CITY OF KIRKLAND
PLANNING AND BUILDING DEPARTMENT
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MEMORANDUM

DATE: August 20, 2015

TO: Kurt Triplett

FROM: Deb Powers, Urban Forester
Paul Stewart, Planning & Building Deputy Director
Jim Lopez, Human Resources Director

SUBJECT: 2015 CROSS KIRKLAND CORRIDOR ECO-CHARRETTE EVENT

RECOMMENDATION

The City Council receive a presentation on the Cross Kirkland Corridor (CKC) Eco-Charrette and authorize staff to evaluate sustainability certification programs for the CKC. Staff will report back to the City Council with a recommendation for appropriate certification programs.

BACKGROUND

In November 2013, the City's Green Team reported to the City Council that it was looking for opportunities to certify the CKC using environmental metrics (Attachment 1). Numerous certification programs were examined; however the Green Team and the CKC Service Team agreed there was a need to have a better understanding of how "sustainable" and "resilient" apply to the CKC; and how best to define a "green" corridor.

To accomplish this, the Green Team hosted an eco-charrette, an interactive workshop focused on developing environmental strategies to supplement the adopted CKC Master Plan. The purpose of the event was to

- Further define CKC Master Plan Goal 03 to "Foster a Green Kirkland."
- Engage experts representing a range of environmental disciplines to explore opportunities towards the "greenest" corridor.
- Identify green strategies and environmental themes for the corridor as a whole, as well as specific corridor segments where applicable.
- Develop concepts to inform future design guidelines, projects and potential eco-certifications.

The event was planned and facilitated by Ryan Orth from the consulting firm EnviroIssues and held in late May, 2015 at the Kirkland Justice Center. A variety of participants were selected to provide a unique and specialized perspective. City staff presented relevant background information, facilitated break-out discussions and served as technical resources.

The eco-charrette process and outcomes are described in the Event Summary document (Attachment 2). As would be expected, most ideas involved transportation, water and energy; however the broad range of other concepts and the connections between each are significant outcomes of the event.

One of the goals of the event was to develop selection criteria for potential CKC certification programs. The selection process is incomplete, however staff has considered the following certification programs:

- International Living Futures Institute (ILFI) Living Community Challenge
- Salmon-Safe for Green Infrastructure
- Sustainable Sites Initiative v2
- Envision (Institute for Sustainable Infrastructure)

Each of these certifications establish high performance standards or benchmarks that a project is then evaluated by, to determine if it meets or exceeds the prescribed standards. An overview of each of these programs is provided in Attachment 3.

NEXT STEPS

The Green Team and CKC Service Team are excited about the opportunities to implement the ideas resulting from the eco-charrette. Aside from credentialing the CKC, the eco-charrette results alone provide a new lens in which to look at City programs, future capital and other projects, policy development, funding and other initiatives.

For example, the CKC Master Plan is the basis from which related goals and policies will need to be developed; the charrette outcomes provide a "sustainability lens" to develop them. Having a sustainability lens in place benefits CKC Master Plan implementation. Additionally, it was suggested that the Eco-Charrette Event Summary be further developed to function as a "Sustainability Addendum" to the Master Plan.

Other opportunities in which to incorporate the eco-charrette's social, educational, cultural and environmental elements include the development of CKC Design Guidelines, Maintenance and Operations Procedures for the Interim Trail, and the CKC Arts Integration Plan. The potential to use the CKC for reclaimed water and

fiber optics conveyance are unique opportunities to incorporate sustainability elements into future city functions, projects and programs.

And finally, the eco-charrette results could provide the basis for Kirkland to develop a '**Sustainability Rating Index'** for capital projects, similar to other municipalities.

The CKC Service Team and Green Teams will continue to coordinate efforts, keeping the City Council apprised of relevant activities through upcoming CKC Update presentations. With City Council direction, staff can proceed with the evaluation and selection of sustainable certification programs that are aligned with eco-charrette outcomes.

Attachment 1 – November 19, 2013 Staff Memo
Attachment 2 – CKC Eco-Charrette Event Summary
Attachment 3 – CKC Certification Program Overview

cc: Scott Guter
Jeremy McMahan
Kari Page
David Barnes
Jenny Gaus
David Godfrey
Katie Cava
Ray Steiger
Brad McGuirt, Berger Partnership
Ryan Orth, EnviroIssues

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MEMORANDUM

To: Kurt Triplett, City Manager

From: Kirkland Green Team
Jim Lopez, Green Team, Chair
David Barnes, Green Team, Co-Chair

Date: November 7, 2013

Subject: Green Team Presentation to City Council

RECOMMENDATION

Council receives a presentation from the City's Green Team and provide direction as appropriate, to implement the Council's Environment Goal. The presentation will explain who we are, what we are doing and how our work continues to support the City Council's environmental goals and enhance a healthy, sustainable natural environment in Kirkland.

BACKGROUND DISCUSSION

Mission Statement: *Kirkland's Green Team is an inter-departmental team charged with coordinating the City's activities related to environmental stewardship and sustainability policies and practices*.

> The Green Team is committed to working internally, within the Kirkland community, and regionally to be proactive problem-solvers for common issues that impact our streams and wetlands, climate and natural resources as they have a direct bearing on a successful economy and the quality of life in Kirkland.

History and Role: In 2000, the Natural Resources Management Team was formed to draft the City's Natural Resource Management Plan. In 2005, in response to the Council signing the U.S. Mayor's Climate Protection Agreement, a staff team was formed to develop a Climate Action Plan. Both of these plans were adopted by the City Council. These two groups merged in 2007 and together with members of the green building team to become the official Green Team.

In order to articulate the key policy and service priorities for Kirkland, the Kirkland City Council developed its operational values and goals. As one out of ten City Council goals, the 'Environment' fell under the Green Team's mission to measure, monitor and report

on. Some ways in which a healthy environment is measured in Kirkland includes greenhouse gas emissions, waste reduction and natural habitat improvements.

> *We are committed to the protection of the natural environment through an integrated natural resource management system.*
>
> **Goal: to protect and enhance our natural environment for current residents and future generations.**

The Green Team raises staff awareness and promotes participation in sustainable initiatives, and serves as a technical advisory panel to the City Council on environmental issues. Internal recycling and waste reduction efforts have saved the City over $35,000 in avoided waste disposal costs, due in part to the efforts of the Green Team Ambassadors. A recent example of the Green Team's role as technical advisors is with the Go Green 13 Mayor Panelist Presentation in which Green Team members helped prepare the Mayor for a panel and provided information about Kirkland's leadership on sustainability.

Accomplishments: The list of Green Team accomplishments includes the Natural Resource Management Plan (2003), the Climate Protection Action Plan (adopted 2009), the Green Codes Updates to the Zoning Code (2011), and providing the Environmental performance measure data that is included on page 22 of Kirkland's Annual Performance Report (since 2009). Collectively, these documents set a course for increased sustainability and environmental stewardship for current and future generations.

Ongoing public education for the City's sustainability issues is achieved through the City's Green Kirkland webpage; Reuse, Recycle, Conserve, a newsletter mailed to residents (biannually) and businesses (annually) and Green E-Updates, a community email news subscription on everything green.

Current Major Projects: The Green Team has decided to focus on three major projects at a time. The following list describes the current projects underway.

Green Power Challenge – Earlier this year, the City signed up for the Puget Sound Energy driven campaign, *Take Charge, Green Power Challenge*, to get more citizens to purchase green power. This can help City win $20,000 to help offset the cost to purchase solar panels for the Public Safety Building. There are two parts to the challenge as described below:

I. Kirkland's Challenge
At the beginning of 2013, over 1,500 Kirkland citizens were already participants of PSE's Green Power program, with a goal to recruit 400 more Kirkland households and businesses by December 31st. Kirkland met that challenge earlier than the deadline and actually exceeded it with 700 new participants at the end of October 2013. Meeting that goal has earned Kirkland $20,000 for a solar array to be installed at the new Public Safety building.

II. Inter-city Challenge

The Green Power Challenge is also a competition among five cities. Kirkland is competing with Snoqualmie, Anacortes, Tumwater, and Bainbridge Island to enroll the highest percentage of new participants from available accounts. If Kirkland out-competes the other cities in the Inter-city Challenge, the City will earn another $20,000, for a total of $40,000! Most importantly, Kirkland will earn bragging rights as the greenest town in Puget Sound! Although we have far exceeded the number of new enrollments in comparison to other cities, because the goal is based on the size of the city and we are the largest competing city, we are in fourth place among the five participating cities.

Sustainable Works – Sustainable Works is an energy efficiency program and non-profit general contractor funded through the State of Washington. Sustainable Works' mission is to help Washington residents save energy and reduce their carbon footprint while creating quality jobs. In the past 3.5 years Sustainable Works has inspected 3000 homes, weatherized 800 homes, saved homeowners $500,000 in energy costs, and created more than 350 living wage jobs. Sustainable Works program is designed to remove barriers that keep homeowners from making their homes more energy efficient. This includes providing a subsidized $95 home energy assessment (a $400 value), access to low-interest financing and project and utility incentive coordination.

Earlier this year, Sustainable Works engaged the Green Team and Kirkland Chamber of Commerce to promote energy efficiency and economic development in the City. The Kirkland Home Energy Audit and Retrofit campaign within the City limits kicked off at Heritage Hall on November 12, 2013. The goal for Kirkland's campaign is to perform a minimum of 140 energy audits on a minimum of homes and 70 whole retrofit those homes to save the owner money and reduce their energy consumption.

Cross Kirkland Corridor (CKC) – The Green Team has provided assistance in the visioning process and promotion of the trail as the "greenest in America." The Green Team met with Project Manager David Godfrey and is looking for opportunities to certify the CKC using metrics similar to the International Living Future Institute's Living Building Challenge. As of yet, there is not a trail that has been certified, but we hope to be the first.

Local and Regional Leadership: The City of Kirkland City Council Goals and operational values guide the City's ability to make progress toward its achievements. These values consist of regional partnerships, efficiency, accountability, and community involvement. In following these values, Green Team members' fields of expertise often result in moving sustainability initiatives forward here in Kirkland. In addition, their regional partnerships and collaborative associations often lead to achievements and representation on a much broader scale. Examples of this include:

A highly successful recycling program - Kirkland continues to have the highest solid waste diversion rate in King County due to its innovative and readily-accessible recycling programs. This includes biannual recycling collection events and the new Used Cooking Oil Recycling Station.

Widespread public involvement in environmental stewardship – The Green Kirkland Partnership program enlists volunteers in stewardship efforts to restore declining forested parks in the City. In 2012 alone, over two thousand volunteers participated in clearing natural areas of invasive weeds and replanting over five thousand native plants.

Green Building Codes/Program – under the leadership of the Green Building Team, Kirkland launched its pilot Green Building Program on Jan. 1, 2008 and adopted the first Green codes in 2011. Green Codes promote electric cars and their infrastructure, solar panels, energy efficiency; allows clustering of houses and give density credits for use of Low Impact stormwater facilities. The City is one of the first in the State of Washington to use Green Codes, which have been successful and well used.

Proactive urban forest management – The City conducted a comprehensive Tree Canopy Assessment (2011) to better understand its urban forest asset and to determine the effectiveness of the City's tree ordinance. To provide a sustainable framework for efficient and consistent management of the asset, the City adopted a Strategic Management Plan in 2013 to optimize the benefits resulting from a healthy, sustainable urban forest.

Green Business Program – The City recognizes the efforts of businesses in Kirkland to employ sustainable business practices. Qualified businesses receive a program logo window cling, an electronic file that can be used for corporate printed materials, and a listing on the participant recognition webpage.

Rooftop Solar Challenge II Grant Award -
The Rooftop Solar Challenge II empowers teams to make it easier and more affordable for Americans to go solar through support for streamlining permit processes, updating planning and zoning codes, improving standards for connecting solar power to the electric grid, and increasing access to financing. Eight local, state, regional and national teams will clear a path for rapid expansion of solar energy and serve as models for other communities across the nation. The Rooftop Solar Challenge II is part of the SunShot Initiative, which strives to make solar energy fully cost-competitive with other forms of energy by the end of the decade. Kirkland is one of the local grant awardees. More information about the grant and the national participants can be found at http://www.eere.energy.gov/solarchallenge/.

Future: Discussions regarding a 'Green Team Endorsement' or 'Project Check-in' process were initiated at our latest monthly meeting. In a consultative capacity, the Green Team (GT) would conduct thorough reviews of projects based on specific sustainability criteria, provide feedback and examples; help to identify resources and stakeholders, etc. This review would result in a GT 'green seal of approval.' The GT would need to develop administrative procedures and communication strategies for this process.

cc: Green Team

ATTACHMENT 2

CROSSKIRKLAND CORRIDOR ECO-CHARRETTE

Event Summary

Eco-charrette [**ee**-koh *shuh*-**ret**]

noun:

1. Having ecological or environmental connotation
2. French for cart or chariot
3. Facilitated creative process to build consensus, plan for projects and generate creative ideas. The term evolved into the current design-related usage in conjunction with working right up until a deadline.

Kirkland Green Team

enviroissues

Overview

On May 28, 2015, the City of Kirkland's Green Team hosted an interactive workshop, or "eco-charrette," to explore the ecological opportunities within the Cross Kirkland Corridor (CKC).

Experts in transportation policy, recreation, storm water management, landscape architecture, climate and energy, urban agriculture, urban fish and wildlife, development and construction, urban forestry and vegetation, environmental education, and representatives of eco-certification programs actively participated.

The event exercises were planned to consider the specific conditions within the corridor and how the CKC can provide a variety of environmental, social and economic benefits to the community and the region. The event was facilitated by EnviroIssues.

Purpose of the CKC Eco-Charrette

-Build upon the CKC Master Plan, further defining Goal 03 to "Foster a Green Kirkland"

-Engage experts from a variety of environmental disciplines to explore opportunities towards the "greenest" corridor

-Identify strategies and environmental themes for the corridor as a whole, as well as specific corridor segments where applicable

-Develop concepts to inform future design guidelines, projects and potential eco-certifications

This summary document captures the event proceedings and results and the description of the process used to identify and prioritize ideas from both individual and group exercises.

Participants

These experts generously contributed their time to identify the current and potential opportunities in the natural, built and social environment within and adjacent to the CKC:

Participant	Affiliation	Expertise
Ellen Southard	Salmon-Safe, Inc.	Eco-certification (Salmon-Safe)
Allison Capen	International Living Future Institute	Eco-certification (ILFI)
John Peters	GeoEngineers, Inc.	Eco-certification (Envision)
Peg Staeheli	SvR Design Company	Landscape Arch./Storm Water
Bob Becker	Becker Architects	Architect/Land Use
Deb Eddy	Eastside Rail Corridor Regional Advisory Council	Transportation Policy
Justus Stewart	O'Brien and Company	Development/Construction
Kelly Hall	NW Energy Coalition	Sustainable Energy
Jacque Klug	King County Wastewater, Resource Recovery	Recycled Water
Jenn Leach	Seattle Tilth	Urban Agriculture
Sara Hemphill	King County Conservation District	Sustainability
Patti Southard	King County, Solid Waste Division GreenTools	Sustainability
Jeff Akers	Cascade Bicycle Club	Human Health/Recreation
McKayla Dunfey	Cascade Bicycle Club	Human Health/Recreation
Becca Fong	Seattle Tilth	Urban Agriculture
Bill Way	Watershed Company	Wildlife Habitat/Wetlands
Brad McGuirt	Berger Partnership	CKC Master Plan

Event Opening

Kirkland City Manager Kurt Triplett and Green Team Co-Chair James Lopez provided opening remarks, emphasizing the City's vision for the CKC as a "world class, world-famous example of sustainability and livability." Both conveyed the City's commitment to sustainable policies and projects; asking participants to further develop this commitment with the CKC.

CKC "Virtual Tour"

City staff member Kari Page and Berger Partnership's Brad McGuirt delivered a presentation on the CKC, including its history, geographic setting and boundaries, and existing corridor characteristics. The "tour" revealed CKC's environmental, urban planning and cultural aspects, including hydrologic features; tree canopy cover; view points; the network of connecting streets, trails, bike lanes, transit routes and pedestrian corridors; and the network of nearby cultural landmarks including parks, schools, cultural venues and retail/commercial property.

The tour included an overview of the Berger Partnership's development of the CKC Master Plan: the Plan is organized around nine "character zones" representing a varying balance of natural and urban features throughout the corridor. The Plan illustrates development of the CKC in several phases: as an interim trail, near-term features and a long-term vision as a possible high capacity transit corridor. Background information also included public input gathered through the CKC Master Planning process and Comprehensive Plan Open House events. In addition, staff referenced several eco-certification programs that had been researched by the City's Green Team.

Figure 1. Cross Kirkland Corridor project area and character zones defined through the CKC Master Plan process.

In a preliminary polling exercise, participants identified the CKC issues they anticipated would be addressed through the eco-charrette:

-Creating a meaningful process, focus on users and the story of place
-Use by and support for cyclists, including local and regional connections
-Local food system integration, building in edible resources
-Regeneration-what does the area need to heal?
-Stream and watershed protection and connection
-Rezoning and private property rights
-Social behavior, social engineering, transient camps, etc.
-Economic redevelopment, green economy
-Clean energy within the corridor
-Trail connections
-North-south scalability
-Community in terms of scale
-Equitable access, views vs. tree canopy
-Invasive [weed] free

Eco-Opportunities

The interactive portion of the event used individual, small group, and full group exercises to identify and prioritize sustainability opportunities in the corridor. The scope of opportunities was not constrained in an effort to rely on practitioners' expertise and to encourage innovative and interdisciplinary thinking. The process was carried out in several steps:

1. A "systems diagram" was created in the front of the room to represent the natural, built and social elements relating to the CKC. These categories helped to represent the diversity of issues, to show connections between them and to inspire innovative ideas. Participants discussed, added to and connected the diagram throughout the day.
2. Individual participants were asked to conceptualize and record opportunities for a "greener" CKC, while select City staff assisted as resources. Individual participants were then asked to choose their top five opportunities.
3. Small groups assembled, each balanced with participants from different backgrounds. Staff facilitated the discussion as each small group worked to reach a consensus on the groups' top green opportunities, which were then affixed to a respective *"eco-category"* in the front of the room.
4. A representative from each small group explained their priorities to the full group of participants while staff adjusted the diagram and consolidated duplicate ideas.
5. All participants engaged in a voting exercise to identify the top 10 eco-opportunities across the CKC and shared final observations about their collective priorities.

Discussion Themes

Several themes emerged from the small group and plenary sessions. For purposes of organization, this summary uses general categories to break the opportunities across basic environmental components, including natural, built and social/cultural environments. However, it is important to recognize that the design of the charrette and interests of attendees was such that many of the opportunities address multiple objectives and interconnections between these systems. In addition, participants noted that while their opportunities may not have always explicitly described traditionally "green" activities, in many cases these were assumed, for example the use of low-impact materials and practices, etc.

Most opportunities resulting from the small group exercise centered around transportation, water and energy; with fewer opportunities on local history and culture, urban agriculture, soils and vegetation and economic development. Figure 2 shows the opportunity categories.

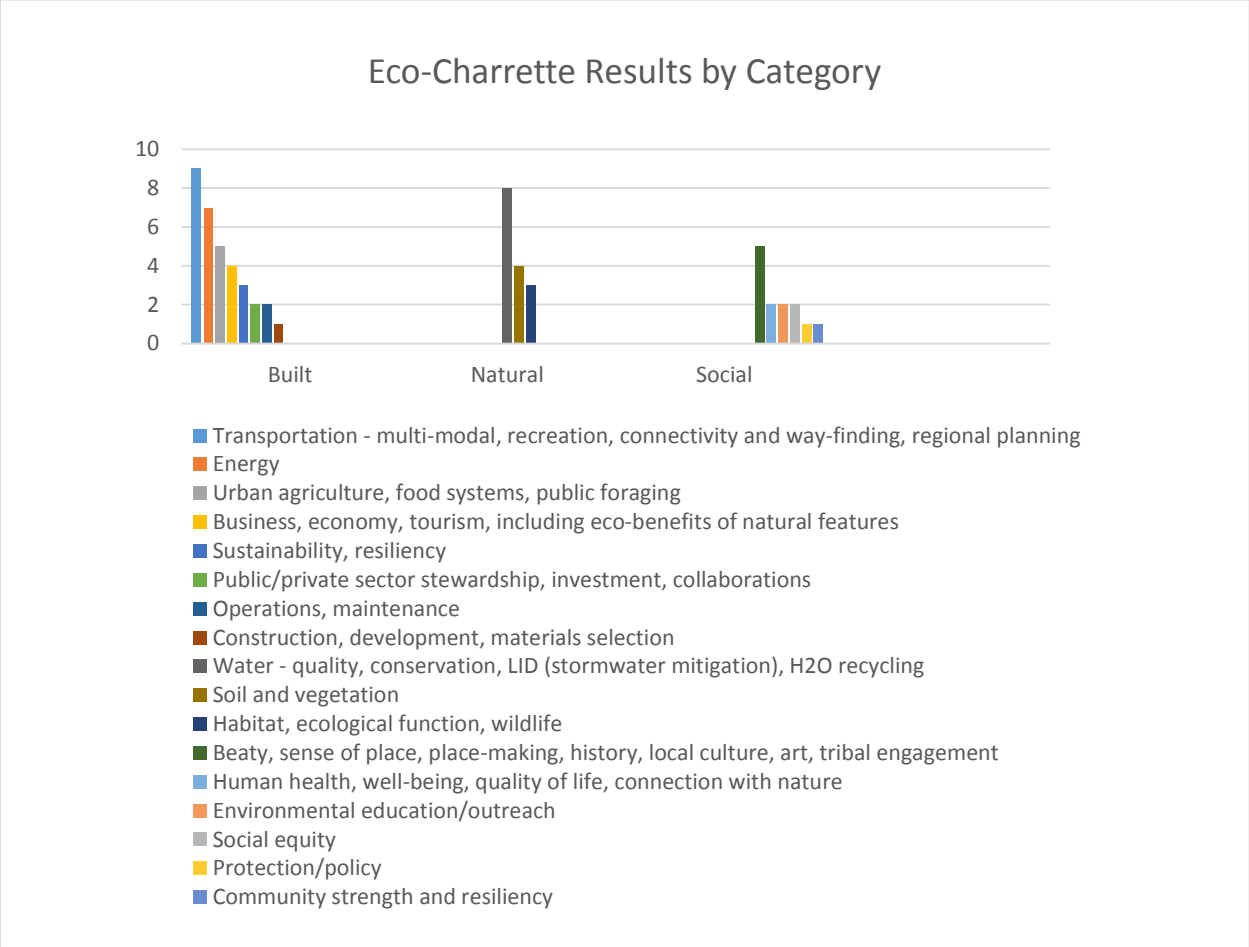

Figure 2. Opportunities shown by category and the number of individual

Additional minor topics rounded-out the results from the small group work. Most of these were applicable across the CKC project area, with fewer ideas tied to a specific location. Overall, the range of ideas generated by the group reflected a broad applicability of "sustainability" and a high level of connectivity between topics. A complete summary of these opportunities is included in Appendix A.

Top Opportunities for a Sustainable, Resilient CKC

Participants "voted" on the ideas that they felt would do the most to promote the CKC as a leading example in sustainable development. These are presented in order of importance from high to low:

1. **City functions as collaborator.** Provide leadership in sustainable development through holistic planning, design and construction, and use of best practices. The City can foster public-private-community collaboration and leverage local, state and federal resources. *Participant quote: "Show a better way through holistic planning, design, construction."*
2. **Storytelling/cultural historic interpretation.** Include interpretive elements that reflect the corridor's cultural history and local stories.
3. **Tribal engagement.** Collaborate with tribes on opportunities to restore the landscape and share prior settlement history and traditions through storytelling and interpretation.
4. **Eco-certification.** Use certification to demonstrate environmental integrity, establish performance measures and to promote the corridor. An opportunity to learn and coordinate with King County and Sound Transit, who have adopted certification policies. *Participant quote: "Certification…demonstrates leadership, establishes metrics and informs, promotes green/sustainable development."*
5. **Connect east-west communities.** Develop east-west linkages that extend the pathways further into the City and provide connected green corridors for people, fish and wildlife. Specific opportunities include Watershed Park to Yarrow Bay (and Lake Washington Blvd.) via Cochran Springs Creek Corridor, as well as Forbes Lake to Lake Washington at the mouth of Forbes Creek.
6. **"Net zero" standards.** Establish standards that strive for water reuse and energy self-generation, and minimize or eliminate the use of pesticides/herbicides, etc. *Participant quote: "Use Corridor as an opportunity to harness energy!"*
7. **Emphasize pedestrian and cyclist priority**. Use of traffic calming measures that place pedestrian and cyclist use as the highest priority.
8. **Equitable multi-modal connector.** Include resources to make use of the trail an easier option for all ages and abilities including railings, restrooms, and benches and sitting areas.
9. **Watershed and stream protection/restoration.** Protect and restore functional habitat for foundational and facilitator species, with emphasis on salmon and riparian areas. Reconnect wetlands and hydrology for habitat and water quality benefits, including use of LID and trailside ditch reconstruction. *Participant quote: "Must have multi-jurisdictional buy-in to exceed [existing stream] standards"*
10. **Trail-oriented development.** Encourage greater housing density, local food and retail businesses and community spaces to activate the trail, as well as connections between existing adjacent gathering spaces, schools and neighborhoods. Create specific guidelines/standards and an overlay zone for development adjacent to the trail addressing low-impact development practices, water retention, energy, access, orientation, and landmark structures.

Final Thoughts…

In closing, charrette participants shared final observations, reflecting on the opportunities they'd identified, and offered several considerations to emphasize and frame their priorities:

- CKC provides prime opportunity for City to partner with Kirkland's private sector.
- Improve connectivity beyond the physical boundaries of the corridor. Consider social, wildlife, watershed, and jurisdictional connectivity. *Participant quote: "East-west corridors could be designed to pass fish, wildlife, and humans [for] volunteerism and school involvement."*
- When implementing ideas, consider pilot projects and find multi-objective opportunities. Also, some opportunities will emerge after the fact through observed uses. For example, observe how the corridor is used by people with different cultural backgrounds and provide a home country experience (e.g. foraging). Ongoing check-ins, monitoring and adaptive management strategies should occur.
- "Green" is the wrong term to describe priorities. Many of them have strong social elements, so they are not traditionally "environmental." However, environmental elements are incorporated into many ideas. Overall, there is a good balance in the priorities, representing the top sustainability categories. *Participant quote: "The top concepts do not necessarily offset the basic sustainable principals…as a collective, we tried to think beyond the standard 'green' topics."*
- There is a clear need to engage under-represented communities. CKC should focus on equity in outcomes and benefits and consider what is best for all people.

Next Steps

After the event, workshop materials were transcribed, compiled and presented to the Eco-Charrette planning committee, the CKC Service Team, and the Green Team. The internal feedback was incorporated into a summary document drafted by EnviroIssues consulting firm. The consensus amongst staff is that the event outcomes, meant to build upon the CKC Master Plan, translate how resiliency and sustainability concepts relate not only to the Cross Kirkland Corridor but to all city projects.

By aligning the Top Ten Opportunities for a sustainable, resilient CKC with the Master Plan and the community's vision for the corridor, the Green Team and CKC Service Team will be able to evaluate and recommend a certification program. The social, educational and cultural aspects may help to inform the development of the CKC Arts Integration Plan, and the City may want to use the data for the development of a '**Sustainability Rating Index'** for capital projects or other sustainability initiatives.

The eco-charrette results provide guidance for decisions related to future projects, policy development, funding and other actions regarding the CKC. A current example of Top Opportunity #1 (City as Collaborator) is the public-private-community collaboration with Google. A potential application of Top Opportunity #5 is to incentivize native and edible landscape/pollinator east-west corridors. Utilizing the CKC for educational events as a "**living classroom**" to highlight sustainability efforts should continue to be a central component of future initiatives and opportunities.

Participant quote: "Thanks for getting a spectrum of organizations together for this discussion!"

ATTACHMENT 2

Appendix A – Specific Green Opportunities from Facilitated Small Group Exercises

Theme	Opportunity	Specific CKC location?
Transportation – multi-modal, recreation, connectivity and wayfinding, regional planning	Connect neighborhoods, schools, public areas. Safe, accessible, prioritize areas	
	Regional transportation network (pedestrian) signage/way-finding along corridor but also signage in city TO corridor.	
	Connect communities. Expand connections east/west that are being on CKC and wider (buffer). Wayfinding –green/pathways to corridors off CKC	
	Wayfinding – how to get to CKC to different places. Parking. Popular and easily recognized locations	
	Traffic calming (curb bulbs, speed bumps). Focus on schools, at grade crossing. Prioritize trail (peds/bikes) and de-prioritize cars.	
	Show light rail and how it will work along CKC	
	Develop east-west trail linkages. For example, Watershed Park could connect to Yarrow Bay (and Lake WA Blvd) via Cochran Springs Creek Corridor. This would bring in Yarrow Office Point folks like Paccar into a public-private partnership. Ditto for Forbes Lake to Lake WA at mouth of Forbes Creek. Corridors could be designed to pass fish, wildlife, and humans, including volunteerism and school involvement. Refer to "Kirkland Streams: Opportunities and Constraints" study by the Watershed Company.	
	[Creation of] habitat corridors to connect green spaces, streams, creeks, lake	
	Reconnect watersheds. Recharge wetlands naturally. Open creeks bridge over Lake WA Blvd the corridor points, or celebrate the creeks by delineating them with surface changes or ID natural materials.	
Water – quality, conservation, LID (stormwater mitigation), H_2O recycling	Protect all streams, establish standards for setbacks, viewing areas, adjacent trails, from headlands to lake. Stream daylighting and restoration. Must have multi-jurisdictional buy-in to get standards	Entire corridor
	Green stormwater infrastructure: changing management practices, creating shallower ditches	
	CKC can serve as sustainable water supply for the community and trail through recycled water. Example: create a water feature in a public place/space (e.g.: wading stream) that aligns with CKC sustainability vision.	Park, public space along/near trail
	Integrate surface water/stormwater into design and experience of corridor, not as fenced off elements. Promote understanding and stewardship (of water resource).	
	Support community resilience (i.e.: "urban agriculture") through varied integration of water infrastructure (capture & infiltration) to help with stormwater issues, become a resource for community water capture.	
	Stream restoration, day-lighting.	Everest and Forbes Creeks to start.
	Restore hydraulic/ecological function and increase safety by reconstructing ditches parallel to trail. Ditches too deep for hydraulic requirements and have unnecessarily de-watered both sides of trail. Use occasional rock weirs to store sediment and water in	Where ever ditches parallel trail

Theme	Opportunity	Specific CKC location?
	ditches. This will result in less runoff, more infiltration, more bio filtration, more evapotranspiration, and enhance/restore wetlands.	
	Local restaurant adopt-a-plot program to grow food for restaurants. Businesses/volunteers tend plots in exchange for restaurant credit/PR.	
Energy	Use corridor as opportunity to harness energy! For example, capturing heat from forced main in local areas (eco-districting), solar and food production all harnessed energy	
	Put solar panels up along the trail, pair w/ educational descriptions of the benefits of renewable energy and ways people can make their energy cleaner. Has duel benefit of cleaning up Kirkland's energy as well as advertising renewables. The #1 main reason people go solar is because their neighbor did!	
	Business engagement to go renewable along CKC. If businesses along CKC go green, customers will associate business w/ sustainability and be more inclined to go green themselves.	
	Support resilience and equity in the community by accessing "extra" solar resources for community needs.	
	Renewable energy artwork through a community contest; get the community involved to create artwork displaying renewable energy.	
	Distribute solar from businesses and trail to support community energy needs.	Solar from industrial buildings?
	Establish net-zero energy standards for any facility built with CKC	
Beauty, sense of place, place-making, history, local culture, art, tribal engagement (5)	Artwork to support community goals including renewable energy (through a contest?), progress & stewardship in real time (various stages of restoration), accessibility to all – visual/auditory/tactile experiences, biophilic integration. Wayfinding, connection and culture – ¼ mile markers, 1% for art	All along CKC
	Cultural retention, story-telling. Celebrate/share history of area/users/past inhabitants. Multi-generations. Gathering stories/meaning from residents/users along stretches of trail. Non-traditional stories.	Using backs of buildings for art
	Work with King County Historic Preservation on interpretive signage, use Cedar River watershed as model.	West Totem Lake area
	Art competition for wayfinding from north to south ends. Art pieces could be placed ¼ mile, needing 20 pieces. Salmon swimming, birds, etc.	
	Work with Tulalip tribe to establish connectivity issues, fish spawning, etc. and promote graphics to illustrate water, rain, and fish relationships. Build Tulalip education shelter, video/handouts (on?) tribe members	Entire corridor
Urban agriculture, public foraging, food systems	Foraging zones along corridor – plant edible plants, revitalize existing ones (fruit trees), engage groups for stewardship – schools, neighborhood associations, etc. address local hunger by creating cultivation/donation program with local food support orgs.	
	Create a café culture w/ food trucks for seasonal (?) or food deserts along the corridor	

Theme	Opportunity	Specific CKC location?
	Community food production areas adjacent to schools. Partner with community/neighborhood residents, local food organizations, local food banks, etc. to steward these areas – connect with homeless service centers.	Adjacent to schools … (?)
	Engage youth students through schools in the commitment to enhancing soil and water – sustainable human beings/stewards	
	Plant for desired density (don't overplant), create demo landscape projects.	
Soil & vegetation	Present dead zone needs to be restored. Highly visible location. Barren soil need replacing; native plants should be planted but not densely. Upslope neighbors and trail users should not have to look at industrial building side. Eventual mature stand of trees and shrubs should frame view, not obstruct it. Demonstration project?	West side of CKC just north of NE 87th Street
	Invasive-free Kirkland!	
	Use trail to demonstrate that Best Available Science (BAS) for upland forest areas should be used to address challenges in the altered environment when working with. BAS to guide policy development.	
	Invite private landowners (commercial/residential) to actively participate in the planning/implementation of protecting and enhancing natural resources (soil, water quality/quantity, tree canopy, and climate).	
Business, economy, tourism, including eco-benefits of natural features (4)	Connect local food/retail businesses with neighborhoods, schools, community places that people gather to the trail system. So they combine active living activities. Use food carts in areas where there may be "food deserts." Leverage food that could be grown on the corridor.	Near schools, retail corridors
	Trail-oriented development for business. How to move from trail to business? City work to bring business, development, increased density housing to the trail corridor (function more than just passing through). Overlay zone, design standards for new development important! Place-making = sitting, play, eat, relax, shop. Establish cultural nodes	Places to stop, hang, relax, enjoy
	Develop a business association among corridor-facing businesses, more marketing & media resources like maps and event promotion. Passport program?	Throughout
	Economic return on ecosystem benefits. Example: carbon offsets, WQ partnership (?).	
Sustainability, resiliency (3)	Certification is important! Demonstrates leadership, establishes metrics, informs, promotes green/sustainable development	
	Use LLC or Salmon Safe as rating system, eliminate the other 3. SS and LLC are based in PNW and will support local living economy. Continuity between certifications; these are used by King Co Green Building	
Habitat, ecological function, wildlife (3)	Certifications – Salmon Safe. Share certification process/accomplishments with public Integrate a connection of habitat and species into the goals of the trail and the story you tell. Salmon Safe can also be used as an urban ag rating and implemented beyond the corridor. SS also reflects our indicator species and will resonate with tribes	Entire corridor
	Enhance ecology through support of key foundational and facilitator species.	
	Habitat corridors such as for pollinators, option to expand into adjacent properties.	

Theme	Opportunity	Specific CKC location?
Human health, well-being, quality of life, connection with nature	Connect children w/ nature through purposeful integration of interactive, messy, uncontrolled places. Use biophilia concept.	
	Approach/invite tribes to the planning and guidance of programs that protect and enhance corridor. Bio-blitz – events that get people on to trail to monitor/experience/learn about nature; create opportunities for children to engage w/ nature and explore.	
Environmental education/outreach	Demonstrate/interpret/show progress of environmental stewardship at various stages as a way to show restoration in real time. This is to address that environmental stewardship doesn't have easily recognizable payoffs.	Contrast areas of forest to be restored, in restoration, then as functional habitat
Operations, maintenance	Net zero – all the operational stuff (water, energy, pesticide, herbicide, etc. Update infrastructure.	
	Equitable multi-modal connector. Resources to make bike/walk/run easier option for all ages and abilities. Railings, restrooms, benches, sitting areas, fountains; as many access points, shuttles, taxis, way-finding as possible. Promote health & wellbeing (for youth).	
Public/private sector stewardship, investment, collaborations (2)	City as collaborator for all interests: incubator, breakdown regional silos, engage universities, bring in federal, state, local resources, construction best practices charrette (contractors, suppliers, inspectors), show a better way through holistic planning, design, construction. City as collaborator for community, private, public interests.	
	Collaborate between jurisdictions for highest return on investment	
Community strength & resiliency	CKC is prime opportunity to create community in Kirkland!	
Social equity	Connect adjacent communities through biophilia and fully accessible experiences (visual, auditory).	
Construction, development, materials selection (1)	Guidelines/standards for development near trail and overlay zone, for new buildings by trail, mitigation for demo'd buildings, LID, access, orientation, water mitigation/retention, landmark structure retention/mitigation	Potential to expand beyond Kirkland
Protection/policy	Work on evolving notion of "public property right" doctrine to maintain/improve green. Linear corridors are particularly tough to manage from encroachment. Adjoining property owners will push whatever they can get for their own interest. Encroachments include tree cutting, storm drainage systems, access, and 0' building setbacks. Obviously, some actions benefit both parties.	Wherever adjacent property owners

CKC Certification Programs Overview

Organization	Program Info	Elements	Existing Projects	Timeframe	Deliverables	Initial Cost + Renewal	Funding Sources
Salmon-Safe *Green Infrastructure, Parks & Natural Areas Dual Certification?*	Development standards that integrate LID site design, focus on salmon habitat & reduction of nonpoint source pollution Provide 3rd-party environmental performance validation Of nation's Top 5 regional eco labels Ellen Southard*, Seattle	See Salmon-Safe Certification Standards Counts toward other cert's (LEED, ILFI, etc.), public credibility/ engagement, enhanced operational efficiency and cost savings. Exceed NPDES req'ments, focuses on habitat/ ecological functions for salmon (what are the gaps?)	Portland Parks, Oly Sculpture Park UW Bothell S Lake Union, etc	Cert valid upon meeting conditions, valid for 5 years	1. Assessment 2. Condition Report (informs design, tool for electeds) 3. Ad campaign (?) using SS eco-brand 4. Monitoring by regional experts **1st Salmon Safe Trail in WA state!**	$35-40K for dual funding w/ Parks $5k to offset cert cost until June 1st (requires agreement letter, regardless of having scheduled an assessment etc.) "Balloon payment option?"	$5K seed money avail until 6/1/14 WRIA-8 grant? Partner w/ Google? Tribal grant?
Living Community Challenge *Certified Project - Landscape & Infrastructure Typology*	Cascadia Green Building Council/ International Living Future Institute (ILFI) "Future that is ...ecologically restorative…" Samuel Wright* and Brad Liljequist, Seattle	'Living Status' = fulfill 7 performance areas for site, water, energy, health, materials, equity and beauty ("Petals") under the Landscape and Infrastructure "typology" 'Petal Certification' = fulfill 3 or more areas, with at least one of water, energy or materials	McGilvra Park?	Depends on development of cert. Register, Document + Operation (12 mo's), Audit then Cert Version 3.0 rolling out Summer 2014 (new criteria)	1. Media exposure 2.Technical assistance (outreach,design charettes) **1st 'Living Trail' certification!**	$900 Project registration fee ~$5-7K per Sam Wright. See 'Cert Details' Add'l cost for optional services, ie: $5K for charrette facilitation $Flat rate for Full Cert, or $Fee for Petal recognition + $ each add'l Petal Fees due @ audit	

Organization	Program Info	Elements	Existing Projects	Timeframe	Deliverables	Initial Cost + Renewal	Funding Sources
Sustainable Sites Initiative (SITES) *SITES Certified Project*	Integrative design process/performance monitoring to meet sustainability guidelines; addresses environmental and social challenges. Jonathan Garner, Program Coordinator	Nations' 1st rating system for sustainable landscape design, construction, maintenance 4-star rating system on a 250-point scale. See Guidelines & Performance Benchmarks manual SITES v2 review/ certification is under the Green Building Certification Institute (GBCI).	30 Pilot Projects certified under 2009 system. One small park in Kirkland under review.	Sites 2009 Guidelines to be replaced with SITES v2 in 2014. Enroll, achieve15 prereq's and at least 100 credit points = Certified		Registration fees determined with release of SITES v2.	
Greenroads Rating System *Bronze, Silver, Gold, Evergreen*	"To benefit communities and the environment by recognizing sustainable roadway projects and by promoting sustainability education for transportation infrastructure." Foundation located in Redmond!	Point-based rating system for "sustainable roadway design and construction best practices that encompass water, environment, access, community impact, construction practices and materials."	Meander Ellis Trail Project (Bellingham)	Projects must be operational for min 12 consecutive months prior to evaluation.		"Large projects" involve free initial consult. $495 for stand-alone registration fee. $1495 for "A-lined Assessment," $5K for basic pilot project cert, $8K for detailed project	

Organization	Program Info	Elements	Existing Projects	Timeframe	Deliverables	Initial Cost + Renewal	Funding Sources
Envision Rating System *Bronze, Silver, Gold, Platinum levels* *(Harvard University Graduate School of Design & Institute for Sustainable Infrastructure)*	Envision™ infrastructure rating system developed to help designers, builders and owners build and direct infrastructure projects toward increasing levels of sustainability. Envision tools help the project design team: - Assess costs and benefits over the project lifecycle. - Evaluate environmental benefits. - Use outcome-based objectives. - Reach higher levels of sustainability achievement	60 sustainability criteria or credits, divided into 5 sections: Quality of Life, Leadership, Resource Allocation, Natural World, and Climate and Risk. Envision tools help the project design team: - Assess costs and benefits over the project lifecycle. - Evaluate environmental benefits. - Use outcome-based objectives. - Reach higher levels of sustainability achievement.	Line J, Section 1 Pipeline Wm Jack Hernandez Sport Fish Hatchery Snow Creek Stream Environment Zone Restoration South Los Angeles Wetland Park Sun Valley Watershed Project	ISA-credentialed person (ENV SP) guides project team and submits project. Verification by independent 3rd party takes 90 days; Otak has credentialed staff.	Public recognition	Verification costs are per project $ amount, registration fee = $1000.	

Notes

- Interim Trail opens January 2015
- Eco-certification may inform/apply to the development of design standards and implementation of the CKC Master Plan
- Eco-certification could apply to the maintenance phase of the interim trail
- Greenroads requirements weights 'Environment & Water' category 24% (more emphasis is put on paved infrastructure)