-9	Demonstrate and share about creek activities during community restoration events, to promote water quality and restore the surrounding area.			•						<b>✓</b>			FCMS, UWT, First Creek Neighbors, Pierce Conservation District
C-10	Secure monetary and technical support for the First Creek blog site.			•			•	•	✓	✓			City Open Space, First Creek Neighbors
C-11	Refresh the First Creek neighbors "outreach booth".			•			•	•	✓	<b>✓</b>			First Creek Neighbors, Metro Parks
C-12	Integrate youth activities into all community events along First Creek that share positive images, educate, and encourage exploration of the Creek. Ideas to engage school-aged children include geocaching, scavenger hunts, design contests, and others.			•			•	•				✓	TSD, Puyallup Tribe, First Creek Neighbors, Metro Parks
C-13	Formally recognize youth volunteer stewardship and monitoring activities, and other community building activities in First Creek.			•			•						City Council, Metro Parks Board, Puyallup Tribe
C-14	Conduct tours of First Creek to raise awareness about the Creek's historical significance.			•			•	•				<b>✓</b>	City Open Space, Puyallup Tribe, THA, SHA, Metro Parks, First Creek Neighbors
C-15	Make active recreation a more visible and viable component of First Creek activities. Partner with the Health Department and groups such as the Thursday Tacoma Runners and Tacoma Housing Authority to organize a Tacoma minibiatholon.			•			•					<b>✓</b>	City Open Space, Metro Parks
C-16	Organize a First Creek "walk-along".			•			•	•					City Open Space, Puyallup Tribe, THA, Metro Parks, SHA

				Objectives						mplem	entatio	n	
	Action Items		Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk o	of Ongoing Action	Partners
C-17	Organize nights at the creek and community events at First Creek that celebrate Tacoma's diverse communities.						•					✓	City Open Space, First Creek Neighbors, Puyallup Tribe, THA, SHA
C-18	Get on the list of judicial system diversion programs and high school community service groups to establish a greater pool of in-kind labor.	•	•		•	•	•		✓				City Open Space
C-19	Participate in City Public Works and Environment Committee, or other public, meetings, advocating for multi-objective management and improvements along First Creek.						•						Community members
C-20	Identify specific First Creek objectives and actions and become a champion/sponsor.			•			•						ENACT, Portland Avenue Business District

**Education:** Strengthen stormwater education and outreach throughout the watershed, and make First Creek programs and activities models for watershed science and education.

				Ob	ject	ives	;	Implementation					
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk o	f Ongoing Action	Partners
E-1	Strengthen community outreach and education around First Creek water quality and health, and about existing City stormwater requirements, programs and opportunities. Publish materials in multiple languages. Make the program family-friendly.			•		•	•	•	✓			✓	City Env Svcs
E-2	Modify and conduct habitat steward training program to best meet First Creek needs, and increase the number of trained stewards.				•	•	•	•					First Creek Neighbors, Green Tacoma Partnership
E-3	Continue to integrate service learning projects that focus on ecosystems, sustainability, water quality, and First Creek-specific issues into First Creek Middle School, Lincoln High School and UWT science curriculum.			•	•	•	•	•		<b>√</b>		<b>√</b>	FCMS, Lincoln High School, UWT, TSD, Metro Parks
E-4	Establish a student internship program that will fill the UWT student coordinator position, allowing this position to be sustained over several years. This program will provide student coordinators that will facilitate research, outreach and community activities surrounding First Creek that will foster stewardship. The internship program will be led by a UWT staff or faculty member. Identification of potential and sustainable funding for this program will make it more feasible.				•	•	•	•	✓				UWT
E-5	Continue to focus FCSM Science Club activities on the creek and its surrounding area.			•	•	•	•	•		✓		✓	FCMS
E-6	Work with FCMS Science Club students to promote watershed issues, and educate about stormwater impacts and other environmental issues relating to First Creek. Take part in their weekly meetings and assist at community and outreach events sponsored by UWT and FCMS. This work is/will be facilitated by a UWT student coordinator who will serve as the liaison between FCMS and UWT.											✓	UWT, FCMS

				Ob	ject	ives	;	Implementation					
	Action Items	Access	Safety	Identity	Habitat	Water	Community	Education	Necessary First Step	"Quick Win"	High Risk of	f Ongoing Action	Partners
E-7	Use the wetland at 56th and Portland Ave. as an educational site.	•			•	•		•					TSD, FCMS, Lincoln High School, Green Tacoma Partnership
E-8	Organize and host "Science Cafes", school-wide events at First Creek Middle School (FCMS) where UWT students enrolled in the Environmental Chemistry course prepare educational stations related to stormwater and urban impacts to the watershed. Provide engaging, hands-on demonstrations where UWT and FCMS students will cycle through them at different times of the day. Plan events in the evening as well as the day-time to encourage parent and family participation.				•	•	•	•					UWT, FCMS, Lincoln High School
E-9	Conduct "critter monitoring" monthly as part of their FCMS Science Club meetings and activities. Deploy amphibian traps and photograph, measure (weight and length) and then release organisms caught. Coordinate all school and university inventory and monitoring activities with the monitoring program for the entire watershed.				•	•	•	•		✓		<b>✓</b>	FCMS, UWT
E-10	Conduct field trips to UWT laboratories and participate in analysis of water samples and related data.				•	•	•	•				<b>✓</b>	UWT, FCMS, Lincoln High School

# VI. First Steps and Priorities

### **NECESSARY FIRST STEPS**

The following items (also found in the complete list of plan actions) are "necessary first steps" towards achieving one or more plan objective.

A general cost is associated with each action, based on the following:

T = Staff or volunteer time

\$ = Under \$10,000

\$\$ = \$10,000 - \$50,000

\$\$ = More than \$50,000

Acce	ss	Partners	Cost	Permit Required
A-1	Study other park and improvement models to help identify desired conditions and future improvements. Examples of parks to study include Longfellow Creek in Seattle and Hylebos Park.	First Creek Neighbors, City Open Space, Metro Parks	Т	None
A-2	Develop a comprehensive map of potential trails, trail connections and gateways and prioritize trail and gateway locations. Finalize plan before building new trails. Consider parking needs in conjunction with proposed trailheads or gateways. Consider availability of funding for stormwater and multi-objective management projects when prioritizing or establishing prioritization criteria to develop trails.	City Open Space, Metro Parks	\$\$	None

Safet	у			Permit
		Partners	Cost	Required
S-1	Actively encourage an "eyes on the creek" approach to improving First Creek safety, and share clear information about the roles the community can play in surveillance and prevention.	Tacoma CARES, First Creek Neighbors	\$	None
S-2	Regularly report homeless encampments, dumping, vandalism and other health and safety issues to the City.	Community members, City Homeless Coordinator, PATH Team	T	None

Identit	У			Permit
		Partners	Cost	Required
1-1	Develop a coordinated interpretive plan and program for First Creek. Incorporate public art and interpretive amenities and displays into permanent improvements/installations. Include signage describing First Creek as a natural system, and its historic and cultural importance. Share information about its historical landscape, including historic infrastructure of community significance (i.e. historic footbridges).	City Open Space, Metro Parks, First Creek Neighbors, Puyallup Tribe	\$\$\$	None
1-2	Develop a distinct graphic or visual brand and identity for First Creek map and incorporate into community outreach and interpretive materials. Design an identifiable logo for First Creek.	City Open Space, First Creek Neighbors, Puyallup Tribe, Community	\$\$	None

Habit	at			Permit
		Partners	Cost	Required
H-3	Complete the appropriate Critical Areas Preservation Ordinance (CAPO) Permit submittal to facilitate ongoing habitat restoration in the corridor.	City Open Space	Т	CAPO
H-10	Develop a complete list of inventory and monitoring needs for wildlife, habitat, wetlands and water quality and hydrology.	City Open Space, City Env Svcs	Т	None

Water	•			Permit
		Partners	Cost	Required
W-3	Survey and inventory vegetation and stormwater structures along the conveyance system corridor in order to identify areas where enhancement or maintenance is needed. Items to be noted include but are not limited to: dumping, illicit discharge, invasive species, dominant species, flow, potential projects, and erosion.	City Env Svcs, Pierce County, UWT	\$\$	
W-11	Identify specific project (new and retrofit) opportunities where bioengineering and "softer" design solutions can be implemented, with multiple objectives in mind. Seek community input.	City Env Svcs, Community members	T	None

Comn	าบnity			Permit
		Partner	Cost	Required
C-2	Maintain an active mailing list of property owners and residents along the creek. Use list to maintain regular contact and to share information about First Creek activities and stewardship opportunities. Encourage and support recruitment in the neighborhood.	City Open Space, First Creek Neighbors, Metro Parks	Т	None
C-4	Strengthen outreach to/coordination between the City, Metro Parks, Tacoma Housing Authority and other agencies and the Puyallup Tribe of Indians and create an active partnership focused on First Creek.	City, Metro Parks, Puyallup Tribe	Т	None
C-10	Secure monetary and technical support for the First Creek blog site.	City Open Space, First Creek Neighbors	\$	None
C-11	Refresh the First Creek neighbors "outreach booth".	First Creek Neighbors, Metro Parks	\$	None
C-18	Get on the list of judicial system diversion programs and high school community service groups to establish a greater pool of in-kind labor.	City Open Space	Т	None

Educa	ıtion	Partner	Cost	Permit Required
E-1	Strengthen community outreach and education about First Creek water quality and health, and about existing City stormwater requirements, programs and opportunities. Publish materials in multiple languages. Make the program family-friendly.	City Env Svcs	\$\$	None
E-4	Establish a student internship program that will fill the UWT student coordinator position, allowing this position to be sustained over several years. This program will provide student coordinators that will facilitate research, outreach and community activities surrounding First Creek that will foster stewardship. The internship program will be led by a UWT staff or faculty member. Identification of potential and sustainable funding for this program will make it more feasible.	UWT	\$\$\$	None

### HIGHEST PRIORITY ACTIONS

The following items (also found in the complete list of plan actions) have been identified as the highest priority actions for implementation. These items include all actions identified as resulting in "high risk" as a result of inaction. High risk in this context means actions that if not accomplished will result in further environmental degradation and/or negative community impacts with potential long-term consequences.

A general cost is associated with each action, based on the following:

T = Staff or volunteer time \$ = Under \$10,000 \$\$ = \$10,000 - \$50,000 \$\$\$ = More than \$50,000

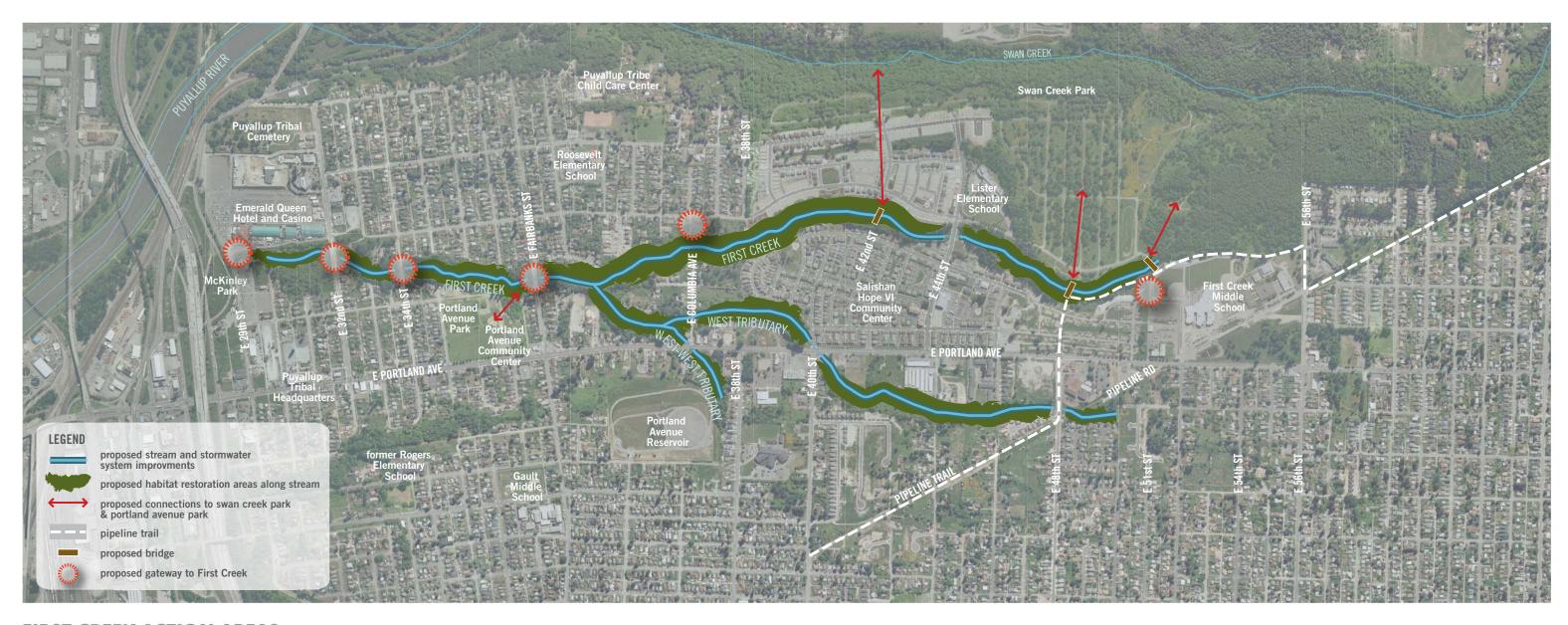
				Permitting
		Lead/Partner	Cost	Required
H-6	Conduct an inventory and eradication program focused on policeman's helmet and Japanese knotweed, beginning upstream and working downstream.	City Open Space, Pierce Conservation District, First Creek Neighbors	\$\$	CAPO
H-7	Remove and manage invasive species along the Creek corridor. Use AHBL's Forest Habitat Assessment and Restoration Report (Oct. 2011) to focus efforts by restoration area, based on recommendations for management and habitat restoration and site management priorities.	City Open Space, City Street Operations (assign Community Service Work Crew), First Creek Neighbors, Community members, Green Tacoma Partnership, Pierce Conservation District	\$\$\$	CAPO

				Permit
		Partner	Cost	Required
W-1	Establish a baseline of water flow data for the purpose of watershed-wide restoration of hydrology. This could involve the installation of water flow/level measuring devices.	Pierce County, Pierce Conservation District, City Env Svcs, UWT	\$\$\$	None
C-1	Expand the number of dedicated First Creek stewards through collaborative, focused outreach.	First Creek Neighbors, City Open Space, Metro Parks, Green Tacoma Partnership	T	None
C-6	Hire or designate a part-time "creek-keeper" to coordinate First Creek activities.	City Env Svcs, City Open Space, Metro Parks, SHA, Green Tacoma Partnership	\$\$\$	None

### **FIRST CREEK VISION:**

First Creek is a valued natural, cultural, and educational resource and center of community in East Tacoma.

The First Creek system is composed of healthy habitats with native plants and urban wildlife, clean fresh water, and a system of safe and well-used trails.



#### **FIRST CREEK ACTION AREAS**

#### **ACCESS**

Strengthen the community's physical access to First Creek.

### \FETY:

Make First Creek a safe place for recreation, education, and family and community activities.

#### **IDENTITY**

Create a positive identity for First Creek and strengthen the community's understanding of its importance socially, culturally and historically.

#### HARITA'

Enhance First Creek's valued natural habitats and communities.

#### **WATER**

Enhance water quality and improve creek hydrology to achieve a healthier, more continuous flow.

### **COMMUNITY:**

Broaden community awareness and participation in First Creek stewardship, events and celebrations.

#### FUIICATION

Strengthen stormwater education and outreach throughout the watershed, and make First Creek programs and activities models for watershed science and education.





